NEC

SL1000

Features and Specifications Manual

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Features

SECTION 1 ABOUT THIS CHAPTER

This chapter provides an alphabetical listing of the features that are available with the SL1000 system.

Each feature provides the following information:

Description - briefly describes the feature and how it is use.

Conditions - provides special operating conditions (if any) that need to be considered with using the feature.

Default Settings - indicates the factory default setting (if any)

System Availability - describes multiline terminals that can be used with this feature and lists any additional equipment, such as adapters or units, that must be installed for this feature to operate.

Programming - lists the memory blocks that support the feature.

Related Features - lists features that are associated with the feature being described (e.g., the Account Codes feature lists the Speed Dialing feature in the related features list because speed dialing bins can contain stored account code (if any).

Operation - provides step-by-step instructions for using the feature.

SECTION 2 IMPORTANT NOTES

Simplifying Multiline Terminal Operation with One-Touch Keys

A multiline terminal user can access many features Service Codes (e.g., Service Code 844 sets Call Forward Busy/No Answer). To streamline the operation of their telephone, a multiline terminal user can store these codes under One-Touch Keys. This provides one-button operation for almost any feature. To find out more, turn to the One-Touch Calling and One-Touch Serial Operation features.

Programmable Keys

When reading an instruction using programmable keys, you will see a notation similar to (*PRG 15-07 or SC nnn*). This means that the key requires service code nnn, and you can program this code in Program 15-07 or by dialing Service Code 851 or 852 . Refer to the Programmable Function Keys feature for more information.

Using Handsfree

The manual assumes each extension has Automatic Handsfree. This lets a user just press a line key or Speaker key to answer or place a call. For extensions without Automatic Handsfree, the user must:

- Lift the handset or press **Speaker** for Intercom dial tone.

- Lift the handset or press **Speaker**, then press a line key for trunk dial tone.

Port Assignments

Port Calculation for Trunks:

The system detects the type of unit (trunk or extension) and assigns the required extension or trunk ports to the slot. The system will use the next available port numbers - it will not reserve any

Abbreviated Dialing/Speed Dial

Description

Abbreviated Dialing/Speed Dial gives an extension user quick access to frequently called numbers. This saves time, for example, when calling a client with whom they deal often. Instead of dialing a long telephone number, the extension user just dials the Speed Dialing code.

There are three types of Speed Dialing: System, Group and Station. All co-workers can share the System Speed Dialing numbers. All co-worker's in the same Speed Dialing Group can share the Group Speed Dialing numbers. Station Speed Dialing numbers are available only at a user's own extension. The system has 1000 Speed Dialing bins that you can allocate between System and Group Speed Dialing and a maximum of 32 Speed Dialing Groups are available. Each extension has 10 Station Speed Dial bins.

Each Speed Dialing bin can store a number with up to 36 digits.

When placing an Speed Dialing call, the system normally routes the call through Trunk Group Routing or ARS (whichever is enabled). Or, the user can preselect a specific trunk for the call. Also the system can optionally force System Speed Dialing numbers to route over a specific Trunk Group. User preselection always overrides the system routing.

System Bins Limited to 900 with Speaker Key or #2 Service Code

Though there are 1000 Speed Dialing bins available in the system, once programmed, these bins can currently be dialed only using the Directory Dial feature (Press Directory key + SYS softkey + use arrow keys to locate number or enter the Speed Dial bin name + Speaker to place call.)

The Speaker key and service code #2 operations are not available for any 4-digit Speed Dial System bin number.

DSS Console Chaining

DSS Console chaining allows an extension user with a DSS Console to chain to an Speed Dialing number stored under a DSS Console key. The stored number dials out (chains) to the initial call. This can, for example, simplify dialing when calling a company with an Automated Attendant. You can program the bin for the company number under one DSS Console key (e.g., 81300) and the client's extension number under the other (e.g., 81301). The DSS Console user presses the first key to call the company, waits for the Automated Attendant to answer, then presses the second key to call the client (extension 400). See the Programming section below for additional details.

The DSS Console user can also chain to an Speed Dialing number dialed manually, from a Programmable Function Key or a One-Touch Key.

Storing a Flash

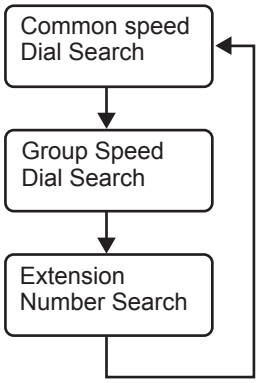
To enhance compatibility with connected Centrex and PBX lines, Speed Dialing bin can have a stored Flash command. For example, storing 9 Flash 926 5400 causes the system to dial 9, flash the line and then dial 926 5400. The Flash can be stored by the user from their telephone or by the system administrator during system programming.

Using a Programmable Function Key

To streamline frequently-called numbers, a Speed Dialing Programmable Function Key can also store a Speed Dialing bin number. When the extension user presses the key, the telephone automatically dials out the stored number. This provides true one-touch calling via a telephone function keys.

Cursor Key Operation (When set PRG15-02-60:0)

By pressing the Right Cursor key, the user can access all directory menus. The flow chart below shows the menu access sequence (refer to Figure 1-1 Right Cursor Key Operation Flow Chart on this page). If the terminal is not allowed access to Speed Dial and/or Telephone Book numbers or no telephone numbers are programmed in those areas, they are skipped.



Related Programs

If the menu is not enabled by programming or there are no numbers in a telephone book the menu will be skipped and the next menu will appear.

Menu	Associated Program
Common SPD	Program 13-01-03
Group SPD	Program 13-02-01
Extension Number	None

↓ = Press Left Cursor key

Once the LEFT key is pressed, the Right Cursor key can be used to switch between the Redial and Incoming History menus.

Figure 1-1 Right Cursor Key Operation Flow Chart

Conditions

- Speed Dial bins can contain stored Account Codes. To prevent them from being displayed use PRG 20-07-04.
- ARS selects the trunk for the call unless the user preselects.
- A user can implement Speed Dial only if their extension has outgoing access to trunks.
- An extension can have a One-Touch Key for Speed Dial operation.
- If you enter a PBX trunk access code in a Speed Dial bin, the system automatically inserts a pause after the bin.
- Single line telephones can dial only System and Group Speed Dial numbers.
- Toll Restriction may prevent a user from using a stored Speed Dial number.
- Unless a user preselects a trunk, Trunk Group Routing selects the trunk Speed Dial uses for trunk calls.
- If the Speed Dial bin does not have a name assigned it does not show when scrolling through the directory of speed dials.
- If Program 13-01-01 is set to 1 (Intercom Access mode), system speed dial bins require inserting a trunk access code.
- When operating the Right Cursor key, if the menu is not enabled by programming or there are no number in a telephone book, the menu is skipped and the next menu will appear.

Default Settings

Available (No Speed Dialing bins are assigned).

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Account Code Entry

Automatic Route Selection (ARS/F-Route)

Central Office Calls, Placing

Code Restriction/Toll Restriction

Dial Tone Detection

One-Touch Calling

PBX Compatibility/Behind PBX

Programmable Function Keys

Single Line Telephones

Trunk Group Routing

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-09-01	DTMF and Dial Tone Circuit Setup	Resource 01 - 132 = 0 (Common)	
11-10-04	Service Code Setup (for System Administrator) - Storing Common Speed Dialing Numbers	853	
11-10-05	Service Code Setup (for System Administrator) - Storing Group Speed Dialing Numbers	854	
11-11-39	Service Code Setup (for Setup/Entry Operation) - Station Speed Dial Number Entry	855	
11-12-10	Service Code Setup (for Service Access) - Common/Station Speed Dialing	#2	
11-12-11	Service Code Setup (for Service Access) - Group Speed Dialing	#4	
11-12-40	Service Code Setup (for Service Access) - Station Speed Dialling	#7	
13-01-01	Speed Dialing Option Setup - Speed Dialing Auto Outgoing Call Mode	0	
13-01-03	Speed Dialing Option Setup - Number of Common Speed Dialing Bins	900	
13-02-01	Group Speed Dialing Bins	not assigned	
13-03-01	Speed Dialing Group Assignment for Extensions	1	
13-04-01	Speed Dialing Number and Name - Speed Dialing Data	not assigned	
13-04-02	Speed Dialing Number and Name - Name	not assigned	
13-04-03	Speed Dialing Number and Name - Transfer Mode	0	
13-04-04	Speed Dialing Number and Name - Transfer Destination Number	not assigned	
13-04-05	Speed Dialing Number and Name - Incoming Ring Pattern	0	

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Program Number	Program Name	Default	Note
13-05-01	**Speed Dialing Trunk Group - Trunk Group Number**	not assigned	
13-06-01	**Speed Dialing Data and Name**	not assigned	
14-02-06	**Analog Trunk Data Setup - Pause at 1st digit after Line Seize in Manual Dial Mode**	1	
15-02-04	**Multiline Telephone Basic Data setup - Redial (Speed Dial) Control**	0	
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.	
20-06-01	**Class of Service for Extensions**	All extension port = Class 1	
20-07-04	**Class of Service Options (Administrator Level) - Storing Speed Dialing Entries**	COS 01~15 = 1	
20-08-03	**COS Options (Outgoing Call Service) - System Speed Dialing**	COS 01~15 = 1	
20-08-04	**COS Options (Outgoing Call Service) - Group Speed Dialing**	COS 01~15 = 1	
30-03-01	**DSS Console Key Assignment**	The DSS keys 001~060 of all DSS consoles = DSS/One-Touch key 200~259	
80-03-01	**DTMF Tone Receiver Setup - Detect Level**	Type 1~5 = 0	
80-03-02	**DTMF Tone Receiver Setup - Start delay time**	Type 1~5 = 0	
80-03-03	**DTMF Tone Receiver Setup - Min. detect level**	Type 1 = 10 (-20dBm) Type 2 = 15 (-25dBm) Type 3 = 10 (-20dBm) Type 4 = 10 (-20dBm) Type 5 = 10 (-20dBm)	
80-03-04	**DTMF Tone Receiver Setup - Max. detect level**	2 (-2dBm)	
80-03-05	**DTMF Tone Receiver Setup - Forward twist level**	5 (6dBm)	
80-03-06	**DTMF Tone Receiver Setup - Backward twist level**	Type 1 ~ 5 = 0 (1dBm)	
80-03-07	**DTMF Tone Receiver Setup - ON detect time**	Type 1~5 = 1 (30ms)	
80-03-08	**DTMF Tone Receiver Setup - OFF detect time**	Type 1~5 = 1 (30ms)	
80-04-01	**Call Progress Tone Detector Setup - Detection Level**	Type 1 (DT) = 0 (-25dBm) Type 2 (BT) = 0 (-25dBm) Type 3 (RBT) = 0 (-25dBm) Type 4 = 0 Type 5 = 0	
80-04-02	**Call Progress Tone Detector Setup - Min. Detection Level**	Type 1 (DT) = 15 (-25dBm) Type 2 (BT) = 15 (-25dBm) Type 3 (RBT) = 15 (-25dBm) Type 4 = 0 Type 5 = 0	
80-04-03	**Call Progress Tone Detector Setup - S/N Ratio**	Type 1 (DT) = 4 (-20dB) Type 2 (BT) = 4 (-20dB) Type 3 (RBT) = 4 (-20dB) Type 4 = 0 Type 5 = 0	
80-04-04	**Call Progress Tone Detector Setup - No tone time**	Type 1 (DT) = 132 (3990ms) Type 2 (BT) = 132 (3990ms) Type 3 (RBT) = 132 (3990ms) Type 4 = 0 Type 5 = 0	
80-04-05	**Call Progress Tone Detector Setup - Pulse Count**	Type 1 (DT) = 1 Type 2 (BT) = 1 Type 3 (RBT) = 1 Type 4 = 0 Type 5 = 0	

Program Number	Program Name	Default	Note
80-04-06	**Call Progress Tone Detector Setup - ON minimum time**	Type 1 (DT) = 63 (1920ms) Type 2 (BT) = 12 (390ms) Type 3 (RBT) = 25 (780ms) Type 4 = 0 Type 5 = 0	
80-04-07	**Call Progress Tone Detector Setup - ON maximum time**	Type 1 (DT) = 0 Type 2 (BT) = 20 (630ms) Type 3 (RBT) = 40 1230ms) Type 4 = 0 Type 5 = 0	
80-04-08	**Call Progress Tone Detector Setup - OFF minimum time**	Type 1 (DT) = 1 (60ms) Type 2 (BT) = 12 (390ms) Type 3 (RBT) = 52 (1590ms) Type 4 = 0 Type 5 = 0	
80-04-09	**Call Progress Tone Detector Setup - OFF maximum time**	Type 1 (DT) = 1 (60ms) Type 2 (BT) = 20 (630ms) Type 3 (RBT) = 80 (2430ms) Type 4 = 0 Type 5 = 0	

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Operation

To store an Speed Dialing number (display telephones only):

1. Press **Speaker**.
2. Dial **853** (for system) or **854** (for group).
3. Dial system or group storage code.

   Initially, there are 900 System Speed Dialing codes. There are Group Speed Dialing codes only if you define them in programming.

4. Dial telephone number you want to store (up to 36 digits).

   *Valid entries are **0~9**, **#** and ✳. To enter a pause, press **Transfer**. To store a Flash, press **Flash**.*

   Enter @ for await answer before sending following digits on ISDN.

5. Press **Hold**.
6. Enter the name associated with the Speed Dialing number.

Table 1-1 Keys for Entering Names

Use this keypad digit . . .	When you want to. . .
1	Enter characters: **1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Å Æ Ç É Ê ì ó 0**
2	Enter characters: **A-C**, **a-c**, **2**.
3	Enter characters: **D-F**, **d-f**, **3**.
4	Enter characters: **G-I**, **g-i**, **4**.
5	Enter characters: **J-L**, **j-l**, **5**.
6	Enter characters: **M-O**, **m-o**, **6**.
7	Enter characters: **P-S**, **p-s**, **7**.
8	Enter characters: **T-V**, **t-v**, **8**.
9	Enter characters: **W-Z**, **w-z**, **9**.

Use this keypad digit . . .	When you want to. . .
0	Enter characters: **0 ! " # $ % & ' ( ) ô õ ú å ä æ ö ü α ε θ B**
*****	Enter characters: ***** + , - . / : ; < = > ? π Σ σ Ω ∞ ¢ £
#	**#** = Accepts an entry (only required if two letters on the same key are needed - ex: TOM). Pressing **#** again = Space. (In system programming mode, use the right arrow Softkey instead to accept and/or add a space.)
Clear/Back or **DND**	Clear the character entry one character at a time.
Flash	Clear all the entries from the point of the flashing cursor and to the right.

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7. Press **Hold**.
8. Press **Speaker** to hang up or repeat steps 3~7 to program another System or Group Speed Dial bin.

To dial a System Speed Dialing number (When set PRG15-02-60:0):

1. Go off-hook.
2. Press **Redial**.
   - OR -
   Press the **Right Cursor** key until the Group Speed Dial menu appears.
   - OR -
3. Dial the System Speed Dialing storage code.

Unless you preselect, Trunk Group Routing selects the trunk for the call. The system may optionally select a specific Trunk Group for the call.

If you have a DSS Console, you may be able to press a DSS Console key to chain to a stored number.

To store a System Speed Dialing number under a Programmable Function Key:

1. At multiline terminal, press **Speaker**.
2. Dial **851** .
3. Press the key where the number is to be stored.
4. Dial **27**.
5. Dial System Speed Dial Bin number to put under the key.
6. Press **Speaker** to hang up.

To dial a System Speed Dialing number under a Programmable Function Key:

1. At the multiline terminal, press **Speaker**.
2. Press the key, which has the stored number to be dialed.

The number seizes an outside line and dials out.

To dial a Group Speed Dialing number (When set PRG15-02-60:0):

1. Go off-hook.
2. Press **Redial**.
   - OR -
   Press the **Right Cursor** key until the Group Speed Dial menu appears.
   - OR -
   Press the **Group Speed Dialing** key (Program 15-07-01 or SC **851** : 28).

*To preselect, press a line key in step 1 (instead of **Speaker**) before pressing **Redial** or **Speed Dialing** key.*

3. Dial the Group Speed Dialing code.

The stored number dials out.

Unless you preselect, Trunk Group Routing selects the trunk for the call.

If you have a DSS Console, you may be able to press a DSS Console key to chain to a stored number.

To check your stored Speed Dialing numbers (display telephone only) (When set PRG15-02-60:0):

1. Press the **Help** key.
2. For System Speed Dialing, press **Redial**.
   Dial the Speed Dialing Code (e.g., common code **001**).

If the entire stored number is too long for your telephone display, press ✳ to see the rest of the number.

- OR -
For Group Speed Dialing, press the **Group Speed Dialing** key.
- OR -
For System Speed Dialing key, press the **System Speed Dialing** key.

3. Press the **Exit** key.

To display additional numbers, repeat from step 1.

- OR -
Press the **Right Cursor** key until the appropriate Telephone Book, System or Group Speed Dial menu appears.

Use the Volume "Down" and Volume "Up" keys to scroll through the stored numbers.

To store a Station Speed Dialing number (display telephones only):

1. Press **Speaker**.
2. Dial **855** .
3. Dial the Station Speed Dial buffer number to be programmed (**0~9**).
   1 = Station Speed Dial buffer 1
   2 = Station Speed Dial buffer 2
   :
   :
   0 = Station Speed Dial buffer 10
4. Dial the telephone number you want to store (up to 36 digits).

Valid entries are 0~9, # and ✳. To enter a pause, press Mute. To store a Flash, press Flash.

5. Press **Hold**.
6. Enter the name associated with the Speed Dialing number (display telephones only).

Key for Entering Names	
Use this keypad digit . . .	**When you want to. . .**
1	Enter characters: **1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Å Æ Ç É Ê ì ó 0**
2	Enter characters: **A-C**, **a-c**, **2**.
3	Enter characters: **D-F**, **d-f**, **3**.
4	Enter characters: **G-I**, **g-i**, **4**.
5	Enter characters: **J-L**, **j-l**, **5**.
6	Enter characters: **M-O**, **m-o**, **6**.

Key for Entering Names	
Use this keypad digit . . .	**When you want to. . .**
7	Enter characters: **P-S**, **p-s**, **7**.
8	Enter characters: **T-V**, **t-v**, **8**.
9	Enter characters: **W-Z**, **w-z**, **9**.
0	Enter characters: **0 ! " # $ % & ' ( ) ô õ ú å ä æ ö ü α ε θ B**
*****	Enter characters: ***** + , - . / : ; < = > ? π Σ σ Ω ∞ ¢ £
#	**#** = Accepts an entry (only required if two letters on the same key are needed - ex: TOM). Pressing **#** again = Space.
Clear/Back or **DND**	Clear the character entry one character at a time.
Flash	Clear all the entries from the point of the flashing cursor and to the right.

A

7. Press **Hold**.
8. Press **Speaker** to hang up.

To store a Station Speed Dialing number (Single Line Telephones only):

1. Lift the Handset.
2. Dial **855** .
3. Dial the Station Speed Dial buffer number to be programmed (**0~9**).
   1 = Station Speed Dial Buffer 1
   2 = Station Speed Dial Buffer 2
   3 = Station Speed Dial Buffer 3
   4 = Station Speed Dial Buffer 4
   5 = Station Speed Dial Buffer 5
   6 = Station Speed Dial Buffer 6
   7 = Station Speed Dial Buffer 7
   8 = Station Speed Dial Buffer 8
   9 = Station Speed Dial Buffer 9
   0 = Station Speed Dial Buffer 10
4. Dial the telephone number you want to store (up to 36 digits).

   *Valid entries are 0~9, # and *.*

   A Single line set cannot program a pause or flash in a spd bin.

5. Hang up.

To dial a Station Speed Dialing number (Multiline Terminal):

1. Press **Speaker**.
2. Dial **#7** (default Service Code).
   - OR -
   Press the **System Speed Dialing** key (Service Code **851** : 27).

   To preselect, press a line key in step 1 (instead of Speaker).

3. Dial the Station Speed Dial buffer number (**0~9**).
   1 = Station Speed Dial buffer 1
   2 = Station Speed Dial buffer 2
   :
   :
   0 = Station Speed Dial buffer 10

   The stored number dials out.

Unless you preselect, Trunk Group Routing selects the trunk for the call. The system may optionally select a specific Trunk Group for the call.

If you have a DSS Console, you may be able to press a DSS Console key to chain to a stored number.

To dial a Station Speed Dialing number (Single Line Telephone):

1. Lift the Handset.
2. Station Speed Dial #7
   Group Speed Dial #4
   System Speed Dial #2
3. Dial the Speed Dial Memory Location.
   Station Speed Dial 0~9
   Group Speed Dial xxx (none at default)
   System Speed Dial 000~999
4. Converse.

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Account Code Forced/Verified/Unverified

A

Description

Account Codes are user-dialed codes that help the system administrator categorize and/or restrict trunk calls. The system has two types of Forced Account Codes:

- Forced Account Codes (Unverified)
  Forced Account Codes *require* an extension user to enter an Account Code every time they place a trunk call. If the user does not enter the code, the system prevents the call. As with Account Codes, the extension user can elect to enter an Account Code for an incoming call. However, the system does not require it.
  Once set up in system programming, you can enable Forced Account Codes on a trunk-by-trunk basis. In addition, Forced Account Codes can apply to all outside calls or just long distance calls.
- Verified Account Codes
  With Verified Account Codes, the system compares the Account Code the user dials to a list of up to 800 pre-programmed codes. If the Account Code is in the list, the call goes through. If the code dialed is not in the list, the system prevents the call. Verified Account Codes can have 3~16 digits using the characters 0~9 and #. During programming, you can use “wild cards” to streamline entering codes into system memory. For example, the entry 123@ lets users dial Verified Account Codes from 1230 through 1239.

Operator Notification

To prevent Account Code abuse, the system can notify the operator each time an Account Code violation occurs (Program: 20-13-20). This can happen if the user fails to enter an Account Code (if Forced) or enters a Verified Account Code that is not in the list. The notification is an automatic Intercom call to the attendant and a RESTRICT message in the operator display.

Account Codes for Incoming Calls

The system allows extension users to enter Account Codes for incoming calls. When this option is enabled, a user can dial * while on an incoming call, enter an Account Code, and then dial * to return to their caller. If the option is disabled, any digits the user dials after answering an incoming call outdial on the connected trunk.

Hiding Account Codes

Account Codes can be optionally hidden from a telephone display. This would prevent, for example, an unauthorized co-worker from obtaining a Verified Account Code by watching the display and making note of the digits that dial out. When hidden, the Account Code digits show as * on the telephone display.

Account Code Capacity

Account Codes print along with the other call data on the SMDR record after the call completes. Account Codes can have 1~16 digits using 0~9 and #. Verified Account Codes can have 3~16 digits.

Redialed Numbers Do Not Contain Account Codes

When using the Last Number Redial, Save or Repeat Dial features, the system does not retain Account Code information. Any number redialed with these features, the user needs to reenter an Account Code.

*If a user enters *12345*203 926 5400*67890*, if the Last Number Redial feature is used, the system dials the number as 203 926 5400*67890*. The *67890*is not treated as an Account Code.*

Conditions

- If a user enters a code that exceeds the 16 digit limit, the system ignores the Account Code Entry.
- If the system has Account Codes disabled, the digits dialed (e.g., *1234*) appear on the SMDR report as part of the number dialed.
- If using Forced Account Code with single line telephone you need a VRS to get the prompts to enter the Forced Account Code.
- When you use Forced Account Code on only toll calls, and you dial a local call, you hear a beep.
- The timer set in 21-01-14 is applied to toll calls and local calls.
- Speed Dial - System/Group/Station bins can contain stored Account Codes. They can be prevented from being displayed using Program 20-07-04.
- To simplify Account Code Entry, store the Account Code (e.g., *1234*) in a One-Touch Key. Just press the key instead of dialing the codes.
- Account Codes appear on the SMDR report (even if they are hidden on the telephone display).
- Do not use an asterisk within a PBX/CTX access code when using Account Codes. The *, causes the trunk to stop sending digits to the central office until another * is entered.
- Account Codes for incoming calls not available for single line telephones.
- When using Forced Account Codes (Unverified) for toll calls only, the station follows the timer setting in Program 21-01-14 for all calls.
- System Account codes are bypassed when using DISA trunks. If a user calls in via a DISA trunk, the user is not required to enter an account code.
- Emergency number data will be defined in program 21-24-01. First digit of dialing data should be same as trunk access code.

Default Settings

Disabled

System Availability

Terminals

Any Station

Required Component(s)

VRS for Forced Account Codes for Single Line TelephonesNone

Related Features

Abbreviated Dialing/Speed Dial

Automatic Route Selection (ARS/F-Route)

PBX Compatibility/Behind PBX

Station Message Detail Recording

Guide to Feature Programming

Program Number	Program Name	Default
14-01-11	**Basic Trunk Data Setup - Account Code Required**	1
15-07-01	**Programmable Function Keys** Account Code Key (code 50)	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1

Program Number	Program Name	Default
20-13-20	**Class of Service Options (Supplementary Service) - Account Code/Toll Restriction Operator Alert (Restricted Operation Transfer)**	COS 01~15 = 1
21-01-14	**System Options for Outgoing Calls - Forced Account Code Inter-digit Timer**	3 (seconds)
21-04-01	**Toll Restriction Class for Extensions**	2
21-24-01	**Forced Access Dialing - Emergency Number**	No setting
35-05-01	**Account Code Setup - Account Code Mode**	0
35-05-02	**Account Code Setup - Forced Account Code Toll Call Setup**	0
35-05-03	**Account Code Setup - Account Codes for Incoming Calls**	0
35-05-04	**Account Code Setup - Hiding Account Codes**	0
35-06-01	**Verified Account Code Table - Verified Account Code**	No setting
40-10-01	**Voice Announcement Service Option - VRS Fixed Message**	1

A

Operation

To enter an Account Code anytime while on a trunk call:

The outside caller cannot hear the Account Code digits you enter. You can use this procedure if your system has Optional Account Codes enabled. You may also be able to use this procedure for incoming calls. This procedure is not available for single line telephones.

1. Dial ✱.
   - OR -
   Press your Account Code key (Program 15-07-01 or SC **851** : code 50).
2. Dial your Account Code (1~16 digits, using 0~9 and #).

   If Account Codes are hidden, each digit you dial shows an "✱" character on the telephone display.

3. Dial ✱.
   - OR -
   Press your Account Code key (Program 15-07-01 or SC **851** : code 50).

To enter a Forced Account Code before dialing the outside number:

If your system has Forced or Verified Account Codes, you may use this procedure instead of letting the system prompt you for your Account Code. You may also use this procedure if your system has Optional Account Codes.

If your system has Verified Account Codes enabled, be sure to choose a code programmed into your Verified Account Code list.

1. Access trunk for outside call.

   You can access a trunk by pressing a line key or dialing a code. Refer to Central Office Calls, Placing on page 1-106 for more information.

2. Dial ✱.
   - OR -
   Press your Account Code key (Program 15-07-01 or SC **851** : code 50).

3. Dial your Account Code [1~16 digits, using 0~9 and # or (3~16 digits for Forced)].

   If you make an incorrect entry, your system may automatically alert the operator. If Account Codes are hidden, each digit you dial shows an ✳ on the telephone display (depending on programming).

4. Dial ✳.
   - OR -
   Press your Account Code key (Program 15-07-01 or SC **851** : code 50).
5. Dial the number you want to call.

To dial an outside number and let your system tell you when a Forced Account Code is required:

1. Access a trunk and dial the number you want to call.
2. Wait for your call to go through.
   - OR -
3. If you hear *"Please enter an Account Code,"(depending on system programming)* and your display shows *ENTER ACCOUNT CODE*.
   - Dial ✳.
     - OR -
     Press your Account Code key (Program 15-07-01 or SC **851** : code 50).
   - Dial your Account Code (3~16 digits, using 0~9 and #).
     If Account Codes are hidden, each digit you dial shows an ✳ on the telephone display.
   - Dial ✳.
     - OR -
     Press your Account Code key (Program 15-07-01 or SC **851** : code 50).

To enter an Account Code for an incoming call:

This procedure is not available for single line telephones.

1. Answer incoming call.

   If Account Codes for Incoming Calls is disabled, the following steps dial digits out onto the connected trunk.

2. Dial ✳.
3. Enter the Account Code (1~16 digits).

   You can enter any code of the proper length.

4. Dial ✳.

To enter a Forced Account Code at a single line telephone:

1. Access trunk for outside call.

   You can access a trunk by dialing a code. Refer to Central Office Calls, Placing for more information.

   With Forced Account Codes, you hear, "Please enter an Account Code."(depending on programming).

2. Dial ✳.
3. Enter Account Code (3~16 digits).
4. Dial ✳.
5. Dial number you want to call.

Account Code Entry

Description

Account Codes are user-dialed codes that help the system administrator categorize and/or restrict trunk calls. Optional Account Codes allow a user to enter an Account Code while placing a trunk call or anytime while on a call. The system does not require the user to enter the optional account code.

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Account Codes for Incoming Calls

The system can control extension user ability to enter Account Codes for incoming calls. When this option is enabled, a user can dial * while on an incoming call, enter an Account Code, and then dial * to return to their caller. If the option is disabled, any digit the user dials after answering an incoming call outdials on the connected trunk.

Hiding Account Codes

Account Codes can be optionally hidden from a telephone display. This prevents, for example, an unauthorized co-worker from obtaining a Verified Account Code by watching the display and making note of the digits that dial out. When hidden, the Account Code digits show an * on the telephone display.

Account Code Capacity

Account Codes print along with the other call data on the SMDR record after the call completes. Account Codes can have 1~16 digits using 0~9 and #.

Redialed Numbers Do Not Contain Account Codes

When using the Last Number Redial, Save or Repeat Dial features, the system does not retain Account Code information. To redial any number with these features, the user must enter an Account Code.

*If a user enters *12345*203 926 5400*67890*, if the Last Number Redial feature is used, the system dials the number as 203 926 5400*67890*. The *67890* is not treated as an Account Code.*

Conditions

- If a user enters a code that exceeds 16 digits limit, the system ignores it.
- If the system has Account Codes disabled, the digits dialed (e.g., *1234*) appear on the SMDR report as part of the number dialed.
- Do not use an asterisk in a PBX access code when using Account Codes. Otherwise, after the *, the trunk stops sending digits to the central office.
- Account Codes appear on the SMDR report (even if they are hidden on the telephone display).
- To simplify Account Code Entry, store the Account Code (e.g., 1234) in a One-Touch Key, and Press the key instead of dialing the code.
- Speed Dialing bins can contain stored Account Codes. Prevent them from being displayed using Program 20-07-04.
- When Account Codes are enabled, the user must press the * three times before the * character is passed to the telco. The system recognizes the initial * as the beginning of an Account Code entry, the second * as the end of an Account Code entry, and the third * is passed to telco.

Default Settings

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Automatic Route Selection (ARS/F-Route)

One-Touch Calling

PBX Compatibility/Behind PBX

Station Message Detail Recording

Guide to Feature Programming

Program Number	Program Name	Default
14-01-11	**Basic Trunk Data Setup - Account Code Required**	1
15-07-01	**Programmable Function Keys** Account Code key (code 50)	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
21-01-04	**System Options for Outgoing Calls - Dial Tone Detection Time**	5 (seconds)
35-05-01	**Account Code Setup - Account Code Mode**	0
35-05-02	**Account Code Setup - Forced Account Code Toll Call Setup**	0
35-05-03	**Account Code Setup - Account Codes for Incoming Calls**	0
35-05-04	**Account Code Setup - Hiding Account Codes**	0
35-06-01	**SMDR Account Code Setup - Verified Account Code**	No setting

Operation

To enter an Account Code anytime while on a trunk call:

The outside caller cannot hear the Account Code digits you enter. You can use this procedure if your system has Optional Account Codes enabled. You may also be able to use this procedure for incoming calls. This procedure is not available for single line telephones.

1. Dial ✱.
   - OR -
   Press your Account Code key (Program 15-07 or SC **851** : code 50).

2. Dial your Account Code (1~16 digits, using 0~9 and #).

   *If Account Codes are hidden, each digit you dial shows an * on the telephone display.*

3. Dial *.
   - OR -
   Press your Account Code key (Program 15-07 or SC **851** : code 50).

To enter an Account Code before dialing the outside number:

If your system has Forced or Verified Account Codes, you may use this procedure instead of letting the system prompt you for your Account Code. You may also use this procedure if your system has Optional Account Codes.

If your system has Verified Account Codes enabled, be sure to choose a code programmed into your Verified Account Code list.

1. Access trunk for outside call.

   Press a line key or dial a code to access a trunk. Refer to Central Office Calls, Placing on page 1-106 for more information.

2. Dial *.
   - OR -
   Press your Account Code key (Program 15-07 or SC **851** : code 50).
3. Dial your Account Code (1~16 digits, using 0~9 and #).

   *If you make an incorrect entry, your system may automatically alert the operator. If Account Codes are hidden, each digit you dial shows an * on the telephone display.*

4. Dial *.
   - OR -
   Press your Account Code key (Program 15-07 or SC **851** : code 50).
5. Dial the number you want to call.

To enter an Account Code for an incoming call:

This procedure is not available for single line telephones.

1. Answer incoming call.

   If Account Codes for Incoming Calls is disabled, the following steps dial digits out to the connected trunk.

2. Dial *.
3. Enter the Account Code.

   You can enter any code of the proper length. Incoming Account Codes cannot be Forced or Verified.

4. Dial *.

To enter an Account Code at a single line telephone:

1. Access trunk for outside call.

   You can access a trunk by dialing a code. Refer to Central Office Calls, Placing on page 1-106 for more information.

2. Dial *.
3. Enter Account Code (1~16 digits).
4. Dial *.
5. Dial number you want to call.

Alarm

Description

Alarm lets any station extension work like an Alarm clock. An extension user can have Alarm remind them of a meeting or an appointment. There are two types of Alarms:

- Alarm 1 (sounds only once at the preset time)
- Alarm 2 (sounds every day at the preset time)

Conditions

- Single line telephones ring and Music on Hold is heard when the Alarm sounds.
- Only a Multiline Terminal user can view what time the Alarm is currently set for.

Default Settings

Enabled

System Availability

Terminals

Any Station

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
20-01-06	**System Options - Alarm Duration**	30 (seconds)

Operation

To set the alarm:

1. At the multiline terminal, press **Speaker**.
   - OR -
   At the single line telephone, lift the handset.
2. Dial 827 .
3. Dial alarm type (1 or 2).

Alarm 1 sounds only once. Alarm 2 sounds each day at the preset time.

4. Dial the alarm time (24-hour clock).

   For example, for 1:15 PM dial 1315. A confirmation tone is heard if the alarm has been set. If the alarm was not set, an error tone is heard instead.

5. At the multiline terminal, press **Speaker** to hang up.
   - OR -
   At the single line telephone, hang up.

To silence an alarm:

1. At multiline terminal, press **Exit**.
   - OR -
   At the single line telephone, lift the handset.

   The single line set user hears Music on Hold when the handset is lifted.

To check the programmed alarm time at a multiline terminal:

1. Press **Help**.
2. Dial 827 .
3. Dial alarm type (**1** or **2**).

   The programmed time displays.

4. Press **Exit**.

To cancel an alarm:

1. At the multiline terminal, press **Speaker**.
   - OR -
   At the single line telephone, lift the handset.
2. Dial 827 .
3. Dial alarm type (**1** or **2**).
4. Dial **9999**.
5. At a multiline terminal, press **Speaker** to hang up.
   - OR -
   At the single line telephone, hang up.

Alarm Reports

Description

The SL1000 system logs various errors and reports information about the operation that can be used to determine the cause of a problem. The system can indicate several errors on the multiline telephone display, output to a Maintenance CF card on the CPU, or be downloaded in PCPro. The report data also can be sent via e-mail.

DSP Resource Full

When attempting a call requiring an IP to TDM conversion and no DSP resource is available, the system displays a message on multiline terminal and can generate an alarm via the Alarm Report.

IP Collision

System is able to detect another device on the same subnet having an IP address that conflicts with those assigned to the CPU, VoIPDB and DSP resource to make trobleshooting easy when IP packets are not sent.

Alarm Report

The Alarm Reports indicate:

- System start-up/upgrade date and time
- Unit communication error with date and time and the restoration date and time
- Date and time a unit was removed from the system
- Date and time an extension was disconnected from the system
- Date and time of any system data change

Table 1-2 Sample Alarm Report

<< Alarm Report **05/16/2006 14:30 PAGE 001**

LVL	NO	STAT	DATE	TIME	ITEM	UNIT	SLT	PRT	PARAMETER
MIN	0002	REC	05/16/06	14:21	PKG Installation	PRT	02	00	
MAJ	0010	ERR	05/16/06	14:21	ISDN Link	PRT	02	12	
MAJ	0010	REC	05/16/06	14:21	ISDN Link	PRT	02	12	
MIN	0002	ERR	05/16/06	14:33	PKG Installation	PRT	02	00	
MIN	0002	ERR	05/16/06	14:33	PKG Installation	ESI	05	00	
MIN	0002	ERR	05/16/06	14:33	PKG Installation	SLIB	07	00	
MAJ	0050	WAR	05/16/06	14:33	System Start Up	none	00	00	
MIN	0002	REC	05/16/06	14:33	PKG Installation	PRT	02	00	
MAJ	0014	ERR	05/16/06	14:33	NTCPU-LAN Link	none	00	00	
MAJ	0014	REC	05/16/06	14:35	NTCPU-LAN Link	none	00	00	
MIN	0002	ERR	05/16/06	14:36	PKG Installation	CTP	08	00	
MIN	0002	REC	05/16/06	14:37	PKG Installation	VMS	08	00	
MIN	0002	ERR	05/16/06	14:38	PKG Installation	VMS	08	00	
MIN	0002	REC	05/16/06	14:40	PKG Installation	PRT	07	00	
MIN	0002	ERR	05/16/06	14:40	PKG Installation	PRT	07	00	
MAJ	0006	ERR	05/16/06	14:41	Blocking	ESIB	01	05	
MAJ	0006	REC	05/16/06	15:01	Blocking	ESIB	01	05	

<< Alarm Report **05/16/2006 14:30 PAGE 001**

LVL	NO	STAT	DATE	TIME	ITEM	UNIT	SLT	PRT	PARAMETER
MAJ	0006	ERR	05/16/06	15:05	Blocking	ESIB	01	07	
MAJ	0006	REC	05/16/06	15:07	Blocking	ESIB	01	07	
MIN	0068	ERR	01/22/09	09:30	VoIP All DSP Busy	VoIPDB	01	00	STA
MIN	0068	ERR	01/22/09	09:31	VoIP All DSP Busy	VoIPDB	01	00	TRK
MIN	0068	ERR	01/22/09	09:35	VoIP All DSP Busy	VoIPDB	01	00	LNK
MIN	0068	ERR	01/22/09	09:40	VoIP All DSP Busy	VoIPDB	01	00	NET

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Table 1-3 Alarm Report Definitions

Alarm Report Heading	Definitions
LVL	Alarm Type (MAJ = Major, MIN = Minor)
NO	Number of Alarm (4-digit)
STAT	Status (REC = Recovered, ERR = Error, WAR = Warning
DATE	Date the Alarm Occurred
TIME	Time the Alarm Occurred
ITEM	Name of the Alarm
UNIT	Name of the Unit
SLT	Chassis Slot Number
PRT	Chassis Port Number
PARAMETER	Related Information

Table 1-4 Alarm Report Item Definitions

Item Name	Definition
PKG Installation	Unit is removed or inserted.
ISDN Link	ISDN Line failure is detected.
CPU LAN Link	CPU LAN connection failure is detected.
Blocking	Terminal Failure may have occurred because terminal blocking is detected. Terminal is unplugged or wire is disconnected.
System Data Change	System Upgrade performed or Programming change.
System Start Up	System is reset.
SMDR Link	Connection failure is detected between the CPU and SMDR printer device.
STA	DSP for IP Station CAll were all busy.
TRK	DSP for Trunk Call were all busy, includes SIP trunks.

System Information

The system can print a report of the units installed, the port assignments, and the port types. This information is sent to the extension defined in Program 90-13.

The System Information Reports indicate:

- Date and Time of the Report
- Unit names

- Slot condition (working, blocked)
- Port assignment
- Port classification

Table 1-5 Sample System Information Printout

System Information				Date	
slot	**location**	**type**	**assign port**	**condition**	**note**
1	1–1	408M	-none-	Running	Slot 1 : Information of 408M
		COIU	1–4	Running	Slot 1 : Information of 408M (COI)
		HBIU	1–8	Running	Slot 1 : Information of 408M (HBI)
		-none-	-none-	Not Install	Slot 1 : Information 2 of 408M (HBI) *1
2	1–2	408M	-none-	Running	Slot 2 : Information of 408E/008E
		COIU	5–8	Running	Slot 2 : Information of 408E (SUB SLOT : COI)
		HBIU	9–16	Running	Slot 2 : Information of 408E (SUB SLOT : HBI)
		-none-	-none-	Not Install	Slot 2 : Information of 408E (SUB SLOT : HBI) *1
3	1–3	-none-	-none-	Not Install	Slot 3 : Information of 000E (Shows as None)
4	1–4	408M	-none-	Running	Slot 4 : Information of 408E/008E
		COIU	9–12	Running	Slot 4 : Information of 408E (SUB SLOT : COI)
		HBIU	17–24	Running	Slot 4 : Information of 408E (SUB SLOT : HBI)
		-none-	-none-	Not Install	Slot 2 : Information 2 of 408E (SUB SLOT : HBI) *1
2	1–2	-none-	-none-	Not Install	Slot 2 : Information of PRI/BRI
3	1–3	BRIU	13–16	Running	Slot 3 : Information of PRI/BRI
4	1–4	-none-	-none-	Not Install	Slot 4 : Information of PRI/BRI
5	2–1	-none-	-none-	Not Install	Slot 5 : Information of EXIFE1 (408M)
6	2–2	-none-	-none-	Not Install	Slot 6 : Information of EXIFE1 (Slot 2 : 408E/008E/000E)
7	2–3	-none-	-none-	Not Install	Slot 7 : Information of EXIFE1 (Slot 3 : 408E/008E/000E)
8	2–4	-none-	-none-	Not Install	Slot 8 : Information of EXIFE1 (Slot 4 : 408E/008E/000E)
6	2–2	-none-	-none-	Not Install	Slot 6 : Information of EXIFE1 (Slot 2 : BRI/PRI)
7	2–3	-none-	-none-	Not Install	Slot 7 : Information of EXIFE1 (Slot 3 : BRI/PRI)
8	2–4	-none-	-none-	Not Install	Slot 8 : Information of EXIFE1 (Slot 4 : BRI/PRI)
9	3–1	408M	-none-	Running	Slot 9 : Information of EXIFE2 (408M)
		COIU	17–20	Running	Slot 9 : Information of EXIFE2 (408M : SUB SLOT (COI))
		HBIU	25–32	Running	Slot 9 : Information of EXIFE2 (408M : SUB SLOT (HBI))
		-none-	-none-	Not Install	Slot 9 : Information of EXIFE2 (408M : SUB SLOT 2 (HBI)) *1

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System Information				Date	
slot	location	type	assign port	condition	note
10	3–2	-none-	-none-	Not Install	Slot 10 : Information of EXIFE2 (Slot 2 : 408E/008E/000E)
11	3–3	008E	-none-	Running	Slot 11 : Information of EXIFE2 (Slot 3 : 408E/008E/000E)
		HBIU	33–40	Running	Slot 11 : Information of EXIFE2 (Slot 3 : 008E : SLOT (HBI))
		-none-	-none-	Not Install	Slot 11 : Information of EXIFE2 (Slot 3 : 008E : SLOT2 (HBI)) *1
12	3–4	-none-	-none-	Not Install	Slot 12 : Information of EXIFE2 (Slot 4 : 408E/008E/000E)
10	3–2	BRIU	21–24	Running	Slot 10 : Information of EXIFE2 (Slot 2 : BRI/PR)
11	3–3	-none-	-none-	Not Install	Slot 11 : Information of EXIFE2 (Slot 3 : BRI/PRI)
12	3–4	-none-	-none-	Not Install	Slot 12 : Information of EXIFE2 (Slot 4 : BRI/PRI)
13	4–1	408M	-none-	Running	Slot 13 : Information of EXIFE3 (408M)
		-none-	-none-	Not Install	Slot 13 : Information of EXIFE3 (408M : SUB SLOT (COI)) *4
		HBIU	41–48	Running	Slot 13 : Information of EXIFE3 (408M : SUB SLOT (HBI))
		-none-	-none-	Not Install	Slot 13 : Information of EXIFE3 (408M : SUB SLOT (HBI)) *1
14	4–2	-none-	-none-	Not Install	Slot 14 : Information of EXIFE3 (Slot 2 : 408E/008E/000E)
15	4–3	-none-	-none-	Not Install	Slot 15 : Information of EXIFE3 (Slot 3 : 408E/008E/000E)
16	4–4	-none-	-none-	Not Install	Slot 16 : Information of EXIFE3 (Slot 4 : 408E/008E/000E)

1. *HBIU control both SLT and KST in same pakage. It will show both information but since it shows same information one of page will show as "none".*
2. *Shows 000E as "-none-".*
3. *Shows 408M/408E/008E and PRI/BRI as different output.*
4. *COIU of Expansion3 has a restriction and it will show as "-none-".*

Conditions

- Alarm Reports and System Information Reports can be output to a CF card on the CPU.
- The SL1000 supports the following Alarms to be output to the LCD of a multiline terminal:
  - SMDR Buffer Full
  - CPU-LAN link Error
- The SL1000 does not support printouts of the following Alarms:
  - Power Failure
  - RAM Backup Battery Error
  - Networking Keep Alive Error
- Up to 12 System Alarm times can be scheduled to print on a Monthly, Daily, and Hourly time frame. The report indicates both Major and Minor Alarms.
- System Information Reports cannot be set to output at a scheduled time.
- When using the E-mail functionality of reports, the E-mail address in Program 90-11-10 (From Address) must be set for the E-mail feature to work.
- After a new alarm is output, it cannot be output a second time.New alarms must be generated before Program 90-12-04 can be performed a second time.

- Up to 100 System Alarm Reports can be stored. When the buffer fills, the oldest record is deleted to allow the new record to be saved.
- If the System is set up to E-mail the Alarm Reports and the Mail Server is down, the report is not sent.
- System Information Reports cannot be set for output via E-mail.
- Scheduled Alarm Reports via E-mail prints all alarms. When the system detects New alarms, this information is output via E-mail individually.
- E-mail Alarm Reports can be sent when each New alarm occurs (Per Event). If you want to receive complete Alarm Reports periodically, you must specify 12 individual dates and times in Program 90-24-01 ~ Program 90-24-04 (per period).

A maximum of 99 entries are emailed with the scheduled alarms.

Default Settings

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

Compact Flash Card

Related Features

None

Guide to Feature Programming

Setting Up Alarms:

Program Number	Program Name	Default
90-10-01	System Alarm Setup - Alarm Type	0
90-10-02	System Alarm Setup - Report	0
90-24-01	System Alarm Report Notification Time Setup - Month	00
90-24-02	System Alarm Report Notification Time Setup - Day	00
90-24-03	System Alarm Report Notification Time Setup - Hour	00
90-24-04	System Alarm Report Notification Time Setup - Minute	00

Printing Reports:

Program Number	Program Name	Default
90-12-01	System Alarm Output - Output Port Type	0

Printing System Information Reports:

Program Number	Program Name	Default
90-13-01	System Information Output - Output Port Type	0
90-13-02	System Information Output - Destination Extension Number	No setting

E-mailing Alarm Reports:

Program Number	Program Name	Default
10-12-01	CPU Network Setup - IP Address	192.168.0.10
10-12-02	CPU Network Setup - Subnet Mask	255.255.255.0
10-12-03	CPU Network Setup - Default Gateway	0.0.0.0
90-11-02	System Alarm Report - Report Method	0
90-11-06	System Alarm Report - SMTP Host Name	No setting
90-11-07	System Alarm Report - SMTP Host Port Number	25
90-11-08	System Alarm Report - To Email Address	No setting
90-11-09	System Alarm Report - Reply Address	No setting
90-11-10	System Alarm Report - From Address	No setting
90-11-11	System Alarm Report - DNS Primary Address	0.0.0.0
90-11-12	System Alarm Report - DNS Secondary Address	0.0.0.0
90-11-13	System Alarm Report - Customer Name	No setting
90-25-01	System Alarm Report CC Mail Setup - CC Mail Address	No setting

Operation

To use this feature at any terminal:

The user must be logged in with an Installer (IN) level password as defined in Program 90-02.

Alphanumeric Display

Description

Multiline display telephones have a 2-line, 16 character-per-line Alphanumeric Display that provides various feature status messages. These messages help the display telephone user process calls, identify callers and customize features.

Conditions

- When the telephone is IDLE contrast can not be changed when BGM is enable or when Navigation Mode (15-02-60) is enable.
- When Navigation is enabled Contrast can be changed by using a Navigation mode.

Default Settings

Enabled for all display telephones.

System Availability

Terminals

All Display Multiline Terminals.

Required Component(s)

None

Related Features

Clock/Calendar Display/Time and Date

Selectable Display Messaging

Guide to Feature Programming

Program Number	Program Name	Default
11-11-13	**Service Code Setup (for Setup/Entry Operation) - Display Language Selection for Multiline Terminal**	778
15-02-01	**Multiline Telephone Basic Data Setup - Display Language Selection** (To select options 8~10, press either 8 or Flash, then press line keys 1~3. Key 1 is option 8, Key 2 is option 9, and Key 3 is option 10.)	1
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-11-08	**Class of Service Options (Hold/Transfer Service) - Transfer Information Display**	COS 01~15 = 1

Operation

Operation is automatic if enabled in programming.

Analog Communications Interface (ACI)

Description

The Analog Communications Interface (ACI) feature uses an analog ports (with associated relays) for Music on Hold, External Paging, and Back Ground Music (BGM).

External Paging, External MOH and BGM

By setting the PRG10-03-02, COI to "1=Audio Port" at 408M-A1, the trunk ports CO2 to CO4 can be used for audio port (External paging, External MOH, BGM).

Each CO ports are configured as follows, COI2 : Paging Out, COI3 : MOH In, COI4 : BGM In. System can only have 1 BGM/MOH port. If more than one port are set as MOH, BGM the youngest 408M-A1 ports will be used. For example if expansion KSU2 and KSU3 have programmed for BGM or MOH, KSU3 setting will be ignored and BGM/MOH of KSU2 will be active.

External paging can be set for each 408M-A1 units except 3rd Expansion KSU. So maximum 3 External paging can be usable.

Relay Control

1 KSU has 2 relay ports (J7) on 408M-A1 unit. The System can have up to 8 relay ports.

These relays can be used for External MOH, BGM resource, External Speaker, or Door Phone control in accordance with PRG10-61-01 and PRG10-61-02 setting.

Conditions

Interface Specifications	
Relay Contacts	
Maximum Contact Ratings	48 VDC @ 320 mA
BGM/ExMOH Source Input	
Output Impedance	600 Ohms @ 1 KHz
Input Level	250 mV (– 10 dBm)
Maximum Input	1.0 Vrms
External Paging Output	
Output Impedance	600 Ohms @ 1 KHz
Output Level	250 mV (– 10 dBm)
Maximum Output	400 mVrms

Default Settings

Disabled

System Availability

Terminals

None

Required Component(s)

None

Related Features

Background Music

Hotline

One-Touch Calling

Paging, External

Door Box

Music on Hold

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-03-02	ETU Setup (COIU Unit Setup) - Select port type	0	
10-61-01	Relay Type	0 = No setting 1 = External MOH 2 = BGM resource 3 = External Speaker 4 = Door Phone	
10-61-02	Destination Selection	[In case 10-61-01 is 1 or 2] = Not Use [In case 10-61-01 is 3] = 1-3 External Speaker message No [In case 10-61-01 is 4] = 1-8 Door Phone No	

Operation

None

Answer Hold/Automatic Hold

Description

Answer Hold/Automatic Hold allows a multiline terminal user to press the flashing **Line** Key to answer an incoming ringing call or a Camp-On call. When the multiline terminal user is already answering a call, the first call is automatically placed on hold, depending on the user setting in Program 15-02-06.

Conditions

- When multiple incoming calls activate the **Line** Key LED, the LED continues to flash until all calls are answered.
- Use Program 15-02-06 (Normal Common, Exclusive Hold, Park Hold) to set the type of Hold key to be used (Default = Normal Common).
- For calls placed in a Park Group, the LED blinks slow (green).
- For calls placed in a Park Group by another user, the LED blinks slow (red).
- The Answer Hold/Automatic Hold Feature is not available for Virtual Extensions.
- The Answer Hold/Automatic Hold Feature does not function for incoming internal calls.
- CO/PBX incoming calls, not assigned to ring or assigned to another ring group, do not activate the Answer Hold feature.
- If the direct trunk appearance key is not assigned, the next incoming call cannot be answered.

Default Settings

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

Not Applicable

Related Features

Central Office Calls, Answering

Guide to Feature Programming

Program Number	Program Name	Default
15-02-06	**Multiline Telephone Basic Data Setup - Hold Key Operating Mode**	0
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
11-12-32	**Service Code Setup (for Service Access) - Answer for Park Hold**	✱6
20-09-01	**Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/DIL Override**	COS 01~15 = 0

Operation

To answer a call on a different line key with a call in progress:

1. Receive a CO/PBX, DID/DISA/DIL incoming ring.

   Line flashes.

2. Press **Line** and answer the new call.

   The Line LED goes out. The original call is put on hold.

3. If additional calls are received, press **Line** to place the current call on hold and connect to the next call as long as CO line keys are available.

Attendant Call Queuing

A

Description

Attendant extensions can have up to 32 incoming calls queued before additional callers hear busy tone. This helps minimize call congestion in systems that use the attendant as the overflow destination for unanswered calls. For example, you can program Direct Inward Lines and Voice Mail calls to route to the attendant when their primary destination is busy. With Attendant Call Queuing, these unanswered calls would normally “stack up” for the attendant until they can be processed.

The 32 call queue total includes Intercom, DISA, DID, DIL and transferred calls. If the attendant does not have an appearance for the queued call, it waits in line to be answered. If the attendant has more than 32 calls queued, an extension can Transfer a call to the attendant only if they have Busy Transfer enabled.

Attendant Call Queuing is a permanent, non-programmable system feature.

Conditions

- Forwarding when unanswered or busy can occur only at the attendant if there are more than 32 calls in queue.
- Assigning a station as operator in Program 20-17-01 enables call queuing function.
- Program 20-17-01 setting overrides setting in Program 20-09-07:Call Queuing Class of Service Option when set to disable.

Default Settings

Enabled

System Availability

Terminals

Any Multiline Terminal assigned as an operator

Required Component(s)

None

Related Features

Call Forwarding

Guide to Feature Programming

Program Number	Program Name	Default
11-01-01	**System Numbering - Service Code**	Refer to Programming Manual.
20-01-01	**System Options - Operator Access Mode**	0
20-09-07	**Class of Service Options (Incoming Call Service) - Call Queuing**	COS 01~15 = 0
20-17-01	**Operator Extension - Operator’s Extension Number**	200
24-02-01	**System Options for Transfer - Busy Transfer**	0

Operation

None

Automatic Release

Description

Automatic Release drops the line circuit when an outside party abandons the call. For this feature to work with Loop Start Trunks, the CO/PBX providing the outside line must provide a timed disconnect signal. Automatic Release is normally provided on Ground Start, DID and ISDN trunks.

Conditions

- Automatic Release on ISDN trunks is provided by the protocol.
- When an outside line is accessed using a dedicated line key, the LED associated with the line key goes off when Automatic Release occurs.
- On Loop Start trunks Automatic Release is only available on incoming calls.
- This feature functions while a call is in progress, on hold, or in a conference.
- This feature applies to all ICM type calls in progress, holding or parked.
- When Automatic Release occurs and the telephone is in handsfree mode, **Speaker** automatically turns off. If using the handset, the station is set to idle when the handset goes on-hook.

Default Settings

None

System Availability

Terminals

Not applicable

Required Component(s)

None

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Guide to Feature Programming

Program Number	Program Name	Default
14-02-09	**Analog Trunk Data Setup - Busy Tone Detection**	0
14-02-14	**Analog Trunk Data Setup - Loop Start/Ground Start**	0
80-04-01	**Call Progress Tone Detector Setup - Detection Level**	Type 1 (DT) = 0 (-25dBm) Type 2 (BT) = 0 (-25dBm) Type 3 (RBT) = 0 (-25dBm) Type 4 = 0 Type 5 = 0
80-04-02	**Call Progress Tone Detector Setup - Min. Detection Level**	Type 1 (DT) = 15 (-25dBm) Type 2 (BT) = 15 (-25dBm) Type 3 (RBT) = 15 (-25dBm) Type 4 = 0 Type 5 = 0

Program Number	Program Name	Default
80-04-03	**Call Progress Tone Detector Setup - S/N Ratio**	Type 1 (DT) = 4 (-20dB) Type 2 (BT) = 4 (-20dB) Type 3 (RBT) = 4 (-20dB) Type 4 = 0 Type 5 = 0
80-04-04	**Call Progress Tone Detector Setup - No Tone Time**	Type 1 (DT) = 132 (3990ms) Type 2 (BT) = 132 (3990ms) Type 3 (RBT) = 132 (3990ms) Type 4 = 0 Type 5 = 0
80-04-05	**Call Progress Tone Detector Setup - Pulse Count**	Type 1 (DT) = 1 Type 2 (BT) = 1 Type 3 (RBT) = 1 Type 4 = 0 Type 5 = 0
80-04-06	**Call Progress Tone Detector Setup - ON Minimum Time**	Type 1 (DT) = 63 (1920ms) Type 2 (BT) = 12 (390ms) Type 3 (RBT) = 25 (780ms) Type 4 = 0 Type 5 = 0
80-04-07	**Call Progress Tone Detector Setup - ON Maximum Time**	Type 1 (DT) = 0 Type 2 (BT) = 20 (630ms) Type 3 (RBT) = 40 1230ms) Type 4 = 0 Type 5 = 0
80-04-08	**Call Progress Tone Detector Setup - OFF Minimum Time**	Type 1 (DT) = 1 (60ms) Type 2 (BT) = 12 (390ms) Type 3 (RBT) = 52 (1590ms) Type 4 = 0 Type 5 = 0
80-04-09	**Call Progress Tone Detector Setup - OFF Maximum Time**	Type 1 (DT) = 1 (60ms) Type 2 (BT) = 20 (630ms) Type 3 (RBT) = 80 (2430ms) Type 4 = 0 Type 5 = 0

A

Operation

None

Automatic Route Selection (ARS/F-Route)

Description

Automatic Route Selection (ARS/F-Route) provides call routing and call restriction based on the digits a user dials. ARS gives the system the most cost-effective use of the connected long distance carriers.

ARS is an on-line call routing program that you can customize (like other system options) from a display telephone. ARS accommodates 400 call routing choices - without a custom-ordered rate structure database. With ARS, you can modify the system routing choices quickly and easily. This is often necessary in the telecommunications world of today where the cost structure and service choices frequently change.

The ARS feature can add or delete digits and route calls according to pre-determined levels.

ARS Feature Summary

ARS provides:

Call Routing

ARS can apply up to 36-digit analysis to every number dialed. For programming, ARS provides separate 4-digit and 36-digit tables. Each table can have up to 250 numbers.

- Dialing Translation (Special Dialing Instructions)
  ARS can automatically execute stored dialing instructions (called Dial Treatments) when it chooses a route for a call. The system allows up to 15 Dial Treatments. The Dial Treatments can:
  - Insert or delete an area code (NPA)
  - Add digits (such as a dial-up OCC number), pauses and waits to the dialing sequence
  - Require the user to enter an authorization code when placing a call (refer to Program 44-03)
- Time of Day Selection
  For routing purposes, ARS provides 10 different day selections (called Time Schedule Patterns). Each Time Schedule Pattern can provide up to 20 time intervals which are assigned to one of the eight day/night modes. The Time Schedule Patterns are then assigned to a day of the week (Monday~Friday, Saturday, Sunday or Holiday).
- Hierarchical Class of Service Control
  ARS allows or denies call route choices based on an extension ARS Class of Service. This allows lower Classes of Service (e.g., 1) to access routes unavailable to higher Classes of Service (e.g., 16). The system provides up to 16 (0=unrestricted, 1~16) ARS Classes of Service.
- Separate Routing for Selected Call Types
  To provide unique control, you can program separate routing instructions for:
  - Directory assistance calls
  - Emergency calls

Basic ARS Operation

When a user places an outside call, ARS analyzes the digits dialed and assigns one of 400 Selection Numbers to the call. The Selection Number chosen depends on which digits the user dialed. ARS then checks the time of day, the day of week and the extension ARS Class of Service. Based on these call routing options, ARS selects a trunk group for the call and imposes the Dial Treatment instructions (if any).

Class of Service Option Allows Outgoing Calls to Not Follow Access Map

Using this option allows a Class of Service to be set so that ARS does not follow the trunk access map settings (Program 14-07-01 and Program 15-06-01). The feature allows an extension user to have CO line keys on their telephone which allow incoming access only. The user has only outgoing access on the CO lines when using ARS to place a call.

Class of Service Matching

With the ARS Class of Service Match Access feature, you can determine whether the system should allow a call based on the COS assigned to the Dial Analysis Table (Program 26-02). This change can be used to create a tenant-like application. It then uses the trunk group defined in the Additional Entry in Program 26-02-03 to place the outgoing call.

When this feature is enabled, the calls are routed in sequential order, and forward provided the Class of Service for the trunk groups match.

For this feature, **Program 26-01-06: Automatic Route Selection Service**, **COS Match Access** is used.

The examples below use the following system programming:

Program 26-02 for Dial Analysis Table for ARS set as:

Table No.	Program 26-02-01 Dial	Program 26-02-02 Service Type	Program 26-02-03 Add Data	Program 26-02-04 ARS COS
1	203@@@@@@@	1:Route to trunk group	3 (Group 3)	5
2	214@@@@@@@	1:Route to trunk group	1 (Group 1)	4
197	@@@@@@@@@@	1:Route to trunk group	2 (Group 2)	4
198	@@@@@@@@@@	1:Route to trunk group	3 (Group 3)	3
199	@@@@@@@@@@	1:Route to trunk group	2 (Group 2)	2
200	@@@@@@@@@@	1:Route to trunk group	1 (Group 1)	1

Program 12-02 for Automatic Night Service Patterns as:

Time Pattern No.	Program 12-02-01 Start Time	Program 12-02-02 End Time	Program 12-02-03 Operation Mode
1	00:00	08:30	2 (Night)
2	08:30	17:00	1 (Day)
3	17:00	00:00	2 (Night)

Program 12-02 for Automatic Night Service Patterns as:

Mode	Ext. 301	Ext. 302	Ext. 401	Ext. 402
Mode 1 (Day)	1	2	3	3
Mode 2 (Night)	1	4	3	5

Program 26-01-03 for ARS Misdialed Number Handling as: 1 (Warning Tone)

With Program 26-01-06: ARS COS Match Access disabled (set to 0):

- If at 9:00 AM, each extension dialed 9+(203)926-5400
  All Extension would use Trunk Group 3
- If at 9:00 AM, each extension dialed 9+(214)262-2000
  All Extension would use Trunk Group 1
- If at 6:00 PM, each extension dialed 9+(203)926-5400
  All Extension would use Trunk Group 3
- If at 6:00 PM, each extension dialed 9+(214)262-2000
  Extension 301, 302 and 401 would use Trunk Group 1
  Extension 402 would not be able to dial out as the COS is lower

With Program 26-01-06: ARS COS Match Access enabled (set to 1):

- If at 9:00 AM, each extension dialed 9+(203)926-5400
  Extension 301 would use Trunk Group 1
  Extension 302 would use Trunk Group 2
  Extension 401, 402 would use Trunk Group 3
- If at 9:00 AM, each extension dialed 9+(214)262-2000
  Extension 301 would use Trunk Group 1
  Extension 302 would use Trunk Group 2
  Extension 401, 402 would use Trunk Group 3
- If at 6:00 PM, each extension dialed 9+(203)926-5400
  Extension 301 would use Trunk Group 1
  Extension 302 would use Trunk Group 2
  Extension 401, 402 would use Trunk Group 3
- If at 6:00 PM, each extension dialed 9+(214)262-2000
  Extension 301, 302 would use Trunk Group 1
  Extension 401 would use Trunk Group 3
  Extension 402 would not be able to dial out as the COS does not match

Conditions

- Do not use ARS behind a Centrex/PBX.
- Line keys, outgoing trunk group keys, dialing **804** + trunk group, dialing +trunk number, and speed dial numbers assigned to a certain trunk group can all be used to by-pass ARS.
- If no PBX access code is entered in the Dial Treatment, the system can still dial 911.
- Toll Restriction overrides ARS.
- A system with Automatic Route Selection cannot also have Trunk Group Routing.
- With ARS installed, Trunk Queuing automatically queues for the least costly route. The system automatically redials the queued call when the extension user lifts the handset.
- Speed Dialing may bypass ARS routing.
- Set up other options for outgoing calls (e.g., unassign line keys, adjust gains, ARS access key, etc.).
- Refer to the Dial Tone Detection feature for the specifics on how the system handles Dial Tone Detection.
- ARS does not permit 0 and 011 + calls to be routed out separate trunk groups. The SL1000 supports only direct trunk selection for dial 0 (Operator) type calls.
- If a user dials a number not programmed in ARS, Program 26-01-03 determines if the system should route over the trunk group settings defined in Program 21-02 or play an error tone.
- When using ARS Class of Service, with Program 26-01-03 set to (1) "Play Warning Tone", Any trunk pointed or transferred to a virtual that is Call Forward Off-Premise will not complete. For a virtual to Call Forward Off-Premise, Program 26-01-03 must be set to "Route to trunk group" and the call will follow the trunk group settings of the trunk, assigned in Program 21-03.
- When using ARS Class of Service, with Program 26-01-03 set to (1) "Play Warning Tone" or transferred to a virtual that is call forwarded off premise will always follow ARS Class 1 routing properties.

Default Setting

Disabled

System Availability

Terminals

None

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Central Office Calls, Placing

Code Restriction/Toll Restriction

Dial Tone Detection

Trunk Group Routing

Trunk Queuing/Camp On

A

Guide to Feature Programming

Program Number	Program Name	Default	Note
11-01-01	**System Numbering**	Refer to Programming Manual.	
11-09-01	**Trunk Access Code**	9	
11-09-02	**2nd Trunk Route Access Code**	No setting	
12-01-01	**Night Mode Function Setup - Manual Night Mode Switching**	1	
12-01-02	**Night Mode Function Setup -Automatic Night Mode Switching**	0	
12-02-01	**Automatic Night Service Patterns - Start Time**	Refer to Programming Manual.	
12-02-02	**Automatic Night Service Patterns - End Time**	Refer to Programming Manual.	
12-02-03	**Automatic Night Service Patterns - Operation Mode**	Refer to Programming Manual.	
12-03-01	**Weekly Night Service Switching**	Night Mode Service Group Numbers: 01 Sunday = Time Pattern 1 02 Monday = Time Pattern 2 03 Tuesday = Time Pattern 3 04 Wednesday = Time Pattern 4 05 Thursday = Time Pattern 5 06 Friday = Time Pattern 6 07 Saturday = Time Pattern 7	
12-04-01	**Holiday Night Service Switching**	not assigned	
12-05-01	**Night Mode Group Assignment for Extensions**	1	
12-06-01	**Night Mode Group Assignment for Trunks**	1	
12-07-01	**Text Data for Night Mode**	Text Messages for Day / Night Modes : Mode 1 = No setting Mode 2 = Night Mode 3 = M-Night Mode 4 = Rest Mode 5 = Day2 Mode 6 = Night2 Mode 7 = M-Night2 Mode 8 = Rest2	
12-08-01	**Night Mode Service Range**	2	
14-05-01	**Trunk Group - Trunk Group Number**	Trunk Port 1~126 = Priority 1~126	

A

Program Number	Program Name	Default	Note
14-07-01	**Trunk Access Map Setup**	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).	
15-06-01	**Trunk Access Map for Extensions**	1	
15-13-01	**Loop Keys - Outgoing Option**	0: Programming Function Key No. = 01-32	
15-13-02	**Loop Keys - Incoming Option**	0: Programming Function Key No. = 01-32	
20-03-04	**System Options for Single Line Telephones - Dial Sending Start Time for SLT or ARS**	3	
20-06-01	**Class of Service for Extensions**	All extension port = Class 1	
20-08-17	**Class of Service Options (Outgoing Call Service) - ARS Override of Trunk Access Map**	COS 01~15 = 0	
21-02-01	**Trunk Group Routing for Extensions**	1	
26-01-01	**Automatic Route Selection Service - ARS Service**	0	
26-01-02	**Automatic Route Selection Service - Network Outgoing Inter-Digit ARS Timer**	30 (seconds)	
26-01-03	**Automatic Route Selection Service - ARS Misdialed Number Handling**	0	
26-01-06	**Automatic Route Selection Service - Class of Service Match Access**	0	
26-01-07	**Automatic Route Selection Service - F-Route Access COS Reference**	0	
26-02-01	**Dial Analysis Table for ARS/LCR - Dial**	not assigned	
26-02-02	**Dial Analysis Table for ARS - ARS Service Type**	0	
26-02-03	**Dial Analysis Table for ARS - Additional Data/Service Number**	0	
26-02-04	**Dial Analysis Table for ARS - ARS Class of Service**	0	
26-02-05	**Dial Analysis Table for ARS - Dial Treatment for ARS**	0	
26-02-07	**Dial Analysis Table for ARS - Network Specified Parameter Table**	0	
26-03-01	**ARS Dial Treatments - Treatment Code**	not assigned	
26-04-01	**ARS Class of Service**	0	
26-11-01	**Transit Network ID Table - Transmit Network ID (Carrier ID)**	not assigned	
44-01-01	**System Options for ARS/F-Route - ARS/F-Route Time Schedule**	0	
44-02-01	**Dial Analysis Table for ARS/F-Route Access - Dial**	not assigned	
44-02-02	**Dial Analysis Table for ARS/F-Route Access - Service Type**	0	
44-02-03	**Dial Analysis Table for ARS/F-Route Access - Additional Data**	0	

Program Number	Program Name	Default	Note
44-02-04	**Dial Analysis Table for ARS/F-Route Access - Dial Tone Simulation**	0	
44-03-01	**Dial Analysis Extension Table - Dial**	not assigned	
44-03-02	**Dial Analysis Extension Table - ARS/F-Route Select Table Number (1~250)**	0	
44-03-03	**Dial Analysis Extension Table - ARS/F-Route Select Table Number (251)**	0	
44-03-04	**Dial Analysis Extension Table - Next Table Area Number (252)**	0	
44-04-01	**ARS/F-Route Selection for Time Schedule**	0	
44-05-01	**ARS/F-Route Table - Trunk Group Number**	0	
44-05-02	**ARS/F-Route Table - Delete Digits**	0	
44-05-03	**ARS/F-Route Table - Additional Dial Number Table**	0	
44-05-04	**ARS/F-Route Table - Beep Tone**	0	
44-05-05	**ARS/F-Route Table - Gain Table Number for Internal Call**	0	
44-05-06	**ARS/F-Route Table - Gain Table Number for Tandem Connections**	0	
44-05-07	**ARS/F-Route Table - ARS Class of Service**	0	
44-05-08	**ARS/F-Route Table - Dial Treatment**	0	
44-05-09	**ARS/F-Route Table - Maximum Digit**	0	
44-05-11	**ARS/F-Route - Network Specified Parameter Table**	0	
44-06-01	**Additional Dial Table**	not assigned	
44-07-01	**Gain Table for ARS/F-Route Access - Incoming Transmit**	32	
44-07-02	**Gain Table for ARS/F-Route Access - Incoming Receive**	32	
44-07-03	**Gain Table for ARS/F-Route Access - Outgoing Transmit**	32	
44-07-04	**Gain Table for ARS/F-Route Access - Outgoing Receive**	32	
44-08-01	**Time Schedule for ARS/F-Route**	All Schedule Patterns: 0:00 - 0:00, Mode 1	
44-09-01	**Weekly Schedule for ARS/F-Route**	01 Sunday = Time Pattern 1 02 Monday = Time Pattern 2 03 Tuesday = Time Pattern 3 04 Wednesday = Time Pattern 4 05 Thursday = Time Pattern 5 06 Friday = Time Pattern 6 07 Saturday = Time Pattern 7	
44-10-01	**Holiday Schedule for ARS/F-Route**	0	
80-03-01	**DTMF Tone Receiver Setup - Detect Level**	Type 1~5 = 0	
80-03-02	**DTMF Tone Receiver Setup - Start Delay Time**	Type 1~5 = 0	

A

Program Number	Program Name	Default	Note
80-03-03	**DTMF Tone Receiver Setup - Min. Detect Level**	Type 1 = 10 (-20dBm) Type 2 = 15 (-25dBm) Type 3 = 10 (-20dBm) Type 4 = 10 (-20dBm) Type 5 = 10 (-20dBm)	
80-03-04	**DTMF Tone Receiver Setup - Max. Detect Level**	Type 1~5 = 2 (-2dBm)	
80-03-05	**DTMF Tone Receiver Setup - Forward Twist Level**	Type 1 ~ 5 = 5 (6dBm)	
80-03-06	**DTMF Tone Receiver Setup - Backwards Twist Level**	Type 1 ~ 5 = 0 (1dBm)	
80-03-07	**DTMF Tone Receiver Setup - ON Detect Time**	Type 1 ~ 5 = 1 (30ms)	
80-03-08	**DTMF Tone Receiver Setup - OFF Detect Time**	Type 1 ~ 5 = 1 (30ms)	

A

Operation

To place a call using ARS:

1. At the multiline terminal, press **Speaker**.
   - OR -
   At the single line telephone, lift the handset.

   You hear normal Intercom dial tone.

2. Dial **9**.

   You hear a second, "stutter" dial tone.

3. Dial the outside number.
   If you hear another "stutter" dial tone, you must enter your extension ARS Authorization Code.

Background Music

Description

Background Music (BGM) sends music from a customer-provided music source to the Speakers of the Multiline Telephone when the station is idle.

Conditions

- Background Music stops while the Multiline Terminal is in use.
- Originating a call, answering a voice announcement, a ringing call, or internal paging interrupts Background Music.
- Background Music is not available on single line telephones.
- Refer to Analog Communication Interface (ACI) for detail settings.

Default Settings

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

- Externally provided Music Source.

Related Features

Music on Hold

Guide to Feature Programming

Program Number	Program Name	Default
10-24-01	**Daylight Savings Setup - Daylight Savings Mode**	0
10-61-01	**Relay Type**	0 = No setting 1 = External MOH 2 = BGM resource 3 = External Speaker 4 = Door Phone
10-61-02	**Destination Selection**	[In case 10-61-01 is 1 or 2] = Not Use [In case 10-61-01 is 3] = 1-3 External Speaker message No [In case 10-61-01 is 4] = 1-8 Door Phone No
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-13-30	**Class of Service Options (Supplementary Service) - Background Music**	COS 01~15 = 1

Operation

To turn Background Music on or off:

1. Press idle **Speaker**.
2. Dial **825** .
3. Press **Speaker** to hang up.

B

Barge-In

Description

Barge-In permits an extension user to break into another extension user's established call, including Conference calls. This sets up a Conference-type conversation between the intruding extension and the parties on the initial call. With Barge-In, an extension user can get a message through to a busy co-worker right away.

There are two Barge-In modes: Monitor Mode (Silent Monitor) and Speech Mode. With Monitor Mode, the caller Barging In can listen to another user's conversation but cannot participate. With Speech Mode, the caller Barging In can listen and join another user's conversation.

The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversation or other sound activities, whether or not contemporaneous with transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to a telephone conversation, such as using a beep tone or other notification methods or requiring the consent of all parties to the telephone conversation, prior to monitoring or recording the telephone conversation. Some of these laws incorporate strict penalties.

Conditions

- An extension user can barge-in on a conference.
- An extension user cannot barge-in on an Intercom call if one of the intercom callers is using Hands-free Answerback. Both Intercom parties must lift the handset or press Speaker.
- With Program 20-13-10 set to 0, a barged into call can be placed on hold by the originator of the outside call. Both the outside caller and the extension that barged into the call are placed on hold.
- With Program 20-13-10 set to 1, a call which is barged into can be placed on Park by the originator of the outside call, but only the outside caller is placed in Park. The extension which barged into the call is dropped.
- Privacy blocks Barge-In attempts.
- Function keys simplify the Barge-In operation.
- When Silent Monitor Mode is used, Mute key can be used to activate speech path to the internal and external parties.

Default Settings

Disabled

System Availability

Terminals

Multiline and Single Line Terminals

Required Component(s)

None

B

Related Features

Call Monitoring

Conference

Hold

Intercom

Off-Hook Signaling

Park

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
11-12-08	**Service Code Setup (for Service Access) - Barge-In**	810
11-16-02	**One-Digit Service Code Setup - Barge-In**	not assigned
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-13-10	**Class of Service Options (Supplementary Service) - Barge-In Monitor**	COS 01~15 = 0
20-13-15	**Class of Service Options (Supplementary Service) - Barge-In, Initiate**	COS 01~15 = 1
20-13-16	**Class of Service Options (Supplementary Service) - Barge-In, Receive**	COS 01~15 = 1
20-13-17	**Class of Service Options (Supplementary Service) - Barge-In Tone/Display (Intrusion Tone)**	COS 01~15 = 1
20-13-32	**Class of Service Options (Supplementary Service) - Multiple Barge-Ins**	COS 01~15 = 0
20-14-11	**Class of Service Options for DISA - DISA/Tie Trunk Barge-In**	COS 01~15 = 0
20-18-07	**Service Tone Timers - Intrusion Tone Repeat Time**	0 (seconds)
21-01-03	**System Options for Outgoing Calls - Trunk Interdigit Time (External)**	10 (seconds)

Operation

To Barge-In after calling a busy extension:

The time in Program 21-01-03 must expire before you can Barge-In.

1. Call a busy extension.
2. Press Barge-In key (Program 15-07-01 or SC **851** : 34).

To Barge-In without first calling the busy extension:

1. Pick up the handset or press **Speaker**.
2. Dial **810** .
   - OR -
   Press Barge-In key (Program 15-07-01 or SC **851** : 34).
3. Dial busy extension.

The extension user hears a warning tone.

The DISA user is rerouted to the defined ring group.

- OR -
The following steps are not available for DISA trunks:

1. Dial the extension number of the busy internal party.
2. Dial the single digit service code or the service code **810** .

To Barge-In to a Conference Call:

1. Pick up the handset or press **Speaker** and dial the service code (default = **810**).

   If the telephone does not have the proper COS, a warning tone is sent. After the user hangs up, the system automatically places a callback to the extension.

2. Dial the extension number or press a DSS key of a telephone within a conference call.
   When a new call is added to the conference, an intrusion tone is heard by all parties in the Conference, depending on system programming, and all display multiline terminals show the joined party. If a Conference is not possible:

   The extension user hears a warning tone.

   The DISA user is rerouted to the defined ring group.

   Not available for DISA.
   - OR -

   1. Dial the extension number of the internal party.
   2. Dial the single digit service code or the service code **810** .

Battery Backup - System Memory

Description

The battery on the CPU retains the Clock/Calendar and Last Number Redial (LNR) buffers for each station when the CPU encounters a power loss. With a fully charged battery, the settings are retained for approximately three years.

The system programmed memory (Customer Database) is stored in Nonvolatile Memory and can be erased only by performing a First Initialization.

For additional storage time and the database can be copied to the Compact Flash card on the CPU.

Conditions

- The battery on the CPU should be removed during long term storage but must be installed (protection against loss of power) just before ETU installation to provide battery backup for System Memory.
- When fully charged, the battery retains System Memory for approximately three years.
- You should replace the CPU battery every three years.
- During normal operation, the battery is continually recharged using a built-in charging circuit from the CPU.
- Battery backup on the CPU does not protect the following:
  - Callback
  - Off-line Status (for programming system or station assignments)
  - Repeat Redial
  - Trunk Queuing/Camp-On

Default Settings

None

The battery must be installed on the CPU prior to programming a customer database.

System Availability

Terminals

Not applicable

Required Component(s)

None

Related Features

Battery Backup - System Power

Guide to Feature Programming

Program Number	Program Name	Default
90-03-01	Save Data	not assigned

Operation

None

Battery Backup - System Power

Description

An External battery box provides complete system operating power for approximately 1 hour during commercial power outages. Actual time depends on system configuration, traffic conditions, and the capacity of the batteries.

Conditions

- During normal operation, the batteries are continually recharged by a built-in charging circuit.
- External Battery Box can be connected to the system to back up the system in the event of commercial power outage. Refer to the SL1000 System Hardware Manual for further details.

Default Settings

None

System Availability

Terminals

Not applicable

Required Component(s)

CPU

Related Features

Battery Backup - System Memory on page 1-48

Programming

None

Operation

None

Built-in Auto-Answering

Description

The system provides 1 port Built-in Auto-Answering feature without using PZ-VM21 or CF on CPU at default. This feature provides easy answering machine function inside the system which supports VRS prompt message and simple voice Mail function. VRS voice prompt or recorded voice message are saved in a flash memory on CPU unit.

Conditions

- Initially equipped the 1 port Built-in Auto-Answering feature in the CPU without any additional hardware.
- Max 4 VRS prompt messages and max 10 voice messages can be recorded in a flash memory on CPU unit. Total recording time is maximum 8 minutes for whole messages.
- Recorded voice messages are saved in VRS number 91 to 100. From 91 to 100 order, VRS number is used, when max 10 messages are recorded, new message can not be recorded until delete an old message.
- For fixed message 1 language is available in SL1000 . Default language will be “UK English”. If customer wants to change language, it can be replaced by downloading from website and uploading new language to CPU.
- In SL1000 2 languages (UK English, Chinese)
- When voice message is recorded, the notification will be displayed on the operator terminal LCD set in PRG 20-17-01. Any operation (off hook, key depress) at operator terminal will dispear the LCD notification.
- As long as CF is not attached, internal modem on PZ-VM21 can be used with Built-in Auto-Answering feature simultaneously.
- Regarding recorded VRS prompt message or voice message, voice format is PCM and file format is FAT. However upload or download function of these messages are not supported.
- Enable to use as simple VRS (Operator Assistance), such as single digit dialing.
- If one of VRS message 91 to 100 is used for normal VRS feature, this simple voice mail can not be used.

Default Settings

None

System Availability

Terminals

All Multiline terminals, Analog telephone

Required Component(s)

None

Related Features

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Default
25-06-01	Next Attendant message number	0
11-10-20	VRS-Record / Erase message	716
20-17-01	Operator's Extension number	No setting
22-02-01	Incoming Service Type Setup	0
25-02-01	DID/DISA VRS Message	1

B

Operation

Set up Built-in Auto-Answering and Sinple Voice Mail

< Program>
PRG22-02-01: 1 (VRS)
PRG25-02-01: Talkie type: 1 (VRS), Additional data: Message No. 1
PRG25-06-01: Message No.1: 106 (record to VRS) Received dial 1

To record VRS prompt message 1

1. Press **Speaker+716+7+001** at terminal
2. After Beep tone, record your message.
3. Press **Speaker** and finish recording.

Incoming call and record calling party message

1. Incoming call to specified trunk
2. Calling party is connected to built-in VRS, and hears auto-answering message 1.
3. Calling party dials 1.
4. Calling party records the message (max 2 minutes) after beep tone.
5. Finish the recording.
6. Then following notification will be indicated at operator multiline terminal LCD.

```
VOICE MESSAGE
xx MESSAGES
```

xx indicates number of recorded messages (01～10)

To retrieve recorded message

1. Press **Speaker+716+5+**message number (091~100) at terminal.
2. Recorded message is played.

To delete recorded message

1. Press **Speaker+716+3+**message number (091~100) at terminal.
2. Recorded message is deleted.

Call Arrival (CAR) Keys

Description

Call Arrival (CAR) Keys are software extensions available on the Basic and Expanded Port Packages. A Call Arrival Extension assigned to a line key, can appear and ring on an individual station or multiple stations. Call Arrival Keys are busy only when ringing and are not used during talking.

Call Arrival Keys are shared with the Virtual Extensions (VE). In virtual extension mode, the key acts as a secondary extension. Up to 50 CAR/VE keys are provided.

Conditions

- CAR keys and virtual extensions share 50 available ports/extensions.
- The 50 available ports/extensions are assigned per extension for CAR key mode or virtual extension (VE) key mode.
- More than one extension can share a CAR key.
- An extension can have more than one CAR key assigned.
- Up to 32 incoming calls can be queued to busy CAR key.
- If multiple CAR/SIE/VE keys are ringing on a station at the same time, the CAR/SIE/VE key on the lowest Line Key is answered first.

Default Settings

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Virtual Extensions

Guide to Feature Programming

Program Number	Program Name	Default
11-01-01	System Numbering - Service Code	Refer to Programming Manual.
11-04-01	Virtual Extension Numbering	All Virtual Extension Port = No Setting
15-01-01	Basic Extension Data Setup - Extension Name	No Setting
15-01-05	Basic Extension Data Setup - Restriction for Outgoing Disable on Incoming Line	0
15-02-07	Multiline Telephone Basic Data Setup - Automatic Hold for CO Lines	1
15-02-21	Multiline Telephone Basic Data Setup - Virtual Extension Access Mode (when idle	2

Program Number	Program Name	Default
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
15-08-01	**Incoming Virtual Extension Ring Tone Setup**	0
15-09-01	**Virtual Extension Ring Assignment**	0
15-10-01	**Incoming Virtual Extension Ring Tone Order Setup**	0 = Tone Pattern 1 1 = Tone Pattern 2 2 = Tone Pattern 3 3 = Tone Pattern 4 4 = Incoming Extension Ring Tone
15-11-01	**Virtual Extension Delayed Ring Assignment**	0
15-18-01	**Virtual Extension Key Enhanced Options – Virtual Extension Key Operation Mode**	0
15-18-02	**Virtual Extension Key Enhanced Options – Display Mode When Placing a Call on Virtual Extension Key**	0
20-04-03	**System Options for Virtual Extensions - CAR/SIE/Virtual Extension Delay Interval**	10 (seconds)
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-07-10	**Class of Service Options (Administrator Level) - Programmable Function Key Programming (Appearance Level)**	COS 01~15=1
20-10-08	**Class of Service Options (Answer Service) - Virtual Extension Off-Hook Answer**	COS 01~15=0
20-13-27	**Class of Service Options (Supplementary Service) - Busy on Seizing Virtual Extension**	COS 01~15=1
21-01-15	**System Options for Outgoing Calls - Outgoing Disable on Incoming Line (Toll Restriction)**	0
23-04-01	**Ringing Line Preference for Virtual Extensions**	00

Operation

To answer a call ringing a Call Arrival (CAR) Key:

1. Press the flashing Call Arrival (CAR) Key.

To place a call to a Call Arrival (CAR) Key:

1. Lift the handset, or press **Speaker**.
2. Dial the CAR key extension, or press the Call Arrival (CAR) Key.

The operation depends on the setting in Program 15-02-21.

To program a Call Arrival (CAR) Key on a telephone:

1. Press **Speaker**.
2. Dial **852**.
3. Press the key you want to program.
4. Dial ***03**.
5. Dial the number of the extension you want to appear on the key.
6. Press **Hold** once for Immediate Ring.

To set for Delayed Ring, skip to Step 8.

7. Dial the Mode number in which the key rings.
   1 = Day 1
   2 = Night 1
   3 = Midnight 1
   4 = Rest 1
   5 = Day 2
   6 = Night 2
   7 = Midnight 2
   8 = Rest 2
8. Press **Hold** to set up Delayed Ring.
   - OR -
   Skip to Step 10.
9. Dial the mode number in which the key delay rings.
   1 = Day 1
   2 = Night 1
   3 = Midnight 1
   4 = Rest 1
   5 = Day 2
   6 = Night 2
   7 = Midnight 2
   8 = Rest 2
10. Press **Speaker**.

Call Duration Timer

Description

Call Duration Timer lets a multiline terminal with an LCD time their trunk calls on the telephone display. This helps users that must keep track of their time on the telephone. For incoming trunk calls, the Call Time begins as soon as the user answers the call.

Conditions

- The Call Timer starts over each time the call is retrieved from Hold or Park.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals with an LCD

Required Component(s)

None

Related Features

Alphanumeric Display

Guide to Feature Programming

Program Number	Program Name	Default
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-09-06	**Class of Service Options (Incoming Call Service) - Incoming Time Display**	COS 01~15 = 1
20-13-36	**Class of Service Options (Supplementary Service) - Call Duration Timer Display**	COS 01~15 = 1
21-01-03	**System Options for Outgoing calls - Trunk Interdigit Time (External)**	10 (seconds)

Operation

To time your trunk calls:

1. Place a trunk call.

The timer starts automatically.

Call Forwarding

Description

Call Forwarding permits an extension user to redirect their calls to another extension or an off-premise number. Call Forwarding ensures that the user's calls are covered when they are away from their work area. The types of Call Forwarding are:

- Call Forwarding when Busy or Unanswered
  Calls to the extension forward when busy or unanswered.
- Call Forwarding Immediate
  All calls forward immediately to the destination, and only the destination rings.
- Call Forwarding - Centrex
  When using PBX/Centrex trunks, calls to extension perform a Centrex transfer using Immediate, Busy and No Answer Forwarding.
- Call Forwarding with both Ringing
  All calls forward immediately to the destination, and both the destination and the forwarded extension ring (not for Voice Mail).
- Call Forwarding when Unanswered
  Calls forward only if they are unanswered (Ring No Answer).
- Call Forwarding Follow Me
  Refer to Call Forwarding with Follow Me on page 1-65 for more information.
- Personal Answering Machine Emulation
  Allows the extension to emulate an answering machine. Refer to SL1000 InMail for more information.

Call Forwarding reroutes calls ringing an extension, including calls transferred from another extension. Call Forwarding can also be split, allowing internal and external calls to forward to different destinations. The extension user can enable Call Forwarding from their telephone. An extension user can also set the forwarding for another extension by using Call Forward for any Extension to Destination. To redirect calls while a user is at another telephone, use Call Forwarding with Follow Me. A periodic VRS announcement can remind users that their calls are forwarded.

Conditions

- Virtual Extensions can be set to Call Forward. Program 15-02-21 must be set to a 1, to allow the Virtual Extension to place outgoing calls.
- If an extension in a call forward chain has Call Forward with Both Ring , calls do not continue routing to other extensions in the chain.
- If an extension in a call forward chain has Call Forward with Follow Me set, calls do not continue routing to other extensions in the chain.
- If the extension in a Call Forward-Both Ring set to another extension, it will only continue to forward if the Both ring location is forwarded (B/NA or NA) to VM and no where else.
- Call Forwards can be chained allowing calls to forward from one extension to the next. Up to 32 extensions can be linked in a call forward chain.
- Periodic reminder message requires a PZ-VM21 daughter board for Voice Response System (VRS).
- Call Forwarding an extension in a Department Group prevents that extension from receiving Department Pilot Calls.
- Ring Groups do not follow Call Forwarding.
- Call Forward Split does not allow for Call Forward with Follow Me.
- If Call Forwarding off premise, a trunk access code must be included in the forwarding number.
- Call Forward with Follow Me allows for a single station to set follow me for multiple stations. When canceling Call Forward with Follow Me, the use must specify the station to cancel or cancel all.
- The telephone must be in an idle state to enable call forwarding with a Programmable Function Key, or receiving dial tone to enable call forwarding with a service code.
- Call Forward for any Extension to Destination cannot be set or canceled from a Virtual Extension.
- Call Forwarding/Do Not Disturb Override allows for Overriding a Call Forwarding or DND setting at another extension.

- When a call is transferred because of Call Forwarding No Answer, Call Forwarding Busy, or DND, the Reason for Transfer option can display to the transferred extension as to why the call is ringing to their telephone.
- An extension user can forward their calls to a Department number.
- A DSS key indicates a Call Forwarding indication for extensions.
- When DND All and Call Forward are set on the same telephone, call forwarding works. If Busy and No Answer Forwarding are set to different locations, it follows the Busy forwarding.
- Function keys simplify Call Forwarding operation.
- If an extension Class of Service denies Call Forwarding (Program 20-11-01~Program 20-11-05, off), the extension can still dial the service code to Set/Cancel Call Forwarding, but it can not set any data.
- Call Forward Both Ring Split does not work to an off-premise destination.
- If an IP telephone has forwarding set and then loses connection, it follows the forwarding.
- If an IP phone has Busy and No Answer Forwarding set to different locations and it loses connection, it follows the Busy forwarding location.
- When the following are done in sequence,
  - Call Forwarding Busy/No Answer is set to extension
  - Call Forwarding Immediate is set on extension
  - Call Forwarding Immediate is cancelled on extension

  then,
  Call Forwarding Busy/No Answer is set back on the extension.
- When the following are done in sequence,
  - Call Forwarding No Answer is set to extension
  - Call Forwarding Immediate is set on extension
  - Call Forwarding Immediate is cancelled on extension

  then,
  all Call Forwarding is cancelled.

Any settings in Programs 24-09-04 and 24-09-05, copies the information to Programs 24-09-02 and 24-09-03 and is changed to Call Forwarding Busy/No Answer.

- When the following are done in sequence,
  - Call Forwarding Busy is set to extension
  - Call Forwarding Immediate is set on extension
  - Call Forwarding Immediate is cancelled on extension

  then,
  Call Forwarding Busy/No Answer is set back on the extension.

Default Settings

Enabled

System Availability

Terminals

Any Station and Virtual Extensions

Required Component(s)

None

Related Features

Call Forwarding, Off-Premise

Call Forwarding with Follow Me

Call Forwarding/Do Not Disturb Override

Central Office Calls, Answering

Department Calling

Direct Station Selection (DSS) Console

Do Not Disturb (DND)

Programmable Function Keys

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Default
11-10-06	Service Code Setup (for System Administrator) - Setting the Automatic Transfer for Each Trunk Line	833
11-10-07	Service Code Setup (for System Administrator) - Canceling the Automatic Transfer for Each Trunk Line	834
11-10-08	Service Code Setup (for System Administrator) - Setting the Destination for Automatic Trunk Transfer	835
11-10-18	Service Code Setup (for System Administrator) - Off-Premise Call Forward by Door Box	822
11-11-01	Service Code Setup (for Setup/Entry Operation) - Call Forward - All	848
11-11-02	Service Code Setup (for Setup/Entry Operation) - Call Forward - Busy	#1
11-11-03	Service Code Setup (for Setup/Entry Operation) - Call Forward - No Answer	845
11-11-04	Service Code Setup (for Setup/Entry Operation) - Call Forward - Busy/No Answer	844
11-11-05	Service Code Setup (for Setup/Entry Operation) - Call Forward - Both Ring	842
11-11-07	Service Code Setup (for Setup/Entry Operation) - Call Forwarding - Follow Me	846
11-11-08	Service Code Setup (for Setup/Entry Operation) - Do Not Disturb	847
11-11-45	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward All (Split)	782
11-11-46	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Busy (Split)	783
11-11-47	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward No Answer (Split)	784
11-11-48	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Busy/No Answer (Split)	785

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Program Number	Program Name	Default
11-11-49	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Both Ring (Split)**	786
11-11-52	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward All Destination (No Split)**	791
11-11-53	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Busy Destination (No Split)**	792
11-11-54	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward No Answer Destination (No Split)**	793
11-11-55	**Service Code Setup (for Setup/Entry Operation) - Call Forward Busy No Answer Destination (No Split)**	794
11-11-58	**Service Code Setup (for Setup/Entry Operation) - Call forward with Personal Greeting**	795
11-12-01	**Service Code Setup (for Service Access) - Bypass Call**	807
11-16-06	**Single Digit Service Code Setup - DND/Call Forward Override Bypass**	not assigned
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-09-01	**Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/DIL Override**	COS 01~15 = 0
20-09-07	**Class of Service Options (Incoming Call Service) - Call Queuing**	COS 01~15 = 0
20-11-01	**Class of Service Options (Hold/Transfer Service) - Call Forward All**	COS 01~15 = 1
20-11-02	**Class of Service Options (Hold/Transfer Service) - Call Forward When Busy**	COS 01~15 = 1
20-11-03	**Class of Service Options (Hold/Transfer Service) - Call Forwarding When Unanswered**	COS 01~15 = 1
20-11-04	**Class of Service Options (Hold/Transfer Service) - Call Forwarding (Both Ringing)**	COS 01~15 = 1
20-11-05	**Class of Service Options (Hold/Transfer Service) - Call Forwarding with Follow Me**	COS 01~15 = 1
20-11-23	**Class of Service Options (Hold/Transfer Service) - VE Call Forward Set/Cancel**	COS 01~15 = 0
20-13-05	**Class of Service Options (Supplementary Service) - Intercom Off-Hook Signaling**	COS 01~15 = 1
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	COS 01~15 = 0
24-02-03	**System Options for Transfer - Delayed Call Forwarding Time**	10 (seconds)
24-09-01	**Call Forward Split Settings - Call Forwarding Type:**	0
24-09-02	**Call Forward Split Settings - CO Call Forwarding Destination for Both Ring, All Call, No Answer**	not assigned
24-09-03	**Call Forward Split Settings - Intercom Call Forwarding Destination for Both ring, All Call, No Answer**	not assigned
24-09-04	**Call Forward Split Settings - CO Call Forwarding Busy Destination**	not assigned
24-09-05	**Call Forward Split Settings - Intercom Call Forwarding Busy Destination**	not assigned
24-09-06	**Call Forward Split Settings - Call Forwarding Destination for CTX/PBX for All Call, No Answer**	not assigned
24-09-07	**Call Forward Split Settings - Call Forwarding Destination for CTX/PBX for Busy**	not assigned

Operation

To set Call Forward - Immediate at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward - Immediate Service Code (default: **848**).
   - OR -
   At the multiline terminal only, press the **Call Forwarding Programmable Function** Keys. (Program 15-07-01, 10 or SC **851** , Key Code 10)
3. Dial **1** (Set).
4. Dial the destination extension or off-premise number.
5. Press **Speaker** or hang up.

Refer to Call Forwarding on page 1-57.

The Call Forwarding Programmable Function Key lights.

To cancel Call Forward - Immediate at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward - Immediate Service Code (default: **848**).
   - OR -
   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys.(Program 15-07-01, 10 or SC **851** , Key Code 10)
3. Dial **0** (Cancel).
4. Press **Speaker** or hang up.

The Call Forwarding Programmable Function Key turns off.

To set Call Forward - Busy/No Answer at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward - Busy/No Answer Service Code (default: **844**).
   - OR -
   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys. (Program 15-07-01, 13 or SC **851** , Key Code 13)
3. Dial **1** (Set).
4. Dial the destination extension or off-premise number.
5. Press **Speaker** or hang up.

Refer to Call Forwarding on page 1-57.

The Call Forwarding Programmable Function Key turns on.

To cancel Call Forward - Busy/No Answer at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward - Busy/No Answer Service Code (default: **844**).
   - OR -
   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys.(Program 15-07-01, 13 or SC **851** , Key Code 13)

3. Dial **0** (Cancel).
4. Press **Speaker** or hang up.

The Call Forwarding Programmable Function Key turns off.

To set Call Forward - Both Ring at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward - Both Ring Service Code (default: **842**).
   - OR -
   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys.(Program 15-07-01, 14 or SC **851** , Key Code 14)
3. Dial **1** (Set).
4. Dial the destination extension number.
5. Press **Speaker** or hang up.

The Call Forwarding Programmable Function Key turns on.

To cancel Call Forward - Both Ring at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward - Both Ring Service Code (default: **842**).
   - OR -
   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys. (Program 15-07-01, 14 or SC 851 , Key Code 14)
3. Dial **0** (Cancel).
4. Press **Speaker** or hang up.

The Call Forwarding Programmable Function Key turns off.

To set Call Forward - Follow Me from the destination station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward - Follow Me Service Code (default: **846**).
   - OR -
   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys.(Program 15-07-01, 10 or SC **851** , Key Code 15)
3. Dial **1** (Set).
4. Dial the station number to be forwarded and then the destination number.
5. Press **Speaker** or hang up.

The Call Forwarding Programmable Function Key goes on.

To cancel Call Forward - Follow Me from the destination station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward - Follow Me Service Code (default: **846**).
   - OR -
   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys.(Program 15-07-01, 10 or SC **851** , Key Code 15)
3. Dial **0** (Cancel).
4. Dial the station number, which is forwarded, or **0** to cancel all extensions.
5. Press **Speaker** or hang up.

The Call Forwarding Programmable Function Key turns off.

To set Call Forward Immediate for any Extension to Destination:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward Immediate for any Extension to Destination Service Code (Default: **791**).
3. Dial **1** (Set).
4. Dial the extension number to be forwarded and then the destination number.
5. Press **Speaker** or hang up.

To cancel Call Forward Immediate for any Extension:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward Immediate for any Extension to Destination Service Code (default: **791**).
3. Dial **0** (Cancel).
4. Dial the station number which is forwarded.
5. Press **Speaker** or hang up.

To set Call Forward Busy/No Answer for any Extension to Destination:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward Busy/No Answer for any Extension to Destination Service Code (default: **794**).
3. Dial **1** (Set).
4. Dial the extension number to be forwarded and then the destination number.
5. Press **Speaker** or hang up.

To cancel Call Forward Busy/No Answer for any Extension to Destination:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward Busy/No Answer for any Extension to Destination Service Code (default: **794**).
3. Dial **0** (Cancel).
4. Dial the station number, which is forwarded.
5. Press **Speaker** or hang up.

To set Call Forward - Immediate using a Virtual Extension:

1. Press the idle **Virtual Extension** key.
2. Dial the Call Forward - Immediate Service Code (default: **848**).
3. Dial **1** (Set).
4. Dial the destination extension or off-premise number.
5. Press **Speaker** or hang up.

Refer to Call Forwarding on page 1-57.

To cancel Call Forward - Immediate at a forwarding station:

1. Press the idle **Virtual Extension** key.
2. Dial the Call Forward - Immediate Service Code (default: **848**).
3. Dial **0** (Cancel).
4. Press **Speaker** or hang up.

To set Call Forward - Busy/No Answer using a Virtual Extension:

1. Press the idle **Virtual Extension** key.
2. Dial the Call Forward - Busy/No Answer Service Code (Default: **844**).
3. Dial 1 (Set).
4. Dial the destination extension or off-premise number.
5. Press **Speaker** or hang up.

Refer to Call Forwarding on page 1-57.

To cancel Call Forward - Busy/No Answer using a Virtual Extension:

1. Press the idle **Virtual Extension** key.
2. Dial the Call Forward - Busy/No Answer Service Code (default: **844**).
3. Dial **0** (Cancel).
4. Press **Speaker** or hang up.

Call Forwarding with Follow Me

Description

While at a co-worker's desk, a user can have Call Forwarding with Follow Me redirect their calls to the co-worker's extension. This helps an employee who gets detained at a co-worker's desk longer than expected. To prevent losing important calls, the employee can activate Call Forwarding with Follow Me from the co-worker's telephone.

Call Forwarding with Follow Me reroutes calls from the destination extension. To reroute calls from the initiating (forwarding) extension, use Call Forwarding.

Conditions

- Call Forwarding an extension in a Department Group prevents that extension from receiving Department Pilot Calls.
- Multiple Stations can set Call Forward Follow Me to one station.
- Calls to extensions with DND active do not follow Call Forwarding programming. DIL calls ring an idle Department Group member, then follow Program 22-08 programming then Program 22-05 programming.

Default Settings

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Do Not Disturb (DND)

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
11-11-07	Service Code Setup (for Setup/Entry Operation) - Call Forwarding - Follow Me	846
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-11-05	Class of Service Options (Hold/Transfer Service) - Call Forwarding with Follow Me	COS 01~15 = 1

Operation

To activate Call Forward Follow Me from a multiline terminal:

1. At a multiline terminal, other than your own, press **Speaker** and dial Service Code (**846** , Program 11-11-07).
   - OR -
   Press the Call Forward Follow Me key (Program 15-07-01 or SC **851** : Code 15).
2. Dial **1** to set.
3. Dial the Extension to forward.

The multiline terminal with display indicates on the display of the telephone which Call Forward Follow Me is set. Also, the Programmed Follow Me Flexible Line Key flashes (if assigned) when Follow Me is set.

To cancel Call Forward Follow Me from your own Multiline Terminal:

1. At your multiline terminal, press **Speaker** and dial Service Code (**846** , Program 11-11-07).
   - OR -
   Press the Call Forward Follow Me key (Program 15-07-01 or SC **851** : Code 15).
2. Dial **0** to cancel.
3. Dial **0** (Cancel All Forward Follow Me).
   - OR -
   Dial the extension number with Follow Me set.

To activate Call Forward Follow Me from a single line telephone:

1. At a single line telephone, other than your own, lift the handset and dial the Service Code (**846** , Program 11-11-07).
2. Dial **1** to set.
3. Dial the extension to forward.

To cancel Call Forward Follow Me from your own single line telephone:

1. At your single line telephone, lift the handset and dial Service Code (**846** , Program 11-11-07).
2. Dial **0** to cancel.
3. Dial **0** (Cancel All Forward Follow Me).
   - OR -
   Dial the extension number with Follow Me set.

Call Forwarding, Off-Premise

Description

Off-Premise Call Forwarding allows an extension user to forward their calls to an off-site location. By enabling Call Forward, Off-Premise, the user can stay in touch by having the system forward their calls while they are away from the office. The forwarding destination can be any telephone number the user enters, such as a mobile phone, home office, hotel or meeting room. Off-Premise Call Forwarding can route the off-site telephone number over a specific trunk or through a trunk group, Automatic Route Selection or Trunk Group Routing.

Off-Premise Call Forwarding reroutes the following types of incoming calls:

- Ringing intercom calls from co-worker's extensions
- Calls routed from the VRS or Voice Mail [1]
- Direct Inward Lines [1]
- DISA and DID calls to the forwarded extension [1]
- Transferred calls [1]

1. Off-Premise Call Forwarding can reroute an incoming trunk call only if the outgoing trunk selected has disconnect supervision enabled (refer to the Programming section).

Off-Premise Call Forwarding does not reroute Call Arrival (CAR) Keys,Virtual Extension keys or Ring Group calls (i.e., trunk ringing according to Ring Group assignments made in Program 22-04 and Program 22-05).

Conditions

- If a call that forwards Off-Premise goes out on a trunk assigned as TIE or DID, and the called party does not answer before the timer in Program 34-07-05, the call recalls to the station that performed the transfer.
- Call Forwarding Off-Premise requires either loop start trunks with disconnect supervision or ground start trunks.
- The trunk access code and the outside telephone number combined cannot exceed 24 digits.
- Call Forwarding an extension in a Department Group prevents that extension from receiving Department Pilot Calls.
- If a Programmable Function key is not defined for Call Forwarding (10~17), the DND key flashes to indicate that the extension is call forwarded.
- DID calls to an extension with Off-Premise Call Forwarding set do not recall if there is no answer.
- Door Boxes must be programmed for the calls to be transferred Off-Premise.
- The outside number Call Forwarding dials can only be a number normally allowed by the forwarded extension Toll Restriction.
- In systems with a PZ-VM21, callers to an extension forwarded off-premise hear, "Please hold on, your call is being rerouted." This option can be disabled in Program 40-10-01 by setting it to disable.
- When a station is in DND and any Call Forwarding Off Premise is set, the call forwards immediately.
- Call Forwarding, Off-Premise is not supported when using Alternate Trunk Group Routing.

Default Settings

Disabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Call Forwarding

Code Restriction/Toll Restriction

Direct Inward Dialing (DID)

Do Not Disturb (DND)

Door Box

Virtual Extensions

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Default
10-09-01	DTMF and Dial Tone Circuit Setup	Resource 01 - 132 = 0 (Common)
11-07-01	Department Group Pilot Numbers - Dial	not assigned
11-11-01	Service Code Setup (for Setup/Entry Operation) - Call Forward - All	848
11-11-02	Service Code Setup (for Setup/Entry Operation) - Call Forward - Busy	#1
11-11-03	Service Code Setup (for Setup/Entry Operation) - Call Forward - No Answer	845
11-11-04	Service Code Setup (for Setup/Entry Operation) - Call Forward - Busy/No Answer	844
11-11-05	Service Code Setup (for Setup/Entry Operation) - Call Forward - Both Ring	842
11-11-45	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward All (Split)	782
11-11-46	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Busy (Split)	783
11-11-47	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward No Answer (Split)	784
11-11-48	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Busy/No Answer (Split)	785
11-11-49	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Both Ring (Split)	786
11-11-52	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward All Destination (No Split)	791
11-11-53	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Busy Destination (No Split)	792
11-11-54	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward No Answer Destination (No Split)	793
11-11-55	Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Busy/No Answer Destination (No Split)	794

Program Number	Program Name	Default
14-01-13	Basic Trunk Data Setup -Trunk-to-Trunk Transfer	1
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-09-01	Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/DIL Override	COS 01~15 = 0
20-09-07	Class of Service Options (Incoming Call Service) - Call Queuing	COS 01~15 = 0
20-11-12	Class of Service Options (Hold/Transfer Service) - Call Forwarding Off-Premise (External Call Forwarding)	COS 01~15 = 1
20-13-05	Class of Service Options (Supplementary Service) - Intercom Off-Hook Signaling	COS 01~15 = 1
20-13-06	Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)	COS 01~15 = 0
21-03-01	Trunk Group Routing for Trunks	0
24-02-07	System Options for Transfer - Trunk-to-Trunk Transfer Release Warning Tone	1800 (seconds)
24-09-01	Call Forward Split Settings - Call Forwarding Type	0
24-09-02	Call Forward Split Settings - CO Call Forwarding Destination for Both Ring, All Call, No Answer	not assigned
24-09-03	Call Forward Split Settings - Intercom Call Forwarding Destination for both ring, All Call, No Answer	not assigned
24-09-04	Call Forward Split Settings - CO Call Forwarding Busy Destination	not assigned
24-09-05	Call Forward Split Settings - Intercom Call Forwarding Busy Destination	not assigned
24-09-06	Call Forward Split Settings - Call Forwarding Destination for CTX/PBX for All Call, No Answer	not assigned
24-09-07	Call Forward Split Settings - Call Forwarding Destination for CTX/PBX for Busy	not assigned
25-07-07	System Timers for VRS/DISA - Long Conversation Warning Tone Time	30 (seconds)
25-07-08	System Timers for VRS/DISA - Long Conversation Disconnect Time	15 (seconds)

Trunk-to-Trunk Forwarding - Normal (0) Trunks

Program Number	Program Name	Default
11-10-06	Service Code Setup (for System Administrator) - Setting the Automatic Transfer for each Trunk Line	833
11-10-07	Service Code Setup (for System Administrator) - Canceling the Automatic Transfer for each Trunk Line	834
11-10-08	Service Code Setup (for System Administrator) - Setting the Destination for Automatic Trunk Transfer	835
13-01-01	Speed Dialing Function Setup - Speed Dialing Auto Outgoing Call Mode	0
13-04-01	Speed Dialing Number and Name - Speed Dialing Data	not assigned
14-01-26	Basic Trunk Data Setup - Automatic Trunk-to-Trunk Transfer Mode	0
20-06-01	Class of Service for Extensions	All extension port = Class 1

Program Number	Program Name	Default
20-07-05	Class of Service Options (Administrator Level) - Set/Cancel Automatic Trunk-to-Trunk Transfer	COS 01~15 = 1
22-02-01	Incoming Call Trunk Setup - Incoming Type	0
24-02-11	System Options for Transfer - No Answer Step Transfer	10 (seconds)
24-02-12	System Options for Transfer - No Answer Trunk-to-Trunk Transfer	0 (seconds)
24-04-01	Automatic Trunk-to-Trunk Transfer Target Setup	999

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Trunk-to-Trunk Forwarding - DID (3) Trunk Forwarding by Department Groups

Refer to Departmental Calling on page 1-149 for additional Department Group programming.

Program Number	Program Name	Default
11-07-01	Department Group Pilot Numbers - Dial	not assigned
11-11-25	Service Code Setup (for Setup/Entry Operation) - Automatic Transfer Setup for Each Extension Group	702
11-11-26	Service Code Setup (for Setup/Entry Operation) - Automatic Transfer Cancellation for Each Extension Group	703
11-11-27	Service Code Setup (for Setup/Entry Operation) - Destination of Automatic Transfer Each Extension Group	704
13-01-01	Speed Dialing Function Setup - Speed Dialing Auto Outgoing Call Mode	0
13-04-01	Speed Dialing Number and Name - Speed Dialing Data	not assigned
14-01-04	Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls	32 (0dB)
14-01-05	Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls	16 (-8dB)
14-06-01	Trunk Group Routing - Priority Order Number	Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~25) and Order Numbers (1~4) = 0 (Not Specified).
15-07-01	Programmable Function Keys	Refer to Programming Manual.
16-02-01	Department Group Assignment for Extensions	All extensions in Department Group 1 with priority in port order: Port 1 priority = 1 Port 128 priority =128
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-11-17	Class of Service Options (Hold/Transfer Service) - Department Group Trunk-to-Trunk Transfer (Each Telephone Group Transfer)	COS 01~15 = 1
24-05-01	Department Group Transfer Target Setup	999

Trunk-to-Trunk Forwarding - DID (3) Trunk Forwarding Using DID Translation Table

Refer to Direct Inward Dialing (DID) on page 1-166 for additional DID programming.

Program Number	Program Name	Default
22-11-05	DID Translation Table Number Conversion - Transfer Destination Number 1	0
22-11-06	DID Translation Table Number Conversion - Transfer Destination Number 2	

C

Operation

To activate Call Forwarding Off-Premise non-split:

1. At a multiline terminal, press **Speaker**.
   - OR -
   At a single line telephone, lift the handset.
2. Dial the Call Forwarding Service Code.
   - OR -
   At a multiline terminal only, press the Call Forwarding Programmable Function keys (Program 15-07-01, Program 15-07-10 ~ Program 15-07-15 or SC **851** Key Code 10~15).
3. Dial **1** (Set).
4. Dial the Trunk Access Code (default: **9**) + Number (**9** + 2142622000).

*Trunk access codes are 9 (ARS/Trunk Group Routing), **804** + Line Group (1~9, 01~99 or 001~100) or **#9** + Line number (e.g., 05 or 005 for line 5).*

Your DND or Call Forwarding (Device) Programmable Function key flashes.

To cancel Call Forwarding Off-Premise non-split:

1. At a multiline terminal, press **Speaker**.
   - OR -
   At a single line telephone, lift the handset.
2. Dial the Call Forward Access Code (default not assigned).
3. Dial **0** (Cancel).

To activate Call Forwarding Off-Premise Split:

1. At a multiline terminal, press **Speaker**.
   - OR -
   At a single line telephone, lift the handset.
2. Dial the Call Forwarding Service Code.
3. Dial **1** (Set).
4. Dial **1** (Internal) or **0** (External).
5. Dial Trunk Access Code (default: 9) + number (9 + 2142622000).

*Trunk access codes are **9** (ARS/Trunk Group Routing), **804** + Line Group (1~9, 01~99 or 001~100) or **#9** + Line number (e.g., 05 or 005 for line 5).*

Your DND or Call Forwarding (Device) Programmable Function key flashes.

To cancel Call Forwarding Off-Premise Split:

1. At the multiline terminal, press **Speaker**.
   - OR -
2. At a single line telephone, lift the handset.
3. Dial the Call Forward Access Code (default not assigned).
4. Dial **0** (Cancel).

If Internal and External are set both are canceled.

Your DND or Call Forwarding (Device) Programmable Function key flashes.

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Off-Premise Call Forwarding for Door Boxes

These operations are performed at the Door Box Ringing Extension only.

To activate Call Forwarding for a Door Box:

This option only works for ISDN PRI or BRI Trunks.

1. At the multiline terminal, press **Speaker** + dial SC **822** .
   - OR -
   At the multiline terminal only, press Call Forward (Device) key (Program 15-07-01 or SC **851** , code 54).
   - OR -
   At the single line telephone, lift the handset + dial **822** .
2. Dial the Door Box number (**1~8**).
3. Dial the Speed Dialing number where the calls should be forwarded.
4. Press **Speaker** (or hang up at the single line telephone) to hang up.

To cancel Call Forwarding Off-Premise for a Door Box:

1. At the multiline terminal, press **Speaker** + dial SC **822** .
   - OR -
   At the multiline terminal only, press Call Forward (Device) key (Program 15-07-01 or SC **851** , code 54).
   - OR -
   At the single line telephone, lift the handset + dial **822** .
2. Dial **0** (Cancel).

Trunk-to-Trunk Forwarding

Set the Destination and Forward the Line:

1. Lift the handset.
2. Dial **835** .
3. Dial trunk port number (**001~126**) to be defined.
4. Select the mode (**1~8**) to be defined.
5. Enter the telephone number, which is the destination of the forwarded trunk.

   The number is stored in the Speed Dial bin number assigned in Program 24-04-01. This entry overwrites anyexisting number defined in the bin.
6. Press **Hold** to accept the entry.
7. Repeat from Step 3 to define another mode entry or press **Speaker** to hang up.

Cancel the Line Forwarding:

1. Lift the handset.
2. Dial **835** .
3. Dial trunk port number (**001~126**) to be defined.
4. Select the mode (**1~8**) to be defined.
5. Press the **Exit** key.
6. Press **Speaker** to hang up.

Automatic Trunk-to-Trunk Transfer (Step Transfer)
(follows the predefined destination in Program 24-04-01) Set Automatic Trunk Forwarding:

The Speed Dial bin must be defined in Program 13-04-01 for the line to forward.

1. Lift the handset.
2. Dial **833** .
3. Dial trunk port number to be used (**001~126**).
4. Press **Speaker** to hang up.

Cancel Automatic Trunk Forwarding:

1. Lift the handset.
2. Dial **834** .
3. Dial trunk port number to be used (**001~126**).
4. Press **Speaker** to hang up.

Department Group Line Forwarding

Method 1
Set the Destination and Forward the Line:

1. Lift the handset.
2. Dial **704** .
3. Dial the Department Group number (**01~32**) to be defined.
4. Select the time mode (**1~8**) to be defined.
5. Enter the telephone number, which is the destination of the forwarded trunk.

   The number is stored in the Speed Dial bin number assigned in Program 24-04-01. This entry overwrites any existing number defined in the bin.
6. Press **Hold** to accept the entry.
7. Repeat from Step 3 to define another time mode entry or press **Speaker** to hang up.

Cancel the Line Forwarding:

1. Lift the handset.
2. Dial **704** .
3. Dial the Department Group number (**01~32**) to be defined.
4. Select the time mode (**1~8**) to be defined.
5. Press the **Exit** key.
6. Press **Speaker** to hang up.

Method 2 (follows the pre-defined destination in Program 24-05-01)
Set Automatic Trunk Forwarding:

The Speed Dial bin must be defined in Program 13-04-01 for the line to forward.

1. Lift the handset.
2. Dial **702** /.
3. Dial the Department Group number (**01~32**) to be defined.
4. Press **Speaker** to hang up.

Cancel Automatic Trunk Forwarding:

1. Lift the handset.
2. Dial **703** .
3. Dial the Department Group number (**01~32**) to be defined.
4. Press **Speaker** to hang up.

C

Call Forwarding/Do Not Disturb Override

Description

An extension user can override Call Forwarding or Do Not Disturb at another extension. This is helpful, for example, to dispatchers and office managers that always need to get through.

Conditions

None

Default Settings

Disabled

System Availability

Terminals

Any Station

Required Component(s)

None

Related Features

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
11-12-01	Service Code Setup (for Service Access) - Bypass Call	807
11-16-06	Single Digit Service Code Setup - DND/Call Forward Override Bypass	not assigned
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-13-04	Class of Service Options (Supplementary Service) - Call Forward/DND Override (Bypass Call)	COS 01~15 = 1

Operation

To override an extension Call Forwarding or Do Not Disturb:

1. Call the forwarded or DND extension.
2. Press the Override key (Program 15-07 or SC **851** : 37) or dial **807** .

Call Monitoring

Description

Call Monitoring allows selected Multiline Terminal Users to monitor another user's conversation without the ability to participate. A programmable audible alert tone can be sent to that station user. Without the audible alert (silent monitor), no indication is provided to either the monitored station or the outside party.

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The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversation or other sound activities, whether or not contemporaneous with transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to a telephone conversation, such as using a beep tone or other notification methods or requiring the consent of all parties to the telephone conversation, prior to monitoring or recording the telephone conversation. Some of these laws incorporate strict penalties.

Call Monitoring with Coaching Ability

Call Monitoring with Coaching Ability allows for the transmit path to be opened to only the monitored station, to provide the Coaching ability for the person that is performing the Call Monitoring. Pressing the Mute key toggles the Coaching ability on and off.

Conditions

- Call Monitoring is allowed for internal calls.
- An extension user cannot Monitor an Intercom call if one of the Intercom callers is using Hands-free Answerback. Both Intercom parties must lift the handset or press **Speaker**.
- An extension user cannot monitor a conference, however an extension programmed for Call Monitor can barge In to a conference.
- With Program 20-13-10 set to 0, a call, which has been barged into, can be placed on hold by the originator of the outside call. Both the outside caller and the extension, which is monitoring the call, are placed on hold.
- The handset and microphone are muted during Call Monitoring.
- Live Record does not work for Call Monitor calls.
- While being monitored, an extension cannot receive Voice Over.
- When a monitored extension places a call on hold, Call Monitor is automatically finished.
- With Program 20-13-10 set to 1, a call which is being Monitored can be placed on park by the originator of the outside call, but only the outside caller is placed in park. The extension which is monitoring the call is dropped.
- When Program 20-13-10 is set to 0 (OFF), coaching is not permitted. When Program 20-13-10 is set to 1 (ON), Program 20-13-45 takes effect.
- When Silent Monitor Mode is used, Mute can be used to activate speech path to the internal and external parties.

Default Settings

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Barge-In

Conference

Hold

Intercom

Park

Programmable Function Keys

InMail

Guide to Feature Programming

Program Number	Program Name	Default
11-12-08	Service Code Setup (for Service Access) - Barge-In	810
11-16-02	Single Digit Service Code Setup - Barge-In	not assigned
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-13-10	Class of Service Options (Supplementary Service) - Barge-In Monitor	COS 01~15 = 0
20-13-15	Class of Service Options (Supplementary Service) - Barge-In, Initiate	COS 01~15 = 1
20-13-16	Class of Service Options (Supplementary Service) - Barge-In, Receive	COS 01~15 = 1
20-13-17	Class of Service Options (Supplementary Service) - Barge-In Tone/Display (Intrusion Tone)	COS 01~15 = 1
20-13-32	Class of Service Options (Supplementary Service) - Deny Multiple Barge-Ins	COS 01~15 = 0
20-13-45	Class of Service Options (Supplementary Service) - MIC Key Mode While Call Monitoring	COS 01~15 = 0
20-14-11	Class of Service Options for DISA - DISA/Tie Trunk Barge-In	COS 01~15 = 0
20-18-07	Service Tone Timers - Intrusion Tone Repeat Time	0 (seconds)
21-01-03	System Options for Outgoing Calls - Trunk Interdigit Time (External)	10 (seconds)

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Operation

The call must be set up for about 10 seconds before it can be Monitored. Listen for busy/ring or busy tone.

To Call Monitor after calling a busy extension:

1. Call a busy extension.
2. Press the Barge-In key (Program 15-07 or SC **851** : 34).
   - OR -
   The following steps are not available for DISA.
   1. Dial the extension number of the busy internal party.
   2. Dial the single digit service code or the service code **810** .

To Call Monitor without first calling the busy extension:

1. Press **Speaker** or lift handset.
2. Dial **810** or press the Barge-In key (Program 15-07 or SC **851** : 34).
3. Dial a busy extension.

If Monitoring is not possible:
- *the extension user hears a warning tone.*
- *the DISA user is rerouted to the defined ring group.*

Call Redirect

Description

Call Redirect allows a multiline terminal user to transfer a call to a pre-defined destination (such as an operator, voice mail, or another extension) without answering the call. This can be useful if you are on a call and another rings in to your extension. By pressing the Call Redirect key, the call is transferred, allowing you to continue with your current call.

This feature works with the following calls:
- Normal trunk call
- DID
- DISA
- DIL
- ICM

The following calls cannot be redirected with the feature:
- Transferred
- Department Group (all ring mode)
- Door Box
- Virtual Extension

Conditions
- After pressing the Call Redirect key, the call does not recall to the extension.
- The predefined destination must be an extension number or voice mail pilot number.
- When a call is Redirected to another phone it does not follow the forwarding on that phone.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1

Program Number	Program Name	Default
20-11-16	**Class of Service Options (Hold/Transfer Service) - Call Redirect**	COS 01~15 = 0

Operation

To redirect a ringing call:
With an incoming call ringing your extension, press the Call Redirect key (Program 15-07 or SC **851** : 49 + Destination Extension Number) without lifting the handset.

Call Waiting/Camp-On

Description

With Call Waiting, an extension user may call a busy extension and wait in line (Camp-On) without hanging up. When the user Camps-On, the system signals the busy extension with two beeps indicating the waiting call. The call goes through when the busy extension becomes free. Call Waiting helps busy extension users know when they have additional waiting calls. It also lets callers wait in queue for a busy extension without being forgotten.

Conditions

- If an extension user Camps-On and then hangs up, the system converts the Camp-On to a callback.
- Off-Hook Signaling gives an extension the ability to block a caller from dialing **850** to Camp-On and/or DID callers from automatically camping on.
- Function keys simplify Call Waiting/Camp-On operation.
- An extension user may be able to Transfer a call to a busy extension.
- Trunk Queuing lets an extension user camp-on to a trunk.
- Call Queuing must also be disabled to disable Call Waiting.

Default Settings

Enabled

System Availability

Terminals

Multiline Terminals and Single Line Telephones

Required Component(s)

None

Related Features

Callback

Off-Hook Signaling

Programmable Function Keys

Transfer

Trunk Queuing/Camp On

Guide to Feature Programming

Program Number	Program Name	Default
11-11-23	Service Code Setup (for Setup/Entry Operation) - Second Call for DID/DISA/DIL	779
11-12-04	Service Code Setup (for Service Access) - Set Camp-On	850

Program Number	Program Name	Default
11-12-05	Service Code Setup (for Service Access) - Cancel Camp-On	870
11-12-47	Service Code Setup (for Service Access) - Call Waiting Answer/Split Answer	894
11-16-05	Single Digit Service Code Setup - Camp-On	#
15-02-06	Multiline Telephone Basic Data Setup - Hold Key Operating Mode	0
15-02-12	Multiline Telephone Basic Data Setup - Off-Hook Ringing	0
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-01-08	System Options - Trunk Queuing Callback Time	15 (seconds)
20-01-09	System Options - Callback/Trunk Queuing Cancel Time	64800 (seconds)
20-03-01	System Options for Single Line Telephones - SLT Call Waiting for Answer Mode	0
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-09-01	Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/DDI/DIL Override	COS 01~15 = 0
20-09-07	Class of Service Options (Incoming Call Service) - Call Queuing	COS 01~15 = 0
20-13-05	Class of Service Options (Supplementary Service) - Intercom Off-Hook signaling	COS 01~15 = 1
20-13-06	Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)	COS 01~15 = 0
20-13-35	Class of Service Options (Supplementary Service) - Block Camp-On	COS 01~15 = 0
20-18-06	Service Tone Timers - Interval of Call Waiting Tone	10 (seconds)

Operation

To Camp-On a busy extension

1. Call the busy extension.
2. Dial **850** or press the Camp-On key (Program 15-07 or SC **851** : 35).
3. Do not hang up.

To camp-on to a trunk, refer to Trunk Queuing/Camp-On on page 1-508.

To cancel a Camp-On request:

1. Hang up.
2. At a multiline terminal, press **Speaker** and dial **870** .
   - OR -
   At a multiline terminal, press the Camp-On key (Program 15-07 or SC **851** : 35).
   - OR -
   At the single line telephone, lift the handset and dial **870** .

To Split (answer a waiting call) at a single line telephone:

Listen for Call Waiting Tones.

1. Hookflash and dial **894** to repeatedly split between the two calls.

The operation depends on the setting in Program 20-03-01.

This operation is valid only before the caller performs the camp-on operation (refer To Camp-on a busy extension - step 2).

Callback

Description

When an extension user calls a co-worker that does not answer or is busy, they can leave a Callback request for a return call. The user does not have to repeatedly call the unanswered extension back, hoping to find it idle.

The system processes Callback requests as follows:

1. Caller at extension A leaves a Callback at extension B.

   Caller can place or answer additional calls in the meantime.

2. When extension B becomes idle, the system rings extension A. This is the Callback ring.
3. Once caller A answers the Callback ring, the system rings (formerly busy or unanswered) extension B.

   If caller A does not answer the Callback ring, the system cancels the Callback.

4. As soon as caller B answers, the system sets up an Intercom call between A and B.

Callback Automatic Answer determines how an extension user answers the Callback ring. When Callback Automatic Answer is enabled, a user answers the Callback ring when they lift the handset. When Callback Automatic Answer is disabled, the user must press the ringing line appearance to answer the Callback ring.

Conditions

- An extension can leave only one Callback request at a time.
- Call Arrival(CAR) Key (virtual extension) keys do not support Call Waiting/Camp-On Programmable Function keys (code 35).
- If an extension user initiates a Callback but does not hang up, their extension Camps-On to the busy extension.
- Function Keys simplify Callback operation.

Default Settings

Enabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Call Waiting/Camp-On

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
11-12-05	**Service Code Setup (for Service Access) - Cancel Camp-On**	870
11-12-44	**Service Code Setup (for Service Access) - Callback Test for SLT**	899
11-16-05	**Single Digit Service Code Setup - Camp-On**	#
15-02-11	**Multiline Telephone Basic Data Setup - Callback Automatic Answer**	1
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-01-07	**System Options - Callback Ring Duration Time**	15 (seconds)
20-01-09	**System Options - Callback/Trunk Queuing Cancel Time**	64800 (seconds)

C

Operation

To place a Callback:

1. Call unavailable (busy or unanswered) extension.
2. Dial **850** or press the Callback key (Program 15-07 or SC **851** : 35).
3. Hang up.
4. Lift the handset when busy extension calls you back.

If the unavailable extension was unanswered (not busy), the Callback goes through after your co-worker uses their telephone for the first time.

If you have Callback Automatic Answer, you automatically place a call to the formerly busy extension when you lift the handset. If you do not have Callback Automatic Answer, you must press the ringing line appearance to place the call.

To cancel a Callback:

1. At the multiline terminal, press **Speaker** and Dial **870** .
   - OR -
   At the multiline terminal, press Camp-On key (Program 15-07 or SC **851** : 35).
   - OR -
   At the single line telephone, lift the handset and dial **870** .

To test Callback at a single line telephone:

1. Lift the handset.
2. Dial **899** .
3. Hang up.
4. When the telephone rings, lift the handset.

   You hear the Hold tone.

5. Hang up.

Caller ID Call Return

Description

The Caller ID Call Return feature allows the voice mail system to use Caller ID information captured with the message to call and connect the person that left the message with the voice mail user that is checking messages.

Conditions

- A caller using a telephone without Softkeys, calling from outside the system, or from a remote system is prompted to hear Caller ID information and return a call.
- Return Call is available for subscriber messages and public messages.
- Return Call is accessible to a subscriber during and after message playback.
- Return Call is available for new and old messages.
- Return Call is accessible to a subscriber using Softkeys in Softkey mode or using DTMF in voice conversation Mode.
- When a subscriber listens to a message from a Softkey equipped telephone, and Caller ID information is unavailable, the voice mail system leaves the second line of the LCD blank. When Caller ID is disabled on the system, voice mail displays the message count.
- Voice mail continues to display Caller ID on the LCD while the post-message playback menu is still displayed on a telephone equipped with Softkeys.
- Live Record is not available when using Return Call.
- To use this feature for long distance calls, ARS must be programmed for the voice mail ports set to dial out. Refer to the SL1000 Programming Manual for detailed programming instructions.
- Use Program 14-01-22 Caller ID to Voice Mail to enable or disable on a per trunk basis the ability to send the Caller ID digits to voice mail.
- After the call is ended by either party, the voice mail user is disconnected.

Default Settings

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

- InMail

Related Features

InMail

Guide to Feature Programming

Program Number	Program Name	Default
14-01-22	Basic Trunk Data Setup - Caller ID to Voice Mail	0
14-02-10	Analog Trunk Data Setup - Caller ID	0
15-02-04	Multiline Telephone Basic Data Setup - Redial (Speed Dial) Control	0

Operation

None

Caller ID

Description

Caller ID allows a display terminal to show an incoming caller's telephone number (called the Directory Number or DN) and optional name. The Caller ID information is available as pre-answer display. With the pre-answer display, the user previews the caller's number before picking up the ringing line.

On the CPU with MEMDB for Caller ID (also used for DTMF receivers and Call Progress Tone Detection) 36 resources are available. Each EXIFE provides an additional 32 resources.

C

Second Call Display

While busy on a call, the telephone display can show the identity of an incoming trunk or Intercom call. For incoming trunk calls, the display shows the Caller ID or the trunk name if Caller ID are not installed. For incoming Intercom calls, the display shows the calling extension name.

Caller ID supports the Telco Called Number Identification (CNI) and Called Number Delivery (CND) service, when available.

The telephone display can show up to 12 Caller ID digits.

Once installed and programmed, Caller ID is enabled for all trunk calls, including:
- Ring Group calls
- Calls transferred from another extension
- Calls transferred from the VRS
- Calls transferred from Voice Mail (unscreened)
- Direct Inward Lines (DILs)

Caller ID temporarily stores 50 calls (total of abandoned and answered/unanswered). New calls replace old calls when the buffer fills.

Temporary Memory

An unanswered call causes the Call History key (Program 15-07 or SC **851** : 08) to flash, indicating a new call was placed in the temporary memory. If enabled in programming, the telephone display shows CHECK LIST.

This Caller ID data from the temporary memory can be saved in either Speed Dial bins or in One-Touch keys making them available for placing future calls.

Cursor Key Operation (When set PRG15-02-60:0)

Pressing the **Left Cursor Key** twice (on equipped terminals) displays the Incoming Call History.

By pressing the Left Cursor Key the user can access the Redial and Incoming Call History menus. The flow chart below shows the menu access sequence. If the terminal is not allowed to have the Dial Preview feature, these menus cannot be accessed.

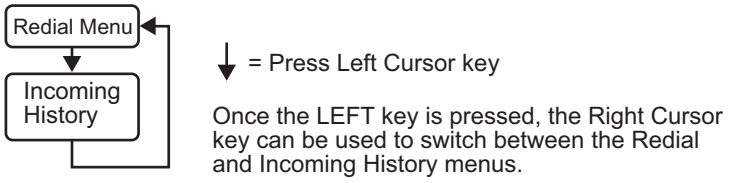

Figure 1-2 Left Cursor Key Operation Flow Chart

Caller ID Digits to Voice Mail

A Caller ID trunk can send Remote Log-On Protocol with Caller ID digits to the voice mail. When a trunk 001 receives the Caller ID as 12345, the protocol becomes ✱✱✱60001✱12345✱.

Outputting Caller ID Data

The system includes the Caller ID data on the SMDR report. The report provides the incoming call DN in the DIALED NUMBER field. The CLASS field shows PIN (just like all other incoming calls).

Display Reason for No Caller ID Information

With Caller ID enabled, the system provides information for analog calls that do not detect the Caller ID information. If the Caller ID information is restricted, the telephone display shows PRIVATE. If the system cannot provide Caller ID information because Telco information is not detected, the display shows NO CALLER INFO.

Option to Enable Caller ID Name for SLT

System programming provides an option for single line telephones to display Caller ID.

Caller ID Sender Queuing Added

The SL1000 system can provide Caller ID (calling party number) to a single line telephone with a display.

The system can queue incoming calls to the single line telephone if the system Caller ID sender resources are busy. Refer to Program 20-19-05 in the *SL1000 Programming Manual*.

If the single line telephone user lifts their handset while an incoming call is waiting in queue, they hear silence (no dial tone) and cannot dial out. When the single line telephone user goes back on-hook, the system immediately sends the queued call to the single line telephone without Caller ID.

Option Available for FSK or DTMF Type for Single Line Telephone

An option (Program 15-03-11) is available for the Caller ID which allows you to select either FSK or DTMF as the Caller ID type to be received by a single line telephone.

Option Available for FSK or DTMF Type from Analog Trunk

An option (Program 14-02-16) is available for the Caller ID which allows you to select the type of Caller ID signal from an analog trunk - FSK or DTMF.

Conditions

- To have pre-answer Caller ID from the voice mail, the call must be an unscreened transfer.
- Caller ID is provided by the CPU. The EXIFE, which plugs into the chassis, can provide additional resources for Caller ID if needed.
- Caller ID Name can display up to 12 characters.
- Caller ID Number can display up to 11 characters.
- A Caller ID Number with more than 12 digits follows Program 20-19-01 (first 10 or the last 10 digits).
- Caller ID information can be stored in Speed Dialing or One-Touch bins.
- Caller ID can be displayed for incoming calls and transferred calls.
- ARS can block outgoing Caller ID information on a call-by-call basis. To do this, insert the Caller ID block code (e.g., .141) in the ARS Dial Treatments.
- Trunks with Privacy Release enabled display Caller ID until the call is answered. To view it after the call has been picked up, press the line key, which sets the call to private mode. To keep the call on Privacy Release, press the Help + Exit keys.
- An extension user can display the Caller ID information for a call in Park if Automatic Handsfree in Program 15-02-08 is set to 0 (Preselect).
- An extension user can display the Caller ID information for multiple incoming calls without answering

the call by pressing the line key if Automatic Handsfree in Program 15-02-08 is set to 0 (Pre-select).

- Caller ID information outputs on the SMDR report.
- The system can send Caller ID digits to the voice mail if allowed in Program 14-01-22.
- When there are more than 20 characters set in Program 20-20 : Message Setup for Non-Caller ID Data, either the first or last character is missing (based on the entry in Program 20-19-01).
- If Program 20-09-06: Class of Service Options (Incoming Call Service): Incoming Time Display is set to 1 (On), the first line displays the time and date.
- Program 15-07-01 button (63) when enabled, removes the CPN from the setup message when making an outbound ISDN call, this is a toggle enable/disable button and can be used on a Call-by-Call basis. Programs 14-01-20, 14-01-21 and 20-08-15 are used for analog trunks only and can only be set on a per trunk/Class of Service basis.
- SLT users cannot block an incoming call based on the incoming Caller ID information on a station-by-station basis.
- The CPU with MEMDB has 36 resources for DTMF receiving and Dial Tone detection. When a EXIFE installed there are 32 resources available.
- When Program 10-09-01 is set to 0 (Common) and Program 14-02-10 (Caller ID) is set to 1 (Yes), all DTMF/Dial Tone Detection resources are always allocated to analog trunks, not analog exetensions. However, if Program 14-02-10 (Caller ID) is set to 0 (No), all DTMF/Dial Tone Detection resources can be used for both analog trunks and analog extensions.
- For the Caller ID List to show calls to a station that received a busy tone, Program 15-02-57 must be set 1 (On).
- When Program 15-02-57 is set to 1 (On) and Program 15-02-34 is set to 0 (Trunk), only outside calls are shown in the Caller ID List.

Default Settings

Disabled

System Availability

Terminals

All Multiline Terminals with a display and Single Line Telephones equipped to receive Caller ID

Required Component(s)

- 408M-A1, 408E-A1
- 2BRIDB-C1
- 1PRIU-C1

Related Features

Abbreviated Dialing/Speed Dial

Automatic Route Selection (ARS/F-Route)

Call Arrival (CAR) Keys

Caller ID Call Return

Conference, Voice Call/Privacy Release

Park

Station Message Detail Recording

InMail

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-02-04	**Location Setup - Area Code**	not assigned	
10-02-05	**Location Setup - Trunk Access Code**	not assigned	
10-09-01	**DTMF and Dial Tone Circuit Setup**	Resource 01 - 132 = 0 (Common)	
14-01-20	**Basic Trunk Data Setup - Block Outgoing Caller ID**	0	
14-01-21	**Basic Trunk Data Setup - Caller ID Block Code**	No setting	
14-01-22	**Basic Trunk Data Setup - Caller ID to Voice Mail**	0	
14-02-10	**Analog Trunk Data Setup - Caller ID**	0	
15-02-08	**Multiline Telephone Basic Data Setup - Automatic Handsfree**	1	
15-02-40	**Multiline Telephone Basic Data Setup - Additional Dial for Caller ID Call Return**	not assigned	
15-02-57	**Multiline telephone Basic Data Setup - Caller Log on Busy**	1	
15-03-09	**Single Line Telephone Basic Data Setup - Caller ID Function - For External Module**	0	
15-03-10	**Single Line Telephone Basic Data Setup - Caller ID Name**	1	
15-03-11	**Single Line Telephone Basic Data Setup - Caller ID Type**	0	
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.	
20-02-08	**System Options for Multiline Telephones - LCD Display Holding Time**	5 (seconds)	
20-06-01	**Class of Service for Extensions**	All extension port = Class 1	
20-08-15	**Class of Service Options (Outgoing Call Service) - Block Outgoing Caller ID**	COS 01~15 = 0	
20-09-02	**Class of Service Options (Incoming Call Service) - Caller ID Display**	COS 01~15 = 1	
20-09-04	**Class of Service Options (Incoming Call Service) - Notification for Incoming Call List Existence**	COS 01~15 = 1	
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	COS 01~15 = 0	
20-19-01	**System Options for Caller ID - Caller ID Displaying Format (If displaying digits are more than 12 digits)**	0	
20-19-05	**System ID Options for Caller ID - Caller ID Sender Queuing Time (Sender Wait)**	0 (seconds)	
20-20-01	**Message Setup for Non-Caller ID Data - Private Call**	UNAVAILABLE INFO	
20-20-02	**Message Setup for Non-Caller ID Data - Call from Out of Service Area**	OUT-OF-STATE	
20-20-03	**Message Setup for Non-Caller ID Data - Call Information with Error**	NO CALLER INFO	
90-03-01	**Save Data**	Dial **1** + press **Hold** (Press **Hold** to cancel.)	
90-04-01	**Load Data**	Dial **1** + press **Hold** (Press **Hold** to cancel.)	

C

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Operation

Storing a Number

To store a Caller ID number in an Speed Dial bin:

15-02-60: 0: Standard

1. With a multiline terminal in an idle condition the display shows:

```
  WED 22  1:59PM
201
```

2. Press the **Left Cursor Key** twice. The display shows:

```
     mm-dd hh:mm
##:          xxxx
```

= List Number
xxxx = Caller ID name
mm-dd hh:mm = incoming date and time

3. Press Caller-ID Key once or Press Down key on Cursor Key once.
Note: You can view next ID by pressing Down key once again or Press Caller ID Key again.

```
↑↓ Store?  Yes:1
##:           xxxx
```

= List Number
xxxx = Caller ID name

4. Press the **1**. The display shows:

```
ABB:1
RI:3
```

5. Press the **1** (ABB). The display shows:

```
SearchEmptyBin:1
DirectEntryBin:2
```

Search Empty Bin = Next Available Speed Dial bin will be used
Direct Entry Bin = Enter the Speed Dial number to be stored directly

6. Dial **1** if you want to assign the Speed Dial automaticall
- OR -
Dial 2 and enter Speed Dial number which the number is to be stored.
Example: 011 (Must be 3 digit).

```
Enter Bin No.
```

7. Display will shows the Speed Dial Number, Name and Number. Press **Hold**.

```
ABBXXXX      xxxx
              NNN
```

XX = Speed Dial Number
xxxx = Caller ID name
NNN = Caller ID Number

8. Enter the name to be associated with the stored number.

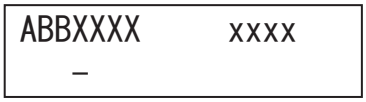


Table 1-6 Keys for Entering Names

Use this keypad digit . . .	When you want to. . .
1	Enter characters: **1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Å Æ Ç É Ê ì ó 0**
2	Enter characters: **A-C, a-c, 2**.
3	Enter characters: **D-F, d-f, 3**.
4	Enter characters: **G-I, g-i, 4**.
5	Enter characters: **J-L, j-l, 5**.
6	Enter characters: **M-O, m-o, 6**.
7	Enter characters: **P-S, p-s, 7**.
8	Enter characters: **T-V, t-v, 8**.
9	Enter characters: **W-Z, w-z, 9**.
0	Enter characters: **0 ! " # $ % & ' ( ) ô õ ú å ä æ ö ü α ε θ B**
*****	Enter characters: ***** + , - . / : ; < = > ? π Σ σ Ω ∞ ¢ £
#	**#** = Accepts an entry (only required if two letters on the same key are needed - ex: TOM). Pressing **#** again = Space. (In system programming mode, use the right arrow Softkey instead to accept and/or add a space.)
Clear/Back or **DND**	Clear the character entry one character at a time.
Flash	Clear all the entries from the point of the flashing cursor and to the right.

9. Press **Hold**. Display shows:

10. Press Speaker.

The telephone returns to idle

Temporary Memory

An unanswered call causes the **Call History** key (Program 15-07 or SC **851** : 08) to flash, indicating a new call was placed in the temporary memory. If enabled in programming, the telephone display shows CHECK LIST.

1. Press the **Call History** key (Program 15-07 or SC **851** : 08) or press the **LIST** Softkey and CID.
   - OR -
   Press the **Left Cursor** Key twice.

The last addition to the list is displayed.

2. Press the **ARROW DOWN** Softkey to scroll through the list of numbers in memory.
3. Press the **DEL** Softkey to delete the entry and scroll to the next entry.
4. The **Call History** key remains on as long as entries remain in memory.
5. To place a call back to a number in the temporary memory list, with the number to be dialed displayed, press a line key or **Speaker**. (Refer to Table 1-6 Keys for Entering Names on the previous page.)

The outgoing call is placed.

To display Caller ID for a call in Park:

Program 15-02-08 is set to 0 (preselect) for this feature.

1. With Program 15-02-08 set to 0 (preselect) and a call in park, press the **PARK** key. (Program 15-07 or SC **852** : ✱04.
   With Program 15-02-08 set to 1 (One-Touch) and a call in park, press **FLASH** then the **PARK** key (Program 15-07 or SC **852** : ✱04).

Checking your Answered/Unanswered Caller ID Calls

To review the last 50 outside calls your extension received:

1. At a display multiline terminal, press the **LIST** Softkey.
   - OR -
   Press the **Left Cursor** Key twice and skip step 2.
2. Press **CID**.

1st row of your display shows the Caller ID number. Ift he Caller ID includes a name, you can press the HELP key to view Unanswered, this indicates that it is a call you missed (unanswered). 2nd row shows the date and time oft he call.

Press the up and down softkeys to see the list of calls available in the buffer.

3. If the Caller ID includes a name, you can press the **HELP** key to view the number of the caller.
4. To call the displayed number, press a **line Key**.
   - OR -
   To erase the displayed number without returning the call, press the **DEL** Softkey.
5. Press **Speaker** to hang up.

Caller ID - Flexible Ringing

Description

The Caller ID - Flexible Ringing feature provides several different options for rerouting calls based on the Caller ID received.

Reject/Reroute "Private" Caller ID Calls

When an analog or ISDN trunk call is received with "Private" Caller ID information, the SL1000 can reject the call by playing a VRS message or it can route the call to an alternative extension or incoming ring group programmed in Program 22-18-01.

Reject/Reroute Based on Entry in SPD Table

When an analog, ISDN or IP trunk call is received with regular Caller ID information, the SL1000 can reject the call by playing a VRS message if the Caller ID number matches the Speed Dial group number programmed in Program 22-16-01 and Speed Dial entry in Programs 13-02-01 and 13-04-01. The analog, ISDN or IP trunk call can also be routed to an alternative extension or incoming ring group if the Caller ID number matches the common or group Speed Dial table (Program 13-04).

This option can block calls on all trunks or it can be set on a per-trunk basis.

Programming Examples for Flexible Ringing by Caller ID:

- To refuse the "Private" Caller ID incoming call:
  Program 14-01-27: 1 (reject)
  Program 20-07-24: 1 (Enable for COS)
  Program 22-18-01: 0 (no transfer)
  Program 40-10-06: 2 (VRS message 2)

then,

Turn on the Private Call Refuse mode using the service code (Program 11-10-32) or Programmable

Function Key (code 86).

- To transfer the "Private" Caller ID incoming call to extension 301 as ring pattern 2:
  Program 14-01-27: 1 (reject)
  Program 22-18-01: 1 (extension number)
  Program 22-18-02: 301 (extension 301)
  Program 22-18-03: 2 (ring pattern 2)

then,

Turn on the Private Call Refuse mode using the service code (Program 11-10-32) or Programmable Function Key (code 86).

- To transfer the "Private" Caller ID incoming call to incoming ring group 2 as ring pattern 3:
  Program 14-01-27: 1 (reject)
  Program 22-18-01: 2 (incoming ring group)
  Program 22-18-02: 2 (group 2)
  Program 22-18-03: 3 (ring pattern 3)

then,

Turn on the Private Call Refuse mode using the service code (Program 11-10-32) or Programmable Function Key (code 86).

- To reject the call with "2142622000" Caller ID incoming call:
  Program 14-01-27: 1 (reject)
  Program 20-07-25: 1 (Enable for COS)

Program 22-16: 32 (Speed Dial group 32)
Program 13-02; Group 32: 1000 - 1099
Program 13-04-01; Table 1000: 2142622000

then,

Turn on the Caller ID Refuse mode using the service code (Program 11-10-34) or Programmable Function Key (code 87).

- To transfer the call with “2142622000” Caller ID incoming call to extension 301 as ring pattern 1:
  Program 13-04-01: 2142622000
  Program 13-04-03: 1 (extension number)
  Program 13-04-04: 301 (extension 301)
  Program 13-04-05: 1 (tone pattern 1)
- To transfer the call with “2142622000” Caller ID incoming call to incoming ring group 2 as ring pattern 2:
  Program 13-04-01: 2142622000
  Program 13-04-03: 2 (incoming ring group)
  Program 13-04-04: 2 (group 2)
  Program 13-04-05: 2 (tone pattern 2)

C

Conditions

- Caller ID Matching. The SL1000 compares the Caller ID and programmed Speed Dial and allows/denies as indicated below.
- The Speed Dial table is searched from the starting number and the first match result is used.
- The maximum number of VRS message channels that can be used simultaneously is 16. These channels are also shared with the voice mail.
- This feature does not work with incoming trunk calls via networking (from another system). In this case, the refuse/routing program must be programmed in the system that has those trunks. Routing to the other system’s extension is available.
- When Program 13-04 is used; it will override the setting in Program 22-02-01: Incoming Call Trunk Setup.
- Program 13-04 will follow Common or Group Speed Dial numbers.

Caller ID Matching Rule:

The system compares the Caller ID and programmed Speed Dial with these rules below.

Table 1-7 Caller ID Matching Rule

Caller ID	Speed Dial	Result
2142622000	2142622000	Matched
2142622000	21426220009	Matched
2142622000	214	Matched
2622000	2142622000	Unmatched
2142622000	2622000	Unmatched

The Speed Dial table is searched from the starting number and the first match result is used.

Default Settings

Not Installed

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Central Office Calls, Answering

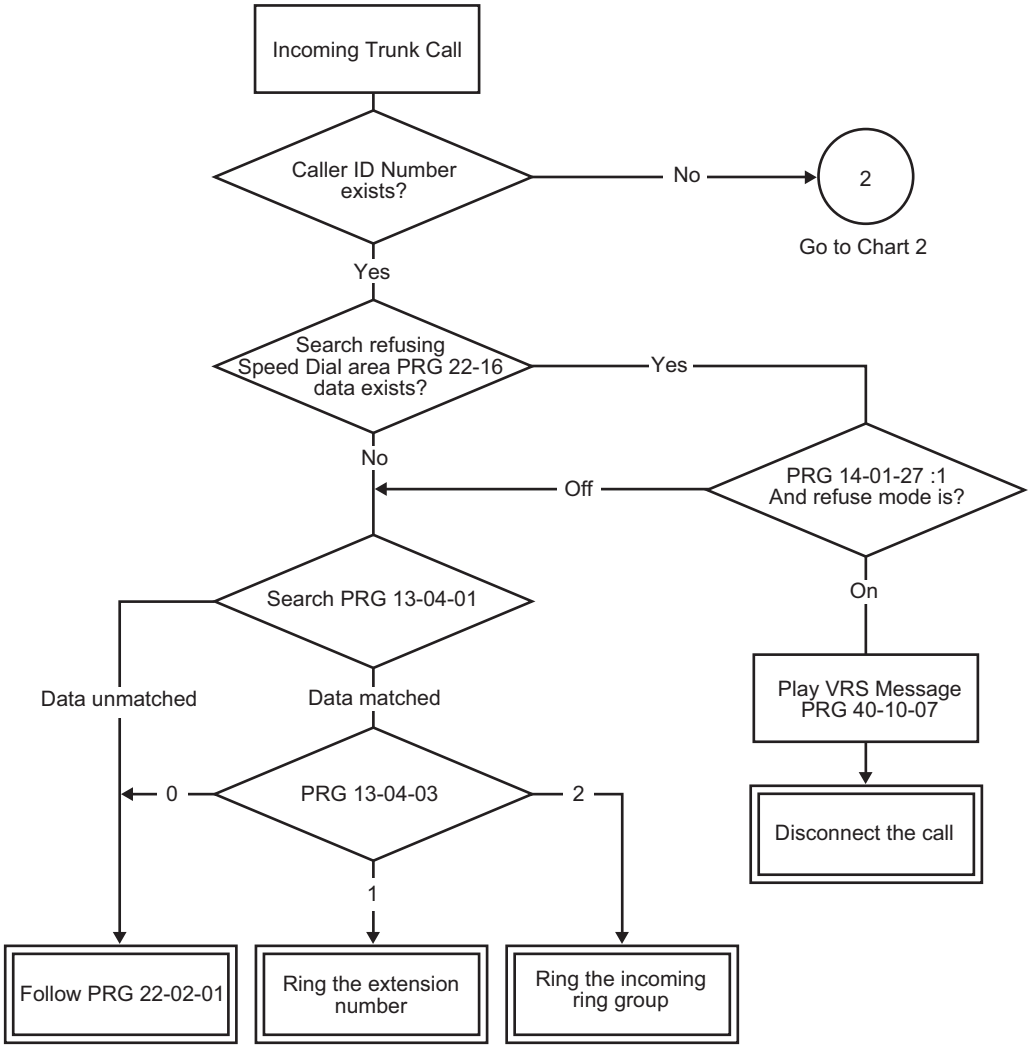
Direct Inward Dialing (DID)

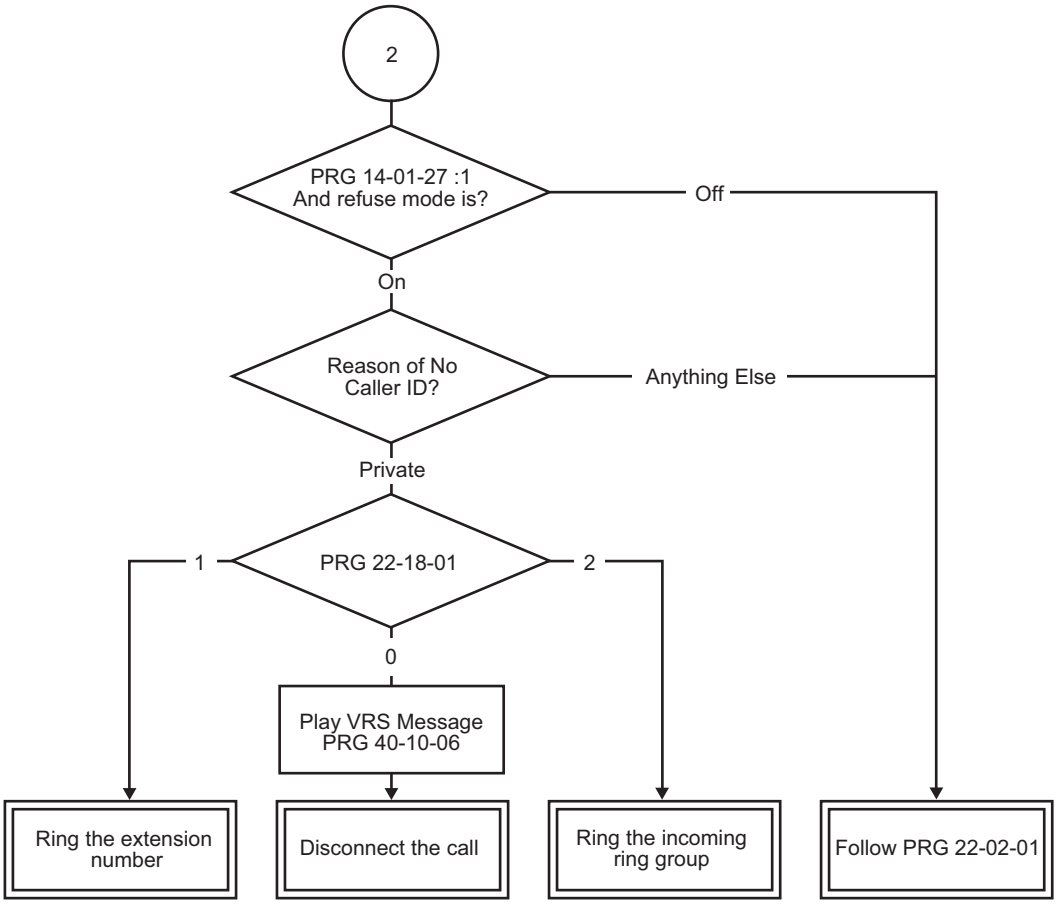
Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Default
11-10-32	Service Code Setup (for System Administrator) - Set Private Call Refuse	746
11-10-33	Service Code Setup (for System Administrator) - Entry Caller ID Refuse	747
11-10-34	Service Code Setup (for System Administrator) - Set Caller ID Refuse	748
13-02-01	Group Speed Dialing Bins	not assigned
13-04-01	Speed Dialing Number and Name - Speed Dialing Data	not assigned
13-04-03	Speed Dialing Number and Name - Transfer Mode	0
13-04-04	Speed Dialing Number and Name- Transfer Destination Number	not assigned
13-04-05	Speed Dialing Number and Name- Incoming Ring Pattern	0
14-01-27	Basic Trunk Data Setup - Caller ID Refuse Setup	0
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-07-24	Class of Service Options (Administrator Level) - Set/Cancel Private Call Refuse	COS 01~15 = 1
20-07-25	Class of Service Options (Administrator Level) - Set/Cancel Caller ID Refuse	COS 01~15 = 1
40-10-06	Voice Announcement Service Option - Set VRS Message for Private Call Refuse (VRS Msg Private Call)	0

The Caller ID - Flexible Ringing Flowchart below helps define programming:





Operation

None

Caller ID - Shared Logging

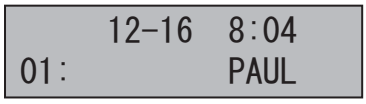
C

Description

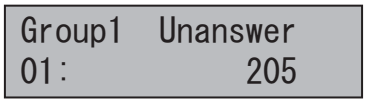
The system can log records directly to extension or one of 8 Caller ID logging groups.

Conditions

- By setting PRG15-02-67: (1-8 shared group), all extensions in the same logging group can share same Caller ID records. When set PRG15-02-67: (0: personal), each extension base log records are supported. Each extension or logging group can store up to 50 records.
- When changed PRG15-02-67: (1-8 shared group) to (0: personal), Caller ID stored for the group will be cleared.
- Extension in a Caller ID shared setting cannot store or refer own register for Caller ID personal. Caller ID personal and Caller ID shared group are exclusive use.
- Below shows Caller ID indication toggled by pressing Help key,



or



Caller ID Number:	01
Caller Name:	PAUL
Caller Number:	205
Time and Date of call:	12-16 8:04
Group Name:	Group01
Soft keys	

Group Name is displayed when PRG16-02-67 is set 1-8 and set group name at PRG20-49-01.

Default Settings

None

System Availability

Terminals

All Multiline terminals, Analog telephone

Required Component(s)

408M-A1, 408E-A1

2BRIDB-C1, 1PRIU-C1

Related Features

Caller ID

Guide to Feature Programming

Program Number	Program Name	Default
15-02-67	**Caller ID shared groups**	0
20-49-01	**Group Name**	1: Group 1 : 8: Group 8

C

Operation

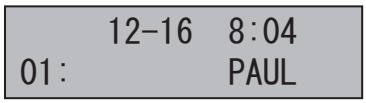
Set up shared Caller ID Group

< Program >
PRG15-02-67: See below table.

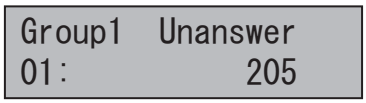
Table 1-8 Example of setting PRG15-02-67

	Caller ID shared groups (PRG15-02-67)
Extension 200	1
Extension 201	1
Extension 202	1
:	:
Extension 297	8
Extension 298	8
Extension 299	8

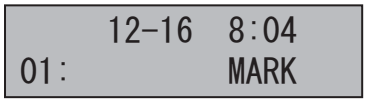
1. The display of Caller ID Group 1 is as follows.



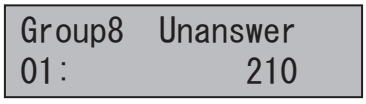
or



The display of Caller ID Group 8 is as follows.



or



Above Caller ID indication is toggled by pressing Help key.

Central Office Calls, Answering

Description

The system provides flexible routing of incoming CO (trunks) calls to meet the exact site requirements. This lets trunk calls ring and be answered at any combination of system extensions. A maximum of 126 trunks are available. For additional information on making trunks ring, refer to Ring Groups on page 1-425.

Delayed Ringing

Extensions in a Ring Group can have delayed ringing for trunks. If the trunk is not answered at its original destination, it rings the DIL No Answer Ring Group (this ring group applies to DIL or non-DIL trunks). This could help a secretary that covers calls for their boss. If the boss does not answer the call, it rings the secretary's telephone after a programmable interval.

Universal Answer

Universal Answer allows an employee to answer a call by going to any multiline terminal and dialing a unique Universal Answer code. The employee does not have to know the trunk number or dial any other codes to pick up the ringing trunk. You normally set up Universal Answer along with Universal Night Answer (refer to Night Service on page 1-370). When a Universal Night Answer call rings the External Paging, an employee can answer the call from the first available telephone. You might also want to use Universal Answer in a noisy warehouse or machine shop where the volume of normal telephone ringing is not adequate. After hearing the ringing over the Paging, an employee can then easily pick up the call from a shop telephone.

The Automatic Off-Hook Answer of Universal Answer Call options (Program 20-10-07) determines whether or not the extension has the Auto Answer feature for ringing calls. This option allows a user to simply lift the handset to answer a ringing call; dialing the service code is not necessary.

Additional Trunk Ring Tones

Various ring tone patterns and melodies for incoming calls are available (Program 22-03-11); Ring Tone Patterns 1~4 and Melodies 1~5.

Sidetone Volume Setup

This option allows system programming for the multiline terminal side tone volume. There are two levels, based on whether the connected trunk is a digital trunk or analog trunk.

Conditions

- The incoming ring group assignment programmed in Program 41-03-01 overrides the setting in Program 22-05-01.
- Ringing calls can be picked up regardless of access map programming.
- An extension user can answer an outside call just by lifting the handset.
- Long Conversation Cutoff can disconnect incoming and outgoing CO calls after a set time period. Using the Warning Tone for Long Conversation feature allows users on outgoing calls to hear a warning tone prior to the call disconnecting.
- Line keys simplify answering outside calls.
- If the Absent text message was set by the originating extension, the destination extension displays the assigned text message instead of the Reason for Transfer message.
- If an extension is assigned to a Trunk Access Map that has no access for a trunk, the extension can still retrieve parked calls on that trunk. The extension can also Group Call Pickup and Direct Call Pickup calls ringing another extension on that trunk.
- To adjust for proper audio quality, refer to Programs 81-07 and 81-17.

Default Settings

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

Any Trunk ETU (i.e., 408M-A1 , 2BRIDB-C1, 1PRIU-C1, etc.)

Related Features

Call Forwarding

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Direct Inward System Access (DISA)

Directed Call Pickup

Do Not Disturb (DND)

Group Call Pickup

ISDN Compatibility

Line Preference

Long Conversation Cutoff

Night Service

Programmable Function Keys

Selectable Display Messaging

Warning Tone for Long Conversation

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-03-XX	ETU Setup	Refer to Programming Manual.	
11-11-13	Service Code Setup (for Setup/Entry Operation) - Display Language Selection for Multiline Terminal	778	
11-12-30	Service Code Setup (for Service Access) - Specified Trunk Answer	772	
11-12-43	Service Code Setup (for Service Access) - Universal Answer	#0	

C

Program Number	Program Name	Default	Note
14-01-02	**Basic Trunk Data Setup - Transmit Level**	32 (0dB)	
14-01-03	**Basic Trunk Data Setup - Receive Level**	32 (0dB)	
14-02-02	**Analog Trunk Data Setup - Ring Detect Type**	0	
14-05-01	**Trunk Group - Trunk Group Number**	Trunk Port 1~126 = Priority 1~126	
14-06-01	**Trunk Group Routing - Priority Order Number**	Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~25) and Order Numbers (1~4) = 0 (Not Specified).	
14-07-01	**Trunk Access Map Setup**	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).	
15-01-05	**Basic Extension Data Setup - Restriction for Outgoing Disable on Incoming Line**	0	
15-02-01	**Multiline Telephone Basic Data Setup - Display Language Selection (To select options 8~10, press either 8 or Flash, then press line keys 1~3. Key 1 is option 8, Key 2 is option 9, and Key 3 is option 10.)**	1	
15-02-02	**Multiline Telephone Basic Data Setup - Trunk Ring Tone**	2	
15-02-22	**Multiline Telephone Basic Data Setup - Multiple Incoming From Intercom and Trunk**	1	
15-03-03	**Single Line Telephone Basic Data Setup - Terminal Type**	0	
15-06-01	**Trunk Access Map for Extensions**	1	
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.	
15-13-01	**Loop Keys - Outgoing Option**	0: Programming Function Key No. = 01-24	
15-13-02	**Loop Keys - Incoming Option**	0: Programming Function Key No. = 01-24	
20-02-09	**System Options for Multiline Telephones - Disconnect Supervision**	1	
20-02-15	**System Options for Multiline Telephones - Caller ID Display Mode**	0	
20-06-01	**Class of Service for Extensions**	All extension port = Class 1	
20-10-07	**Class of Service Options (Answer Service) - Automatic Off-Hook Answer**	COS 01~15 = 1	
20-13-13	**Class of Service Options (Supplementary Service) - Continued Dialing (DTMF) Signal on ICM Call**	COS 01~15 = 1	
20-13-23	**Class of Service Options (Supplementary Service) - Display the Reason for Transfer**	COS 01~15 = 0	
21-01-15	**System Options for Outgoing Calls - Outgoing Disable on Incoming Line (Toll Restriction)**	0	
21-01-16	**System Options for Outgoing Calls - Supervise Dial Detection Timer**	20 (seconds)	
21-01-17	**System Options for Outgoing Calls - Restriction Digit in Outgoing Disable on Incoming Line**	4	

Program Number	Program Name	Default	Note
22-01-01	**System Options for Incoming Calls - Incoming Call Priority**	1	
22-01-02	**System Options for Incoming Calls - Incoming Call Ring No Answer Alarm**	0	
22-01-03	**System Options for Incoming Calls - Ring No Answer Alarm Time**	60 (seconds)	
22-01-04	**System Options for Incoming Calls - DIL No Answer Recall Time**	0 (seconds)	
22-02-01	**Incoming Call Trunk Setup**	0	
22-03-01	**Trunk Ring Tone Range - Ring Tone Pattern**	0	
22-04-01	**Incoming Extension Ring Group Assignment**	Extension 200 (first port)	
22-05-01	**Incoming Trunk Ring Group Assignment**	1	
22-06-01	**Normal Incoming Ring Mode**	1	
22-07-01	**DIL Assignment**	not assigned	
22-08-01	**DIL/IRG No Answer Destination**	0	

Operation

To answer an incoming trunk call:

1. Lift the handset.

To use Universal Answer to answer a call ringing over the Paging system:

1. Go off-hook.

   Depending on system programming, this may answer the call and you can skip Step 2.

2. Dial **#0**.

   If you hear error tone, your extension Class of Service prevents Universal Answer.

To listen to the incoming trunk ring choices:

1. Press **Speaker**.
2. Dial **811** + 2.
3. Select the ringing (**1~7**) you want to check.
4. Go back to step 3 to listen to additional choices or press **Speaker** to hang up.

To change the ringing of your incoming trunk:

1. Press **Speaker**.
2. Dial **820** + 2.
3. Select the ringing (**1~7**).
4. Press **Speaker** to hang up.

Central Office Calls, Placing

Description

The system provides flexibility in the way each extension user can place outgoing trunk calls. This lets you customize the call placing options to meet site requirements and each individual's needs. To place a call the user can:

- Press Line Keys
- Press a Trunk Group Key
- Press a Trunk Group Routing (dial 9) Key
- Dial a code for a specific trunk (**#9** + the trunk number)
- Dial a code for a Trunk Group (**804** + group number)
- Dial a code for Trunk Group Routing or ARS (**9**)
- Dial an Alternate Trunk Route Access Code (which you must define)
- Press or Use a Speed Dial bin

There are **126** available trunks.

Trunk Port Disable

The system provides a service code (default: **745**) which can be used by an extension user to block a trunk for outgoing calls. The user which busied out the trunk still has access to it. All other users are blocked from seizing it to place an outgoing call. The trunk, however, can still be answered by any users programmed with the trunk access.

Sidetone Volume Setup

Allows the system programming for the multiline terminal side tone volume. There are two levels, based on whether the connected trunk is a digital trunk or analog trunk.

Conditions

- If the trunk name seize display is enabled in programming, the Call Timer starts automatically after the user places a trunk call. Disabling the trunk name seize display also disables the Call Timer.
- The system can automatically select the correct type of line to use based on the number dialed and the time.
- With Automatic Handsfree, an extension user can press a line key to place a trunk call without lifting the handset or pressing Speaker. Users without Automatic Handsfree can preselect a line key before lifting the handset or pressing Speaker.
- Long Conversation Cutoff can disconnect incoming and outgoing CO calls after a set time period. Using the Warning Tone for Long Conversation feature allows users on outgoing calls to hear a warning tone prior to the call disconnecting.
- An extension Toll Class of Service may prevent them from dialing certain numbers.
- Dialing 9 or any other trunk access code after dialing an extension results in termination of the intercom call and a trunk is seized.
- Setting Program 14-02-11 to On may cause a slight delay in dial tone while loop current is returned.
- When Account Codes are enabled, the user must press the * three times before the * character is passed to the telco. The system recognizes the initial * as the beginning of an Account Code entry, the second * as the end of an Account Code entry, and the third * will be passed to telco.
- To adjust for proper audio quality, refer to Programs 81-07 and 81-17.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

Any Trunk ETU (i.e., 408M-A1 , 2BRIDB-C1, 1PRIU-C1, etc.)

Related Features

Alphanumeric Display

Automatic Route Selection (ARS/F-Route)

Code Restriction/Toll Restriction

Dial Tone Detection

Handsfree Answerback/Forced Intercom Ringing

Long Conversation Cutoff

Microphone Cutoff

Programmable Function Keys

Trunk Group Routing

Trunk Groups

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-03-XX	**ETU Setup**	Refer to Programming Manual.	
11-01-01	**System Numbering**	Refer to Programming Manual.	
11-09-01	**Trunk Access Code**	9	
11-09-02	**Trunk Access Code - 2nd Trunk Route Access Code**	not assigned	
11-10-27	**Service Code Setup (for System Administrator) - Trunk Port Disable for Outgoing Calls**	745	
11-11-13	**Service Code Setup (for Setup/Entry Operation) - Display Language Selection for Multiline Terminal**	778	
11-12-01	**Service Code Setup (for Service Access) - Bypass Call**	807	
11-12-14	**Service Code Setup (for Service Access) - Trunk Group Access**	804	
14-01-01	**Basic Trunk Data Setup - Trunk Name**	Trunk port Number: 001 ~ 126 Trunk Name: 001 ~ 126	
14-01-02	**Basic Trunk Data Setup - Transmit Level**	32 (0dB)	
14-01-03	**Basic Trunk Data Setup - Receive Level**	32 (0dB)	

C

Program Number	Program Name	Default	Note
14-01-07	**Basic Trunk Data Setup - Outgoing Calls**	1	
14-01-10	**Basic Trunk Data Setup - DTMF Tones for Outgoing Calls**	1	
14-02-05	**Analog Trunk Data Setup - Dial Tone Detection for Manually Accessed Trunks**	1	
14-02-11	**Analog Trunk Data Setup - Next Trunk in Rotary if No Dial Tone**	0	
14-02-14	**Analog Trunk Data Setup - Loop Start/Ground Start**	0	
14-05-01	**Trunk Group - Trunk Group Number**	Trunk Port 1~126 = Priority 1~126	
14-06-01	**Trunk Group Routing - Priority Order Number**	Route 1, Order Number 1 = 1 (Trunk Group 1), Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~100) and Order Numbers (1~4) = 0 (Not Specified)	
14-07-01	**Trunk Access Map Setup**	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).	
15-02-01	**Multiline Telephone Basic Data Setup - Display Language Selection** (To select options 8~10, press either 8 or Flash, then press line keys 1~3. Key 1 is option 8, Key 2 is option 9, and Key 3 is option 10.)	1	
15-02-08	**Multiline Telephone Basic Data Setup - Automatic Handsfree**	1	
15-03-03	**Single Line Telephone Basic Data Setup - Terminal Type**	0	
15-06-01	**Trunk Access Map for Extensions**	1	
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.	
15-13-01	**Loop Keys - Outgoing Option**	0: Programming Function Key No. = 01-32	
15-13-02	**Loop Keys - Incoming Option**	0: Programming Function Key No. = 01-32	
20-02-06	**System Options for Multiline Telephones - Preselection Time**	5 (seconds)	
20-02-09	**System Options for Multiline Telephones - Disconnect Supervision**	1	
20-06-01	**Class of Service for Extensions**	All extension port = Class 1	
20-07-12	**Class of Service Options (Administrator Level) - Trunk Port Disable**	COS 01~15 = 1	
20-08-02	**Class of Service Options (Outgoing Call Service) - Trunk Outgoing Calls**	COS 01~15 = 1	
20-13-13	**Class of Service Options (Supplementary Service) - Continued Dialing (DTMF) Signal on ICM Call**	COS 01~15 = 1	
21-01-15	**System Options for Outgoing Calls - Outgoing Disable on Incoming Line (Toll Restriction)**	0	
21-01-16	**System Options for Outgoing Calls - Supervise Dial Detection Timer**	20 (seconds)	

Program Number	Program Name	Default	Note
21-01-17	**System Options for Outgoing Calls - Restriction Digit in Outgoing Disable on Incoming Line**	4	
21-02-01	**Trunk Group Routing for Extensions**	1	
21-15-01	**Individual Trunk Group Routing for Extensions**	0	
24-02-07	**System Options for Transfer - Trunk-to-Trunk Transfer Release Warning Tone**	1800 (seconds)	
24-02-10	**System Options for Transfer - Disconnect Trunk to Trunk Timer**	0 (seconds)	

Operation

To place a call over a trunk group:

1. Go off-hook.
2. Dial **804** .
3. Dial trunk group number (**01~25**).
4. Dial the number.
   - OR -
   1. At the multiline terminal, press the **trunk group** key (Program 15-07-01 or SC **851** : ✱02 + group).
   2. Dial the number.

To place a call using Trunk Group Routing:

1. Go off-hook.
2. Dial **9**.

   If your system has an Alternate Trunk Route Access code, you may dial that instead.

3. Dial the number.
   - OR -
   1. At the multiline terminal, press the **Trunk Group Routing** key (Program 15-07-01 or SC **852** : ✱02 plus trunk group).
   2. Dial the number.

To place a call over a specific trunk:

1. Dial **#9** .
2. Dial the line number (e.g., 005 for line 5).
3. Dial the number.
   - OR -
   1. At the multiline terminal, press line key (Program 15-07-01 or SC **852** : ✱01 001 to 126).
   2. Dial the number.

To busy out a trunk from outbound usage:

1. Press **Speaker** + **745** + Trunk Number (**001~126**) + **1**.

   The user which busied out the trunk still has access to it. All other users are blocked from seizing it to place an outgoing call. The trunk, however, can still be answered by any user programmed with the trunk access.

To Remove a Trunk from a Busied Out State:

1. Press **Speaker** + **745** + Trunk Number (**001~126**) + **0**.

C

Class of Service

Description

Class of Service (COS) sets various features and dialing options (called items) for extensions. The system allows any number of extensions to share the same Class of Service. An extension can have a different Class of Service for each of the Night Service modes. This lets you program a different set of dialing options for daytime operation, nighttime operation and even during lunch breaks. An extension Class of Service can be changed in system programming or via a Service Code (normally **777**). There are 15 available Classes of Service.

Conditions

- Before assigning a new COS, make sure the new COS matches the old COS or you may enable options, which the extension should not have or remove options, which it should have.
- An extension can have a different Class of Service for each Service mode. At default, the Mode names are assigned as follows:
  - Mode 1 = No setting
  - Mode 2 = Night
  - Mode 3 = Midnight
  - Mode 4 = Rest
  - Mode 5 = Day2
  - Mode 6 = Night2
  - Mode 7 = Midnight2
  - Mode 8 = Rest2
- If a user dials a number not programmed in ARS, Program 26-01-03 determines if the system should route over the trunk group settings defined in Program 21-02 or play an error tone.
- When using ARS Class of Service, with Program 26-01-03 set to (1) "Play Warning Tone", Any trunk pointed or transferred to a virtual that is Call Forward Off-Premise will not complete. For a virtual to Call Forward Off-Premise, Program 26-01-03 must be set to "Route to trunk group" and the call will follow the trunk group settings of the trunk, assigned in Program 21-03.
- When using ARS Class of Service, with Program 26-01-03 set to (1) "Play Warning Tone" or transferred to a virtual that is Call Forward Off-Premise will always follow ARS Class 1 routing properties.

Default Settings

- All extensions have Class of Service 1 in all Night Service modes.
  If changing Class of Service via Service Code:
  - An extension can use Service Code **777** to change another extension Class of Service (Program 20-13-28 = 1).
  - An extension can automatically block another extension attempt to change their Class of Service via Service Code **777** (Program 20-13-28 = 0).
  - The default Service Code for this option is **777** (Program 11-11-24 = **777**).

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Night Service

C

Guide to Feature Programming

Program Number	Program Name	Default	Note
11-11-24	Service Code Setup (for Setup/Entry Operation) - Change Station Class of Service	777	
11-19-01	Remote Conference Pilot Number Setup - Maximum Channels	No Remote Conference Pilot Numbers assigned to any Conference Group (1-4)	
20-06-01	Class of Service for Extensions	All extension port = Class 1	
20-07-01	Class of Service Options (Administrator Level) - Manual Night Service Enabled	COS 01~15 = 1	
20-07-02	Class of Service Options (Administrator Level) - Changing the Music on Hold Tone	COS 01~15 = 1	
20-07-03	Class of Service Options (Administrator Level) - Time Setting	COS 01~15 = 1	
20-07-04	Class of Service Options (Administrator Level) - Storing Speed Dialing Entries	COS 01~15 = 1	
20-07-05	Class of Service Options (Administrator Level) - Set/Cancel Automatic Trunk-to-Trunk Transfer	COS 01~15 = 1	
20-07-10	Class of Service Options (Administrator Level) - Programmable Function Key Programming (Appearance Level)	COS 01~15 = 1	
20-07-11	Class of Service Options (Administrator Level) - Forced Trunk Disconnect (analog trunk only)	COS 01~15 = 1	
20-07-12	Class of Service Options (Administrator Level) - Trunk Port Disable	COS 01~15 = 1	
20-07-13	Class of Service Options (Administrator Level) - VRS Record (VRS Msg Operation)	COS 01~15 = 0	
20-07-14	Class of Service Options (Administrator Level) - VRS General Message Play	COS 01~15 = 0	
20-07-15	Class of Service Options (Administrator Level) - VRS General Message Record/Delete	COS 01~15 = 0	
20-07-18	Class of Service Options (Administrator Level) - SMDR Printout Accumulated Extension Data	COS 01~15 = 1	
20-07-19	Class of Service Options (Administrator Level) - SMDR Printout Department Group (STG) Data	COS 01~15 = 1	
20-07-20	Class of Service Options (Administrator Level) - SMDR Printout Accumulated Account Code Data	COS 01~15 = 1	
20-07-23	Class of Service Options (Administrator Level) - CO Message Waiting Indication Callback Number Programming	COS 01~15 = 0	
20-07-24	Class of Service Options (Administrator Level) - Set/Cancel Private Call Refuse	COS 01~15 = 1	
20-07-25	Class of Service Options (Administrator Level) - Set/Cancel Caller ID Refuse	COS 01~15 = 1	
20-07-26	Class of Service Options (Administrator Level) - Dial-In Mode Switch	COS 01~15 = 1	

Program Number	Program Name	Default	Note
20-07-27	Class of Service Options (Administrator Level) - Do-Not-Call Administrator	COS 01~15 = 0	
20-08-01	Class of Service Options (Outgoing Call Service) - Intercom Calls	COS 01~15 = 1	
20-08-02	Class of Service Options (Outgoing Call Service) - Trunk Outgoing Calls	COS 01~15 = 1	
20-08-03	Class of Service Options (Outgoing Call Service) - System Speed Dialing	COS 01~15 = 1	
20-08-04	Class of Service Options (Outgoing Call Service) - Group Speed Dialing	COS 01~15 = 1	
20-08-05	Class of Service Options (Outgoing Call Service) - Dial Number Preview (Preset Dial)	COS 01~15 = 1	
20-08-06	Class of Service Options (Outgoing Call Service) - Toll Restriction Override	COS 01~15 = 1	
20-08-07	Class of Service Options (Outgoing Call Service) - Repeat Redial	COS 01~15 = 1	
20-08-08	Class of Service Options (Outgoing Call Service) - Toll Restriction Dial Block	COS 01~15 = 1	
20-08-09	Class of Service Options (Outgoing Call Service) - Hotline/Extension Ringdown	COS 01~15 = 1	
20-08-10	Class of Service Options (Outgoing Call Service) - Signal/Voice Call	COS 01~15 = 1	
20-08-11	Class of Service Options (Outgoing Call Service) - Protect for the Call Mode Switching from Caller	COS 01~15 = 0	
20-08-12	Class of Service Options (Outgoing Call Service) - Department Group Step Calling	COS 01~15 = 1	
20-08-13	Class of Service Options (Outgoing Call Service) - ISDN CLIP	COS 01~15 = 1	
20-08-14	Class of Service Options (Outgoing Call Service) - Call Address Information	COS 01~15 = 0	
20-08-15	Class of Service Options (Outgoing Call Service) - Block Outgoing Caller ID	COS 01~15 = 0	
20-08-17	Class of Service Options (Outgoing Call Service) - ARS Override of Trunk Access Map	COS 01~15 = 0	
20-08-19	Class of Service Options (Outgoing Call Service) - Hotline for Speaker	COS 01~15 = 0	
20-08-20	Class of Service Options (Outgoing Call Service) - Hot Key Pad	COS 01~15 = 0	
20-08-21	Class of Service Options (Outgoing Call Service) - Automatic Trunk Seizing by Pressing Speaker Key	COS 01~15 = 0	
20-08-22	Class of Service Options (Outgoing Call Service) - Voice Over to busy Virtual Extension	COS 01~15 = 0	
20-09-01	Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/DIL Override	COS 01~15 = 0	
20-09-02	Class of Service Options (Incoming Call Service) - Caller ID Display	COS 01~15 = 1	
20-09-03	Class of Service Options (Incoming Call Service) - Sub Address Identification	COS 01~15 = 0	

C

Program Number	Program Name	Default	Note
20-09-04	Class of Service Options (Incoming Call Service) - Notification for Incoming Call List Existence	COS 01~15 = 0	
20-09-05	Class of Service Options (Incoming Call Service) - Signal/Voice Call	COS 01~15 = 1	
20-09-06	Class of Service Options (Incoming Call Service) - Incoming Time Display	COS 01~15 = 0	
20-09-07	Class of Service Options (Incoming Call Service) - Call Queuing	COS 01~15 = 0	
20-10-01	Class of Service Options (Answer Service) - Group Call Pickup (Within Group)	COS 01~15 = 1	
20-10-02	Class of Service Options (Answer Service) - Group Call Pickup (Another Group)	COS 01~15 = 1	
20-10-03	Class of Service Options (Answer Service) - Group Call Pickup for Specific Group	COS 01~15 = 1	
20-10-04	Class of Service Options (Answer Service) - Telephone Call Pickup	COS 01~15 = 1	
20-10-05	Class of Service Options (Answer Service) - Directed Call Pickup for Own Group	COS 01~15 = 1	
20-10-06	Class of Service Options (Answer Service) - Meet-Me Conference and Paging	COS 01~15 = 1	
20-10-07	Class of Service Options (Answer Service) - Automatic Off-Hook Answer	COS 01~15 = 1	
20-10-08	Class of Service Options (Answer Service) - Virtual Extension Off-Hook Answer	COS 01~15 = 0	
20-10-09	Class of Service Options (Answer Service) - Call Pickup Callback	COS 01~15 = 0	
20-10-10	Class of Service Options (Answer Service) - Answer Preset	COS 01~15 = 0	
20-11-01	Class of Service Options (Hold/Transfer Service) - Call Forward All	COS 01~15 = 1	
20-11-02	Class of Service Options (Hold/Transfer Service) - Call Forward When Busy	COS 01~15 = 1	
20-11-03	Class of Service Options (Hold/Transfer Service) - Call Forwarding When Unanswered	COS 01~15 = 1	
20-11-04	Class of Service Options (Hold/Transfer Service) - Call Forwarding (Both Ringing)	COS 01~15 = 1	
20-11-05	Class of Service Options (Hold/Transfer Service) - Call Forwarding with Follow Me	COS 01~15 = 1	
20-11-06	Class of Service Options (Hold/Transfer Service) - Unscreened Transfer (Ring Inward Transfer)	COS 01~15 = 1	
20-11-07	Class of Service Options (Hold/Transfer Service) - Transfer Without Holding	COS 01~15 = 0	
20-11-08	Class of Service Options (Hold/Transfer Service) - Transfer Information Display	COS 01~15 = 1	
20-11-09	Class of Service Options (Hold/Transfer Service) - Group Hold Initiate	COS 01~15 = 1	

Program Number	Program Name	Default	Note
20-11-10	**Class of Service Options (Hold/Transfer Service) - Group Hold Answer**	COS 01~15 = 1	
20-11-11	**Class of Service Options (Hold/Transfer Service) - Automatic On-Hook Transfer**	COS 01~15 = 1	
20-11-12	**Class of Service Options (Hold/Transfer Service) - Call Forwarding Off-Premise (External Call Forwarding)**	COS 01~15 = 1	
20-11-13	**Class of Service Options (Hold/Transfer Service) - Operator Transfer After Hold Callback**	COS 01~15 = 1	
20-11-14	**Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer Restriction**	COS 01~15 = 0	
20-11-15	**Class of Service Options (Hold/Transfer Service) - VRS Personal Greeting (Message Greeting)**	COS 01~15 = 1	
20-11-16	**Class of Service Options (Hold/Transfer Service) - Call Redirect**	COS 01~15 = 0	
20-11-17	**Class of Service Options (Hold/Transfer Service) - Department Group Trunk-to-Trunk Transfer (Each Telephone Group Transfer)**	COS 01~15 = 1	
20-11-18	**Class of Service Options (Hold/Transfer Service) - No Recall**	COS 01~15 = 0	
20-11-19	**Class of Service Options (Hold/Transfer Service) - Hold/Extended Park**	COS 01~15 = 0	
20-11-20	**Class of Service Options (Hold/Transfer Service) - No Callback**	COS 01~15 = 0	
20-11-21	**Class of Service Options (Hold/Transfer Service) - Restriction for Tandem Trunking on Hang Up**	COS 01~15 = 0	
20-11-22	**Class of Service Options (Hold/Transfer Service) - Restrict Unsupervised Conference**	COS 01~15 = 0	
20-11-23	**Class of Service Options (Hold/Transfer Service) - VE Call Forward Set/Cancel**	COS 01~15 = 0	
20-11-24	**Class of Service Options (Hold/Transfer Service) - Trunk Park Hold Mode**	COS 01~15 = 0	
20-11-25	**Class of Service Options (Hold/Transfer Service) - Transfer Park Call**	COS 01~15 = 0	
20-11-26	**Class of Service Options (Hold/Transfer Service) - Station Park Hold Mode**	COS 01~15 = 0	
20-11-27	**Class of Service Options (Hold/Transfer Service) - Call Park Automatically Search**	COS 01~15 = 1	
20-12-02	**Class of Service Options (Charging Cost Service) - Advice of Charge**	COS 01~15 = 1	
20-12-03	**Class of Service Options (Charging Cost Service) - Cost Display (TTU)**	COS 01~15 = 0	
20-13-01	**Class of Service Options (Supplementary Service) - Long Conversation Alarm**	COS 01~15 = 1	
20-13-02	**Class of Service Options (Supplementary Service) - Long Conversation Cutoff (Incoming)**	COS 01~15 = 0	
20-13-03	**Class of Service Options (Supplementary Service) - Long Conversation Cutoff (Outgoing)**	COS 01~15 = 0	

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Program Number	Program Name	Default	Note
20-13-04	Class of Service Options (Supplementary Service) - Call Forward/DND Override (Bypass Call)	COS 01~15 = 1	
20-13-05	Class of Service Options (Supplementary Service) - Intercom Off-Hook Signaling	COS 01~15 = 1	
20-13-06	Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)	COS 01~15 = 0	
20-13-07	Class of Service Options (Supplementary Service) - Message Waiting	COS 01~15 = 1	
20-13-08	Class of Service Options (Supplementary Service) - Conference	COS 01~15 = 1	
20-13-09	Class of Service Options (Supplementary Service) - Privacy Release	COS 01~15 = 1	
20-13-10	Class of Service Options (Supplementary Service) - Barge-In Monitor	COS 01~15 = 0	
20-13-11	Class of Service Options (Supplementary Service) - Room Monitor, Initiating Extension	COS 01~15 = 0	
20-13-12	Class of Service Options (Supplementary Service) - Room Monitor, Extension Being Monitored	COS 01~15 = 0	
20-13-13	Class of Service Options (Supplementary Service) - Continued Dialing (DTMF) Signal on ICM Call	COS 01~15 = 1	
20-13-14	Class of Service Options (Supplementary Service) - Department Calling (PLT No Called Extension)	COS 01~15 = 1	
20-13-15	Class of Service Options (Supplementary Service) - Barge-In, Initiate	COS 01~15 = 1	
20-13-16	Class of Service Options (Supplementary Service) - Barge-In, Receive	COS 01~15 = 1	
20-13-17	Class of Service Options (Supplementary Service) - Barge-In Tone/Display (Intrusion Tone)	COS 01~15 = 1	
20-13-18	Class of Service Options (Supplementary Service) - Programmable Function Key Programming (General Level)	COS 01~15 = 1	
20-13-19	Class of Service Options (Supplementary Service) - Selectable Display Messaging (Text Messaging)	COS 01~15 = 1	
20-13-20	Class of Service Options (Supplementary Service) - Account Code/Toll Restriction Operator Alert (Restricted Operation Transfer)	COS 01~15 = 1	
20-13-21	Class of Service Options (Supplementary Service) - Extension Name	COS 01~15 = 1	
20-13-22	Class of Service Options (Supplementary Service) - Busy Status Display (Called Party Status)	COS 01~15 = 0	
20-13-23	Class of Service Options (Supplementary Service) - Display the Reason for Transfer	COS 01~15 = 0	
20-13-24	Class of Service Options (Supplementary Service) - Privacy Release by Pressing Line Key	COS 01~15 = 0	

Program Number	Program Name	Default	Note
20-13-26	**Class of Service Options (Supplementary Service) - Group Listen**	COS 01~15 = 0	
20-13-27	**Class of Service Options (Supplementary Service) - Busy on Seizing Virtual Extension**	COS 01~15 = 1	
20-13-28	**Class of Service Options (Supplementary Service) - Allow Class of Service to be Changed**	COS 01~15 = 0	
20-13-29	**Class of Service Options (Supplementary Service) - Paging Display**	COS 01~15 = 1	
20-13-30	**Class of Service Options (Supplementary Service) - Background Music**	COS 01~15 = 1	
20-13-31	**Class of Service Options (Supplementary Service) - Connected Line Identification (COLP)**	COS 01~15 = 0	
20-13-32	**Class of Service Options (Supplementary Service) - Deny Multiple Barge-Ins**	COS 01~15 = 0	
20-13-34	**Class of Service Options (Supplementary Service) - Block Manual Off-Hook Signaling**	COS 01~15 = 0	
20-13-35	**Class of Service Options (Supplementary Service) - Block Camp-On**	COS 01~15 = 0	
20-13-36	**Class of Service Options (Supplementary Service) - Call Duration Timer Display**	COS 01~15 = 1	
20-13-38	**Class of Service Options (Supplementary Service) - Headset Ringing**	COS 01~15 = 0	
20-13-40	**Class of Service Options (Supplementary Service) - Do Not Disturb**	COS 01~15 = 1	
20-13-41	**Class of Service Options (Supplementary Service) - Voice Mail Message Indication on DSS**	COS 01~15 = 0	
20-13-42	**Class of Service Options (Supplementary Service) - Extension Data Swap Enabling**	COS 01~15 = 1	
20-13-44	**Class of Service Options (Supplementary Service) - Live Monitor Enabling**	COS 01~15 = 1	
20-13-45	**Class of Service Options (Supplementary Service) - MIC Key Mode While Call Monitoring**	COS 01~15 = 0	
20-13-46	**Class of Service Options (Supplementary Service) - Remote Conference**	COS 01~15 = 1	
20-13-47	**Class of Service Options (Supplementary Service) - Station Number Display**	COS 01~15 = 1	
20-13-48	**Class of Service Options (Supplementary Service) - Station Name Display**	COS 01~15 = 1	
20-13-49	**Class of Service Options (Supplementary Service) - BLF Indication on CO Incoming State**	COS 01~15 = 0	
20-13-50	**Class of Service Options (Supplementary Service) - AIC Agent display which call is from**	COS 01~15 = 1	
20-13-51	**Class of Service Options (Supplementary Service) - Number and Name appear in the directory**	COS 01~15 = 1	

Program Number	Program Name	Default	Note
20-14-01	**Class of Service Options for DISA - First Digit Absorption (Delete First Digit Dialed)**	COS 01~15 = 0	
20-14-02	**Class of Service Options for DISA - Trunk Group Routing/ARS Access**	COS 01~15 = 0	
20-14-03	**Class of Service Options for DISA - Trunk Group Access**	COS 01~15 = 0	
20-14-04	**Class of Service Options for DISA - Outgoing System Speed Dialing**	COS 01~15 = 0	
20-14-05	**Class of Service Options for DISA - Operator Calling**	COS 01~15 = 0	
20-14-06	**Class of Service Options for DISA - Internal Paging**	COS 01~15 = 0	
20-14-07	**Class of Service Options for DISA - External Paging**	COS 01~15 = 0	
20-14-08	**Class of Service Options for DISA - Direct Trunk Access**	COS 01~15 = 0	
20-14-09	**Class of Service Options for DISA - Forced Trunk Disconnect <Not for ISDN T-point>**	COS 01~15 = 0	
20-14-10	**Class of Service Options for DISA - Call Forward Setting by Remote via DISA**	COS 01~15 = 0	
20-14-11	**Class of Service Options for DISA - DISA/Tie Trunk Barge-In**	COS 01~15 = 0	
20-14-12	**Class of Service Options for DISA - Retrieve Park Hold**	COS 01~15 = 0	

Operation

To change an extension Class of Service (via Service Code 777):

1. Press **Speaker**.
2. Dial **777** .
3. Dial the extension number you want to change.

   You see: MODE1:nn

   *Press **Hold** to leave the current value unchanged.*

   The extension you dial may be set to block your attempt to change their Class of Service.

4. Enter the Day 1 Mode Class of Service for the extension you selected in step 3 and press **Hold**.

   You see: MODE2:nn

   *Press **Hold** to leave the current value unchanged.*

5. Enter the Night 1 Mode Class of Service for the extension you selected in step 3 and press **Hold**.

   You see: MODE3:nn

*Press **Hold** to leave the current value unchanged.*

6. Enter the Midnight 1 Mode Class of Service for the extension you selected in step 3 and press **Hold**.

   You see: MODE4:nn

   *Press **Hold** to leave the current value unchanged.*

7. Enter the Rest 1 Mode Class of Service for the extension you selected in step 3 and press **Hold**.

   You see: MODE5:nn

   *Press **Hold** to leave the current value unchanged.*

8. Enter the Day 2 Mode Class of Service for the extension you selected in step 3 and press **Hold**.

   You see: MODE6:nn

   *Press **Hold** to leave the current value unchanged.*

9. Enter the Night 2 Mode Class of Service for the extension you selected in step 3 and press **Hold**.

   You see: MODE7:nn

   *Press **Hold** to leave the current value unchanged.*

10. Enter the Midnight 2 Mode Class of Service for the extension you selected in step 3 and press **Hold**.

    You see: MODE8:nn

    *Press **Hold** to leave the current value unchanged.*

11. Enter the Rest 2 Mode Class of Service for the extension you selected in step 3 and press **Hold**.

    You see: Enter Station#

12. Go to step 3 and enter another extension number.
    - OR -
    Press **Speaker** to hang up.

C

Clock/Calendar Display/Time and Date

Description

The system uses Clock/Calender Display/Time and Data for:

- Central Office Calls (Access Maps)
- Class of Service (Class)
- Direct Inward Lines
- Display Telephones
- Night Service (Automatic)
- Programmable Trunk Parameters
- Ring Groups
- Station Message Detail Recording
- System Reports
- Toll Restriction (Class)
- Trunk Group Routing
- Voice Mail
- Voice Response System

Using the Daylight Savings Setup program, you can determine whether the system should automatically adjust the system time for daylight savings time/standard time changes.

Clock Adjustment

The system can be programmed to automatically adjust the system clock on a nightly basis. This feature allows you to make adjustments should the system cabinet regularly lose or gain time.

Conditions

- The system retains the Clock/Calendar Display after a power failure or system reset.
- Changing the time may change the current Class of Service (COS) service depending on the COS mode setup.
- You can program the system to automatically switch modes.
- Single line telephones cannot set the time and date.
- Changing the system time automatically changes the InMail time.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals with a display

Required Component(s)

None

Related Features

Class of Service

Night Service

Single Line Telephones

InMail

Voice Mail Integration (Analog)

Guide to Feature Programming

Program Number	Program Name	Default
10-01-01	Time and Date - Year	not assigned
10-01-02	Time and Date - Month	not assigned
10-01-03	Time and Date - Day	not assigned
10-01-04	Time and Date - Week	not assigned
10-01-05	Time and Date - Hour	not assigned
10-01-06	Time and Date - Minute	not assigned
10-01-07	Time and Date - Second	not assigned
10-24-01	Daylight Savings Setup - Daylight Savings Mode	0
10-24-02	Daylight Savings Setup - Time for Daylight Savings	02:00
10-24-03	Daylight Savings Setup - Start of Month (Summer Time)	4
10-24-04	Daylight Savings Setup - Start of Week	1
10-24-05	Daylight Savings Setup - Start of Week Day	1
10-24-06	Daylight Savings Setup - End of Month	10
10-24-07	Daylight Savings Setup - End of Week	0
10-24-08	Daylight Savings Setup - End of Week Day	1
20-02-07	System Options for Multiline Telephones - Time and Date Display Mode	1
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-07-03	Class of Service Options (Administrator Level) - Time Setting	COS 01~15 = 1

Operation

The date must be set in system programming (10-01).

To set the system Time:

1. Press **Speaker**.
2. Dial **828** .
3. Dial two digits for the hour (24 hour clock, 13 = 1:00 PM).
4. Dial two digits for the minutes (00~59).
5. Press **Speaker** to hang up.

Code Restriction/Toll Restriction

Description

Code Restriction/Toll Restriction limits the numbers an extension user may dial. By allowing extensions to place only certain types of calls, you can better control long distance costs. The system applies Code Restriction according to the Code Restriction Class. The system allows for up to 15 Code Restriction Classes and 128 extensions.

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Conditions

- If a Code Restriction Class has the same entries in both a permit and restriction table, the system does not restrict the call.
- Code Call Digit counting may prevent users from taking advantage of long distance automated services like automated Technical Service.
- Code Restriction is applied when accessing ARS.
- If Program 21-01-10 is programmed with an entry other than 0, a call cannot have a talk path unless the user dials at least the number of digits entered in this option when placing an out going call. This means that an entry of 4 or higher in this program causes a problem when dialing 999 or 112. Since these are only 3-digit numbers, the call does not have a talk path, preventing the emergency dispatcher from hearing the caller. This option should be kept at its default setting of 0 to prevent any problem with dialing 999 or 112.
- Common Permit Code Table
  Use the Common Permit Code Table when you have numbers you want all Code Restriction Classes to dial. To let all users dial 999 or 112, for example, put 999 & 112 in the Common Permit Code Table. The Common Permit Code Table overrides the Restrict Code and Common Restrict Code Tables. The system provides 10 tables, with 10 entries in each table. Each code is four digits maximum, using 0~9, #, * and the Flash key (as a wild card).
- Common Restrict Code Table
  The Common Restrict Code Table lets you globally restrict certain numbers for all Code Restriction Classes. Be sure you do not allow the codes you want to restrict in the Permit Code Table or the Common Permit Code Table. The system provides 10 tables, with 10 entries in each table. Each code is four digits maximum, using 0~9, #, * and Flash (as a wild card).
- Restrict Code Table
  When you want Code Restriction to allow most calls and restrict only selected calls, use the Restrict Code Table. To block only 1-900 calls, for example, enter 1900 in the Restrict Code Table. (If the same Code Restriction Class has both Permit and Restrict Code Tables, the system restricts calls that you enter only in the Restrict Code Table. Calls entered in both tables are not restricted.) The system provides four tables, with 60 entries (restricted codes) in each table. A restricted code is 12 digits maximum, using 0~9, #, * and Flash (as a wild card).
- Permit Code Table
  The Permit Code Table lets you set up Code Restriction so that users can dial only selected (permitted) telephone numbers. Use this table when you want to restrict most calls. To allow all users to dial only area code 01203, for example, enter 01203 in the Permit Code Table. 01203 + (digits) are the only numbers users can dial. (If the same Code Restriction Class has both Permit and Restrict Code Tables, the system restricts calls that you enter only in the Restrict Code Table. Calls entered in both tables are not restricted.) The system provides four tables, with 200 entries (permitted codes) in each table. A permitted code is 12 digits maximum, using 0~9, #, * and Flash (as a wild card).
- International Call Restriction
  International Call Restriction lets you limit the international calls an extension user may dial. You can build a restrict table to prevent only certain calls, or you can build a permit table to allow only certain calls. To allow most international calls, use the International Call Restrict Table. To prevent most international calls, use the International Call Allow Table. The system provides 10 International Call Restrict tables with up to four digits in each table entry and 20 International Call Allow tables, with up to six digits in each table entry. Valid entries are 0~9, #, * and Flash (for a wild card).
- Code Restriction for Speed Dialing
  Speed Dialing can bypass or follow Code Restriction. If you allow many users to program Speed Dialing, consider code restricting the numbers they dial. If only administrators can program Speed

Dialing, Code Restriction may not be necessary. You can separately restrict Group and Common Speed Dialing.

- Toll Digit Counting
  Use Call Digit Counting to limit the number of digits local callers can dial. You can use this option to prevent users from accessing local dial-up services. For example, set the Maximum Number of Digits in Local Calls to seven to limit local callers to dialing local numbers only. The system provides four tables in which you can make entries for this option. The range is 4~30 digits.
- Code Call Digit Counting
  With Code Call Digit Counting, you can limit the number of digits long distance callers can dial. This lets you prevent callers from dialing extensively into long distance dial-up services. You can make four entries (4~30 digits).
- Toll Free Trunks
  Certain trunks can be completely unrestricted, such as the company president's Private Line. Users can place calls on Code Free Trunks anytime - to anywhere, without inadvertently being Code restricted.
- PBX Call Restriction
  Code Restriction programming lets you enable/disable PBX Call Restriction and enter PBX access codes. You only need to do this if your system is behind a PBX and you have trunks programmed for behind PBX operation. Refer to PBX Compatibility on page 1-396 feature for the specifics.
- A user can temporarily override an extension's Code Restrictions.
- The system allows or denies outgoing access to trunks depending on Code Restriction.
- When using DISA, additional programming is required for Code Restriction (DISA, refer to Program 25-10).
- A user can temporarily block their extension Code Restriction access, preventing unwanted calls from being placed on their telephone while they are away from their desk.
- A phone and a trunk will have a Restriction Class. The higher class applies for outgoing calls.
  For example:
  - When trunk class is 01 and station class 02, Toll Restriction Class 02 is applied.
  - When trunk class is 15 and station class 03, Toll Restriction Class 15 is applied.

Default Settings

Disabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Central Office Calls, Placing

Code Restriction Override/Toll Restriction Override

Code Restriction, Dial Block/Toll Restriction, Dial Block

Direct Inward System Access (DISA)

PBX Compatibility/Behind PBX

Multiple Trunk Types

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Guide to Feature Programming

Program Number	Program Name	Default
14-01-08	**Basic Trunk Data Setup - Toll Restriction**	1
15-02-30	**Multiline Telephone Basic Data Setup - Toll Restriction Class**	1
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-08-02	**Class of Service Options (Outgoing Call Service) - Trunk Outgoing Calls**	COS 01~15 = 1
20-13-20	**Class of Service Options (Supplementary Service) - Account Code/Toll Restriction Operator Alert (Restricted Operation Transfer)**	COS 01~15 = 1
21-01-10	**System Options for Outgoing Calls - Dial Digits for Toll Restriction Path**	0
21-01-15	**System Options for Outgoing Calls - Outgoing Disable on Incoming Line (Toll Restriction)**	0
21-01-16	**System Options for Outgoing Calls - Supervise Dial Detection Timer**	20 (seconds)
21-01-17	**System Options for Outgoing Calls - Restriction Digit in Outgoing Disable on Incoming Line**	4
21-04-01	**Toll Restriction Class for Extensions**	2
21-05-01	**Toll Restriction Class - International Call Restriction Table**	0
21-05-02	**Toll Restriction Class - International Call Permit Code Table**	0
21-05-04	**Toll Restriction Class - Maximum Number of Digits Table Assignment**	0
21-05-05	**Toll Restriction Class - Common Permit Code Table**	0
21-05-06	**Toll Restriction Class - Common Restriction Table**	0
21-05-07	**Toll Restriction Class - Permit Code Table**	0
21-05-08	**Toll Restriction Class - Restriction Table**	0
21-05-09	**Toll Restriction Class - Restriction for Common Speed Dials**	0
21-05-10	**Toll Restriction Class - Restriction for Group Speed Dials**	0
21-05-11	**Toll Restriction Class - Intercom Call Restriction**	0
21-05-12	**Toll Restriction Class - PBX Call Restriction**	0
21-06-01	**Toll Restriction Table Data Setup - International Call Restriction Table**	Tables 1~10 = No Setting
21-06-02	**Toll Restriction Table Data Setup - International Call Permit Code Table**	Tables 1~20 = No Setting
21-06-03	**Toll Restriction Table Data Setup - Maximum Number of Digits Table Assignment**	Tables 1~ 4 = 30
21-06-04	**Toll Restriction Table Data Setup - Common Permit Code Table**	Table 1 ~ 10 = No Setting
21-06-05	**Toll Restriction Table Data Setup - Common Restriction Table**	Tables 1~ 10 = No Setting
21-06-06	**Toll Restriction Table Data Setup - Permit Code Table**	Table 1~4 = No Setting
21-06-07	**Toll Restriction Table Data Setup - Deny Restriction Table**	Table 1~4 = No Setting

Program Number	Program Name	Default
21-06-08	**Toll Restriction Table Data Setup - PBX Access Code**	Table 1~4 = No Setting
21-21-01	**Toll Restriction for Trunks (Seized Trunk Basis Setting) - Restriction Class**	1
35-02-01	**SMDR Output Options - Toll Restricted Call**	1

Operation

To place a trunk call if your system is Code Restricted:

1. Place call normally.

If your Code Restriction Class does not allow the number you dial, your call is cut off.

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Code Restriction Override/Toll Restriction Override

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Description

Code Restriction Override/Toll Restriction Override lets a user temporarily bypass the Code Restriction for an extension. This helps a user that must place an important call that Code Restriction normally prevents. For example, you could set up Code Restriction to block 100 calls and then provide a Code Restriction Override code to your attendant and executives. When the attendant or executive needs to place a 100 call, they just:

- Press **Speaker**, dial a service code, and enter their override code.
- Press **Speaker** and dial a trunk access code (e.g., 9 or #9 002).
- Place the 100 call without restriction.

You can assign a different Code Restriction Override code to each extension. Or, extensions can share the same override code.

Code Restriction Override overrides all Code Restriction programming. Walking Code Restriction allows you to assign a Code Restriction level for each user. When a call is placed using Walking Code Restriction, the restriction for the call is based on the Code Restriction level defined in Programs 21-05-xx and Programs 21-06-xx.

Conditions

- Off-Premise notification and external extensions require access to outside lines.
- In the Class heading in the SMDR report, POTA indicates that the call was placed using Temporary Code Restriction Override.
- Code Restriction Override and Walking Code Restriction temporarily overrides an extension Code Restriction.
- Users will hear, “Your call cannot go through. Please call the operator” when they dial a number that Code Restriction prevents.

Default Settings

Disabled

Related Features

Central Office Calls, Placing

Code Restriction/Toll Restriction

Station Message Detail Recording

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Default
11-11-34	Service Code Setup (for Setup/Entry Operation) - Temporary Toll Restriction Override	875
11-11-36	Service Code Setup (for Setup/Entry Operation) - Toll Restriction Override	763

Program Number	Program Name	Default
20-08-06	**Class of Service Options (Outgoing Call Service) - Toll Restriction Override**	COS 01~15 = 1
21-01-07	**System Options for Outgoing Calls - Toll Restriction Override Time**	10 (seconds)
21-07-01	**Toll Restriction Override Password Setup**	not assigned
21-14-01	**Walking Toll Restriction Password Setup - User ID**	not assigned
21-14-02	**Walking Toll Restriction Password Setup - Walking Toll Restriction Class Number**	15
35-02-01	**SMDR Output Options - Toll Restricted Call**	1
35-02-02	**SMDR Output Options - PBX Calls**	1
35-02-03	**SMDR Output Options - Trunk Number or Name**	1
35-02-04	**SMDR Output Options - Summary (Daily)**	1
35-02-05	**SMDR Output Options - Summary (Weekly)**	1
35-02-06	**SMDR Output Options - Summary (Monthly)**	1
35-02-07	**SMDR Output Options - Toll Charge Cost**	1
35-02-08	**SMDR Output Options - Incoming Call**	1
35-02-09	**SMDR Output Options - Extension Number or Name**	1
35-02-10	**SMDR Output Options - All Lines Busy (ALB) Output**	0
35-02-12	**SMDR Output Options - DID Table Name Output**	0
35-02-13	**SMDR Output Options - CLI Output When DID to Trunk**	0
35-02-14	**SMDR Output Options - Date**	0
35-02-15	**SMDR Output Options - CLI/DID Number Switching**	0
35-02-16	**SMDR Output Options - Trunk Name or Received Dialed Number**	0
35-02-17	**SMDR Output Options - Print Account Code or Caller Name ofIncoming Call**	0
35-02-18	**SMDR Output Options - Print Mode for Caller Name of Incoming Call**	0

C

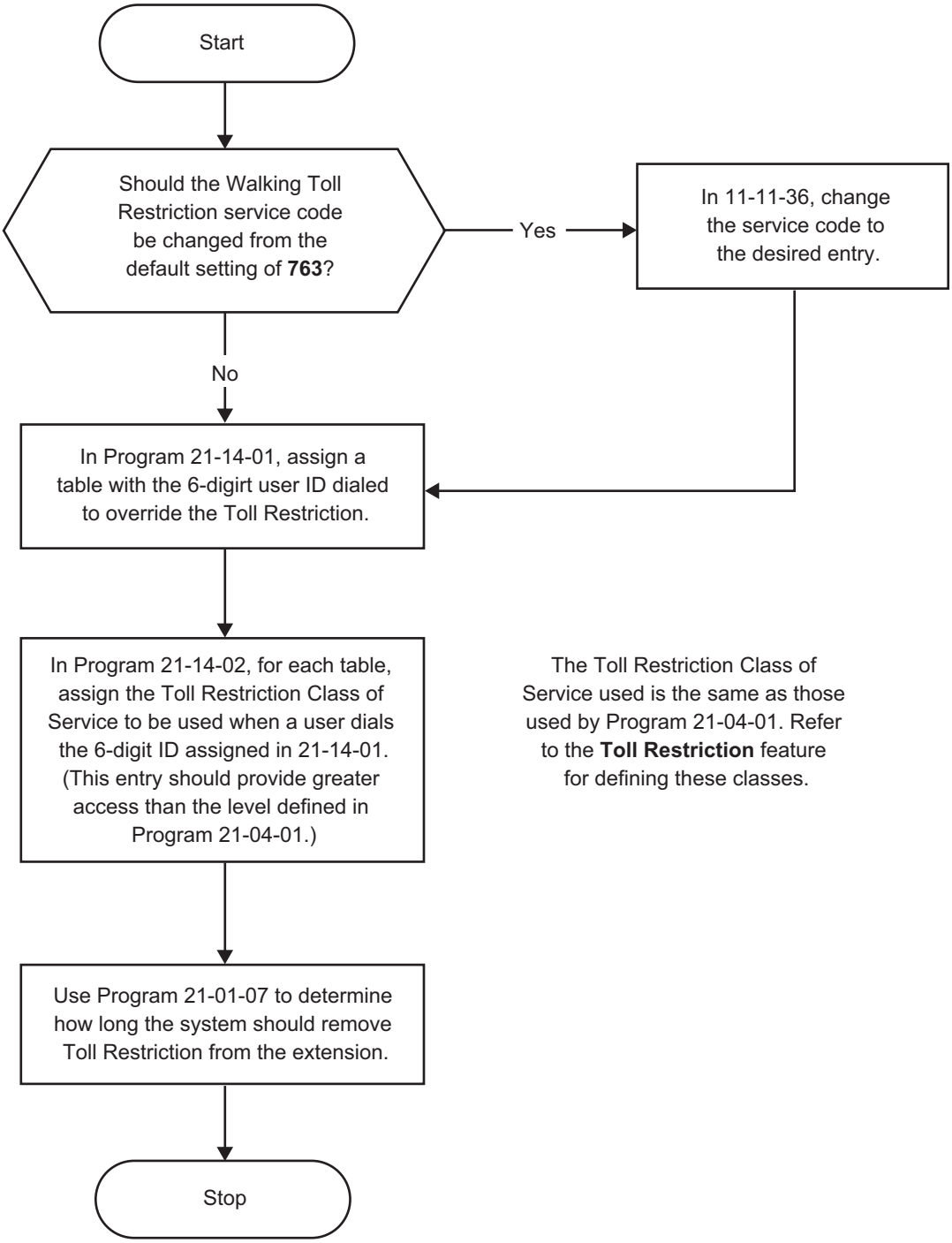

Figure 1-3 Walking Code Restriction

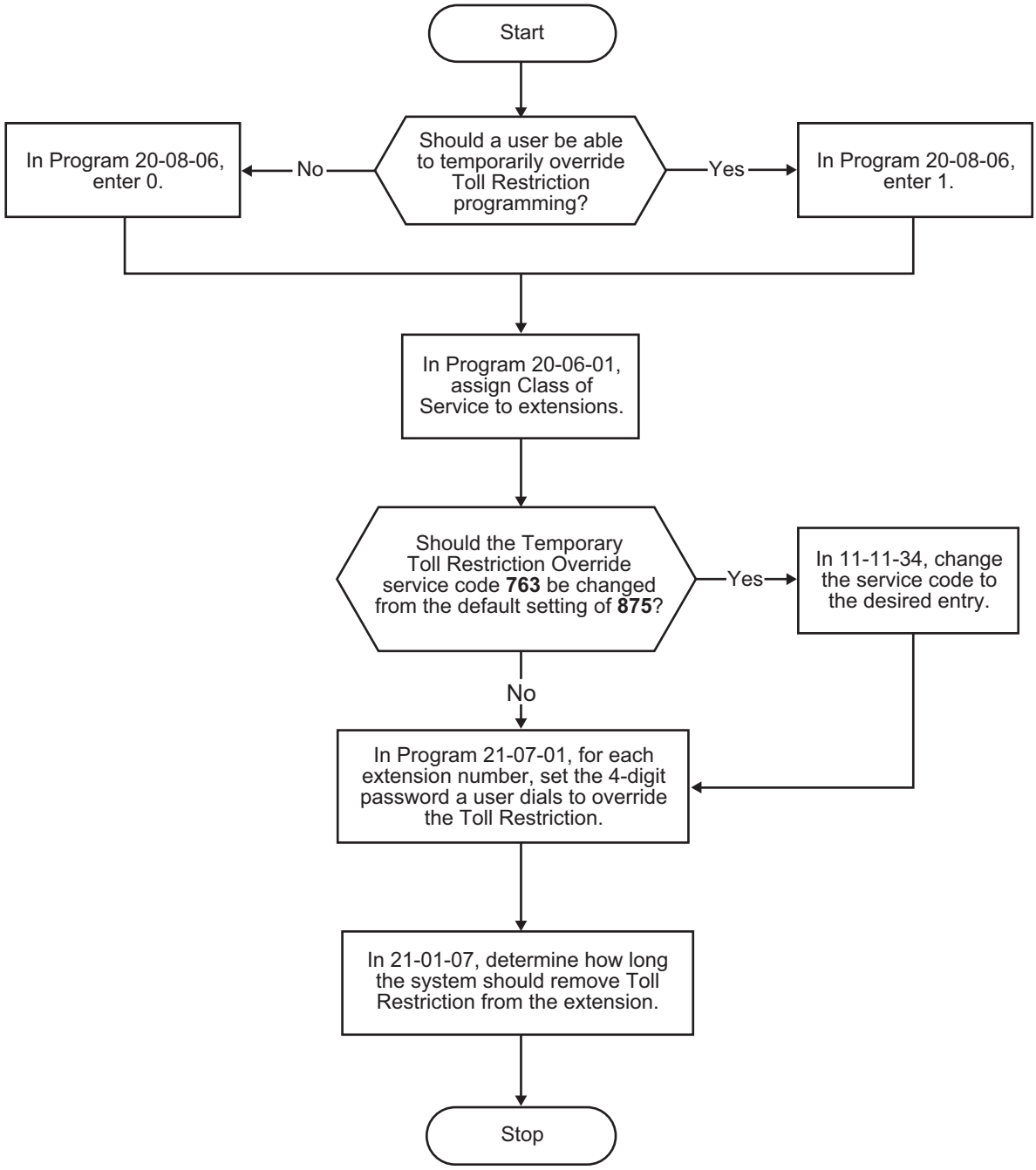

Figure 1-4 Temporary Code Restriction Override

Operation

To temporarily override a restricted extension Code Restriction:

You can override restriction for only one call at a time.

1. At the multiline terminal, press **Speaker**.
   - OR -
   At single line telephone, lift the handset.

2. Dial **875** .
3. Dial the 4-digit Code Restriction Override code.

If you wait too long before going to the next step, you may have to repeat the procedure. After dialing the service code, the display indicates the override codes as they are being entered. As the last digit is entered, the display is cleared and ICM dial tone is heard.

You hear error tone if you dial your code incorrectly.

4. Press idle line key or dial trunk access code.
5. Dial the number without any restriction.

C

To use your Walking Code Restriction level at an extension:

You can override restriction for only one call at a time.

1. At the multiline terminal, press **Speaker**.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **763** and dial the 6-digit Walking Toll Restriction Class of Service code.

After dialing the service code, the display indicates the override codes as they are being entered. As the last digit is entered, the display is cleared and ICM dial tone is heard.

You hear error tone if you dial your code incorrectly.

3. Press idle line key or dial trunk access code.
4. Dial the number.

The call is allowed or denied based on the user's Toll Restriction Class of Service level.

Code Restriction, Dial Block/Toll Restriction, Dial Block

Description

Code Restriction, Dial Block/Toll Restriction, Dial Block lets a user temporarily block dialing on an extension. This helps a user block his or her phone from being used by another person while they are away from their desk. A user would need to enter a 4-digit personal code to enable/disable this feature.

Dial Block can also be set by the supervisor's access code. If Dial Block is set by an extension user, the supervisor cannot release it. Additionally, if Dial Block is set by the supervisor's code, the extension user cannot release it.

Important: This function works by password and Class of Service control (the supervisor is not an assigned extension). If Dial Block is available for all Classes of Service, everyone may become a supervisor if they know the Dial Block password.

Conditions

- If the system is reset by a first initialize, the Dial Block feature is cleared.
- This feature is not available for ISDN S-Bus extensions.
- Both Program 21-09-01 (Code Restrict Class) and Program 21-10 (Dial Block Restriction Class per Extension) can be set at the same time. However the system gives priority to the setting in Program 21-10.
- Dial Block can temporarily block an extension Code Restriction setting by changing to a predefined table that has more restrictions.

Default Settings

Disabled

System Availability

Terminals

None

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
11-10-17	**Service Code Setup (for System Administration) - Dial Block by Supervisor**	701
11-11-33	**Service Code Setup (for Setup/Entry Operation) - Dial Block**	700
20-06-01	**Class of Service for Extensions**	All extension port = Class 1

Program Number	Program Name	Default
20-08-08	**Class of Service Options (Outgoing Call Service) - Toll Restriction Dial Block**	COS 01~15 = 0
21-09-01	**Dial Block Setup - Toll Restriction Class with Dial Block**	1
21-09-02	**Dial Block Setup - Supervisor Password**	not assigned
21-10-01	**Dial Block restriction Class per Extension**	0
90-19-01	**Dial Block Release**	[Release?]: Dial **1**+ press **Hold** (Press **Hold** to cancel.)

C

Operation

To set Dial Block:

1. At the multiline terminal, press **Speaker**.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **700** (default).
3. Dial the 4-digit Dial Block Code (as set in programming).
4. Dial **1**.

   Confirmation tone is heard.
5. Press **Speaker** or replace the handset to hang up.

To release Dial Block:

1. At the multiline terminal, press **Speaker**.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **700** .
3. Dial the 4-digit Dial Block code.
4. Dial **0**.

   Confirmation tone is heard.
5. Press Speaker or replace the handset to hang up.

To set Dial Block from another extension:

1. At the multiline terminal, press **Speaker**.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **701** (default).
3. Dial the 4-digit Dial Block code (as set in programming).
4. Dial the extension number to blocked.
5. Dial **1**.

   Confirmation tone is heard.

6. Press **Speaker** or replace the handset to hang up.

To release Dial Block from another extension:

1. At the multiline terminal, press **Speaker**.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **701** .
3. Dial the 4-digit Dial Block code.
4. Dial the extension number to be released from Dial Block.
5. Dial **0**.

   Confirmation tone is heard.

6. Press **Speaker** or replace the handset to hang up.

Conference

Description

Conference lets an extension user add additional inside and outside callers to their conversation. With Conference, a user can set up a multiple-party telephone meeting without leaving the office. The CPU provides 32 conference ports, allowing any number of internal or external parties to be conferenced together for a limit of 16 parties. This means that one extension can conference up to 31 internal and/or external parties together (the originator would be the 16th party reaching the maximum of 16). While this Conference call is active, another user can initiate a separate Conference also for a limit of 16 parties, or any number of conferences can be initiated with any number of parties (up to 16) until all 32 Conference ports are busy.

Conditions

- Split allows a user to alternate (i.e., switch) between their callers in Conference. This allows a dispatcher, for example, to control a telephone meeting between themselves, a customer and a service technician. The dispatcher can meet together with all parties, privately set up a service strategy with the technician and then meet again to set the schedule.
- Split cycles through the Conference in the same order in which the Conference was initially set up. If a user places an outside call, conferences extension 200 followed by extension 201, Split cycles from the trunk, to 200 and finally to 201. The Split cycle then repeats.
- If a user's extension has Barge-In ability enabled, they can also Barge-In on an established Conference. This permits, for example, an attendant or supervisor to join a Conference in an emergency. It also allows a co-worker to leave a conference - and then rejoin the telephone meeting when it is convenient to do so.

If a user's extension has Barge-In monitor enabled (Program 20-13-10), they can Silent Monitor a conference already in progress (Program 99-01-49 option 49 must be set to 1).

- A Class of Service option is available which allows or denies an extension user from automatically setting up a Conference/Tandem Trunking call upon hanging up the telephone.
- An extension with Barge-In ability can Transfer a call into an existing Conference. This allows, for example, an attendant to locate co-workers and then Transfer them into an existing telephone meeting. There is no need for the attendant to locate all the parties at the same time and sequentially add them into the Conference. Transfer Call Into Conference Code (PRG11-12-58).
- An option is available which allows an extension Conf key (SC 851 : 07) to be programmed for Conference or for Transfer. When set for Transfer, the user places a call on hold, dials the extension to which it should be transferred, and presses Conf. The call is then transferred. When set for Conference, with an active call, the user presses Conf, places a second call, then presses Conf twice. All the calls are then connected.
- Users can Barge-In on a Conference call if allowed in programming.
- Define the outgoing call options for each trunk and user.
- Set up a Conference with a co-worker in your immediate work area.
- DISA users may use the Barge-In feature on a Conference call if they know the service code and are permitted in their DISA Class of Service.
- Meet Me Conference lets an extension user set up a Conference via Paging.
- Meet Me Paging lets an extension user set up a two-party meeting via Paging.
- A user can set up an Unsupervised Trunk-to-Trunk Conference and then drop out of the call, allowing the remaining parties to continue the conversation. Establish two trunk calls press the Hold key and dial **#8**.
- You can optionally program Conf (Transfer) for Transfer. In this case, the Multiline Terminal must have a Conference function key. The system also allows a call to be transferred into a Conference call.
- When the Conference Originator hangs up with a conference on Hold, or when trying to add another caller, all internal calls are dropped.
- Conferencing when talking on a Virtual Extension:

- While talking on a Virtual Extension, if the station has an internal call on Hold, a conference call cannot be established.
- While talking on a Virtual Extension, if the station receives an intercom call (call to its actual station number), a conference call cannot be established.
- While talking on a Virtual Extension, if the station has a call on Hold, a conference call cannot be established.

Default Settings

Enabled

System Availability

Terminals

Multiline and Single Line Terminals

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-07-01	Conversation Record Circuit	0	
11-12-08	Service Code Setup (for Service Access) - Barge-In	810	
11-12-47	Service Code Setup (for Service Access) - Call Waiting Answer/ Split Answer	894	
11-12-57	Service Code Setup (for Service Access) - Tandem Trunking	#8	
11-12-58	Service Code Setup (for Service Access) - Transfer Into Conference	884	
11-16-02	Single Digit Service Code Setup - Barge-In	not assigned	
14-01-04	Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls	32 (0dB)	
15-02-24	Multiline Telephone Basic Data Setup - Conference Key Mode	0	
15-07-01	Programmable Function Keys	Refer to Programming Manual.	
20-06-01	Class of Service for Extensions	All extension port = Class 1	
20-11-21	Class of Service Options (Hold/ Transfer Service) - Restriction for Tandem Trunking on Hang Up	COS 01~15 = 0	
20-13-08	Class of Service Options (Supplementary Service) - Conference	COS 01~15 = 1	
20-13-10	Class of Service Options (Supplementary Service) - Barge-In Monitor	COS 01~15 = 0	
20-13-15	Class of Service Options (Supplementary Service) - Barge-In, Initiate	COS 01~15 = 1	

Program Number	Program Name	Default	Note
20-13-16	**Class of Service Options (Supplementary Service) - Barge-In, Receive**	COS 01~15 = 1	
20-14-11	**Class of Service Options for DISA - DISA/Tie Trunk Barge-In**	COS 01~15 = 0	

Operation

To establish a Conference:

Multiline Terminal

1. Establish intercom or trunk call.
2. Press **Conf** or **Conf** softkey (Program 15-07 or SC **851** : 07).
3. Dial the extension you want to add.
   - OR -
   Access outside call.
   - OR -
   Retrieve call from Park orbit.

   *To get the outside call, you can either press a line key or press the Speaker key and dial 9, the Trunk Access Code + the trunk number (default **#9**). You can optionally go back to step 2 to add more parties to your Conference.*
4. When called party answers, press the **Conf** softkey or **Conf** twice.

   If you cannot add additional parties to your Conference, you have exceeded the system Conference limit.

   If the call being added is busy/unanswered: With an outside call, press the line key for a call previously added to the Conference. The unanswered call drops and the initiator is back into the Conference call.

   *Adding an Intercom call to an outside Conference call: Press the **Conf** softkey on the Multiline Terminal display or **Conf** twice to re-establish the Conference. If using a non-display telephone, press **Conf** twice.*

   *With only Intercom calls in the Conference: Press **Conf** twice to re-establish the Conference. If the voice mail answers, there is no way to drop that extension out. You must drop the Conference call.*
5. Repeat steps 2~4 to add more parties.

Single Line Telephone

1. Establish intercom or trunk call.
2. Hookflash and dial **826** .
3. Dial extension you want to add.
   - OR -
   Access trunk call.
   - OR -
   Retrieve call from Park orbit.
4. Hookflash and repeat step 3 to add more parties.
   - OR -
   Hookflash twice to set up the Conference.

To Split (alternate) between the parties in Conference:

Multiline Terminal

1. Press **Conf** (Transfer) or **Conference** key (Program 15-07 or SC **851** : 07).
2. Dial Split service code (**894**).

Repeat this procedure to alternate between the remaining parties in the Conference. Press the Conf softkey or press Conf twice to set up the Conference again.

Single Line Telephone

1. Hookflash and dial **894** .

Repeat this procedure to alternate between the remaining parties in the Conference. Hookflash twice to set up the Conference again.

To drop an outside call from the Conference:

1. Press **Hold** to place the conference call on hold.
2. Hang up.

The lines involved in the Conference ring back separately to the telephone.

3. Answer and disconnect the unwanted outside call.
4. To re-establish the Conference, answer the remaining call by pressing **Conf** after each call is answered. Press **Conf** twice when all calls have been answered.

To exit a Conference without affecting the other parties:

Multiline Terminal

1. Hang up.

*If you press **Hold** while on a call with two outside callers, the outside callers hear what is programmed in Program 10-04-01.*

Single Line Telephone

1. Hang up.

If you are not permitted to use Tandem Trunking, outside callers may hear Music on Hold.

To Barge-In to Conference Call:

1. Pick up the handset or press **Speaker** and dial the service code (default = **810**).

If the telephone does not have the proper COS, a warning tone is sent. After the user hangs up, the system automatically places a Callback to the extension.

2. Dial the extension number or press a **DSS** key of a telephone within a Conference call.

When a new call is added to the conference, an intrusion tone is heard by all parties in the Conference, depending on system programming, and all display multiline terminals show the joined party. If a Conference is not possible:
- *the extension user hears a warning tone*
- *the DISA user is rerouted to the defined ring group*

- OR -

The following steps are not available for DISA:

1. Dial the extension number of the internal party.
2. Dial the single digit service code, if programmed.

*Instead of the single digit service code, the service code **810** can also be dialed at this point.*

To Transfer a Call into a Conference:

1. While on a call, press **Hold**.
2. Dial the Transfer to Conference service code (default = **PRG11-12-58**).

   If the telephone does not have the proper COS, a warning tone is sent. After the user hangs up, the system automatically places a Callback to the extension.

   The display shows the line Number, Number/Name and Extension Name/Number.

3. Dial the extension number or press a **DSS** key of a telephone in a Conference call.

   If an error tone is heard, Barge-In is not enabled for the extension and the call cannot go through. Retrieve the call by pressing the flashing line Key or hang up and the call recalls the extension.

   When the call is transferred into the Conference, an intrusion tone is heard by all parties in the conference, depending on the entries in Program 20-13-17 and Program 80-01, and all display multiline terminals show the joined party.

   To cancel the transfer, press the flashing line Key to retrieve the call.

4. Hang up.

Conference, Remote

Description

The Remote Conference feature enhances the Conference feature by allowing outside parties to dial a Remote Conference pilot number and a Conference Group number to connect to a Conference call.The conference circuits on the CPU are used to join each party to the conference. A maximum of 16 conference participants is possible for one Conference. However, the conference call cannot be split over the CPU's conference blocks. This could limit the number of participants if other conference circuits are in use.

A maximum of 4 simultaneous Remote Conference calls is possible. The conference call is password protected so that any user joining the conference would be required to enter a password before being connected.

- One terminal or trunk needs one conference channel to participate in the conference.
- The conference call cannot be split over the CPU's two conference blocks, limiting the number of conference participants to 16.

Conditions

None

Default Setting

Not defined

Related Features

Barge-In

The Barge-In feature cannot be used for an extension user on a Remote Conference call.

Call Forward

The Remote Conference pilot number can not be set as the destination for Call Forward.

Hold

Using Hold while on a Remote Conference call is not possible.

Transfer

Calls cannot be transferred to the Remote Conference session.

Guide to Feature Programming

Program Number	Program Name	Default
11-19-01	**Remote Conference Pilot Number Setup - Maximum Channels**	Refer to Programming Manual.
14-01-02	**Basic Trunk Data Setup - Transmit Level**	32 (0dB)
14-01-03	**Basic Trunk Data Setup - Receive Level**	32 (0dB)
14-01-04	**Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls**	32 (0dB)

Program Number	Program Name	Default
14-01-05	**Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**	16 (-8dB)
14-02-09	**Analog Trunk Data Setup - Busy Tone Detection**	0
20-13-46	**Class of Service Options (Supplementary Service) - Remote Conference**	COS 01~15 = 1
20-34-01	**Remote Conference Group Setup - Conference Name**	Group1 - Conf 1 Group2 - Conf 2 Group3 - Conf 3 Group4 - Conf 4
20-34-02	**Remote Conference Group Setup - Password**	Group1 - 1111 Group2 - 2222 Group3 - 3333 Group4 - 4444
20-34-03	**Remote Conference Group Setup - Maximum Participants**	8
20-34-04	**Remote Conference Group Setup - Maximum Conference Duration**	7200
20-34-05	**Remote Conference Group Setup - End Tone Alert Time**	300

C

Operation

To joining a Remote Conference Call:

1. Internal Extension: Lift the handset and dial the extension number of the Remote Conference pilot number (assigned in Program 11-19-01).
   - OR -
1. External Party:
   Dial the telephone number for the Remote Conference pilot number(assigned in Program 11-19-01).
   - When using a subaddress, dial the Remote Conference pilot number as the Subaddress
2. The password is requested by the VRS (Password please).
3. Dial the password of the conference group.
4. If the password matches, the participant becomes part of the Remote Conference.
   If the password does not match, a warning tone is heard.
   - A busy tone will also be heard if the maximum number of Remote Conference participants has been reached or if a conference resource cannot be secured.
   - As the maximum time for the conference nears, the system will provide an end tone to the participants according to the timer in Program 20-34-05. Once this timer expires, if the conference is still ongoing, the call will be disconnected by the system.

Conference, Voice Call/Privacy Release

Description

Voice Call Conference lets extension users in the same work area join in a trunk Conference. To initiate a Voice Call Conference, an extension user just presses the Meet-Me Conference key and tells their co-workers to join the call. The system releases the privacy on the trunk, and other users can just press the trunk line key to join the call. Line keys assigned for the trunk blink indicating that privacy has been released, and others can join the current call.

Voice Call Conference does not use the telephone system features to announce the call. The person initiating the Voice Call Conference just announces it verbally. A tone, indicating others have joined the conference, can be provided.

The CPU provides 32 Conference circuits, to allow internal or external parties to be conferenced together up to a limit of 16.

Privacy Mode Toggle Option

The Privacy Mode Toggle option allows an extension user to quickly change an outside call from the non-private mode to the private mode. If the outside call is on a line key, the user just presses the line key to switch from non-private mode to private mode. For systems using the Privacy Mode Toggle option, trunks initially have the privacy released. The remainder of the call is private. If the call is on a Loop Key, the user presses their Meet-Me Conference function key instead. Unlike pressing the line key, pressing the Meet-Me Conference key toggles back and forth between private and non-private mode for the call.

Conditions

- Call Arrival (CAR) Keys and Virtual Extensions do not support Voice Call Conference Programmable Function keys.
- Voice Call Conference requires a Meet-Me Conference function key and trunk line keys.
- This feature is not available on single line telephones.
- With Caller ID enabled, a call with Privacy Release shows the Caller ID until the call is answered. It can be viewed again by pressing the line key, though this sets the call to Private mode. To keep the call on Privacy Release, press the Help + Exit keys.

Default Settings

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Caller ID

Conference

Programmable Function Keys

C

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-07-01	Conversation Record Circuits	0	
14-01-19	Basic Trunk Data Setup - Privacy Mode Toggle Option	0	
15-07-01	Programmable Function Keys	Refer to Programming Manual.	
20-06-01	Class of Service for Extensions	All extension port = Class 1	
20-13-09	Class of Service Options (Supplementary Service) - Privacy Release	COS 01~15 = 1	
20-13-17	Class of Service Options (Supplementary Service) - Barge-In Tone/Display (Intrusion Tone)	COS 01~15 = 1	
31-01-04	System Options for Internal/External Paging - Privacy Release Time	90 (seconds)	

Operation

To join a Voice Call Conference (if invited):

1. After Conference request, press indicated line key.

*A **Conf** indication is displayed on both telephones.*

A trunk with privacy release or Voice Call Conference blinks.

To exit a Voice Call Conference without affecting the other parties:

1. Press **Speaker** to hang up.

To toggle between Private and Non-Private mode:

1. Press the Meet-Me Conference key (Program 15-07-01, SC **851** : 32).
   - OR -
   Press the Trunk Line Key. (This toggles from Non-Private to Private. To go back to Non-Private, the Meet-Me Conference Key above must be pressed.)

Continued Dialing

Description

Continued Dialing allows an extension user to dial a call, wait for the called party to answer and then dial additional digits. This helps users that need services like Voice Mail, automatic banking and Other Common Carriers (OCCs).

There are two types of Continued Dialing:

Continued Dialing for Intercom Calls

Depending on an extension Class of Service, a multiline terminal user may be able to dial additional digits after their Intercom call connects. In systems with Voice Mail, for example, Continued Dialing lets extension users dial the different options after the Voice Mail answers. Without Continued Dialing, extension users cannot access these Voice Mail options.

Continued Dialing for Trunk Calls

Continued Dialing gives a user access to outside services like automatic banking, an outside Automated Attendant, bulletin boards and Other Common Carriers (OCCs). After the outside service answers, the user can dial digits for whatever options the services allow. Without Continued Dialing, the system Toll Restriction cuts off the call after a specific number of dialed digits. See Programming below for additional information.

Continued Dialing may make the system more susceptible to toll fraud.

Conditions

- The ability to use Continued Dialing on trunk calls is set by Toll Restriction programming.
- Continued Dialing for intercom calls only applies to calls made to analog type devices.
- With Pulse to Tone Conversion, users can place calls to services over Dial Pulse trunks-and then dial DTMF digits after the service answers.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Pulse to Tone Conversion

Guide to Feature Programming

Program Number	Program Name	Default
15-03-03	**Single Line Telephone Basic Data Setup - Terminal Type**	0
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-13-13	**Class of Service Options (Supplementary Service) - Continued Dialing (DTMF) Signal on ICM Call**	COS 01~15 = 1
21-04-01	**Toll Restriction Class for Extensions**	2
21-05-04	**Toll Restriction Class - Maximum Number of Digits Table Assignment**	0
21-06-03	**Toll Restriction Table Data Setup - Maximum Number of Digits Table Assignment**	Tables 1~4 = 30

C

Operation

To use Continued Dialing:

1. Place an intercom or trunk call.
2. Continue dialing after the call connects.

Data Line Security

Description

Data Line Security protects any station port from receiving audible tones (such as Camp-On or Override) and denies a station from barging in while busy to prevent disruption of data transmission when using a modem or facsimile machine.

Conditions

- When a multiline terminal and a single line telephone are assigned for Data Line Security, Tone Override/Voice Override and Call Alert notification tone are not heard over the handset speaker.
- Data Line Security protects a station from Barge-in, even when Barge-In is allowed in Class of Service.
- When any multiline terminal or single line telephone calls a station with Data Line Security, a constant busy tone is heard.

Default Settings

None

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
20-09-05	**Class of Service Options (Incoming Call Service) - Signal/Voice Call**	COS 01~15 = 1
20-09-06	**Class of Service Options (Incoming Call Service) - Incoming Time Display**	COS 01~15 = 1
20-09-07	**Class of Service Options (Incoming Call Service) - Call Queuing**	COS 01~15 = 0
20-13-05	**Class of Service Options (Supplementary Service) - Intercom Off-Hook Signaling**	COS 01~15 = 1
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	COS 01~15 = 0
20-13-35	**Class of Service Options (Supplementary Service) - Block Camp-On**	COS 01~15 = 0

Operation

None

D

Delayed Ringing

Description

Delayed Ringing allows programmed secondary answering positions to ring on incoming calls after a programmed time. This feature applies to CO/PBX lines and Virtual Extension Keys.

Conditions

- An extension user can answer an outside call just by lifting the handset (depending on programming).
- Terminals must have CO line appearance for a trunk call to be answered on the telephone.

Default Settings

None

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Call Arrival (CAR) Keys

Central Office Calls, Answering

Secondary Incoming Extension

Virtual Extensions

Guide to Feature Programming

Program Number	Program Name	Default
14-07-01	Trunk Access Map Setup	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).
15-06-01	Trunk Access Map for Extensions	1
15-07-01	Programmable Function Keys	Refer to Programming Manual.
15-09-01	Virtual Extension Ring Assignment	0
15-11-01	Virtual Extension Delayed Ring Assignment	0
20-04-03	System Options for Virtual Extensions - Virtual Extension Delay Interval	10 (seconds)

Program Number	Program Name	Default
22-01-04	**System Options for Incoming Calls - DIL No Answer Recall Time**	0 (seconds)
22-02-01	**Incoming Call Trunk Setup**	0
22-08-01	**DIL/IRG No Answer Destination**	0

Operation

To answer Delay Ringing calls:

1. Go off-hook.
   - OR -
   Press **Answer**.
   - OR -
   Press the flashing key.

   Either Trunk key or CAR/SIE/VE key.

To program a CAR/SIE/VE key on a phone:

1. Press **Speaker**.
2. Dial **852** .
3. Press the key you want to program.
4. Dial ***03**.
5. Dial the number of the extension you want to appear on the key.
6. Press **Hold** once for Immediate Ring (skip to step 8 for Delayed Ring).
7. Dial the mode number in which the key will ring.
   1 = Day 1
   2 = Night 1
   3 = Midnight 1
   4 = Rest 1
   5 = Day 2
   6 = Night 2
   7 = Midnight 2
   8 = Rest 2
8. Press **Hold** for a second time for Delayed Ring, or Skip to step 10.
9. Dial the mode number in which the key will delay ring.
   1 = Day 1
   2 = Night 1
   3 = Midnight 1
   4 = Rest 1
   5 = Day 2
   6 = Night 2
   7 = Midnight 2
   8 = Rest 2
10. Press **Speaker**.

Department Calling

Description

With Department Calling, an extension user can call an idle extension in a preprogrammed Department Group (32 Department Groups available) by dialing the group pilot number. For example, this would let a caller dial the Sales department just by knowing the Sales department pilot number. The caller does not have to know any of the Sales department extension numbers.

Two types of routing are available with Department Calling: Priority Routing and Circular Routing. With Priority Routing, an incoming call routes to the highest priority extensions first. Lower priority extensions ring only if all higher priority extensions are busy. With Circular Routing, each call rings a new extension.

Overflow Routing

Department Calling also provides overflow routing for extensions within the group. If a user directly dials a busy extension within a Department Group, the system can optionally route the call to the first available group member. The system follows Program 22-15-01 ~ 22-15-07 for playing the periodic VRS message.

Department Calling also allows for each Department group to transfer calls to a predefined Speed dial bin (Program 24-05-01) immediately or after a Delayed time (Program 24-02-08). Internal and transferred calls are not supported for Delayed transfer.

DID and Overflow Routing

Three types of Overflow are supported for DID calls:

- Immediate Transfer:
  This feature can be enabled or disabled by using a (58) key programmed in Program 15-07. It can also be done by using the service codes in Program 11-11-25 (set) and Program 11-11-26 (cancel). When this feature is activated, any DID calls pointed directly to the Pilot Number go immediately to the transfer destination and do not ring anyone in the group. To set up the destination you use Program 24-05 and Program 13-04. Once these programs are set, the access code assigned in Program 11-11-27 can be used to change the destination as needed.
- Delay:
  This feature can be enabled or disabled by using a (59) key programmed in Program 15-07. It can also be done by using service codes assigned in Program 11-11-28 (set) and Program 11-11-29 (cancel). When this feature is activated, any DID calls pointed directly to the Pilot follow one of the two patterns:
  - If all available members are busy or logged out, the call goes immediately to the transfer destination.
  - If agents are logged in and not busy, the call comes in and hunts through the idle members until the timer in Program 24-02-08 expires. Once this time expires, the call is routed to the transfer destination assigned in Program 24-05 and Program 13-04. Once these programs are assigned, the access code assigned in Program 11-11-27 can be used to change the destination as needed.
- DND:
  This feature can be enabled by using a (60) key programmed in Program 15-07 or by using service codes assigned in Program 11-11-30 (set) and Program 11-11-31 (cancel). When this feature is activated any DID pointed directly to the Pilot gets a busy tone and the call does not route.

User Log Out/Log In

An extension user can log out and log in to a Department Calling Group. By logging out, the user removes their extension from the group. Once logged out, Department Calling bypasses their extension. When they log back in, Department Calling routes to their extension normally. All users can dial a code to log in or log out of their Department Calling Group. A multiline terminal can optionally have a function key programmed to login/logout.

D

Enhanced Hunting

Department Calling is enhanced with expanded hunting abilities. Hunting sets the conditions under which calls to a Department Group pilot number will cycle through the members of the group. The hunting choices are:

- Busy
  A call to the pilot number hunts past only a busy group member to the first available extension.
- **Not Answered**
  A call to the pilot number cycles through the idle members of a Department Calling group. The call continues to cycle until it is answered or the calling party hangs up. If the Department Group has Priority Routing enabled, and the highest priority member is busy, the call does not hunt to the next available extension.
- Busy or Not Answered
  A call to the pilot number cycles through the idle members of a Department Calling group. The call continues to cycle until it is answered or the calling party hangs up.

If all members of the Department Group are busy, an incoming or transferred call to the group pilot number queues for an available member. Each group has a queue that can hold any number of waiting calls. If a display telephone is waiting in queue, the user sees: WAITING (group name). If a transferred call in queue is an outside call, and the system has DSP daughter board installed with the VRS, the queued caller hears, “Please hold on. All lines are busy. Your call will be answered when a line becomes free.”

The VRS can also transfer calls to Department Groups. Refer to Voice Response System (VRS) on page 1-531 for information on setting up the VRS.

The system prevents hunting to a Department Group extension if it is:

- Busy on a call
- In Do Not Disturb
- Call Forwarded
- Logged Out

Conditions

- When a DIL rings to a Department Group, the DIL may follow overflow programming (Program 22-01-04 and Program 22-08-01).
- If all agents are logged out and an intercom call to the Department Group is made you get a busy signal.
- Extensions in a Department Group which have Call Forwarding enabled are not included in the call hunt. The extension to which the user is forwarded does not receive the hunted calls. When you use the automatic Department Step calling (Program 16-01-03) it hunts only to members with the same or lower priority.
- Easily step call to an idle Department Group member if the member called is busy.
- A virtual extension can be programmed to receive multiple calls which can camp-on to the extension - no analog port is required.
- An extension user can Transfer a call to a Department Group Pilot number. If unanswered, the call recalls (depending on programming) the transferring extension after the Transfer Recall Time (Program 24-02-04).
- Voice mail uses one Department Group for voice mail.
- When Program 16-01-05 is set to (1) Automatic, all telephones in the Department group Ring for ICM calls & DID calls Directed to the Department Group Pilot Number only.
- The Overflow feature is only supported for DID calls pointed directly to the Pilot Number. POTS lines and transferred DIDs ignore the Overflow settings.
- When a Department Group is assigned as the VM Department Group in Program 45-01-01 it will only work as priority mode no matter what Program 16-01-02 is set to for that Department Group.
- Program 16-01-05 (Extension Group All Ring Mode Operation) does not work to a Secondary Department Group.

Default Settings

Disabled

Priority Routing

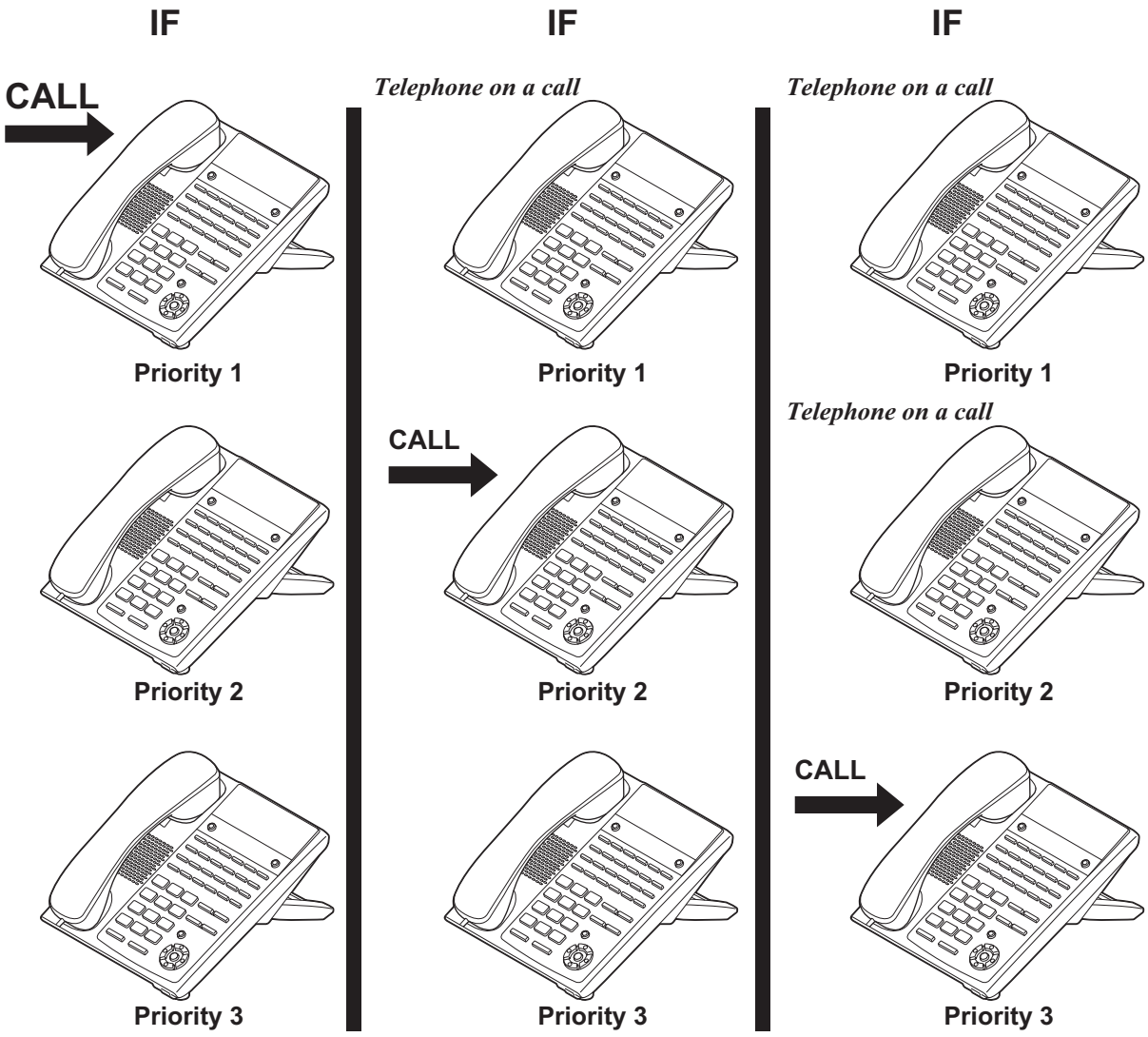

Figure 1-5 Department Calling Priority Call Routing

D

Circular Routing

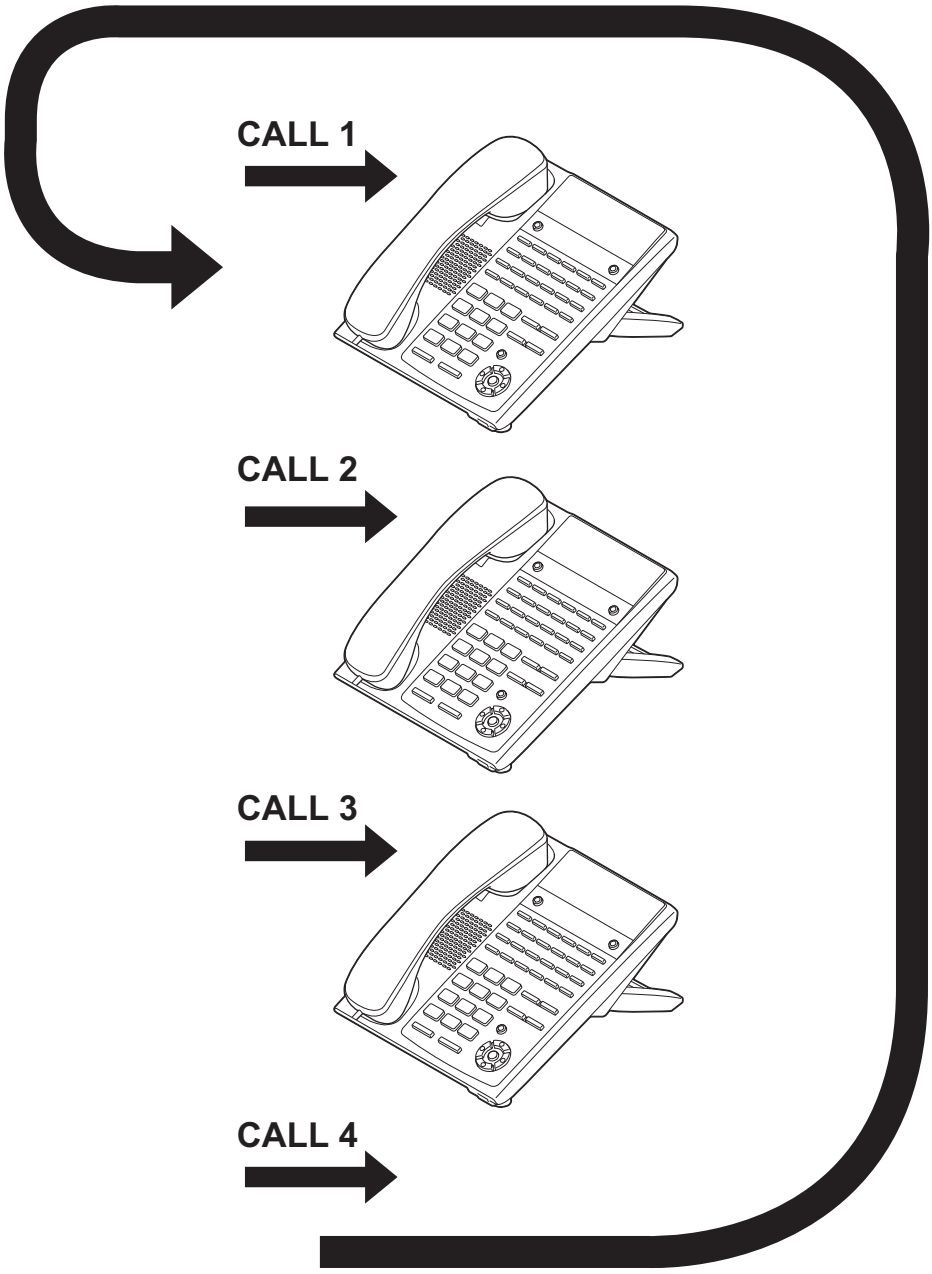

Figure 1-6 Department Calling Circular Routing

System Availability

Terminals

All Terminals

Required Component(s)

VRS for Messaging

Related Features

Call Forwarding

Department Step Calling

Transfer

InMail

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Default
11-07-01	Department Group Pilot Numbers - Dial	not assigned
11-11-25	Service Code Setup (for Setup/Entry Operation) - Automatic Transfer Setup for Each Extension Group	702
11-11-26	Service Code Setup (for Setup/Entry Operation) - Automatic Transfer Cancellation for Each Extension Group	703
11-11-27	Service Code Setup (for Setup/Entry Operation) - Destination of Automatic Transfer Each Extension Group	704
11-11-28	Service Code Setup (for Setup/Entry Operation) - Delayed Transfer for Every Extension Group	705
11-11-29	Service Code Setup (for Setup/Entry Operation) - Delayed Transfer Cancellation for Each Extension Group	706
11-12-09	Service Code Setup (for Service Access) - Change to STG (Department Group) All Ring	780
11-16-10	Single Digit Service Code Setup - (Department) STG All Ring Mode	not assigned
15-07-01	Programmable Function Keys	Refer to Programming Manual.
16-01-01	Department Group Basic Data Setup - Department Name	not assigned
16-01-02	Department Group Basic Data Setup - Department Calling Cycle	0
16-01-03	Department Group Basic Data Setup - Department Routing When Busy (Auto Step Call)	0
16-01-04	Department Group Basic Data Setup - Hunting Mode	0
16-01-05	Department Group Basic Data Setup - Extension Group All Ring Mode Operation	0
16-01-06	Department Group Basic Data Setup - STG Withdraw Mode	0
16-01-07	Department Group Basic Data Setup - Call Recall Restriction for STG	0
16-01-09	Department Group Basic Data Setup - Department Hunting No Answer Time	15 (seconds)
16-01-10	Department Group Basic Data Setup - Enhanced Hunt Type	0
16-02-01	Department Group Assignment for Extensions	Refer to Programming Manual.
16-03-01	Secondary Department Group	not assigned
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-09-07	Class of Service Options (Incoming Call Service) - Call Queuing	COS 01~15 = 0

Program Number	Program Name	Default
20-11-17	**Class of Service Options (Hold/Transfer Service) - Department Group Trunk-to-Trunk Transfer (Each Telephone Group Transfer)**	COS 01~15 = 1
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	COS 01~15 = 0
20-13-14	**Class of Service Options (Supplementary Service) - Department Calling (PLT No Called Extension)**	COS 01~15 = 1
22-02-01	**Incoming Call Trunk Setup - Incoming Type**	0
22-07-01	**DIL Assignment**	No Setting
24-02-05	**System Options for Transfer - Message Wait Ring Interval Time**	30 (seconds)
24-02-08	**System Options for Transfer - Delayed Transfer Timer for All Department Groups**	10 (seconds)
24-05-01	**Department Group Transfer Target Setup**	999

D

Operation

To call a department group:

1. Go off-hook.
2. Dial department extension number.

   The system routes the call to the first free telephone in the department group.

3. **Optional:** To manually ring all members of the group, dial the single digit service code assigned for All Member Ring (Program 11-16-10).

To log out of your Department Calling Group:

While you are logged out, Department Calling cannot route calls to your extension.

1. Press **Speaker**.
2. Dial **750** + 1.
   - OR -
   Press **Department Calling Log** In key (Program 15-07-01 or SC **851** : 46).

   The key lights while you are logged out.

To log back in to your Department Calling Group:

When you log back in, Department Calling routes calls to your extension.

1. Press **Speaker**.
2. Dial **750** + **0**.
   - OR -
   Press Department Calling Log In key (Program 15-07-01 or SC **851** : 46).

   The key goes out when you log back in.

To change the Department Group Overflow Destination:

1. Press **Speaker**.
2. Dial **704** + **Department Group** (01 ~ 32).
3. Dial **01** ~ **08** (Refer to Program 24-05).
4. Dial the destination the calls **route to**.
5. Press **Hold**.

Department Step Calling

Description

After calling a busy Department Calling Group member, an extension user can have Department Step Calling quickly call another member in the group. The caller does not have to hang up and place another Intercom call if the first extension called is unavailable. Department Step Calling also allows an extension user to cycle through the members of a Department Group.

Conditions

- If required, use this option to change the Department Step Calling Single Digit Service Code (default code = 2).
- A function key for Department Step Calling can be assigned (code 36).
- In Program 20-08-12, enable (1) or disable (0) an extension ability to use Department Step Calling.

Default Settings

Enabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Department Calling

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
11-12-07	Service Code Setup (for Service Access) - Step Call	808
11-16-01	Single Digit Service Code Setup - Step Call	4
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-08-12	Class of Service Options (Outgoing Call Service) - Department Group Step Calling	COS 01~15 = 1

Operation

To make a Step Call:

1. Place a call to a busy Department Group member.
   - OR -
   Place a call to a Department Group pilot number.
2. Dial Department Step Code (2) to call the next available Department Group member.
3. Repeat step 2 to call other Department Group members.

You step through Department Groups set in Program 16-02-01.

D

Dial Pad Confirmation Tone

Description

For an extension with Dial Pad Confirmation Tone enabled, the user hears a beep each time they press a key. This is helpful for Intercom calls and Dial Pulse trunk calls, since these calls provide no Call Progress tones.

Conditions

- Dial Pad Confirmation Tone does not apply to single line telephones.
- Dial Pad Confirmation Tone is not canceled when dialing in handset mode.
- Dial Pad Confirmation Tone is canceled when dialing in handsfree mode, but only for internal calls. The tone is still heard for external dialing.

Default Settings

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
11-11-19	**Service Code Setup (for Setup/Entry Operation) - Key Touch Tone On/Off**	824

Operation

To enable/disable Dial Pad Confirmation Tone:

1. Pick up the handset or press **Speaker**.
2. Dial **824** .

Dial Tone Detection

Description

If a trunk has Dial Tone Detection enabled, the system monitors for dial tone from the Telco or PBX when a user places a call on that trunk. If the user accesses the trunk directly (by pressing a line key or dialing **#9** and the trunk number), the system drops the trunk if dial tone does not occur. If the user accesses the trunk via a Trunk Group (by dialing a trunk group code or automatically using a feature like Last Number Redial), the system can drop the trunk or optionally skip to the next trunk in the group. Refer to the chart under Programming for more information.

Conditions

None

Default Settings

Disabled for manually dialed calls; enabled for automatically dialed calls.

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Automatic Route Selection (ARS/F-Route)

Central Office Calls, Placing

Last Number Redial

Save Number Dialed

Trunk Group Routing

Trunk Groups

Guide to Feature Programming

Program Number	Program Name	Default
10-09-01	**DTMF and Dial Tone Circuit Setup**	Resource 01 - 132 = 0 (Common)
14-02-05	**Analog Trunk Data Setup - Dial Tone Detection for Manually Accessed Trunks**	1
14-02-11	**Analog Trunk Data Setup - Next Trunk in Rotary if No Dial Tone**	0

Program Number	Program Name	Default
21-01-04	**System Options for Outgoing Calls - Dial Tone Detection Time**	5 (seconds)
21-01-05	**System Options for Outgoing Calls - Disconnect Time When Dial Tone Not Detected**	0
21-01-06	**System Options for Outgoing Calls - Dial Pause at First Digit**	3 (seconds)

Table 1-9 Dial Tone Detection Program Interaction

Method	14-02-05	14-02-11	Result if dial tone not present . . .
Press a line key - or - Dial **#9** + Trunk number	0	0	Trunk hangs (does not disconnect)
	0	1	Trunk hangs (does not disconnect)
	1	0	Trunk drops
	1	1	Trunk drops
Dial a Trunk Group code - or - Automatically through a feature	0	0	Trunk hangs (does not disconnect)
	0	1	Trunk reroutes after time-out
	1	0	Trunk drops
	1	1	Trunk reroutes after time-out

Operation

Dial Tone Detection is automatic if enabled in programming.

Dialing Number Preview

Description

Dialing Number Preview lets a display multiline terminal user dial and review a number before the system dials it. Dialing Number Preview helps the user avoid dialing errors.

Conditions

- An extension user cannot edit the displayed number.
- To place an outgoing call, an extension user must have outgoing access to a line or trunk group key.
- If the system has VRS or InMail installed, you must press * to preview a number.

Default Settings

Enabled

System Availability

Terminals

All Display Multiline Terminals

Required Component(s)

None

Related Features

Central Office Calls, Placing

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Default
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-08-05	**Class of Service Options (Outgoing Call Service) - Dial Number Preview (Preset Dial)**	COS 01~15 = 1

Operation

To use Dial Number Preview to place a call (multiline terminal only) (When set PRG15-02-60:0):

1. Do not lift the handset or press **Speaker**.
2. To preview any number, dial the number you wish to call.

*With VRS or InMail installed, you must press * to preview the number.*

To preview a Speed Dial - System/Group number, press **Redial** and dial the Speed Dial - System/Group bin number you want to call.

The number is displayed.

3. To dial out the displayed trunk number, press a Line/Trunk Group key.

*If the previewed number as a trunk access code (e.g., 9), you can press **Speaker** instead.*

- OR -
To dial an Intercom number, press Speaker.
- OR -
To cancel the number without dialing it out, press **Hold**.

D

Digital Trunk Clocking

Description

The SL1000 CPU has a built-in clock source for all digital trunk units. Digital trunk units are connected via an internal PLO (Phase Locked Oscillator) to derive Primary Clock from the network in priority order. If priority is set up incorrectly, or if two primary clocks are coming in, slips may occur causing improper data synchronization. The Phase Locked Oscillator (PLO) equipped with the SL1000 CPU is the timing source for all digital trunk units in the system. The PLO synchronizes the system and clocks signals from another office. When the SL1000 is a clock receiver office, the PLO generates the clock signal according to the source clock signals received from the source office within the network. The source clock signals are extracted from digital trunk units and are supplied to the PLO.

The PLO synchronization source priorities are as follows:

1. 1PRIU-C1
2. 2BRIDB-C1
3. CPU

Conditions

- If multiple PRIs exist, the system chooses the first one that synchronized with the carrier.
- If there are multiple PRIs and the one being used for the source goes down, the system begins to count forward in slot numbers looking for the next available PRI.
- If multiple BRIs exist and no 1PRIU-C1 exists, the SL1000 CPU chooses the first BRI that synchronized with the carrier.
- If there is one 1PRIU-C1 and the one being used for the source goes down, the SL1000 CPU looks to see if there are any BRIs installed in the system. If there are no BRIs, the SL1000 CPU becomes the new synchronization source. The reason for this is when a 1PRIU-C1 is installed in the system.

Default Settings

None

System Availability

Terminals

None

Required Component(s)

CPU

2BRIDB-C1

- OR -

1PRIU-C1

Related Features

ISDN Compatibility

D

Feature Examples

Digital Trunk Clocking Examples:

If multiple PRIs exist, the first one that synchronized with the carrier is chosen. In this example, the PRI in slot02 was the first to synchronize with the carrier; therefore, it is the PLO synchronization source.

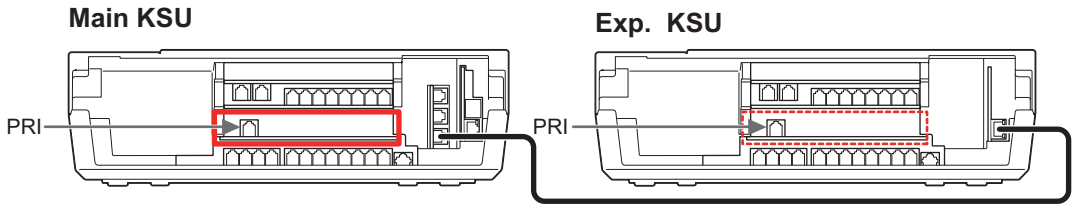

Figure 1-7 Digital Trunk Clocking Example 1

If there are multiple PRIs and the one being used for the source goes down, the system begins to count forward in slot numbers looking for the next available PRI. In this example, the PRI in slot02 went down, so the system now begins looking forward in slot numbers for the next PRI to use as the clock source.

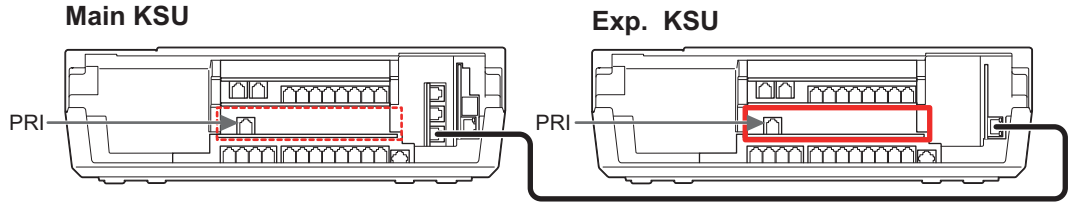

Figure 1-8 Digital Trunk Clocking Example 2

In this example, the PRI in slot06 was the first to synchronize with the carrier and became the PLO synchronization source. The PRI in slot06 then went down and the system began looking forward in slot numbers to find the next PLO source. In this case, the PRI in slot02 was the next source because after it looks through the rest of the slots in the system, it starts over with slot01.

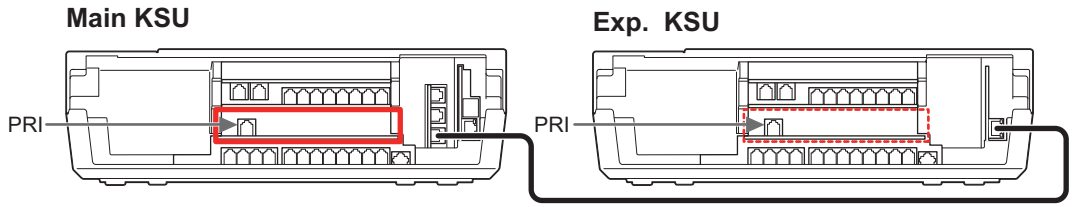

Figure 1-9 Digital Trunk Clocking Example 3

In this example, there are multiple T1 circuits in the system. There can only be one T1 circuit assigned as EXTERNAL in the system, so the T1 assigned as EXTERNAL is the PLO synchronization source.

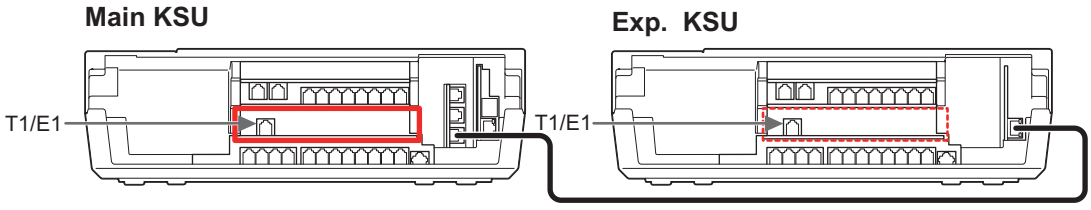

Figure 1-10 Digital Trunk Clocking Example 4

In this example, there are multiple T1 circuits and a BRI circuit. Since the T1 assigned as EXTERNAL has higher priority than a BRI, the T1 EXTERNAL is the PLO synchronization source.

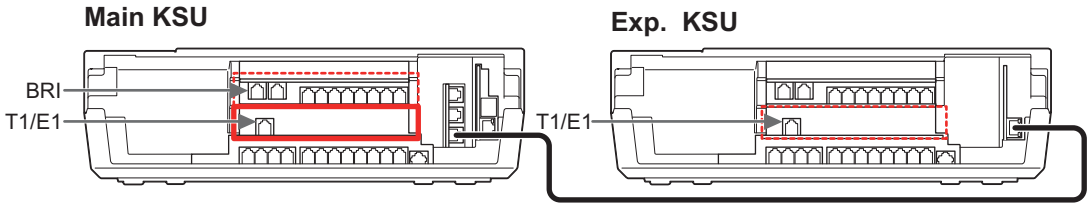

Figure 1-11 Digital Trunk Clocking Example 5

In this example, there is a PRI, multiple T1s, and a BRI. The PRI was the PLO synchronization source until it went down. The BRI then becomes the PLO synchronization source because when a PRI is in the system, T1s cannot be assigned as EXTERNAL, which are not in the PLO Synchronization Source priority list.

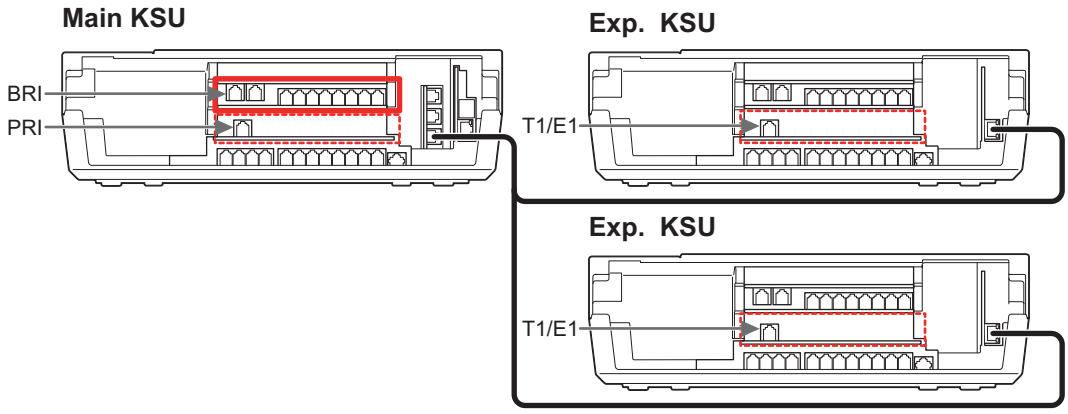

Figure 1-12 Digital Trunk Clocking Example 6

If multiple BRIs exist and no PRI or T-1 EXTERNAL exists, the system chooses the first BRI that synchronized with the carrier. In this example, the BRI in slot02 synchronized with the carrier first and became the PLO synchronization source.

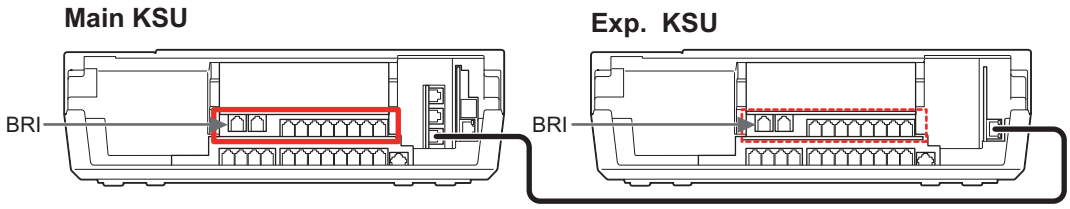

Figure 1-13 Digital Trunk Clocking Example 7

In this scenario, the PRI was the clocking source until it went down. There are no other PRIs, T1 (Externals), or BRIs in the system. The CPU now becomes the PLO synchronization source.

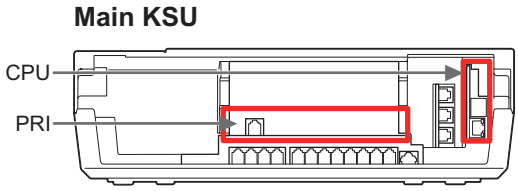

Figure 1-14 Digital Trunk Clocking Example 8

Guide to Feature Programming

Refer to the related features for programming.

Operation

Refer to the related features for details.

Direct Inward Dialing (DID)

Description

Direct Inward Dialing (DID) lets outside callers directly dial system extensions. DID saves time for callers who know the extension number they wish to reach. To place a DID call, the outside caller dials the local exchange and additional digits to ring the telephone system extension. For example, DID number 926-5400 can directly dial extension 400. The caller does not have to rely on attendant or secretary call screening to complete the call.

Direct Inward Dialing requires DID service from Telco.

In addition to direct dialing of system extensions, DID provides:

- DID Dialed Number Translation
- Flexible DID Service Compatibility
- DID Intercept
- DID Camp-On

There are 20 DID Translation tables that can be divided between 800 entries.

DID Dialed Number Translation

DID allows different tables for DID number translation. This gives you more flexibility when buying DID service from Telco. If you cannot buy the exact block of numbers you need (e.g., 301~556), use the translation tables to convert the digits received. For example, a translation table could convert digits 501~756 to extension numbers 301~556.

The SL1000 system has 800 DID Translation Table entries that you can allocate among the 20 DID Translation Tables. One translation is made in each entry. For a simple installation, you can put all 800 entries in the same table. For more flexibility, you can optionally distribute the 800 entries among the 20 tables.

In addition to number conversion, each DID Translation Table entry can have a name assigned to it. When the DID call rings the destination extension, the programmed name displays.

Flexible DID Service Compatibility

With three-digit service, the Telco sends three digits to the system for translation. Be sure to program your system for compatibility with the provided Telco service. For example, if the Telco sends four digits, make sure you set up the translation tables to accept four digits.

DID Camp-On

DID Camp-On sets what happens to DID calls to busy extensions when you have Busy Intercept disabled. With DID Camp-On enabled, a call to a busy extension camps-on for the DID Ring No Answer Time. It then diverts to the programmed DID Intercept extension ring group or Voice Mail. Without DID Camp-On, the caller to the busy extension hears only busy tone.

DID Routing Through the VRS

DID calls can optionally route through the VRS. The DID caller hears an initial Automated Attendant Greeting explaining their dialing options. If the caller misdials, they hear a second greeting with additional instructions. For example, the first Automated Attendant Greeting can be, “Thank you for calling. Please dial the extension number you wish to reach or dial 0 for the operator.” If the caller inadvertently dials an extension that does not exist, they could hear, “The extension you dialed is unavailable. Please dial 0 for assistance or dial # to leave a message so we can call you back.”

You assign Automated Attendant greetings (i.e., VRS Messages) to the numbers in each Translation Table. This provides you with extensive flexibility when determining which greetings the system should play for which dialed numbers. You could, for example, set up 926 5401 through 926 5449 to route to extensions 401~449, and have 926 5450 route to the automated attendant.

If you translate a DID so that it hits a specific VRS message, you must disable Program 25-01-02. Otherwise, the outside caller waits while hearing the DISA dial tone.

The system allows an extension to be defined as a 1-digit number that can be dialed by the outside caller on a DID/DISA trunk using the VRS. The outside caller can access the desired extension/department group by dialing only one digit after the system answers the call. If the same number is used as the first digit of an extension number and the 1-digit access code for DID/DISA, the outside caller cannot access the extension.

Example:

If 2 is defined as a 1-digit access code to department group 300, outside callers cannot access extensions 200~299 directly.

SMDR Includes Dialed Number

The SMDR report can optionally print the trunk name (entered in system programming) or the number the incoming caller dialed (i.e., the dialed DID digits). This gives you the option to analyze the SMDR report based on the number your callers dial. (This option also applies to an ISDN trunk.)

DID Intercept

DID Intercept automatically reroutes DID calls under certain conditions. There are three DID Intercepts:

- Vacant Number Intercept
  If a caller dials an extension that does not exist or misdials, Vacant Number Intercept can reroute the call to the programmed DID Intercept extension ring group or Voice Mail. Without Vacant Number Intercept, the caller hears error tone after misdialing.
- Busy Intercept
  Busy Intercept determines DID routing when a DID caller dials a busy extension. If Busy Intercept is enabled, the call immediately routes to the programmed DID Intercept extension ring group or Voice Mail. If Busy Intercept is disabled, the call follows DID Camp-On programming.
- Ring-No-Answer Intercept
  Ring-No-Answer Intercept sets the routing options for DID calls that ring unanswered at the destination extension. With Ring-No-Answer Intercept enabled, the unanswered call reroutes to the DID Intercept extension ring group or Voice Mail after the DID Ring-No-Answer Time. If Ring-No-Answer Intercept is disabled, the unanswered call rings the destination until the outside caller hangs up.

Delayed DID

Delayed DID allows a user a programmed time to answer a call. If the call is not answered in this time, the system automatically answers the call. An outside party hears a voice message, music, or dial tone according to the following conditions:

- If a VRS is installed, the system sends a prerecorded message from the VRS.
- If a customer-provided audio system (example: tape recorder) is connected, an error message or music can be played for the caller.
- If equipment is not connected for an announcement, the system sends a unique dial tone to the outside caller.

This feature is not available for the normal incoming call on ISDN trunks.

DID Intercept Destination for Each DID Number

With this feature the system allows you to program a DID Intercept destination for a DID number which receives no answer or busy call. The system can be programmed to use a trunk ring group, the VRS or the voice mail as the programmed destination. Each vacant number intercept for a DID number can have two destinations. The first destination is for an invalid DID number, busy or no answer extension. The second destination is for a no answer trunk ring group.

If the first programmed destination is a Ring Group and the second Destination is Voice Mail, the call does not forward to VoiceMail.

For busy or no answer intercept calls, a third destination can be defined in Program 22-12. If the first and third destinations are programmed but the second destination is not, the incoming call goes to the third destination after the first destination. If the first and second destinations are not programmed, but the third destination is, the call goes directly to the third destination.

This feature works for DID trunks with a trunk service type 3 in Program 22-02. Other types of trunks may use the DID table, but the DID intercept feature is not yet supported.

With the DID Intercept for each DID number feature, when the primary destination (Program 22-11-05) is set to Voice Mail, the Voice Mail protocol is:

1. Busy Intercept = Forward Busy
2. Ring-No-Answer Intercept = Forward RNA

When the secondary destination (Program 22-11-06) is set to Voice Mail, the Voice Mail protocol is based on the first destination routing. When the incoming call is forwarded to the first destination by a busy intercept, the Voice Mail protocol forwards busy calls. When the incoming call is routed to the first destination by a ring-no-answer intercept, the protocol forwards ring-no-answer. The Voice Mail transfers the calls to the mailbox number defined in Program 22-11-02.

Any valid DID number must be entered in the DID table (Program 22-11 or Program 22-17-01). If a valid DID number is not entered, there is no ring destination for any incoming calls to that number (the calls do not ring any extension in the system).

If the first programmed destination is a Ring Group and the second Destination is Voice Mail, the call does not forward to VoiceMail.

Calls Can Follow Ring Group Programming for Transferring Calls

An option has been added to Program 22-11 which allows you to determine if the DID routing should use the programmed ring group entry in Program 22-12-01 when transferring calls from a busy or no answer number.

If DID digits match with the conversion table but there is no extension, no Voice Mail, or Voice Mail did not boot up, use Program 22-11-11 to decide what to do with the incoming call. Go to (1) normal ring (default) or (0) caller hears a Busy Tone.

DID Call by Time Schedule

DID Call by Time Schedule allows for 100 programmed DID Conversion table entries (PRG 22-17-01) that can be routed based on Time Patterns. Each DID Conversion table has a maximum of eight programmable Time Patterns and each Time Pattern can reference one of the 800 different Dial-In Conversion table entries in PRG 22-11-01.

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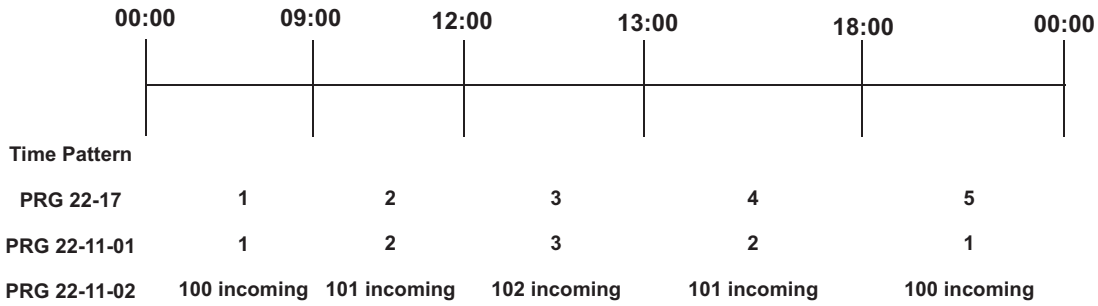
Example 1 (Automatic Change)



PRG 22-11-01 and PRG 22-11-02		
Table No.	**Receive Dial**	**Transfer Dial**
1	No setting	100
2	No setting	101
3	No setting	102

PRG 22-17					
Table No.	**Receive Dial**	**Time Pattern**	**Start Time**	**End Time**	**PRG 22-11**
1~100	1111	1	00:00	09:00	1
		2	09:00	12:00	2
		3	12:00	13:00	3
		4	13:00	18:00	2
		5	18:00	00:00	1
		6	00:00	00:00	0
		7	00:00	00:00	0
		8	00:00	00:00	0

Table 1-10 Example 2 (Manual Change)

PRG 22-17					
Table No.	**Receive Dial**	**Time Pattern**	**Start Time**	**End Time**	**PRG 22-11**
1~100	1111	1	00:00	00:00	1
		2	00:00	00:00	2
		3	00:00	00:00	3
		4	00:00	00:00	0
		5	00:00	00:00	0
		6	00:00	00:00	0
		7	00:00	00:00	0

PRG 22-17					
Table No.	**Receive Dial**	**Time Pattern**	**Start Time**	**End Time**	**PRG 22-11**
		8	00:00	00:00	0

Conditions

- DID service must be purchased from your local telephone company.
- DID Intercept for each DID number works for DID trunks with a trunk service type 3 in Program 22-02. Other types of trunks may use the DID table, but the DID intercept feature for each DID number is not yet supported.
- When a call is transferred because of Call Forwarding No Answer, Call Forwarding Busy, or DND, the reason for Transfer option can display to the transferred extension when the call is ringing to their telephone.
- DISA also allows outside callers to dial system extensions directly.
- The Off-Hook Signaling provide DID calls with signaling options. Refer to Off-Hook Signaling for specific details.
- DID trunks do not ring external page speakers. Only trunks defined as normal in Program 22-02-01 ring external page speakers.
- To simplify answering DID calls, assign function keys as line keys for the DID trunks.
- SMDR can print trunk port names or received dialed number for DID trunks. If enabled, DNIS digits can be printed on the SMDR reports instead of the trunk name.
- Transferred calls on DISA, DID, DIL, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer, or DND).
- When defining trunks as DID or DID Mode in Program 22-02-01, DID translation (Program 22-11 or Program 22-17) must be used, even if the incoming digits match the extension number.
- When using DID Call by Time Schedule and breaking out the Time Patterns, set the start time to 00:00 and end time to 00:00 for this feature to operate correctly. Refer to DID Call by Time Schedule on the previous page for more details.
- DID Call by Time Schedule Priority is given to the pattern that is set **manually**. However, when a time pattern changes with the time schedules set in Program 22-17, the pattern applied by the Manual change is canceled and the Time Pattern is given priority.
- When Transfer Operation Mode is set to busy, call queuing must be turned off for it to work.

Default Settings

Disabled

Related Features

Central Office Calls, Answering

Direct Inward Line (DIL)

Direct Inward System Access (DISA)

Off-Hook Signaling

Paging, External

Programmable Function Keys

Station Message Detail Recording

Transfer

Guide to Feature Programming

Program Number	Program Name	Default
10-03-01	**ETU Setup**	Refer to Programming Manual.
14-05-01	**Trunk Group - Trunk group Number**	Trunk Port 1~126 = Priority 1~126
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-09-01	**Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/DIL Override**	COS 01~15 = 0
20-13-23	**Class of Service Options (Supplementary Service) - Display the Reason for Transfer**	COS 01~15 = 0
21-01-02	**System Options for Outgoing Calls - Intercom Interdigit Time**	10 (seconds)
22-01-06	**System Options for Incoming Calls - DID Ring-No-Answer Time**	20 (seconds)
22-02-01	**Incoming Call Trunk Setup**	0
22-04-01	**Incoming Extension Ring Group Assignment**	Extension 200 (first port)
22-09-01	**DID Basic Data Setup - Expected Number of Digits**	2
22-09-02	**DID Basic Data Setup - Received Vacant Number Operation**	0
22-10-01	**DID Translation Table Setup**	1st: 1 Start - 1, End - 200 2 Start - 201, End - 400 3 Start - 401, End - 600 4 Start - 601, End - 800 5 ~ 20 Start - 0, End - 0 2nd: 1 ~ 20 Start - 0, End - 0
22-11-01	**DID Translation Number Conversion - Received Number**	Refer to Programming Manual.
22-11-02	**DID Translation Number Conversion - Target Number**	Refer to Programming Manual.
22-11-03	**DID Translation Number Conversion - DID Name**	not assigned
22-11-04	**DID Translation Number Conversion - Transfer Operation Mode**	0
22-11-05	**DID Translation Table Number Conversion - Transfer Destination Number 1**	0
22-11-07	**DID Translation Number Conversion - Call Waiting**	0
22-11-08	**DID Translation Number Conversion - Maximum Number of DID Calls**	0
22-11-09	**DID Translation Number Conversion - Music On Hold Source**	0
22-11-10	**DID Translation Number Conversion - ACI Music Source Port**	0
22-11-11	**DID Translation Number Conversion - Ring Group Transfer**	1
22-12-01	**DID Intercept Ring Group**	1
22-13-01	**DID Trunk Group to Translation Table Assignment**	1
25-01-01	**VRS/DISA Line Basic Data Setup - VRS/DISA Dial-In Mode**	0
25-01-03	**VRS/DISA Line Basic Data Setup - VRS/DISA Transfer Alarm**	0
25-02-01	**VRS/DISA VRS Message**	0
25-03-01	**VRS/DISA Transfer Ring Group With Incorrect Dialing**	0
25-04-01	**VRS/DISA Transfer Ring Group With No Answer/Busy**	0
25-05-01	**VRS/DISA Error Message Assignment**	0

Program Number	Program Name	Default
25-06-02	VRS/DISA One-Digit Code Attendant Setup - Destination Number	not assigned
25-07-01	System Timers for VRS/DISA - VRS/DISA Dial Tone Time	10 (seconds)
25-07-02	System Timers for VRS/DISA - VRS/DISA No Answer Time	10 (seconds)
25-07-04	System Timers for VRS/DISA - Calling Time to Automatic Answering Telephone Set	10 (seconds)
25-07-05	System Timers for VRS/DISA - Duration Time for Guidance Message by Automatic Answering Telephone Set	10 (seconds)
25-07-06	System Timers for VRS/DISA - Duration Time for Guidance Message by ACI	10 (seconds)
25-07-11	System Timers for VRS/DISA - VRS/DISA Answer Delay Time	0 (seconds)
25-07-13	System Timers for VRS/DISA - VRS/DISA Busy Tone Interval	5 (seconds)
25-07-14	System Timers for VRS/DISA - Delayed VRS Answer Time	10 (seconds)

D

Table 1-11 Default Value for PRG22-11-01/02

Conversion Table	Received Number	Terget Number
1	00	200
2	01	201
:	:	:
100	99	299
101	No Setting	No Setting
:	:	:
800	No Setting	No Setting

Direct Call by Time Schedule

Program Number	Program Name	Default
11-10-35	Service Code Setup (for Administrator) - Dial-In Mode Switching	not assigned
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-07-26	Class of Service Options (Administrator Level) - Dial-In Mode Switch	COS 01~15 = 0
22-02-01	Incoming Call Trunk Setup	0
22-11-02	DID Translation Number Conversion - Target Number	Refer to Programming Manual.
22-17-01	Dial-In Conversion Table Area Setup for Time Pattern - Received Dial	not assigned
22-17-02	Dial-In Conversion Table Area Setup for Time Pattern - Start of Time	0000
22-17-03	Dial-In Conversion Table Area Setup for Time Pattern - End of Time	0000
22-17-04	Dial-In Conversion Table Area Setup for Time Pattern - Dial-In Conversion Table Number	0

Operation

DID calls ring extensions like normal trunk calls.

To Activate DID Call by Time Schedule:

1. At any display multiline terminal, press **Speaker**.
2. Dial the Dial-In Mode Switching Service Code (Default = Not assigned).
   - OR -
   Press the Dial-In Mode Switching Programmable Function key (Program 15-07-01, 88, or SC 851 Key Code 88).
3. Dial 1~100 (table number).
4. Dial the Time Pattern 1~8.

Table 1-12 LED Flash Patterns

Time Pattern	LED Appearance
Pattern 1	Off
Pattern 2	On
Pattern 3	Slow Flash
Pattern 4	Fast Flash
Patterns 5~8	Off

Direct Inward Line (DIL)

Description

A Direct Inward Line (DIL) is a trunk that rings an extension, virtual extension or Department Group directly. Since DILs only ring one extension or group (i.e., the DIL destination), employees always know which calls are for them. For example, a company operator can have a Direct Inward Line for International Sales Information. When outside callers dial the DIL telephone number, the call rings the operator on the International Sales line key. The DIL does not ring other extensions.

D

There are 126 available trunks, 32 Department Groups, 128 extensions and 50 virtual extensions.

DIL Delayed Ringing

Extensions in a Ring Group can have delayed ringing for another extension DIL. If the DIL is not answered at its original destination, it rings the DIL No Answer Ring Group. This could help a Technical Service department, for example, that covers calls for an Inside Sales department. If the Inside Sales calls are not answered, they ring into the Technical Service department.

Conditions

- If unanswered, a DIL without delayed ringing rings an extension until the outside party hangs up.
- If a DIL rings a Department Group and all agents are busy, the system routes the call as follows:
  1. The trunk rings the overflow destination assigned in Program 22-08.
  2. If there is no 22-08 assignment, the call rings according to the Ring Group assignments in Program 22-04 and Program 22-05.
  3. If none of the destinations in steps 1~2 above are available, the call continues to ring until a destination becomes free.
- The DIL follows call forwarding programming, even to voice mail.
- When a call is transferred by Call Forwarding - No Answer, Call Forwarding - Busy, or DND, the Reason for Transfer can display at the transferred extension.
- You can place DILs in trunk groups to make outgoing DIL calls easier.
- If a DIL destination extension is in DND, an incoming call rings according to Ring Group programming (Program 22-08 then Program 22-05).
  - If a user puts the telephone in Do Not Disturb, calls routed to the telephone in DND do not follow call forwarding.
- A user can activate Group Call Pickup to intercept a DIL ringing another extension.
- Program a name for a DIL in Program 14-01-01. This makes it easier to identify the incoming call.
- If a Multiline Terminal is busy, a second incoming DIL call provides Call Alert Notification, depending on chassis programming. The second DIL call waits in line for the user to answer the call. The outside caller hears ringback tone while this occurs.
- If an extension has a line key for a DIL, the call rings the key. If not, the call rings an available line appearance. For other extensions, the DIL indicates busy.
- A DIL rings its assigned extension without Ring Group programming. A DIL only rings its assigned extension. It does not ring other extensions in a Ring Group.
- Transferred calls on DISA, DID, DIL, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer, or DND).

Default Settings

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Call Forwarding

Central Office Calls, Answering

Central Office Calls, Placing

Department Calling

Do Not Disturb (DND)

Group Call Pickup

Name Storing

Off-Hook Signaling

Paging, External

Programmable Function Keys

Ring Groups

Transfer

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-09-01	**Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/DIL Override**	COS 01~15 = 0
20-13-23	**Class of Service Options (Supplementary Service) - Display the Reason for Transfer**	COS 01~15 = 0
22-01-04	**System Options for Incoming Calls - DIL No Answer Recall Time**	0 (seconds)
22-02-01	**Incoming Call Trunk Setup**	0
22-04-01	**Incoming Extension Ring Group Assignment**	Extension 200 (first port)
22-07-01	**DIL Assignment**	not assigned
22-08-01	**DIL/IRG No Answer Destination**	0

Operation

To answer a call on your Direct Inward Line:

1. Lift the handset.
2. Press the flashing line key for DIL on the multiline terminal.
   - Pressing the flashing Line Key puts the first call on hold and answers the second incoming call. This can be repeated until all incoming calls are answered.
   - If you have Ringing Line Preference, lift the handset to answer the call.
   - If you do not answer the call, it may ring other extensions (i.e., the DIL No Answer Ring Group).

D

To place a call on your Direct Inward Line:

1. Lift the handset.
2. At the multiline terminal, press the line key for DIL.
   - OR -
   Dial **#9** and the DIL trunk number (e.g., 05).
   - OR -
   Dial **804** and the DIL trunk group number (e.g., 05).
   - OR -
   Dial **9** for Trunk Group Access.
3. Dial the number.

Direct Inward System Access (DISA)

Description

DISA permits outside callers to directly dial system extensions, trunks and selected features. This could help an employee away from the office that wants to directly dial co-workers or use the company trunks for long distance calls. To use DISA, the employee:

- Dials the telephone number that rings the DISA trunk
- Waits for the DISA trunk to automatically answer with a unique dial tone
- Dials the 6-digit DISA password (access code)
- Waits for a second unique dial tone
- Accesses a system trunk, uses a selected feature or dials a system extension

DISA calls ring system extensions like other outside calls. If an extension has a line key for the DISA trunk, the call rings that key.

You can set DISA operation differently for each Night Service mode. For example, a trunk can be a normal trunk during the day and a DISA trunk at night. You can also set the routing for DISA trunks when the caller dials a busy or unanswered extension, dials incorrectly or forgets to dial.

DISA allows 15 users, 15 DISA Classes of Service and 126 trunks.

DISA Class of Service

DISA Class of Service provides features and dialing restrictions for DISA callers. This allows you to control the ability of the DISA callers dialing into your system. When a DISA caller first accesses the system, they can be prompted to enter a DISA password before proceeding. The system associates the password entered with a specific user number, which in turn has a Class of Service. If the Class of Service allows the action (such as making outgoing trunk calls), the call goes through. If the DISA Class of Service does not allow the action, the system prevents the call. The DISA Class of Service options are:

- Trunk Group Routing/ARS Access
  When a DISA caller dials into the system, they may be able to dial 9 and place outside calls. Any toll charges are incurred by the system. The call follows the system Trunk Group Access or Automatic Route Selection - whichever is enabled.
- Trunk Group Access
  DISA callers may be able to access a specific trunk group for outgoing calls through the system. To access a Trunk Group, the user dials Service Code **804** followed by the Trunk Group number (Trunk Groups 1~25). This allows the DISA caller to place an outgoing call over the selected group. Trunk Group Access bypasses the system Trunk Group Routing/ARS/Trunk Access Maps. As with dial **9** access, any toll charges are incurred by the system.
- Speed Dial - System/Group/Station
  The System Speed Dial dialing bins may be available to DISA callers. This could save the DISA caller time when dialing. To access the System Speed Dialing bins, the caller dials Service Code **#2** and the System Speed Dial Bin number.
- Operator Calling
  A DISA caller may be able to dial 0 for the system operator.
- Paging
  Internal and External Paging may be available to DISA callers. This allows co-workers in adjacent facilities, for example, to broadcast announcements to each other.
- Direct Trunk Access
  DISA callers may be able to select a specific trunk for outgoing calls through the system. To directly access a trunk, the user dials Service Code **#9** followed by the trunk number (e.g., 001). This allows the DISA caller to place an outgoing call over the selected trunk. Direct Trunk Access bypasses the system Trunk Group Routing/ARS/Trunk Access Maps. As with dial **9** access, any toll charges are incurred by the system.
- Call Forward

DISA callers may be able to set Call Forwarding to redirect extension calls to another extension. Call Forwarding ensures that the user's calls are covered when they are away from their work area.

- DISA Barge-In
  The DISA Barge-In option allows a DISA caller to break into another extension user's established call. This sets up a three-way conversation between the intruding party and the two parties on the initial call.

DISA Toll Restriction

The digits a DISA caller dials for an outgoing call may be subject to the system Toll Restriction. For example, Toll Restriction can prevent users from dialing a 1-900 service. When an incoming DISA caller tries to use system trunks to dial 1-900, Toll Restriction denies the call.

D

DISA Operating Modes

The DISA Operating Modes determine what happens when a DISA caller forgets to dial, calls a busy or unanswered extension or dials incorrectly. The system can either drop the call or send it to a preset Ring Group (called the DISA Transfer Destination).

Department Calling with Overflow Message

If a DISA caller dials a busy Department Calling Group, the system can periodically play the voice prompt, *"Please hold on. All lines are busy. Your call will be answered when a line becomes free."* while the caller waits. The interval between the voice prompts is the VRS Waiting Message Interval Time. When an extension in the Department Group becomes available, the call automatically goes through. If the Department Calling Group remains busy past the DISA No Answer Time, the DISA call routes to the overflow destination or disconnects. (What happens to the unanswered call is set by the DISA Operating Mode). The Overflow Message requires a VRS.

Warning Tone for Long DISA Calls

You can set up the system to provide a warning tone to DISA callers that have been on a call too long. The warning tone can be just a reminder (which the caller can ignore) or can be followed by a forced disconnect of the call. When the DISA caller hears the warning tone, they have the option of dialing a code to continue the conversation or disconnect.

Trunk Continue/Disconnect Codes

Users have the option to use a Continue or Disconnect service code. The Continue service code extends the conversation for a programmed time. If the user enters the Disconnect service code, the call is immediately disconnected.

Example:

The following example indicates how a call will be handled with the system programmed as follows:

- Program 14-01-25: **1**
  Program 20-28-01: **#**
  Program 20-28-02: **No Setting**
  Program 20-28-03: **180**
  Program 24-02-07: **600** (Used only with manually transferred Tandem Trunk calls)
  Program 24-02-10: **30** (Used only with manually transferred Tandem Trunk calls)
  Program 25-07-07: **600** (Used only with automatically transferred Tandem Trunk calls or DISA calls)
  Program 25-07-08: **30** (Used only with automatically transferred Tandem Trunk calls or DISA calls)

1. An external call connects to an external number (either by transferring with Tandem Trunking or by DISA caller).
2. After 10 minutes (Tandem Trunking = Program 24-02-07 or DISA = Program 25-07-07), a warning tone is heard and the user dials # (Program 20-28-01) to extend the conversation.
3. After three minutes (Program 20-28-03), the warning tone is heard again. After 30 seconds (Tandem Trunking = Program 24-02-10 or DISA = Program 25-07-08), the call is disconnected.

Conditions

- The DISA caller must use an analog (DTMF) telephone. DISA is compatible with calling devices that meet the DTMF signaling requirements of EIA Specification RS-464. DISA trunks must be ground start or supervised loop start.
- The Continue/Disconnect code must be DTMF.
- With an analog trunk, the Continue/Disconnect code may work using DTMF sounds from the opposite side trunk. With an ISDN trunk, Program 14-01-25 must be enabled to detect the Continue/Disconnect code.
- The Continue/Disconnect code is not accepted while dialing a trunk.
- Continue/Disconnect codes do not work if all DTMF receivers are busy.
- When used with the Networking feature, both systems must be programmed the same.
- In a system with ARS enabled:
  When a DISA caller dials **9** for an outside call (if allowed), the system routes the call via ARS.
- In a system with ARS disabled:
  When a DISA caller dials **9** for an outside call (if allowed), the system uses the routes programmed for Trunk Group Routing.
- Transferred calls on DISA, DID, DIL, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer or DND).
- Long conversation cutoff is controlled separately for manually transferred Tandem Trunk calls, automatically transferred Tandem Trunk calls, and DISA calls.
- Tandem Trunking also uses the Continue/Disconnect codes DISA uses.
- Department Calling with Overflow Message requires PZ-VM21 for VRS.
- DISA can only be set to call forward to another extension. Call Forward Off-Premise is not supported.
- When the DISA/VRS Ring Group Transfer (Programs 25-03 and 25-04) are set to 104 (Speed Dial Bin), the Speed dial is treated as an internal call no matter what Program 13-01-01 is set to. If an outside number is required, the trunk access code must be put into the speed dial bin.

Default Settings

Disabled

System Availability

Terminals

Remote Analog DTMF telephones

Required Component(s)

InMail (for Announcements)

Related Features

Automatic Route Selection (ARS/F-Route)

Central Office Calls, Answering

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Long Conversation Cutoff

Tandem Trunking (Unsupervised Conference)

Transfer

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Default
10-09-01	DTMF and Dial Tone Circuit Setup	Resource 01 - 132 = 0 (Common)
11-01-01	System Numbering	Refer to Programming Manual.
11-09-02	Trunk Access Code - 2nd Trunk Route Access Code	not assigned
14-01-02	Basic Trunk Data Setup - Transmit Level	32 (0dB)
14-01-03	Basic Trunk Data Setup - Receive Level	32 (0dB)
14-01-13	Basic Trunk Data Setup - Trunk-to-Trunk Transfer	1
20-01-05	System Options - DTMF Receive Active Time	10 (seconds)
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-09-01	Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/DIL Override	COS 01~15 = 0
20-13-23	Class of Service Options (Supplementary Service) - Display the Reason for Transfer	COS 01~15 = 0
20-14-01	Class of Service Options for DISA - First Digit Absorption (Delete First Digit Dialed)	COS 01~15 = 0
20-14-02	Class of Service Options for DISA - Trunk Group Routing/ARS Access	COS 01~15 = 0
20-14-03	Class of Service Options for DISA - Trunk Group Access	COS 01~15 = 0
20-14-04	Class of Service Options for DISA - Outgoing System Speed Dialing	COS 01~15 = 0
20-14-05	Class of Service Options for DISA - Operator Calling	COS 01~15 = 0
20-14-06	Class of Service Options for DISA - Internal Paging	COS 01~15 = 0
20-14-07	Class of Service Options for DISA - External Paging	COS 01~15 = 0
20-14-08	Class of Service Options for DISA - Direct Trunk Access	COS 01~15 = 0
20-14-09	Class of Service Options for DISA - Forced Trunk Disconnect <Not for ISDN T-point>	COS 01~15 = 0
20-14-10	Class of Service Options for DISA - Call Forward Setting by Remote via DISA	COS 01~15 = 0
20-14-11	Class of Service Options for DISA - DISA/Tie Trunk Barge-In	COS 01~15 = 0
21-15-01	Individual Trunk Group Routing for Extensions	0 (No setting)
22-01-11	System Options for Incoming Calls - VRS Waiting Message Interval Time	20 (seconds)
22-02-01	Incoming Call Trunk Setup	0
22-04-01	Incoming Extension Ring Group Assignment	Extension 200 (first port)
25-01-01	VRS/DISA Line Basic Data Setup - VRS/DISA Dial-In Mode	0
25-01-02	VRS/DISA Line Basic Data Setup - DISA User ID	1
25-01-03	VRS/DISA Line Basic Data Setup - VRS/DISA Transfer Alarm	0
25-02-01	VRS/DISA VRS Message	Talkie type = 1 Additional Data = 1
25-03-01	VRS/DISA Transfer Ring Group With Incorrect Dialing	0
25-04-01	VRS/DISA Transfer Ring Group With No Answer/Busy	0
25-05-01	VRS/DISA Error Message Assignment	0

Program Number	Program Name	Default
25-06-01	**VRS/DISA One-Digit Code Attendant Setup - Next Attendant Message Number**	0
25-06-02	**VRS/DISA One-Digit Code Attendant Setup - Destination Number**	not assigned
25-07-01	**System Timers for VRS/DISA - VRS/DISA Dial Tone Time**	10 (seconds)
25-07-02	**System Timers for VRS/DISA - VRS/DISA No Answer Time**	10 seconds
25-07-03	**System Timers for VRS/DISA - Disconnect after VRS/DISA retransfer to IRG**	60 (seconds)
25-07-04	**System Timers for VRS/DISA - Calling Time to Automatic Answering Telephone Set**	10 (seconds)
25-07-05	**System Timers for VRS/DISA - Duration Time for Guidance Message by Automatic Answering Telephone Set**	10 (seconds)
25-07-06	**System Timers for VRS/DISA - Duration Time for Guidance Message by ACI**	10 (seconds)
25-07-07	**System Timers for VRS/DISA - Long Conversation Warning Tone Time**	30 seconds
25-07-08	**System Timers for VRS/DISA - Long Conversation Disconnect Time**	15 seconds
25-07-09	**System Timers for VRS/DISA - DISA Internal Paging Time**	30 (seconds)
25-07-10	**System Timers for VRS/DISA - DISA External Paging Time**	30 (seconds)
25-07-11	**System Timers for VRS/DISA - VRS/DISA Answer Delay Time**	0 (seconds)
25-07-13	**System Timers for VRS/DISA - VRS/DISA Busy Tone Interval**	5 (seconds)
25-08-01	**DISA User ID Setup - Password**	Not assigned
25-09-01	**Class of Service for DISA Users**	1
25-10-01	**Trunk Group Routing for DISA**	1
25-11-01	**DISA Toll Restriction Class**	2
25-12-01	**Alternate Trunk Group Routing for DISA**	0
25-15-01	**DISA Transfer Target Setup - DISA Transfer Target Area at Wrong Dial**	999
25-15-02	**DISA Transfer Target Setup - DISA Transfer Target Area at No Answer or Busy**	999

Trunk Continue/Disconnect Codes

Program Number	Program Name	DefaultS
14-01-25	Basic Trunk Data Setup - Continued/Discontinued Trunk-to-Trunk Conversation	0
22-07-01	DIL Assignment	not assigned
20-28-01	Trunk to Trunk Conversation - Conversation Continue Code	not assigned
20-28-02	Trunk to Trunk Conversation - Conversation Disconnect Code	not assigned
20-28-03	Trunk to Trunk Conversation - Conversation Continue Time	0 (seconds)
24-02-07	System Options for Transfer - Trunk-to-Trunk Transfer Release Warning Tone	1800 (seconds)
24-02-10	System Options for Transfer - Disconnect Trunk-to-Trunk	0 (seconds)
25-07-07	System Timers for VRS/DISA - Long Conversation Warning Tone Time	30 (seconds)

Program Number	Program Name	DefaultS
25-07-08	System Timers for VRS/DISA - Long Conversation Disconnect Time	15 (seconds)

Operation

To place a DISA call into the system:

1. Dial the telephone number that rings the DISA trunk.
2. Wait for the DISA trunk to automatically answer with a unique dial tone.
3. Dial the 6-digit DISA password (access code).
4. Wait for a second unique dial tone.
5. Dial an extension.
   - OR -
   Dial **9** for Trunk Group Routing or ARS.
   - OR -
   Dial Alternate Trunk Route Access Code (if enabled).
   - OR -
   Dial **804** + a trunk group number (**1~25**) for an outside call.
   - OR -
   Dial **#9** + a trunk number (**001~126**) for an outside call.
   - OR -
   Dial **#2** + System Speed Dialing bin number.
   - OR -
   Dial **0** for the operator.
   - OR -
   Dial **801** + an Internal Paging Zone number (**0**, **1~9**, **00**, **01~64**).
   - OR -
   Dial **803** + an External Paging Zone number (1~8 or 0 for All Call).
   - OR -
   Dial **810** + a busy extension number to barge in to a call.

To forward extension calls using a DISA call into the system:

1. Dial the telephone number that rings the DISA trunk.
2. Wait for the DISA trunk to automatically answer with a unique dial tone.
3. Dial the 6-digit DISA password (access code).
4. Wait for a second unique dial tone.
5. Dial the Call Forward service code (as defined in Program 11-11-01 through Program 11-11-05).
6. Dial the number of the extension to be forwarded.
7. Dial **1** to set Call Forwarding or 0 to cancel Call Forwarding.
8. Dial the extension number to which the calls will be forwarded.

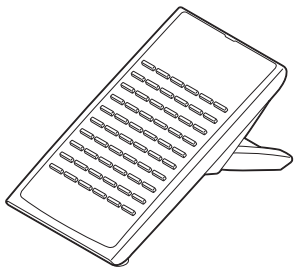
To use the Continue code to extend a DISA call:

1. An external call connects to an external number (either by transferring with Tandem Trunking or by DISA caller).
2. After the programmed time (Program 25-07-07), a warning tone is heard and the user dials the Continue code (Program 20-28-01) to extend the conversation.
3. After the programmed time (Program 20-28-03), the warning tone is heard again. After the programmed time (Program 25-07-08), the call is disconnected if the Continue code is not dialed again.

Direct Station Selection (DSS) Console

Description

The DSS Console gives a multiline terminal user a Busy Lamp Field (BLF) and one-button access to extensions, trunks, and system features. This saves time for users that do a lot of call processing (e.g., attendants, operators, or dispatchers). The DSS Console simplifies:



- Calling extensions and door boxes
- Placing, answering and transferring outside calls (Needs to assign keys)
- Making an External or Internal Page (Needs to assign keys)
- Switching the Night Service mode (Needs to assign keys)

The DSS Console also provides DSS Console Alternate Answer. This lets a multiline terminal user with a DSS Console quickly reroute their calls to a co-worker. Transferred and dial 0 calls ring both DSS Consoles and, if the VRS is installed, the main operator hears the message, “Your calls have been forwarded”. Central office calls ring both consoles and no message is heard by the operator.

You can also program the DSS Console keys to store Service Codes (up to 36 digits long). This provides the DSS Console user with many of the features available on One-Touch and Programmable Feature Keys. The DSS Console keys can optionally store additional associated digits after the Service Code. For example, if they are Trunk Group 1 ~ 9 then storing 80401 under a DSS Console Key access Trunk Group 1 when the console user presses the key. If they are more than 9 Trunk Group it will be 80401 .

The maximum number of consoles allowed per system is 12.

DSS Lamp Table Changed to Apply to DSS/Hotline Keys for Multiline Terminals

Using Programs 30-05-02~30-05-21 DSS Console Lamp Table, you can assign LED flash patterns for DSS and Hotline keys on multiline terminals and DSS Consoles.

Conditions

- Changing flash patterns for DSS Consoles also changes them for Hotline keys.
- When installing a DSS, the system must auto-detect the console for the LEDs to function correctly. When connecting the DSS to an extension previously defined with another circuit type, undefine the circuit type (enter 00 in Program 10-03-01 for the extension number), then connect the DSS Console.
- Programmable Function keys for Trunk Group (*02) and Virtual Extension (*03) cannot be programmed on a DSS Console as the system does not allow entry of the additional data required for these keys.
- A user can use the One-Touch Programmable Function Key (code 01) to have DSS Console keys for Personal Speed Dial and common and group Speed Dial.
- A DSS key indicates only a Call Forwarding indication for extensions forwarded with Immediate Call Forwarding.
- A DSS Console can have line keys for placing and answering calls.
- The DSS Console provides one-touch calling and a Busy Lamp Field for Door Boxes. Refer to Door Box on page 1-199 when programming Door Boxes.
- The DSS Console provides one-touch Night Service switching. Refer to Night Service on page 1-370 when programming Night Service options.

- Like a One-Touch Key, a user can have DSS Console keys for Direct Station Selection, Trunk Calling, Personal Speed Dial, Speed Dialing, and Service Code access.
- The DSS Console provides one-touch External and Internal Page zone access. Refer to Paging, External on page 1-383 and Paging, Internal on page 1-388.
- You can program the DSS Console keys with service codes to provide the functions of many of the Programmable Function keys. The stored service code can have up to three digits, but it can have additional option codes added (e.g. to set Immediate Call Forward for all calls. Trunk Group (*02) and Virtual Extension (*03) codes can not be programmed on a DSS Console as the system does not allow entry of the additional data required.
- When a multiline terminal user is on a call, they can transfer to another station by pressing a DSS key for that station. It is not necessary to press Transfer to transfer to another station using a DSS key.

When a multiline terminal user is on a call, they must press Transfer to transfer a call off site with a DSS key.

- Pauses can be entered in the dial string of a DSS/One Touch button. The pause is entered as P in the dial string and causes the system to wait three seconds before sending the rest of the digits that follow the P (pause). Multiple pauses can be entered.
- The @ can be entered in the dial string of a DSS/One Touch button. The @ only applies to ISDN and Intercom calls. When using the @, the system waits for the destination to answer (answer supervision), and then sends the rest of the digits.
- Entering a P (pause) in a DSS/One Touch dial string can be used for CO calls, Intercom calls, or after the @ for ISDN calls.

Default Settings

- No DSS Consoles assigned (in Program 30-02-01).
- All DSS Console key ranges are ports 1~60.
- Once a DSS Console is enabled, the console keys are DSS keys (Program 30-03-01).

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Call Forwarding

Central Office Calls, Answering

Central Office Calls, Placing

Door Box

Night Service

One-Touch Calling

Paging, External

Paging, Internal

Programmable Function Keys

Speed Dial - System/Group/Station

Guide to Feature Programming

Program Number	Program Name	Default
10-03-01	**ETU Setup (HBI PKG Setup) - Terminal Type (B1)**	Refer to Programming Manual.
15-02-08	**Multiline Telephone Basic Data Setup - Automatic Handsfree**	1
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	COS 01~15 = 0
20-13-49	**Class of Service Options (Supplementary Service) - BLF Indication on CO Incoming State**	COS 01~15 = 0
20-17-01	**Operator Extension - Operator's Extension Number**	200
30-01-01	**DSS Console Operating Mode**	0
30-02-01	**DSS Console Extension Assignment - Extension Number**	not assigned
30-03-01	**DSS Console Key Assignment**	The DSS keys 001~060 of all DSS consoles = DSS/One-Touch key 200~259
30-04-01	**DSS Console Alternate Answer**	0
30-05-02	**DSS Console Lamp Table - Busy Extension**	7 (On)
30-05-03	**DSS Console Lamp Table - DND Extension**	3 (On)
30-05-09	**DSS Console Lamp Table - Hotel Status Code 1 (Hotel DSS)**	7 (On)
30-05-10	**DSS Console Lamp Table - Hotel Status Code 2 (Hotel DSS)**	1 (FL)
30-05-11	**DSS Console Lamp Table - Hotel Status Code 3 (Hotel DSS)**	2 (WK)
30-05-12	**DSS Console Lamp Table - Hotel Status Code 4 (Hotel DSS)**	3 (RW)
30-05-13	**DSS Console Lamp Table - Hotel Status Code 5 (Hotel DSS)**	5 (IL)
30-05-14	**DSS Console Lamp Table - Hotel Status Code 6 (Hotel DSS)**	3 (RW)
30-05-15	**DSS Console Lamp Table - Hotel Status Code 7 (Hotel DSS)**	6 (IW)
30-05-16	**DSS Console Lamp Table - Hotel Status Code 8 (Hotel DSS)**	4 (IR)
30-05-17	**DSS Console Lamp Table - Hotel Status Code 9 (Hotel DSS)**	3 (RW)
30-05-18	**DSS Console Lamp Table - Hotel Status Code 0 (Hotel DSS)**	0 (Off)
30-05-19	**DSS Console Lamp Table - Hotel Status Code ✱** (Hotel DSS)	4 (IR)
30-05-20	**DSS Console Lamp Table - Hotel Status Code # (Hotel DSS)**	5 (IL)
30-05-21	**DSS Console Lamp Table - VM Message Indication**	3 (RW)
30-10-01	**DSS Console IP Terminal Setup - MAC Address**	00-00-00-00-00-00

Table 1-13 Default Value for PRG30-03-01

Key Number	Function Number	Additional Data
DSS001	01 (DSS Key)	200
DSS002	01 (DSS Key)	201
:	:	:
DSS060	01 (DSS Key)	259

D

Operation

Calling an extension from your DSS Console:

1. Press the **DSS Console** key.

If the call voice-announces, you can make it ring by dialing 1.

If you do not have Handsfree, you must lift the handset to speak.

Extension Busy Lamp Field	
When the DSS key is...	**The assigned extension is...**
On	Busy on a call
Off	Idle
Flashing Fast	In Do Not Disturb

Answering a trunk call from your DSS Console:

1. Press the flashing **DSS Console** key assigned to the trunk.

If you do not have Handsfree, you must lift the handset to speak.

Transferring a call using your DSS Console (Needs to set at 30-03):

1. Place or answer the call.
2. Press **Transfer** to transfer the call.
3. Press the DSS key for the extension to receive the transfer.
4. (Optional) Announce the call.

If called party does not want the call, press the flashing line key to retrieve it.

Making an External Page using your DSS Console (Needs to set at 30-03):

1. Press the **DSS Console External Page** zone key (1~3).

If the zone you want is busy, try again later.

If you do not have Handsfree, lift the handset to make your announcement.

External Page Busy Lamp Field	
When the DSS key is...	**The External Page zone is...**
On	Busy
Off	Idle

Making an Internal Page using your DSS Console (Needs to set at 30-03):

1. Press the **DSS Console Internal Page** zone key (Group key 1~32).

If the zone you want is busy, try again later.

If you do not have Handsfree, lift the handset to make your announcement.

Internal Page Busy Lamp Field	
When the DSS key is...	**The Internal Page zone is...**
On	Busy
Off	Idle

Switching the Night Service mode from your DSS Console (Needs to set at 30-03):

1. Press the Night Service key.

Night Service Busy Lamp Field	
When this key is ON...	**The system is in the...**
DAY	Day 1 Mode
NIGHT	Night 1 Mode
BREAK	Break 1 Mode
NIGHT 2	Night 2 Mode

Using a DSS Console key as a One-Touch or Programmable Function Key:

A user can have DSS Console keys programmed as One-Touch Keys. These keys can be used for Direct Station Selection, Trunk Calling, Personal Speed Dial, Speed Dialing, and Service Code access. The stored service code cannot be longer than three digits.

1. Press the **DSS Console** key for function.

For example, you can forward your calls by pressing DSS key + 1 + destination. Your DSS key must have been previously programmed for Call Forward.

Directed Call Pickup

Description

Directed Call Pickup permits an extension user to intercept a call ringing another extension. This allows a user to conveniently answer a call for a co-worker from their own telephone. With Directed Call Pickup, an extension user can pick up:

- Trunk calls (i.e., Ring Group calls)
- Direct Inward Lines
- Transferred trunk calls
- Transferred Intercom calls
- Ringing and voice-announced Intercom calls

Conditions

- Calls which were on hold or transferred which recall the extension can be answered using Directed Call Pickup.
- Personal Park also uses the Directed Call Pickup code.
- Voice Mail Park and Page also uses the Directed Call Pickup code.

Default Settings

Enabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Department Calling

Group Call Pickup

Hold

Hotline

Park

Secretary Call Pickup

Transfer

Virtual Extensions

InMail

Guide to Feature Programming

Program Number	Program Name	Default
11-12-25	**Service Code Setup (for Service Access) - Direct Call Pickup - Own Group**	856
11-12-26	**Service Code Setup (for Service Access) - Call Pickup for Specified Group**	868
11-12-27	**Service Code Setup (for Service Access) - Call Pickup**	*#
11-12-28	**Service Code Setup (for Service Access) - Call Pickup for Another Group**	869
11-12-29	**Service Code Setup (for Service Access) - Direct Extension Call Pickup**	**
11-12-30	**Service Code Setup (for Service Access) - Specified Trunk Answer**	772
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-10-05	**Class of Service Options (Answer Service) - Directed Call Pickup for Own Group**	COS 01~15 = 1

D

Operation

To use Directed Call Pickup to intercept a call to a co-worker's extension:

1. Pick up the handset or press **Speaker**.
2. Dial **.
3. Dial number of extension whose call you want to intercept.

If more than one call is coming in, the system sets the priority for which call it answers first.

Directory Dialing

Description

Directory Dialing allows a Multiline Terminal user to select a co-worker or outside caller from a list of names, rather than dialing the telephone number. There are four types of Directory Dialing:

- SPD-Speed Dials
- EXT-co-worker's Extensions
- STA-Personal Speed Dials
- TELBK-Telephone Book

Conditions

- Directory Dialing sorts and searches directory names in alphabetical order (based on all characters entered of the name) when the system starts up or reboots. The system resorts extension names when:
  - You change Program 15-01-01 (Extension Numbers and Names).
  - Any user dials 800 and changes their extension name.
- Directory Dialing follows all the programmed options and conditions for Speed Dial-System/Group/Station, Intercom Calling and One-Touch Calling.
- Extension Directory only shows a telephones/VEs that are connected and have a name assigned in Program 15-01-01.

Default Settings

Enabled

System Availability

Terminals

All Display Multiline Terminals with Softkeys

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Last Number Redial

Name Storing

Guide to Feature Programming

Program Number	Program Name	Default
20-13-51	**Class of Service Options (Supplementary Service) - Number and Name Appear in the Directory**	COS 01~15 = 1
21-01-02	**System Options for Outgoing Calls - Intercom Inter-digit Time**	10 (seconds)

Operation

For the Directory Dialing at advance mode (PRG15-02-60:1 or 2), refer Navigation key feature.

To use Directory Dialing from a multiline terminal with an LCD (When set PRG15-02-60:0):

1. Press the **Dir** softkey.
   - OR -
   Press the Right Cursor key.
2. Press the **softkey** for the Directory Dialing type:
   - SPD-Speed Dials
   - EXT-co-worker's Extensions
   - STA-Personal Speed Dials
   - TELBK-Telephone Book

   Directory Dialing follows any feature restrictions that your system may have enabled. For example, if your extension cannot normally use Speed Dial - System/Group/Station, Directory Dialing can not access it either.
3. Dial letter/number range for the party you want to call (e.g., dial 2 for A, B, C or 2).

   You can enter several letters to help narrow the search.

   Press # to enter additional letters on the same key (ex: TOM = 8666#6).
4. Press the **Down Arrow** softkey to jump to that section.
5. Press the Volume ▲ or ▼ key to scroll through the list.

   If you wait too long between your selections, Directory Dialing automatically cancels.
6. Lift the handset or press the **DIAL** softkey, or press **Speaker** to place the selected call.

   If you selected an outside call, it routes according to your system Trunk Group Routing/ARS setup.

To cancel Directory Dialing:

Press the **Exit** key.

D

Distinctive Ringing, Tones and Flash Patterns

Description

Distinctive Ringing, Tones and Flash Patterns provide extension users with audible and visual call status signals. This lets users tell the type of calls by listening to the ringing/tones and watching the keys. It also helps users monitor the progress of their calls. In addition, Distinctive Ringing lets multiline terminal users customize their Intercom and trunk call ringing. This is helpful for users that work together closely. For example, if several co-workers set their multiline terminals to ring at different pitches, each co-worker can always tell which calls are for them. You can also customize the tones the system uses for splash tone, confirmation tone, trunk ring tone, Intercom ring tone and Alarm ring tone. Refer to the chart below and the SL1000 Programming Manual for more details.

Table 1-14 Distinctive Ringing: Tones and Flash Patterns

Program	Description
80-01-01~04 Service Tone Setup	Set the frequency of the system splash tone. This is the tone the system uses, for example, to alert the user of an incoming voice-announced Intercom call.
30-05-02~21 DSS Console Lamp Table	Set the DSS and Hotline key flash rates for busy, idle, DND, and hotel options.

Conditions

- Single line telephone users cannot listen to or hear the pitch of the telephone incoming ring.
- If Program 22-03-01 is set to 0~3 and Program 15-02-02 is set to 1~3, trunk calls follow the ring pattern in Program 22-03-01 and the pitch in Program 15-02-02.
- If Program 22-03-01 is set to 4~8 and Program 15-02-02 is set to 1~3, trunk calls follow the ring pattern in Program 22-03-01.
- If Program 22-03-01 is set to 0~8 and Program 15-02-02 is set to 4~8, trunk calls follow the ring pattern in Program 15-02-02.
- If Program 15-08 : Incoming Virtual Extension Ring Tone Setup is set to Incoming Ring Tone Extension, then Program 15-10 : Incoming Virtual Extension Ring Tone Order Setup must have one of the priorities set to Incoming Ring Tone Extension.
- The following voice mail features require system tones be changed in Program 80-01-02 to work. Refer to the Programming section of the InMail feature for details.
  - Call Holding
  - Busy Greeting
  - Call Screening
  - Await Answer Transfer
- When a ring group call rings a Single Line Station, the BLF indication shows busy.
- The priority of the Large LED is as follows:
  1. CO Call Ringing
  2. Message Waiting Received
  3. VM Message Waiting
  4. Message Waiting Set
- Program 15-08 is only effective for Virtual Extensions appearing on a station when the station is set for patterns 1~3 in Program 15-02-02. When Program 15-02-02 for the station is set to patterns 4~8, Program 15-08 for Virtual Extensions is not used.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Default	Note
15-02-02	Multiline Telephone Basic Data Setup - Trunk Ring Tone	2	
15-02-03	Multiline Telephone Basic Data Setup - Extension Ring Tone	5	
15-08-01	Incoming Virtual Extension Ring Tone Setup	0 (Tone Pattern 1)	
15-10-01	Incoming Virtual Extension Ring Tone Order Setup	0 = Tone Pattern 1 1 = Tone Pattern 2 2 = Tone Pattern 3 3 = Tone Pattern 4	
20-13-49	Class of Service Options (Supplementary Service) - BLF Indication on CO Incoming State	COS 01~15 = 0	
20-15-01	Ring Cycle Setup - Normal Incoming Call on Trunk	3	
20-15-02	Ring Cycle Setup - PBX, CES Incoming Call	8	
20-15-03	Ring Cycle Setup - Incoming Internal Call	8	
20-15-04	Ring Cycle Setup - DID/DISA/VRS	8	
20-15-05	Ring Cycle Setup - DID/DDI	8	
20-15-06	Ring Cycle Setup - Dial-In	8	
20-15-07	Ring Cycle Setup - Door Box Ringing for SLT	2	
20-15-08	Ring Cycle Setup - Virtual Extension Ring	8	
20-15-09	Ring Cycle Setup - Callback	4	
20-15-10	Ring Cycle Setup - Alarm for SLT	5	
20-15-11	Ring Cycle Setup - VRS Waiting Message Incoming Call	6	
22-03-01	Trunk Ring Tone Range	0	
80-01-01	Service Tone Setup - Repeat Count	0~255 (0 = Endless)	

Program Number	Program Name	Default	Note
80-01-02 (06)	**Service Tone Setup - Basic Tone Number**	0~33 (0 = No Tone) (33 = Default Time Slot)	
80-01-02 (14)	**Service Tone Setup - Basic Tone Number**	Refer to Programming Manual.	
80-01-02 (39)	**Service Tone Setup - Basic Tone Number**	Refer to Programming Manual.	

D

Table 1-15 Basic Tone Table - Tone 06

Tone 06			
Unit	**Basic Tone**	**Duration**	**Gain Level**
1	1 - 420Hz, -13dB	500ms	42
2	0 - No Tone	500ms	42
3	0 - No Tone	0ms	
4	0 - No Tone	0ms	
5	0 - No Tone	0ms	
6	0 - No Tone	0ms	
7	0 - No Tone	0ms	
8	0 - No Tone	0ms	

Table 1-16 Basic Tone Table - Tone 14

Tone 14			
Unit	**Basic Tone**	**Duration**	**Gain Level**
1	1 - 420Hz, -13dB	1000ms	42
2	0 - No Tone	4000ms	42
3	0 - No Tone	0ms	
4	0 - No Tone	0ms	
5	0 - No Tone	0ms	
6	0 - No Tone	0ms	
7	0 - No Tone	0ms	
8	0 - No Tone	0ms	

Table 1-17 Basic Tone Table - Tone 39

Tone 39			
Unit	**Basic Tone**	**Duration**	**Gain Level**
1	24 - 400/450Hz, -13/-13dB	200ms	35
2	0 - No Tone	200ms	35
3	0 - No Tone	200ms	35
4	0 - No Tone	2000ms	35
5	0 - No Tone	0ms	
6	0 - No Tone	0ms	
7	0 - No Tone	0ms	

Tone 39			
Unit	**Basic Tone**	**Duration**	**Gain Level**
8	0 - No Tone	0ms	

Operation

To listen to the incoming ring choices:

1. Press **Speaker**.
2. Dial **811** .
3. Dial **1** to check ringing for intercom calls.
   - OR -
   Dial **2** to check ringing for trunk calls.
4. For Intercom calls, select the pitch you want to check (1~7).
   - OR -
   For trunk calls, select the pitch (1~7) you want to check.
5. Go back to step 4 to listen to additional choices or press **Speaker** to hang up.

To change the pitch of your incoming ring (multiline terminal only):

1. Press **Speaker**.
2. Dial **820** .
3. Dial **1** to change ringing for Intercom calls.
   - OR -
   Dial **2** to change ringing for trunk calls.
4. Select the pitch (1~7).
5. Press **Speaker** to hang up.

D

Do Not Disturb (DND)

Description

Do Not Disturb (DND) blocks incoming calls and Paging announcements. DND permits an extension user to work by the telephone undisturbed by incoming calls and announcements. The user can activate DND while their telephone is idle or while on a call. Once activated, incoming trunk calls still flash the line keys. The user may use the telephone in the normal manner for placing and processing calls.

D

Six Do Not Disturb options are available at each extension. These options can be accessed via Multiline Terminal Softkeys, DND feature key or DND system access code.

- 1 = Incoming trunk calls blocked.
- 2 = Paging, incoming Intercom, Call Forwards and transferred trunk calls blocked.
- 3 = All calls blocked.
- 4 = Incoming Call Forwards blocked.
- 5 = Room Monitor Blocked.
- 0 = Do Not Disturb canceled.

Multiline Line Terminals will display the following to indicate the type of DND that has been set.

- 1 = DND EXTERNAL
- 2 = DND INTERCOM
- 3 = DND ALL
- 4 = DND TRANSFER
- 5 = DND MONITORED

Conditions

- Do Not Disturb access code is programmable via Program 11-11-08.
- Virtual Extension (VE) do not support DND Programmable Function keys.
- Multiline Terminal users can activate or deactivate Do Not Disturb while on a call. This option is not available for single line telephones.
- When DND and Call Forward are set on the same telephone, call forwarding works. If Busy and No Answer Forwarding are set to different locations, it follows the Busy forwarding.
- If an extension already receiving forwarded calls activates DND option 4, callers to the forwarded extension hear DND tone.
- If an extension activates DND option 4, other extensions can still forward calls to it, but the callers hear DND tone.
- An extension user can override Call Forwarding or Do Not Disturb at another extension using any of the following methods:
  1. Program 11-12-01 Service Code Setup (for Service Access) - Bypass Call(default: 807)
  2. Program 11-16-06 Single Digit Service Code Setup - DND/Call Forward Override Bypass (default: No Setting)
  3. OVRD Softkey
- When a call is transferred because of Call Forwarding No Answer, Call Forwarding Busy, or DND, the Reason for Transfer option can display to the transferred extension while the call is ringing to the user telephone.
- DND modes 1~3 causes calls to follow Program 22-08 programming, then Program 22-05 programming even if the extension is forwarded.
- When Selectable Display Messaging is set as DND All, all other DND modes are canceled when Selectable Display Messaging is canceled.
- When DND and any Call Forwarding is set, the call forwards immediately.

Default Settings

Enabled for all extensions.

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Call Forwarding

Call Forwarding/Do Not Disturb Override

Central Office Calls, Answering

Direct Inward Line (DIL)

Distinctive Ringing, Tones and Flash Patterns

Selectable Display Messaging

Guide to Feature Programming

Program Number	Program Name	Default
11-11-08	**Service Code Setup (for Setup/Entry Operation) - Do Not Disturb**	847
11-12-01	**Service Code Setup (for Service Access) - Bypass Call**	807
11-16-06	**Single Digit Service Code Setup - DND/Call Forward Override Bypass**	not assigned
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-13-04	**Class of Service Options (Supplementary Service) - Call Forward/DND Override (Bypass Call)**	COS 01~15 = 1
20-13-40	**Class of Service Options (Supplementary Service) - Do Not Disturb**	COS 01~15 = 1

Operation

To activate or deactivate Do Not Disturb while your extension is idle:

Multiline Terminal Using Feature Key or Access Code

1. Do not lift the handset.
2. Press the **DND** feature key programmed in (Program15-07-01 or SC:**851** :03).
   - OR -
   Press **Speaker** and dial **847** .
3. Dial the DND option code.
   0 = Cancel DND
   1 = Incoming Trunk Calls Blocked
   2 = Paging, incoming Intercom, Call Forwards and Transferred Trunk Calls Blocked
   3 = All Calls Blocked
   4 = Call Forwards Blocked
   5 = Room Monitor Blocked

Single Line Telephone

1. Lift the handset.
2. Dial **847** .
3. Dial the DND option code.
   0 = Cancel DND
   1 = Incoming Trunk Calls Blocked
   2 = Paging, Incoming Intercom, Call Forwards and Transferred Trunk Calls Blocked
   3 = All Calls Blocked
   4 = Call Forwards Blocked

Door Box

Description

The Door Box is a self-contained Intercom unit typically used to monitor an entrance door. A visitor at the door can press the Door Box call button (like a door bell). The Door Box then sends chime tones to all extensions programmed to receive chimes. To answer the chime, the called extension user just lifts the handset. This lets the extension user talk to the visitor at the Door Box. The Door Box is convenient to have at a delivery entrance, for example. It is not necessary to have company personnel monitor the delivery entrance; they answer the Door Box chimes instead. Any number of system extensions can receive Door Box chime tones.

Each Door Box has a pair of normally open relay contacts that can connect to an electric door strike. Use these contacts to remotely control the entrance door. After answering the Door Box chimes, a multiline terminal user can press the Flash key to activate the Door Box contacts. This in turn releases the electric strike on the entrance door. The device connected to the Door Box contacts cannot exceed the contact ratings shown in the following table:

Door Box Specifications	
Maximum Output	400 mV RMS
Output Impedance	600 Ohms

The system can have up to 8 Door Boxes. Six chime tones are available.

Conditions

- The Door Box Feature Requires an unused analog extension port (408M-A1: ST6-ST7 fixed) on the each KSU.
- To use Door Box PRG 10-03-01 (HBI PKG): 8 Door Phone, and 10-03-05 (HBI PKG): 1 Door Phone need to set.
- Door Boxes can ring multiline, single line, and wireless telephones.
- A Door Box cannot ring a virtual extension.
- External Call forward by Doorphone can forward Doorphone calls Off-Premise while a user is away. This feature only works for ISDN lines.
- Off-hook signaling is available for Door Boxes. If an extension user is on the telephone, the Large LED flashes indicating the Door Box ringing, and the display shows a call from the door box.
- The door strike cannot be activated when a door box is forwarded off-premise.

Default Settings

Disabled

System Availability

Terminals

All Stations

Required Component(s)

408M-A1

Related Features

ISDN Compatibility

Paging, External

Single Line Telephones

D

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-03-01	ETU Setup (HBI PKG Setup) - 8: Door Phone	0	
10-03-05	ETU Setup (HBI PKG Setup) - 1: Door Phone	0	
10-61-01	Relay Type	0 = No setting 1 = External MOH 2 = BGM resource 3 = External Speaker 4 = Door Phone	
10-61-02	Destination Selection	[In case 10-61-01 is 1 or 2] = Not Use [In case 10-61-01 is 3] = 1-3 External Speaker message No [In case 10-61-01 is 4] = 1-8 Door Phone No	
11-12-36	Service Code Access (for Service Access) - Door Box Access	802	
15-07-01	Programmable Function Keys	Refer to Programming Manual.	
32-01-01	Door Box Timers - Door Box Answer Time	30 (seconds)	
32-01-02	Door Box Timers - Door Lock Cancel Time	10 (seconds)	
32-01-03	Door Box Timers - Off-Premise Call Forward by Door Box Disconnect Timer	60 (seconds)	
32-02-01	Door Box Ring Assignments	Doorphone Ringing Member 1 : 200 Other: No setthing	
32-03-01	Door Box Basic Setup - Chime Pattern	Door Box 1 = 1 Door Box 2 = 2 Door Box 3 = 3 Door Box 4 = 4 Door Box 5 = 5 Door Box 6 = 6 Door Box 7 = 1 Door Box 8 = 1	
32-03-02	Door Box Basic Setup - CODEC Transmit Gain Setup	32 (0 dB)	
32-03-03	Door Box Basic Setup - CODEC Receive Gain Setup	32 (0 dB)	
32-04-01	Doorphone Name Setup	Doorphone Name = DOOR-1 ~ 8	

Operation

To call a Door Box:

Multiline Terminal

1. Press **Speaker**.
2. Dial **802** .
3. Dial Door Box Number (**1~8**).

Single Line Telephone

1. Lift the handset.
2. Dial **802** .
3. Dial Door Box Number (**1~8**).

To activate the Door Box strike:

Multiline Terminal

1. While talking to the Door Box, press the Flash key.

Single Line Telephone

1. While talking to the Door Box, hookflash.

To answer a Door Box chime:

1. Lift the handset or press **Speaker**.

To Answer a Door Box call while busy on another call:

Multiline Terminal

If you are busy on a call, the display shows the incoming Door Box call and the large LED flashes.

1. Place your active call on hold by pressing **Hold**.
2. When you hear dial tone, dial the door box access code (**802** by default) plus the door box number (**1~8**) to answer the Door Box call.

To retrieve the original call, hang up with the door box and press the Conf key.

Single Line Telephone

If you are busy on a call, an off-hook signal is heard indicating the incoming Door Box call.

1. Press the **Flash** key or hookflash to place your active call on hold.
2. Dial the door box access code (**802** by default) plus the door box number (**1~8**) to answer the Door Box call.

To retrieve the original call, hang up. The original call rings the single line telephone.

To activate Call Forwarding Off-Premise for a Door Box:

This option only works for ISDN PRI or BRI Trunks.

1. At the multiline terminal, press **Speaker** + dial SC **822** .
   - OR -
   At the multiline terminal only, press the External Forward by Doorphone key (Program 15-07-01 or SC **851** , code 54).
   - OR -
   At the single line telephone, lift the handset + dial **822** .

2. Dial the Door Box number (**1~8**).
3. Dial the Speed Dialing number where the calls should be forwarded.
4. Press **Speaker** (or hang up at the single line telephone) to hang up.

To cancel Call Forwarding Off-Premise for a Door Box:

1. At the multiline terminal, press **Speaker** + dial SC **822** .
   - OR -
   At the multiline terminal only, press External Forward by Doorphone key (Program 15-07-01 or SC **851** , code 54).
   - OR -
   At the single line telephone, lift the handset + dial **822** .
2. Dial **0** for Cancel.

D

Ecology

Description

Environmental issues, such as global warming issue or ecology are most important theme in a world. In a point of energy saving following ecology functions are implemented in a system.

- *Ecology mode*

Conditions

Ecology mode (Power Cutting for Terminal)

- System can cut the power for Multiline terminals connected to each interface packages.
  Interface packages;
  Slot 2 ~ 16 for 408M-A1 (Expansion KSU), 408E-A1, 008E-A1

If user doesn't want to power cut for the door phone or Analog interface device, such as the Passive Infrared Sensor which is connected to a hybrid port, these should be connected to slot 1 of Main KSU.

- Power cutting "on" or "off" can be set per individual slot (package) basis, however slot 1 (408M-A1 of Main KSU) cannot be set, this way remain non power cutting extension in a system for emergency call, etc.
- Power cutting time will follow with Night mode time schedule. If some terminals are on call at power cutting start time, the system will wait for the power cutting "off" for the package until all extensions in the package become idle.
- Power cutting feature can be set "on" or "off" by either combination of following method.
  - Night mode time schedule
  - Service Code
  - Function key

If system reset happened during power cutting "off" state, after the system boots up all extensions will be powered up normally.

- Combination of time schedule and Manual mode change

If power cutting set "on" manually during scheduled power cutting "off" state, power cutting "on" state continues until next power cutting "off" time.

The system does not start the cutting telephone power until next schedule.

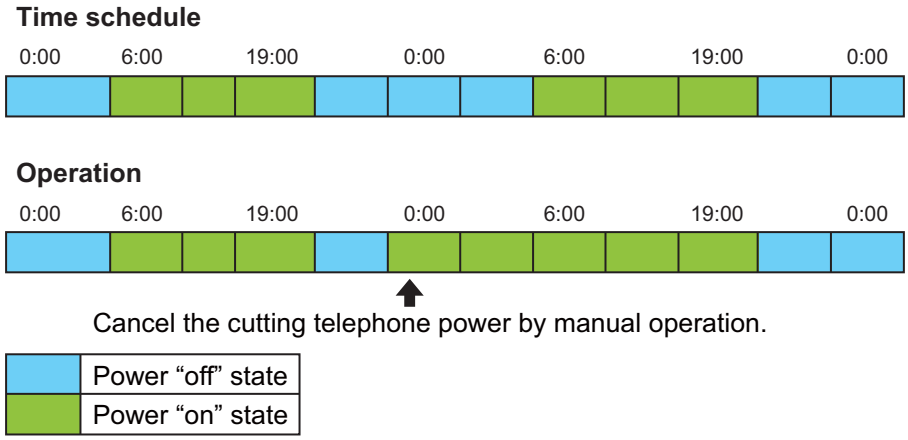


Figure 1-15 Time Schedule 1

Vice versa if power cutting is set "off" manually during scheduled power cutting "on" state, power cutting "off" state continues to next power cutting "on" time.

The system does not start the power supply until next schedule.

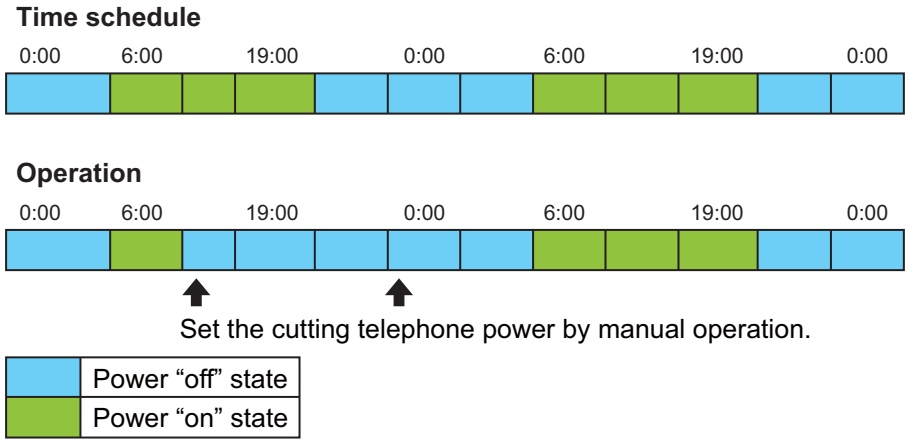


Figure 1-16 Time Scedule 2

- During power cutting “off” state,
  - Outgoing call can not make.
  - Incoming call receives busy.
  - Call forward feature works at forward set terminal.
  - Disable Both Ring CFW / Follow Me.

Default Settings

None

System Availability

Terminals

All Multiline terminals and Single Line Telephones

Required Component(s)

408M-A1 (Expansion KSU), 408E-A1, 008E-A1

Related Features

Night Service

Guide to Feature Programming

Program Number	Program Name	Default
15-02-18	**Power saving Mode**	1
20-02-10	**Timer for Power saving mode**	0
20-42-01	**Ecology Mode group No.**	1
20-43-01	**Ecology Mode**	1
15-07	**Programmable Function Key**	Refer to Programming Manual
11-10-44	**Cutting the telephone power**	831

Operation

Ecology Mode (Power Cutting for terminal)

To cut the power for package 2 during night time (19:00-6:00):

< Program >
PRG20-42-01: PKG 2 Night Mode Service Group No. 1
PRG20-42-01: PKG 3 Night Mode Service Group No. 1
PRG20-43-01: PKG 2 Night Mode 1, Eco Mode 1 / **Night Mode 2, Eco Mode 0**
PRG20-43-01: PKG 3 Night Mode 1, Eco Mode 1 / Night Mode 2, Eco Mode 1

PRG12-02: Automatic Night Service Patterns

Night Group Mode	Time pattern	Set Time No.	Start	End	Night Mode
1	1	1	0000	0600	2
1	1	2	0600	1900	1
1	1	3	1900	0000	2

19:00 - 06:00

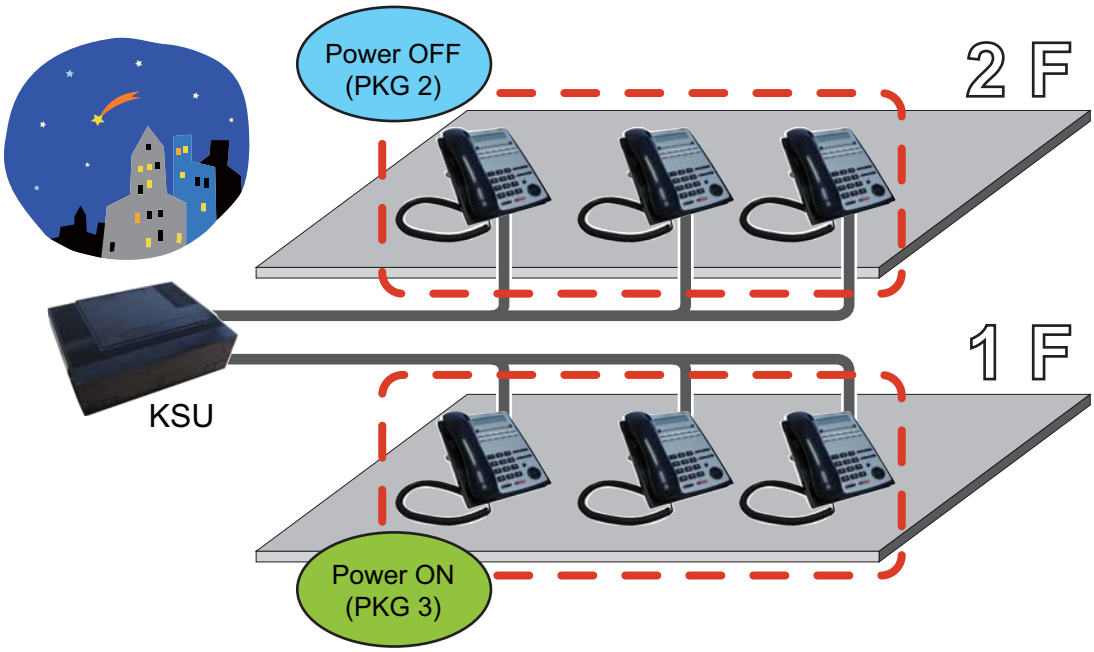


Figure 1-17 Automatic Night Service

To cut the power for package 2 and 3 only on Sunday

<Program>
PRG20-42-01: PKG 2 Night Mode Service Group No. 1
PRG20-42-01: PKG 3 Night Mode Service Group No. 1
PRG20-43-01: PKG 2 Night Mode 1, Eco Mode 1 / **Night Mode 2, Eco Mode 0**
PRG20-43-01: PKG 3 Night Mode 1, Eco Mode 1 / **Night Mode 2, Eco Mode 0**

PRG12-02: Automatic Night Service Patterns

Night Group Mode	Time pattern	Set Time No.	Start	End	Night Mode
1	1	1	0100	0100	1

Night Group Mode	Time pattern	Set Time No.	Start	End	Night Mode
1	2	1	0100	0100	2

PRG12-03: Weekly Night Service Switching

Night Group Mode 1;

- Sunday Time pattern 2
- Monday Time pattern 1
- Tuesday Time pattern 1
- Wednesday Time pattern 1
- Thursday Time pattern 1
- Friday Time pattern 1
- Saturday Time pattern 1

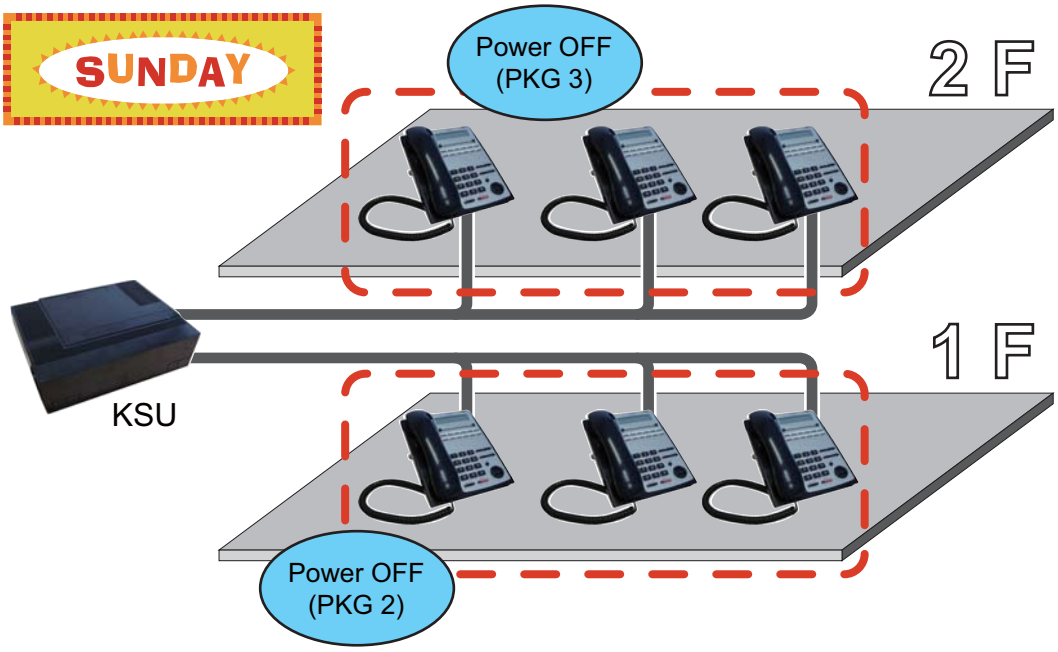


Figure 1-18 Weekly Night Service

Flash

Description

Flash allows an extension user to access certain CO and PBX features by interrupting the trunk loop current. Flash lets an extension user take full advantage of whatever features the connected Telco or PBX offers. You must set the Flash parameters for compatibility with the connected Telco or PBX.

Conditions

The system does not provide a ground flash.

Default Settings

Enabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

PBX Compatibility/Behind PBX

InMail

Guide to Feature Programming

Program Number	Program Name	Default
11-12-42	Service Code Setup (for Service Access) - Flash on Trunk Lines	#3
14-02-03	Analog Trunk Data Setup - Flash Type	0
14-02-04	Analog Trunk Data Setup - Hooking Type	1
14-04-01	Behind PBX Setup	0
15-03-04	Single Line Telephone Basic Data Setup - Flashing	1
81-10-07	COI Initial Data Setup - Hookflash Time Selection 1	9 (600ms)
81-10-08	COI Initial Data Setup - Hookflash Time Selection 2	14 (3.0 seconds)

Operation

To flash the trunk you are on:

From a Multiline Terminal

1. Press **Flash**.

From a Single Line Telephone

1. Hookflash.
2. Dial **#3**.

Flexible System Numbering

Description

Flexible System Numbering lets you reassign the system port-to-extension assignments. This allows an employee to retain their extension number if they move to a different office. In addition, factory technicians can make comprehensive changes to your system number plan. You can have factory technicians:

- Set the number of digits in internal (Intercom) functions. For example, extension numbers can have up to four digit
- Change your system Service Code numbers.
- Assign single digit access to selected Service Codes.

Talk to your sales representative to find out if this program is available to you.

You can also use Flexible System Numbering to change the system Trunk Group Routing code. Although the default code of 9 is suitable for most applications, you can alter the code if needed.

The system provides a completely flexible system numbering plan. Refer to the chart below and the SL1000 Programming Manual for more details.

Flexible System Numbering	
Program	**Description**
11-01-01 System Numbering	Set the system internal (Intercom) numbering plan. The numbering plan includes the digits an extension user must dial to access features and other extensions.
11-09-01 Trunk Access Code	Assign the single-digit trunk access code (normally 9). This is the code users dial to access Automatic Route Selection or Trunk Group Routing.
11-20-01 Dial Extension Analyze Table	Use tables 01 ~ 128 to assign the digits to be dialed using the Dial Extension Analyze Tables. These tables are used when Program 11-01-01 is set to option 9 = Dial Extension Analyze. (Up to four digits can be assigned and the valid entries are: 0, 1 ~ 9, #, ✱,)
11-20-02 Dial Extension Analyze Table	Assign the Type of Dial for the Dial Extension Analyze Table from Program 11-20-01. (Svc Code, Intercom, Operator, or F-Route)
11-10 Service Code Setup (for System Administrator) 11-11 Service Code Setup (for Setup/Entry Operation) 11-12 Service Code Setup (for Service Access) 11-14 Service Code Setup (for Hotel) 11-15 Service Code Setup, Administrative (for Special Access)	Customize the Service Codes.
11-16 Single Digit Service Code Setup	Assign the Single Digit Service Codes. these are the post-dialing codes a user can dial after placing an Intercom call to a co-worker.

Conditions

- Programming follows a telephone extension number, not the port number in most cases. If you relocate a telephone, you may need to change additional programming. For example, if you change the extension assigned to a port in Program 11-02, the line key programming does not follow. However, if you move the extension using the Station Relocation Feature, the line key programming does follow.
- Since making changes in Program 11-01 does not automatically make any other changes in any other program, changing the number plan after the system is in operation may cause problems in the following programs:

PRG 11-01 Type 2 (Extension Number)				PRG 11-01 Type 1 (Service Codes)		
11-02	11-08	15-12	22-11	11-10	11-14	21-11
11-04	11-17	16-01-01	25-06	11-11	11-15	30-03
11-06	15-01-01	15-14	30-03	11-12	15-07	
11-07	15-07	21-11		11-13	15-14	

- Any feature which requires dialing a code or extension number can be affected.
- When the system searches the Dial Extension Analyze Table (PRG 11-20-01), the system uses prefix searching, giving the lower table number the higher priority. For example, the user programs 211 in table 1 and 2113 in table 2, then dials 2113, the system selects table 1.

F

Example for 310X	Example for 3100X
10s Group (4-digit)	**100s Group** (5-digit)
11-01-01 = Dial 3 31 Digit 4 = (9)Dial Extension Analyze Table	11-01-01 = Dial 3 31 Digit 7 = (9)Dial Extension Analyze Table
11-20-01 Table 1 = Dial 310	11-20-01 Table 1 = Dial 3100
11-20-02 Table 1 = Intercom	11-20-02 Table 1 = Intercom

Example for 31000X	Example for 310000X
1000s Group (6-digit)	**10,000s Group** (7-digit)
11-01-01 = Dial 3 31 Digit 4 = (9)Dial Extension Analyze Table	11-01-01 = Dial 3 31 Digit 7 = (9)Dial Extension Analyze Table
11-20-01 Table 1 = Dial 31000	11-20-01 Table 1 = Dial 310000
11-20-02 Table 1 = Intercom	11-20-02 Table 1 = Intercom

Default Settings

Extensions and Virtuals are numbered in the following order:

Program 11-02-01 and Program 11-04-01
- Physical Extensions:
  - Extn Port 1 = 200 ~ Extn Port 128 = 327
- Virtual Extensions:
  - All VE Ports = No setting

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default	Note
11-01-01	**System Numbering - Service Code**	Refer to Programming Manual.	
11-02-01	**Extension Numbering**	Station Port No. 1 ~ 128 = Extension Number : 200~327	
11-04-01	**Virtual Extension Numbering**	not assigned	
11-06-01	**ACI Extension Numbering**	not assigned	
11-07-01	**Department Group Pilot Numbers - Dial**	not assigned	
11-08-01	**ACI Group Pilot Number**	not assigned	
11-09-01	**Trunk Access Code**	9	
11-09-02	**Trunk Access Code - 2nd Trunk Route Access Code**	not assigned	
11-10-01	**Service Code Setup (for System Administrator) - Night Mode Switching**	818	
11-10-03	**Service Code Setup (for System Administrator) - Setting the System Time**	828	
11-10-04	**Service Code Setup (for System Administrator) - Storing Common Speed Dialing Numbers**	853	
11-10-05	**Service Code Setup (for System Administrator) - Storing Group Speed Dialing Numbers**	854	
11-10-06	**Service Code Setup (for System Administrator) - Setting the Automatic Transfer for Each Trunk Line**	833	
11-10-07	**Service Code Setup (for System Administrator) - Canceling the Automatic Transfer for Each Trunk Line**	834	
11-10-08	**Service Code Setup (for System Administrator) - Setting the Destination for Automatic Trunk Transfer**	835	
11-10-12	**Service Code Setup (for System Administrator) - Night Mode Switching for Other Group**	718	
11-10-16	**Service Code Setup (for System Administrator) - Leaving Message Waiting (Requires CPU to be licensed for Hotel/Motel)**	726	
11-10-17	**Service Code Setup (for System Administrator) - Dial Block by Supervisor**	701	
11-10-18	**Service Code Setup (for System Administrator) - Off-Premise Call Forward by Door Box**	822	
11-10-20	**Service Code Setup (for System Administrator) - VRS - Record/ Erase Message**	716	
11-10-21	**Service Code Setup (for System Administrator) - VRS - General Message Playback**	711	
11-10-22	**Service Code Setup (for System Administrator) - VRS - Record or Erase General Message**	712	
11-10-23	**Service Code Setup (for System Administrator) - SMDR - Extension Accumulated Printout Code**	721	

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Program Number	Program Name	Default	Note
11-10-24	**Service Code Setup (for System Administrator) - SMDR - Group Accumulated Printout Code**	722	
11-10-25	**Service Code Setup (for System Administrator) - Account Code Accumulated Printout Code**	723	
11-10-26	**Service Code Setup (for System Administrator) - Forced Trunk Disconnect**	724	
11-10-27	**Service Code Setup (for System Administrator) - Trunk Port Disable for Outgoing Calls**	745	
11-10-32	**Service Code Setup (for System Administrator) - Set Private Call Refuse**	746	
11-10-33	**Service Code Setup (for System Administrator) - Entry Caller ID Refuse**	748	
11-10-34	**Service Code Setup (for System Administrator) - Set Caller ID Refuse**	748	
11-10-35	**Service Code Setup (for System Administrator) - Dial-In Mode Switching**	709	
11-11-01	**Service Code Setup (for Setup/Entry Operation) - Call Forward - All**	848	
11-11-02	**Service Code Setup (for Setup/Entry Operation) - Call Forward - Busy**	#1	
11-11-03	**Service Code Setup (for Setup/Entry Operation) - Call Forward - No Answer**	845	
11-11-04	**Service Code Setup (for Setup/Entry Operation) - Call Forward - Busy/No Answer**	844	
11-11-05	**Service Code Setup (for Setup/Entry Operation) - Call Forward - Both Ring**	842	
11-11-07	**Service Code Setup (for Setup/Entry Operation) - Call Forwarding - Follow Me**	846	
11-11-08	**Service Code Setup (for Setup/Entry Operation) - Do Not Disturb**	847	
11-11-09	**Service Code Setup (for Setup/Entry Operation) - Answer Message Waiting**	*0	
11-11-10	**Service Code Setup (for Setup/Entry Operation) - Cancel All Messages Waiting**	873	
11-11-11	**Service Code Setup (for Setup/Entry Operation) - Cancel Message Waiting**	871	
11-11-12	**Service Code Setup (for Setup/Entry Operation) - Alarm Clock**	827	
11-11-13	**Service Code Setup (for Setup/Entry Operation) - Display Language Selection for multiline terminal**	778	
11-11-14	**Service Code Setup (for Setup/Entry Operation) - Text Message Setting**	836	
11-11-15	**Service Code Setup (for Setup/Entry Operation) - Enable Handsfree Incoming Intercom Calls**	821	
11-11-16	**Service Code Setup (for Setup/Entry Operation) - Force Ringing of Incoming Intercom Calls**	823	
11-11-17	**Service Code Setup (for Setup/Entry Operation) - Programmable Function Key Programming (2-Digit Service Codes)**	851	

Program Number	Program Name	Default	Note
11-11-18	**Service Code Setup (for Setup/Entry Operation) - BGM On/Off**	825	
11-11-19	**Service Code Setup (for Setup/Entry Operation) - Key Touch Tone On/Off**	824	
11-11-20	**Service Code Setup (for Setup/Entry Operation) - Change Incoming CO and ICM Ring Tones**	820	
11-11-21	**Service Code Setup (for Setup/Entry Operation) - Check Incoming Ring Tones**	811	
11-11-22	**Service Code Setup (for Setup/Entry Operation) - Extension Name Programming**	800	
11-11-23	**Service Code Setup (for Setup/Entry Operation) - Second Call for DID/DISA/DIL**	779	
11-11-24	**Service Code Setup (for Setup/Entry Operation) - Change Station Class of Service**	777	
11-11-25	**Service Code Setup (for Setup/Entry Operation) - Automatic Transfer Setup for Each Extension Group**	702	
11-11-26	**Service Code Setup (for Setup/Entry Operation) - Automatic Transfer Cancellation for Each Extension Group**	703	
11-11-27	**Service Code Setup (for Setup/Entry Operation) - Destination of Automatic Transfer Each Extension Group**	704	
11-11-28	**Service Code Setup (for Setup/Entry Operation) - Delayed Transfer for Every Extension Group**	705	
11-11-29	**Service Code Setup (for Setup/Entry Operation) - Delayed Transfer Cancellation for Each Extension Group**	706	
11-11-30	**Service Code Setup (for Setup/Entry Operation) - DND Setup for Each Extension Group**	707	
11-11-31	**Service Code Setup (for Setup/Entry Operation) - DND Cancellation for Each Extension Group**	708	
11-11-33	**Service Code Setup (for Setup/Entry Operation) - Dial Block**	700	
11-11-34	**Service Code Setup (for Setup/Entry Operation) - Temporary Toll Restriction Override**	875	
11-11-35	**Service Code Setup (for Setup/Entry Operation) - Pilot Group Withdrawing**	750	
11-11-36	**Service Code Setup (for Setup/Entry Operation) - Toll Restriction Override**	763	
11-11-37	**Service Code Setup (for Setup/Entry Operation) - Ring Volume Set**	829	
11-11-38	**Service Code Setup (for Setup/Entry Operation) - Programmable Function Key Programming (3-Digit Service Codes)**	852	
11-11-41	**Service Code Setup (for Setup/Entry Operation) - Tandem Ringing**	744	
11-11-43	**Service Code Setup (for Setup/Entry Operation) - Headset Mode Switching**	788	

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Program Number	Program Name	Default	Note
11-11-45	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward All (Split)**	782	
11-11-46	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Busy (Split)**	783	
11-11-47	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward No Answer (Split)**	784	
11-11-48	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Busy No Answer (Split)**	785	
11-11-49	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Both Ring (Split)**	786	
11-11-50	**Service Code Setup (for Setup/Entry Operation) - Set Message Waiting Indication**	not assigned	
11-11-51	**Service Code Setup (for Setup/Entry Operation) - Cancel Message Waiting Indication**	not assigned	
11-11-52	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward All Destination (No Split)**	791	
11-11-53	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward Busy Destination (No Split)**	792	
11-11-54	**Service Code Setup (for Setup/Entry Operation) - Set/Cancel Call Forward No Answer Destination (No Split)**	793	
11-11-55	**Service Code Setup (for Setup/Entry Operation) - Call Forward Busy No Answer Destination (No Split)**	794	
11-11-57	**Service Code Setup (for Setup/Entry Operation) - Set Do Not Call Table**	749	
11-11-58	**Service Code Setup (for Setup/Entry Operation) - Call Forward with Personal Greeting**	795	
11-11-59	**Call Forward to Attendant except Busy**	796	
11-11-60	**Call Forward to Attendant/No Answer**	797	
11-11-65	**Headset Mode Switching**	798	
11-11-66	**Dial Control Key Operation**	877	
11-11-68	**Service Code Setup (for Setup/ Entry Operation) - IntraMail Language Selection for own Extension**	764	
11-11-69	**Service Code Setup (for Setup/ Entry Operation) - IntraMail Language Selection for Specific Extension**	765	
11-12-01	**Service Code Setup (for Service Access) - Bypass Call**	807	
11-12-02	**Service Code Setup (for Service Access) - Conference**	826	
11-12-03	**Service Code Setup (for Service Access) - Override (Off-Hook Signaling)**	809	
11-12-04	**Service Code Setup (for Service Access) - Set Camp-On**	850	

Program Number	Program Name	Default	Note
11-12-05	Service Code Setup (for Service Access) - Cancel Camp-On	870	
11-12-06	Service Code Setup (for Service Access) - Switching of Voice Call and Signal Call	812	
11-12-07	Service Code Setup (for Service Access) - Step Call	808	
11-12-08	Service Code Setup (for Service Access) - Barge-In	810	
11-12-09	Service Code Setup (for Service Access) - Change to STG (Department Group) All Ring	780	
11-12-10	Service Code Setup (for Service Access) - Station Speed Dialing	#2	
11-12-11	Service Code Setup (for Service Access) - Group Speed Dialing	#4	
11-12-12	Service Code Setup (for Service Access) - Last Number Dial	#5	
11-12-13	Service Code Setup (for Service Access) - Saved Number Dial	815	
11-12-14	Service Code Setup (for Service Access) - Trunk Group Access	804	
11-12-15	Service Code Setup (for Service Access) - Specified Trunk Access	#9	
11-12-17	Service Code Setup (for Service Access) - Clear Last Number Dialing Data	876	
11-12-18	Service Code Setup (for Service Access) - Clear Saved Number Dialing Data	885	
11-12-19	Service Code Setup (for Service Access) - Internal Group Paging	801	
11-12-20	Service Code Setup (for Service Access) - External Paging	803	
11-12-21	Service Code Setup (for Service Access) - Meet-Me Answer to Specified Internal Paging Group	864	
11-12-22	Service Code Setup (for Service Access) - Meet-Me Answer to External Paging	865	
11-12-23	Service Code Setup (for Service Access) - Meet-Me Answer in Same Paging Group	863	
11-12-24	Service Code Setup (for Service Access) - Combined Paging	*1	
11-12-25	Service Code Setup (for Service Access) - Direct Call Pickup - Own Group	856	
11-12-26	Service Code Setup (for Service Access) - Call Pickup for Specified Group	868	
11-12-27	Service Code Setup (for Service Access) - Call Pickup	*	
11-12-28	Service Code Setup (for Service Access) - Call Pickup for Another Group	869	
11-12-29	Service Code Setup (for Service Access) - Direct Extension Call Pickup	**	
11-12-30	Service Code Setup (for Service Access) - Specified Trunk Answer	772	
11-12-31	Service Code Setup (for Service Access) - Park Hold	#6	

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Program Number	Program Name	Default	Note
11-12-32	Service Code Setup (for Service Access) - Answer for Park Hold	*6	
11-12-33	Service Code Setup (for Service Access) - Group Hold	832	
11-12-34	Service Code Setup (for Service Access) - Answer for Group Hold	862	
11-12-35	Service Code Setup (for Service Access) - Station Park Hold	773	
11-12-36	Service Code Setup (for Service Access) - Door Box Access	802	
11-12-37	Service Code Setup (for Service Access) - Common Canceling Service Code	*9	
11-12-38	Service Code Setup (for Service Access) - General Purpose Indication	883	
11-12-39	Service Code Setup (for Service Access) - Voice Mail Center Access	not assigned	
11-12-40	Service Code Setup (for Service Access) - Station Speed Dialing	#7	
11-12-41	Service Code Setup (for Service Access) - Voice Over	890	
11-12-42	Service Code Setup (for Service Access) - Flash on Trunk lines	#3	
11-12-43	Service Code Setup (for Service Access) - Answer No-Ring Line (Universal Answer)	#0	
11-12-44	Service Code Setup (for Service Access) - Callback Test for SLT	899	
11-12-45	Service Code Setup (for Service Access) - Enabled On Hook When Holding (SLT)	849	
11-12-46	Service Code Setup (for Service Access) - Answer On Hook When Holding (SLT)	859	
11-12-47	Service Code Setup (for Service Access) - Call Waiting Answer/Split Answer	894	
11-12-48	Service Code Setup (for Service Access) - Account Code	##	
11-12-51	Service Code Setup (for Service Access) - VM Access (InMail and VMS)	*8	
11-12-52	Service Code Setup (for Service Access) - Live Monitoring (InMail)	725	
11-12-53	Service Code Setup (for Service Access) - Live Recording at SLT	754	
11-12-54	Service Code Setup (for Service Access) - VRS Routing for ANI/DNIS	882	
11-12-56	Service Code Setup (for Service Access) - E911(US only) Alarm Shut Off	886	
11-12-57	Service Code Setup (for Service Access) - Tandem Trunking	#8	
11-12-58	Service Code Setup (for Service Access) - Transfer Into Conference	884	
11-12-59	Service Code Setup (for Service Access) - Trunk Drop Operation for SLT	760	
11-12-62	Security Sensor Reset	816	
11-12-63	Watch Mode Start	817	

Program Number	Program Name	Default	Note
11-12-64	**Security Sensor Mode Start**	819	
11-14-01	**Service Code Setup (for Hotel) - Set DND for Own Extension**	727	
11-14-02	**Service Code Setup (for Hotel) - Cancel DND for Own Extension**	728	
11-14-03	**Service Code Setup (for Hotel) - Set DND for Other Extension**	729	
11-14-04	**Service Code Setup (for Hotel) - Cancel DND for Other Extension**	730	
11-14-05	**Service Code Setup (for Hotel) - Set Wake Up Call for Own Extension**	731	
11-14-06	**Service Code Setup (for Hotel) - Cancel Wake Up Call for Own Extension**	732	
11-14-07	**Service Code Setup (for Hotel) - Set Wake Up Call for Other Extension**	733	
11-14-08	**Service Code Setup (for Hotel) - Cancel Wake Up Call for Other Extension**	734	
11-14-09	**Service Code Setup (for Hotel) - Set Room to Room Call Restriction**	735	
11-14-10	**Service Code Setup (for Hotel) - Cancel Room to Room Call Restriction (Hotel)**	736	
11-14-11	**Service Code Setup (for Hotel) - Change Toll Restriction Class for Other Extension**	737	
11-14-12	**11-14-12 Service Code Setup (for Hotel) - Check-In**	738	
11-14-13	**Service Code Setup (for Hotel) - Check-Out**	739	
11-14-14	**Service Code Setup (for Hotel) - Room Status Change for Own Extension**	740	
11-14-15	**Service Code Setup (for Hotel) - Room Status Change for Other Extension**	741	
11-14-16	**Service Code Setup (for Hotel) - Room Status Output**	742	
11-14-17	**Service Code Setup (for Hotel) - Hotel Room Monitor**	770	
11-14-18	**Service Code Setup (for Hotel) - Set Hotel PMS Code Restriction**	766	
11-15-01	**Service Code Setup, Administrative (for Special Access) - Remote Maintenance**	830	
11-15-05	**Service Code Setup, Administrative (for Special Access) - System Programming Mode, Log-On**	# * # *	
11-15-09	**Service Code Setup, Administrative (for Special Access) - Transfer to Incoming Ring Group**	not assigned	
11-15-11	**Service Code Setup, Administrative (for Special Access) - Ethernet Port Reset**	not assigned	
11-15-12	**Service Code Setup, Administrative (for Special Access) - Extension Data Swap**	not assigned	
11-15-13	**Service Code Setup, Administrative (for Special Access) - Remote Access from DISA**	not assigned	
11-15-14	**Service Code Setup, Administrative (for Special Access) - Modem Access**	840	

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Program Number	Program Name	Default	Note
11-16-01	Single Digit Service Code Setup - Step Call	4	
11-16-02	Single Digit Service Code Setup - Barge-In	not assigned	
11-16-03	Single Digit Service Code Setup - Switching of Voice/Signal Call	1	
11-16-04	Single Digit Service Code Setup - Intercom Off-Hook Signaling	*	
11-16-05	Single Digit Service Code Setup - Camp-On	#	
11-16-06	Single Digit Service Code Setup - DND/Call Forward Override Bypass	not assigned	
11-16-07	Single Digit Service Code Setup - Message Waiting	0	
11-16-08	Single Digit Service Code Setup - Voice Over	6	
11-16-09	Single Digit Service Code Setup - Access to Voice Mail	5	
11-16-10	Single Digit Service Code Setup - (Department) STG All Ring Mode	not assigned	
11-16-11	Single Digit Service Code Setup - Station Park Hold	not assigned	
11-20-01	Dial Extension Analyze Table - Dial Digits	not assigned	
11-20-02	Dial Extension Analyze Table - Type of Dials	0	

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Operation

None

Flexible Timeouts

Description

The Flexible Timeouts feature provides a variety of timers in the Resident System Program to allow the system to operate without initial programming. The system timers can be changed to meet customer needs according to the system application requirements.

A Timer Class is used to allow terminals and trunks to have different timers for the same feature. There are 16 timer Classes (0~15). The following table shows the Programs that are used depending on the Timer Class used:

Timer Class 0	Timer Class 1~15	Title	Comment
20-01-08	20-31-01	Trunk Queuing Callback Time	Trunk Queuing callback rings an extension for this time. Station Timer Class is referred by the station that sets trunk queuing.
20-01-09	20-31-02	Callback / Trunk Queuing Cancel Time	The system cancels an extension Callback or Trunk Queuing request after this time. Station Timer Class is referred by the station that sets an extension Callback or Trunk Queuing.
20-04-03	20-31-03	Virtual Extension Delay Interval	If VE is set for Delayed Ringing (Program 15-11-01), ring the covering extension after this time. Station Timer Class is referred by the station assigned to CAR/VE.
21-01-02	20-31-04	Intercom Interdigits Time	When placing Intercom calls, users must dial each digit in this time. Station Timer Class is referred by stations. Trunk Timer Class is referred by DID/ Automatic Answer Trunk trunks.
21-01-03	20-31-05	Trunk Interdigits Time	When placing CO calls, users must dial each digit in this time. Station Timer Class is referred by stations. Trunk Timer Class is referred by DID/ Automatic Answer Trunk trunks.
21-01-09	20-31-06	Hotline Time Start Time	A Ringdown extension automatically calls its programmed destination after this time. Station Timer Class is referred by the stations which sets Hotline.
22-01-03	20-31-07	Ring No Answer Alarm Time	If a trunk rings a key telephone longer than this time, the system changes the ring cadence. This indicates to the user that the call was ringing too long. Trunk Timer Class is referred by the trunk.
22-01-04	20-31-08	DIL No Answer Recall Time	A DIL that rings its programmed destination longer than this time diverts to the DIL No Answer Ring Group (Program 22-08-01). Trunk Timer Class is referred by the trunk.
22-01-06	20-31-09	DID Ring-No-Answer Time	In systems with DID Ring No Answer Intercept, this time sets the Ring No Answer time. This time is how long a DID call rings the destination extension before rerouting to the intercept ring group. Trunk Timer Class is referred by DID trunk.
24-01-01	20-31-10	Hold Recall Time (Non Exclusive Hold)	A call on Hold recalls the extension that placed it on Hold after this time. Station Timer Class is referred by held call.
24-01-02	20-31-11	Hold Recall Callback Time (Non Exclusive Hold)	A Hold recall rings an extension for this time. Station Timer Class is referred by held call.
24-01-03	20-31-12	Exclusive Hold Recall Time	A call on Hold recalls the extension that placed it on Hold after this time. Station Timer Class is referred by held call.

Timer Class 0	Timer Class 1~15	Title	Comment
24-01-04	20-31-13	Exclusive Hold Recall Callback Time	An Exclusive Hold Recall rings an extension for this time. If not picked up, the call goes back on Non exclusive Hold. Station Timer Class is referred by held call.
24-01-06	20-31-14	Park Hold Time - Normal	A call left parked longer than this time recalls the extension that initially parked it. Trunk or Station Timer Class is referred by held call.
24-02-03	20-31-15	Delayed Call Forwarding Time	If activated at an extension, No Answer Call Forwarding occurs after this time. Station Timer Class is referred by the station sets No Answer Call Forward.
24-02-04	20-31-16	Transfer Recall Time	A transferred call recalls to the extension that initially transferred it after this time. Station Timer Class is referred by transferred call.
25-07-02	20-31-17	VRS/DISA No Answer Time	After this time expires, the call follows the programmed Ring No Answer routing (Program 25-03 and 25-04-01). Trunk Timer Class is referred.
25-07-03	20-31-18	Disconnect after VRS/DISA Re-transfer to IRG	Disconnect after re-transfer to Incoming Ring Group. Trunk Timer Class is referred.
25-07-07	20-31-19	Long Conversation Warning Tone Time	Determine the time trunk-to-trunk conversation can talk before the Long Conversation tone is heard. Trunk Timer Class is referred.
25-07-08	20-31-20	Long Conversation Disconnect Time	This timer determines how long the system waits before disconnecting a trunk-to-trunk conversation call after the Long Conversation tone is heard. Trunk Timer Class is referred.
25-07-09	20-31-21	DISA Internal Paging Time	This is the maximum length of an Internal Page placed by a DISA caller. If the Page continues longer than this time, the system terminates the DISA call. Trunk Timer Class is referred.
25-07-10	20-31-22	DISA External Paging Time	This is the maximum length of an External Page placed by a DISA caller. If the Page continues longer than this time, the system terminates the DISA call. Trunk Timer Class is referred.
31-01-02	20-31-23	Page Announcement Duration	This timer sets the maximum length of External Page announcements. Station or Trunk Timer Class is referred by the caller makes announcement.

Conditions

- Timer Classes are used for CAR/VE also.
- When Timer Class is set to 0 it uses the system-wide timers.
- All stations and trunks are assigned to Timer Class 0 at default.
- Both system-wide timers (Timer Class 0) and Timer Class timers (Timer Class 1~15) can be used in the same system.

Default Settings

Timer Class set to 0 for all trunks and extensions.

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
20-01-08	System Options - Trunk Queuing Callback Time	15 (seconds)
20-01-09	System Options - Callback/Trunk Queuing Cancel Time	64800 (seconds)
20-04-03	System Options for Virtual Extensions - Virtual Extension Delay Interval	10 (seconds)
20-29-01	Timer Class for Extensions	0
20-30-01	Timer Class for Trunks	0
20-31-01	Timer Class Timer Assignment - Trunk Queuing Callback Duration Time	15 (seconds)
20-31-02	Timer Class Timer Assignment - Callback/Trunk Queuing Cancel Time	64800 (seconds)
20-31-03	Timer Class Timer Assignment - Virtual Extension Delay Interval	10 (seconds)
20-31-04	Timer Class Timer Assignment - Intercom Interdigits Time (Intercom I/D Timer)	10 (seconds)
20-31-05	Timer Class Timer Assignment - Trunk Interdigits Time (Trunk I/D Timer)	10 (seconds)
20-31-06	Timer Class Timer Assignment - Hotline Time Start Time (Hotline Start)	5 (seconds)
20-31-07	Timer Class Timer Assignment - Ring No Answer Alarm Time	60 (seconds)
20-31-08	Timer Class Timer Assignment - DIL/Incoming Ring Group No Answer Time	0 (seconds)
20-31-09	Timer Class Timer Assignment - DID Ring-No-Answer Time	20 (seconds)
20-31-10	Timer Class Timer Assignment - Hold Recall Time (Non Exclusive Hold)	90 (seconds)
20-31-11	Timer Class Timer Assignment - Hold Recall CallBack Time (Non Exclusive Hold)	30 (seconds)
20-31-12	Timer Class Timer Assignment - Exclusive Hold Recall Time	90 (seconds)
20-31-13	Timer Class Timer Assignment - Exclusive Hold Recall Callback Time	30 (seconds)
20-31-14	Timer Class Timer Assignment - Park Hold Time - Normal	90 (seconds)
20-31-15	Timer Class Timer Assignment - Delayed Call Forwarding Time (Call Forward No Answer)	10 (seconds)
20-31-16	Timer Class Timer Assignment - Transfer Recall Time	30 (seconds)
20-31-17	Timer Class Timer Assignment - DID/DISA No Answer Time (Disconnect or IRG or VM)	10 (seconds)
20-31-18	Timer Class Timer Assignment - Disconnect after Re-transfer to IRG	60 (seconds)

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Program Number	Program Name	Default
20-31-19	**Timer Class Timer Assignment - Long Conversation Warning Tone Time (Trunk to Trunk)**	30 (seconds)
20-31-20	**Timer Class Timer Assignment - Long Conversation Disconnect (Trunk to Trunk)**	15 (seconds)
20-31-21	**Timer Class Timer Assignment - DISA Internal Paging Time**	30 (seconds)
20-31-22	**Timer Class Timer Assignment - DISA External Paging Time**	30 (seconds)
20-31-23	**Timer Class Timer Assignment - Page Announcement Duration**	1200 (seconds)
21-01-02	**System Options for Outgoing Calls - Intercom Interdigit Time**	10 (seconds)
21-01-03	**System Options for Outgoing Calls - Trunk Interdigit Time (External)**	10 (seconds)
21-01-09	**System Options for Outgoing Calls - Ringdown Extension Timer (Hotline Start)**	5 (seconds)
22-01-03	**System Options for Incoming Calls - Ring No Answer Alarm Time**	60 (seconds)
22-01-04	**System Options for Incoming Calls - DIL No Answer Recall Time**	0 (seconds)
22-01-06	**System Options for Incoming Calls - DID Ring-No-Answer Time**	20 (seconds)
24-01-01	**System Options for Hold - Hold Recall Time**	90 (seconds)
24-01-02	**System Options for Hold - Hold Recall Callback Time**	30 (seconds)
24-01-03	**System Options for Hold - Exclusive Hold Recall Time**	90 (seconds)
24-01-04	**System Options for Hold - Exclusive Hold Recall Callback Time**	30 (seconds)
24-01-06	**System Options for Hold - Park Hold Time - Normal**	90 (seconds)
24-02-03	**System Options for Transfer - Delayed Call Forwarding Time**	10 (seconds)
24-02-04	**System Options for Transfer - Transfer Recall Time**	30 (seconds)
25-07-02	**System Timers for VRS/DISA - VRS/DISA No Answer Time**	10 (seconds)
25-07-03	**System Timers for VRS/DISA - Disconnect after VRS/DISA retransfer to IRG**	60 (seconds)
25-07-07	**System Timers for VRS/DISA - Long Conversation Warning Tone Time**	30 (seconds)
25-07-08	**System Timers for VRS/DISA - Long Conversation Disconnect Time**	15 (seconds)
25-07-09	**System Timers for VRS/DISA - DISA Internal Paging Time**	30 (seconds)
25-07-10	**System Timers for VRS/DISA - DISA External Paging Time**	30 (seconds)
31-01-02	**System Options for Internal/External Paging - Page Announcement Duration**	1200 (seconds)

Operation

Please refer to the feature for the operation.

Forced Trunk Disconnect

Description

Forced Trunk Disconnect allows an extension user to disconnect (release) another extension active outside call. The user can then place a call on the released trunk. Forced Trunk Disconnect lets a user access a busy trunk in an emergency, when no other trunks are available. Maintenance technicians can also use Forced Trunk Disconnect to release a trunk on which there is no conversation. This can happen if a trunk does not properly disconnect when the outside party hangs up.

Forced Trunk Disconnect abruptly terminates the active call on the line. Only use this feature in an emergency and when no other lines are available.

Conditions

This feature only works on an analog trunk. ISDN and IP trunks do not have the Forced Trunk Disconnect available.

Default Settings

- COS 01~15 = Disabled

System Availability

Terminals

All Terminals

Required Component(s)

Analog Trunks

Related Features

Central Office Calls, Placing

Guide to Feature Programming

Program Number	Program Name	Default
11-10-26	**Service Code Setup (for System Administrator) - Forced Trunk Disconnect**	724
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-07-11	**Class of Service Options (Administrator Level) - Forced Trunk Disconnect (analog trunk only)**	COS 01~15 = 1
21-01-18	**System Options for Outgoing Calls - Reset Dial After Failure of Trunk Access**	0

F

Operation

To disconnect a busy trunk:

Multiline Terminal

1. Press line key for trunk.
   - OR -
   Dial trunk access code (**#9** + trunk number).

   You hear busy tone. Trunk numbers are 001~126 .

2. Dial the Service Code (**724**).

   You hear confirmation beeps as the system disconnects the trunk.

   You can now place a call on the free trunk.

3. Press the line key for the trunk disconnected in Step 2.
   - OR -
   Dial the trunk access code (**#9** + trunk number) for the trunk disconnected in Step 2.

Single Line Telephone

1. Dial trunk access code (**#9** + trunk number).

   You hear busy tone. Trunk numbers are 001~126 .

2. Dial Service Code (**724**).

   You hear confirmation beeps as the system disconnects the line.

3. Hookflash.

   You can now place a call on the free line.

4. Dial the trunk access code (**#9** + trunk number) for the trunk disconnected in Step 2.

Group Call Pickup

Description

Group Call Pickup allows an extension user to answer a call ringing another extension in a Pickup Group. This permits co-workers in the same work area to easily answer each other's calls. The user can dial a code or press a programmed Group Call Pickup key to intercept the ringing call. If several extensions within the group are ringing at the same time, Group Call Pickup intercepts the call based on the extension priority in the Pickup Group.

With Group Call Pickup, a user can intercept the following calls:

- A call ringing the user's own pickup group
- A call ringing another pickup group when the user knows the group number
- A call ringing another pickup group when the user does not know the group number

There are 32 Call Pickup Groups available.

Conditions

- A Call Pickup Group cannot have an associated name.
- Group Call Pickup can be used to answer calls recalling from Hold or Park.
- Group Call Pickup cannot be used to answer calls ringing Call Arrival Keys or Virtual Extensions.
- Virtual Extensions can use Group Call Pickup to answer calls ringing a multiline terminal or single line telephone.
- Users can pickup calls regardless of their access map programming.
- Directed Call Pickup provides another way of answering a co-worker's call.
- Function keys simplify Group Call Pickup operation.

Default Settings

Enabled

System Availability

Terminals

Any Station

Required Component(s)

None

Related Features

Central Office Calls, Answering

Directed Call Pickup

Programmable Function Keys

G

Guide to Feature Programming

Program Number	Program Name	Defaul
11-12-25	**Service Code Setup (for Service Access) - Direct Call Pickup - Own Group**	856
11-12-26	**Service Code Setup (for Service Access) - Call Pickup for Specified Group**	868
11-12-27	**Service Code Setup (for Service Access) - Call Pickup**	⋆#
11-12-28	**Service Code Setup (for Service Access) - Call Pickup for Another Group**	869
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-10-01	**Class of Service Options (Answer Service) - Group Call Pickup (Within Group)**	COS 01~15 = 1
20-10-02	**Class of Service Options (Answer Service) - Group Call Pickup (Another Group)**	COS 01~15 = 1
20-10-03	**Class of Service Options (Answer Service) - Group Call Pickup for Specific Group**	COS 01~15 = 1
20-10-04	**Class of Service Options (Answer Service) - Telephone Call Pickup**	COS 01~15 = 1
20-10-05	**Class of Service Options (Answer Service) - Directed Call Pickup for Own Group**	COS 01~15 = 1
20-10-09	**Class of Service Options (Answer Service) - Call pickup Callback**	0
23-02-01	**Call Pickup Groups**	Refer to Programming Manual.

Operation

To answer a call ringing another telephone in your Pickup Group:

1. Pick up the handset or press **Speaker** .
2. At multiline terminal only, press the **Group Call Pickup** key (Program 15-07 or SC **851** : 24).
   - OR -
   Dial **856** or ⋆#.

   Service Code ⋆# can pick up any call in the group, plus any Ring Group calls. Service Code 856 cannot pick up Ring Group calls.

To answer a call ringing a telephone in another Pickup Group when you do not know the group number:

1. Pick up the handset or press **Speaker**.
2. At multiline terminal only, press the **Group Call Pickup** key (Program 15-07 or SC **851** : 25).
   - OR -
   Dial **869** .

To answer a call ringing a telephone in another Pickup Group when you know the group number:

1. Pick up the handset or press **Speaker**.
2. At multiline terminal only, press the **Group Call Pickup** key (Program 15-07 or SC **851** : 26 + group).
   - OR -
   Dial **868** and the group number (1~32).

Group Listen

Description

Group Listen permits a multiline terminal user to talk on the handset and have their caller's voice broadcast over the telephone speaker. This lets the multiline terminal user's co-workers listen to the conversation. Group Listen turns off the multiline terminal handsfree microphone so the caller does not pick the co-worker's voices during a Group Listen.

Conditions

- An extension in the headset mode cannot use Group Listen.
- Group Listen is not available to single line telephones.

Default Settings

Disabled

System Availability

Terminals

Digital Multiline Terminal

Required Component(s)

None

Related Features

Handset Operation

Guide to Feature Programming

Program Number	Program Name	Default
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-13-26	Class of Service Options (Supplementary Service) - Group Listen	COS 01~15 = 0

Operation

To initiate Group Listen:

1. Place or answer call using the handset.
2. Press **Speaker** (but do not hang up).

Speaker flashes slowly.

*You can talk to the caller through your handset. Your co-workers hear your caller's voice over your telephone speaker after pressing **Speaker**.*

To talk Handsfree after initiating Group Listen:

1. Hang up the handset.

To cancel Group Listen (without hanging up your call):

1. Do not hang up.
2. Press the flashing **Speaker**.

You can talk to the caller over the handset. Your co-workers can no longer hear the caller's voice.

Handset Mute/Handset Cutoff

Description

At the same time with Microphone On/Off control, Handset Mute/Handset Cutoff is provided to Multiline terminals connected to the SL1000 system. While talking on the Multiline Terminal handset, a station user can press **Mute** key to mute the transmit speech path. The station user can still hear the outside (or intercom) voice.

Conditions

- The **Mute** key flashes when active.
- When Mute is set at the terminal and answer the incoming call or held call by Off Hooking the Handset, transmit Mute is canceled temporary, and back to original Mute state when On Hook.
- At PRG15-02-50, MIC Lamp Status Change, **Mute** key LED can be set either way. Default is LED On when Mute On.

Default Settings

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
15-02-50	MIC Lamp Status Change	0
15-07-01	Programmable Function Keys	Refer to Programming Manual.

Operation

While talking on a terminal handset:

1. Press **Mute**.

Handsfree and Monitor

Description

Handsfree allows a Multiline Terminal user to process calls using the speaker and microphone in the telephone instead of the handset. Handsfree is a convenience for workers who do not have a free hand to pick up the handset. For example, a terminal operator could continue to enter data with both hands while talking on the telephone.

There are three variations of Handsfree.

- Handsfree
  The user can press Speaker to place and answer calls instead of using the handset.
- Automatic Handsfree
  The user can press a trunk line key or virtual extension key without lifting the handset or pressing the Speaker key. An extension can have Automatic Handsfree for outgoing calls or for both outgoing calls and incoming calls.
- Monitor
  User can place a call without lifting the handset, but must lift the handset to speak.

Conditions

- Handsfree and Monitor are not available for single line telephones.
- Prime Line Selection affects how incoming and outgoing calls are handled and thus determines what happens when the user presses the speaker key.
- Monitoring volume may be adjusted using the volume control on the Multiline Terminal.
- When a Multiline Terminal user lifts the handset, the monitoring condition is automatically released, and the Speaker LED goes off.
- A Multiline Terminal is considered off-hook by the system when this feature is used.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Microphone Cutoff

Prime Line Selection

Guide to Feature Programming

Program Number	Program Name	Default
15-02-08	**Multiline Telephone Basic Data Setup - Automatic Handsfree**	1
15-02-16	**Multiline Telephone Basic Data Setup - Handsfree Operation**	1
20-02-12	**System Options for Multiline Telephones - Forced Intercom Ring (ICM Call Type)**	1
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-09-05	**Class of Service Options (Incoming Call Service) - Signal/Voice Call**	COS 01~15 = 1

Operation

To talk Handsfree:

1. Press **Speaker**, **Trunk Line** key or **Virtual Extension** key.
2. Place the call.
3. Speak toward the telephone when the called party answers.

To change a handset call into a Handsfree call:

1. Press **Speaker** and hang up the handset.
2. Press **Speaker** again to hang up.

To change a Handsfree call into a handset call:

1. Lift the handset.

To turn on/off Monitor:

1. Press **Mute** or the Microphone Function Key (Program 15-07 or SC **851** : 02) to turn on or off the Microphone.

*Monitor is off when **Mute** LED is lit, the Microphone Function Key is not lit (Off), or the handset is lifted.*

Handsfree Answerback/Forced Intercom Ringing

Description

Handsfree Answerback permits an extension user to respond to a voice-announced Intercom call by speaking toward the telephone, without lifting the handset. Like Handsfree, this is a convenience for workers who do not have a free hand to pick up the handset.

Conditions

- Handsfree Answerback does not require the Speaker phone to be enabled (Program15-02-16).
- A Multiline Terminal user can process calls using the speaker and microphone in the telephone (instead of the handset).
- With Microphone Cutoff enabled, Handsfree Answerback callers to an extension hear a single beep (instead of two).
- Incoming Intercom calls always ring single line telephones.
- The extension you are calling must be set to Voice for this feature to work.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Handsfree and Monitor

Microphone Cutoff

Guide to Feature Programming

Program Number	Program Name	Default
11-11-15	System Numbering - Enable Handsfree Incoming Intercom Calls	821
11-11-16	System Numbering - Force Ringing of Incoming Intercom Calls	823
11-12-06	Service Code Setup (for Service Access) - Switching of Voice Call and Signal Call	812
15-02-16	Multiline Telephone Basic Data Setup - Handsfree Operation	1
20-02-12	System Options for Multiline Telephones - Forced Intercom Ring (ICM Call Type)	1

Program Number	Program Name	Default
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-08-10	**Class of Service Options (Outgoing Call Service) - Signal/ Voice Call**	COS 01~15 = 1
20-09-05	**Class of Service Options (Incoming Call Service) - Signal/Voice Call**	COS 01~15 = 1

Operation

To enable Handsfree Answerback for your incoming Intercom calls:

1. Press idle **Speaker**.
2. Dial **821** .
3. Press **Speaker** to hang up.

This disables Forced Intercom Ringing.

To enable Forced Intercom Ringing for your incoming Intercom calls:

1. Press idle **Speaker**.
2. Dial **823** .
3. Press **Speaker** to hang up.

This disables Handsfree Answerback.

To change the way your Intercom call signals the extension you are calling:

1. Dial **1**.

If ringing, your call voice-announces. If voice-announced, your call starts to ring the destination. This option is also available at single line telephones.

Headset Operation

Description

A multiline terminal user can use a customer-provided headset in place of the handset. Like using Handsfree, using the headset frees up the user's hands for other work. However, Headset Operation provides privacy not available from Handsfree.

As the headset plugs into a separate jack on the bottom of the telephone, the handset can still be connected to the telephone. This gives you the option to use the handset, headset or the speaker-phone for calls.

Conditions

- While using the headset, the Headset function key becomes a release (disconnect) key and no dial tone is heard from the speaker.
- While in the headset mode, the hook switch is not functional.
- An extension with a headset can still receive voice-announced Intercom calls and respond handsfree when idle.
- A Headset Function key is required to answer or place a call in headset mode.

Default Settings

Disabled

System Availability

Terminals

None

Required Component(s)

Headset

Related Features

Handsfree Answerback/Forced Intercom Ringing

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-02-05	**System Options for Multiline Telephones - Headset Busy Mode**	0
20-02-12	**System Options for Multiline Telephones - Forced Intercom Ring (ICM Call Type)**	1
20-09-07	**Class of Service Options (Incoming Call Service) - Call Queuing**	COS 01~15 = 0
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	Refer to Programming Manual.

Operation

To enable the headset:

1. Plug in the headset into the headset jack on the bottom of the telephone.
2. Program a **Headset** key (Program 15-07 or SC **851** : 05).

You hear a confirmation beep.

To use the headset:

The Headset key lights when on a call. To disconnect, press the Headset key again.

*You can still use the handset for calls or respond to voice-announced Intercom calls with the headset plugged in. The headset only activates when the **Headset** key is pressed.*

1. Answer a ringing call by pressing the Headset key.
   - OR -
2. Press the **Headset** key and then a line key or press **Speaker** then **9** to make a outgoing call.
   - OR -
3. Press the **Headset** key to get intercom dial tone.
   - OR -
4. If on a call, press the **Headset** key to hang up.

Hold

Description

Hold lets an extension user put a call in a temporary waiting state. The caller on Hold hears silence or Music on Hold, not conversation in the extension user's work area. While the call waits on Hold, the extension user may process calls or use a system feature. Calls left on Hold too long recall the extension that placed them on Hold. There are four types of Hold:

- System Hold
  An outside call a user places on Hold flashes the line key (if programmed) at all other multiline terminals. Any multiline terminal user with the flashing line key can pick up the call.
- Exclusive Hold
  When a user places a call on Exclusive Hold, only that user can pick up the call from Hold. The trunk appears busy to all other multiline terminals that have a key for the trunk. Exclusive hold is important if a user does not want a co-worker picking up their call on Hold.
- Group Hold
  If a user places a call on Group Hold, another user in the Department Group can dial a code to pick up the call. This lets members of a department easily pick up each other's calls.
- Intercom Hold
  A user can place an Intercom call on Hold. The Intercom call on Hold does not indicate at any other extension.

Hold Recall to Operator

Hold Recall to Operator enhances how the system handles calls that are left on hold too long. With Hold Recall to Operator:

- A trunk call recalls the extension that placed it on Hold after the Hold/Exclusive Hold Recall Time.
- The recalling trunk rings the extension that placed it on Hold for the Hold/Exclusive Hold Recall Callback Time.
- After the Hold/Exclusive Hold Recall Callback Time, the trunk call rings the operator.

Hold Recall to Operator applies to trunk calls placed on System Hold, Exclusive Hold and Group Hold. It does not apply to Intercom calls.

Conditions

- The called extension must lift the handset or press the Speaker key before the call can be placed on hold.
- Callers on Hold hear Music on Hold, if programmed.
- An extension can have function keys for System Hold and Exclusive Hold.
- Analog single line telephones can only use Exclusive Hold and Group Hold.
- If station A calls station B, and station A puts station B on hold and then calls station C, station C cannot transfer the call.
- In order for a station to retrieve a held ICM call, the station must have an ICM key assigned in 15-07 (*00).

Default Settings

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Music on Hold

Programmable Function Keys

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Default
11-12-30	Service Code Setup (for Service Access) - Specified Trunk Answer	772
11-12-33	Service Code Setup (for Service Access) - Group Hold	832
11-12-34	Service Code Setup (for Service Access) - Answer for Group Hold	862
14-01-16	Basic Trunk Data Setup - Forced Release of Held Call	0
14-07-01	Trunk Access Map Setup	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).
15-02-06	Multiline Telephone Basic Data Setup - Hold Key Operating Mode	0
15-02-07	Multiline Telephone Basic Data Setup - Automatic Hold for CO Lines	1
15-02-11	Multiline Telephone Basic Data Setup - Callback Automatic Answer	1
15-06-01	Trunk Access Map for Extensions	1
15-07-01	Programmable Function Keys	Refer to Programming Manual.
16-02-01	Department Group Assignment for Extensions	Department Groups 1 - 32 Priority 1 - 999 All extensions in Department Group 1 with priority in port order: Port 1 priority = 1 Port 128 priority = 128
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-11-09	Class of Service Options (Hold/Transfer Service) - Group Hold Initiate	COS 01~15 = 1
20-11-10	Class of Service Options (Hold/Transfer Service) - Group Hold Answer	COS 01~15 = 1
20-11-13	Class of Service Options (Hold/Transfer Service) - Operator Transfer After Hold Callback	COS 01~15 = 0
20-17-01	Operator Extension - Operator's Extension Number	200
24-01-01	System Options for Hold - Hold Recall Time	90 (seconds)
24-01-02	System Options for Hold - Hold Recall Callback Time	30 (seconds)
24-01-03	System Options for Hold - Exclusive Hold Recall Time	90 (seconds)

Program Number	Program Name	Default
24-01-04	**System Options for Hold - Exclusive Hold Recall Callback Time**	30 (seconds)
24-01-05	**System Options for Hold - Forced Release of Held Call**	64800 (seconds)

Operation

System Hold

To place an outside call on System Hold:

Press **Hold**

To pick up an outside call on System Hold:

1. If you know the specific line number, dial **772** + Line number (**001~126**).

Exclusive Hold

To place an outside call on Exclusive Hold:

Press the **Exclusive Hold** key (Program 15-07-01 or SC **851** : 45).

Single Line Telephone

1. Hookflash.
2. Dial **849** .

To pick up an outside call on Exclusive Hold:

1. Press flashing **line** key.

Single Line Telephone

1. Dial **859** .

Group Hold

To place a call on Hold so anyone in your Department Group can pick it up:

1. Press **Hold**.
2. Dial **832** .
3. Press **Speaker** to hang up.

Single Line Telephone

1. Hookflash.
2. Dial **832** .
3. Hang up.

To pick up a call on Group Hold:

1. Press **Speaker**.
2. Dial **862** .

Single Line Telephone

1. Lift the handset.
2. Dial **862** .

Intercom Hold

To place an Intercom call on Intercom Hold:

1. Press **Hold**.
2. Press **Speaker** to hang up.

To pick up an Intercom call on Intercom Hold:

1. Press **Speaker**.
2. Press flashing **Feature**.

Hotel/Motel

Description

Your system provides Hotel/Motel services in addition to the many features available to business users. These Hotel/Motel services help you run your facility more efficiently, save you time and money **and** provide your guests with more responsive service.

Hotel/Motel features include:

H

Wake Up Call

Wake Up Call is like having an alarm clock in each room – with some unique advantages:

- Guests can set or cancel Wake Up Calls for themselves, or you can set and cancel Wake Ups for them.
- Unanswered Wake Up Calls can automatically call the operator and print on the Room Status Print-out report.
- Use Wake Up Call as a meeting reminder (e.g., for convention attendees).

Single Digit Dialing

Single Digit Dialing gives your guests one-touch access to your important Hotel/Motel services. They can lift the handset and press a single key for:

- Extensions such as the front desk, reservation services, housekeeping or the maitre d' of your restaurant.
- Feature Access Codes for one-button access to selected features and outside lines.
- Voice Mail, so your guests can leave requests even when your service providers are unavailable.

A Department Calling Group

A Department Calling Group, allowing, for example, your guests to reach the first available agent in your reservation desk group.

Message Waiting

If you call a guest while they are away from their room, leave them a Message Waiting. When the guest returns, they see the lamp on their phone flashing and can automatically call you back. You can use Message Waiting when you have parcels for a guest dropped off at your front desk. Do not keep redialing the guest if they are not in – just send them a Message Waiting. (Your DSS Console can show all the rooms that have messages waiting.)

Room to Room Calling Restriction

Prevent guests in one room from calling guests in another – a handy feature for guests that want to maintain their privacy. If you need to, you can always allow inter-room calling (e.g., for families or groups that have separate rooms).

Toll Restriction (When Checked In)

Control a guest's long distance dialing automatically when they check in. Use this feature to set up two different Toll Restriction modes. The first mode is for you and your staff when the room is checked out. The second mode is for your guests when they check in. You may want to restrict the outside numbers guests can dial, but allow your staff to call vendors and suppliers.

Room Status

Your phone and DSS Console can set and monitor the status of all your guest rooms: Checked In, Checked Out, Maid Required and Maid in Room. Maximize room usage by coordinating your cleaning staff and reservation desk. For example, you can dial simple codes to set a room status.

Room Status Printouts

The Room Status Printouts give you a concise overview of the status of all your guest rooms at a glance. The printouts provide up to the minute reports showing Room Status, Room Call Restriction, Do Not Disturb, Message Waiting and Wake Up Calls. If your cleaning staff needs to know which rooms to clean, for example, just print out the report showing Room Status. This printout requires a connection to the system using IP post on the CPU.

DSS Console Monitoring

Your DSS Console provides room monitoring abilities. You can see at a glance which rooms have Wake Up Calls set or messages waiting. In addition, you can still use your console for business mode features.

Do Not Disturb

A guest can activate DND anytime they need privacy (for example, if they need to work uninterrupted). Do Not Disturb (DND) blocks the room telephone incoming calls and Paging announcements. This can be set from the room phone or attendant phone.

Flexible Numbering Plan

To simplify dialing guests and services in your facility, customize your system to have room numbers match phone extension numbers. For example, if the rooms on the first floor are numbered 100~120, the corresponding room extensions should also be 100~120.

Conditions

- Function codes 92 and 93 can be assigned only to a DSS Console that is in Hotel Mode. These features do not work when programmed on multiline telephone line keys or on a DSS Console in Business mode.
- When multiple DSS Consoles are used for Hotel/Motel, function keys must be assigned to each DSS console for Wake Up Call Indication and Room Status Indication.
- The Message Waiting status of a room cannot be seen when the console is in Wake Up Call or Room Status mode.
- The BLF indication for each room is always available no matter what mode the console is in.
- The Hotel/Motel feature requires the licensed. The following dial access codes can be used only if the CPU is licensed for the Hotel/Motel Feature:

Dial Access Codes that Require SL-SYS-HOTEL LIC		
Program	**Dial Access Code**	**Description**
11-10-16	726	Leaving Message Waiting (Requires CPU to be licensed for Hotel/Motel)
11-14-01	727	Set DND for Own Extension
11-14-02	728	Cancel DND for Own Extension
11-14-03	729	Set DND for Other Extension
11-14-04	730	Cancel DND for Other Extension
11-14-05	731	Set Wake Up Call for Own Extension
11-14-06	732	Cancel Wake Up Call for Own Extension
11-14-07	733	Set Wake Up Call for Other Extension
11-14-08	734	Cancel Wake Up Call for Other Extension
11-14-09	735	Set Room to Room Call Restriction

Dial Access Codes that Require SL-SYS-HOTEL LIC		
Program	**Dial Access Code**	**Description**
11-14-10	736	Cancel Room to Room Call Restriction (Hotel)
11-14-11	737	Change Toll Restriction Class for Other Extension
11-14-12	738	Check In
11-14-13	739	Check Out
11-14-14	740	Room Status Change for Own Extension
11-14-15	741	Room Status Change for Other Extension
11-14-16	742	Room Status Output
11-14-17	770	Hotel Room Monitor

Default Settings

Not Enabled

System Availability

Terminals

All Terminals

Required Component(s)

- DSS Console
- License (SL-SYS-HOTEL LIC)

Related Features

Code Restriction/Toll Restriction

Department Calling

Do Not Disturb (DND)

Flexible System Numbering

Guide to Feature Programming

Program Number	Program Name	Default
10-20-01	**LAN Setup for External Equipment – TCP Port**	External Device 1 ~10 = 0 External Device 12~14 = 0
11-10-16	**Service Code Setup (for System Administrator) – Leaving Message Waiting (Requires CPU to be licensed for Hotel/Motel)**	726
11-14-01	**Service Code Setup (for Hotel) – Set DND for Own Extension**	727
11-14-02	**Service Code Setup (for Hotel) – Cancel DND for Own Extension**	728
11-14-03	**Service Code Setup (for Hotel) – Set DND for Other Extension**	729
11-14-04	**Service Code Setup (for Hotel) – Cancel DND for Other Extension**	730
11-14-05	**Service Code Setup (for Hotel) – Set Wake Up Call for Own Extension**	731

Program Number	Program Name	Default
11-14-06	Service Code Setup (for Hotel) – Cancel Wake Up Call for Own Extension	732
11-14-07	Service Code Setup (for Hotel) – Set Wake Up Call for Other Extension	733
11-14-08	Service Code Setup (for Hotel) – Cancel Wake Up Call for Other Extension	734
11-14-09	Service Code Setup (for Hotel) – Set Room to Room Call Restriction	735
11-14-10	Service Code Setup (for Hotel) – Cancel Room to Room Call Restriction (Hotel)	736
11-14-11	Service Code Setup (for Hotel) – Change Toll Restriction Class for Other Extension	737
11-14-12	Service Code Setup (for Hotel) – Check-In	738
11-14-13	Service Code Setup (for Hotel) – Check-Out	739
11-14-14	Service Code Setup (for Hotel) – Room Status Change for Own Extension	740
11-14-15	Service Code Setup (for Hotel) – Room Status Change for Other Extension	741
11-14-16	Service Code Setup (for Hotel) – Room Status Output	742
11-14-17	Service Code Setup (for Hotel) – Hotel Room Monitor	770
15-03-01	Single Line Telephone Basic Data Setup – SLT Signaling Type	1
15-03-04	Single Line Telephone Basic Data Setup – Flashing	1
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-13-11	Class of Service Options (Supplementary Service) – Room Monitor, Initiating Extension	COS 01~15 = 0
20-13-13	Class of Service Options (Supplementary Service) – Continued Dialing (DTMF) Signal on ICM Call	COS 01~15 = 1
20-13-16	Class of Service Options (Supplementary Service) – Barge-In, Receive	COS 01~15=1
20-13-17	Class of Service Options (Supplementary Service) – Barge-In Tone/Display (Intrusion Tone)	COS 01~15 = 1
20-13-40	Class of Service Options (Supplementary Service) – Do Not Disturb	COS 01~15 = 1
20-15-10	Ring Cycle Setup – Alarm for SLT	5
20-17-01	Operator Extension – Operator's Extension Number	200
20-35-01	Extension's Operator Setting	0
30-01-01	DSS Console Operating Mode	0
30-02-01	DSS Console Extension Assignment – Extension Number	not assigned
30-03-01	DSS Console Key Assignment	The DSS keys 001~060 of all DSS consoles = DSS/One-Touch key 200~259
42-01-01	System Options for Hotel/Motel – Answering Message Mode for Wake Up Call (Hotel Mode)	0
42-01-02	System Options for Hotel/Motel – Wake Up Call Message Assignment	0
42-01-03	System Options for Hotel/Motel – Wake Up Call No Answer	0
42-01-04	System Options for Hotel/Motel – Setup Message Mode for Wake Up Call (Hotel Mode)	0
42-01-05	System Options for Hotel/Motel – Wake Up Call Message Assignment	0
42-02-01	Hotel/Motel Telephone Setup – Hotel Mode	0

Program Number	Program Name	Default
42-02-02	Hotel/Motel Telephone Setup – Toll Restriction Class When Check In	1
42-03-01	Class of Service Options (Hotel/ Motel) – Check-In Operation	1
42-03-02	Class of Service Options (Hotel/ Motel) – Check-Out Operation	1
42-03-03	Class of Service Options (Hotel/ Motel) – Room Status Output	1
42-03-04	Class of Service Options (Hotel/ Motel) – DND Setting for Other Extension	1
42-03-05	Class of Service Options (Hotel/ Motel) – Wake up Call Setting for Other Extension	1
42-03-06	Class of Service Options (Hotel/ Motel) – Room Status Change for Other Extension	1
42-03-07	Class of Service Options (Hotel/ Motel) – Restriction Class Changing for Other Extension	1
42-03-08	Class of Service Options (Hotel/ Motel) – Room to Room Call Restriction	1
42-03-09	Class of Service Options (Hotel/ Motel) – DND Setting for Own Extension	1
42-03-10	Class of Service Options (Hotel/ Motel) – Wake Up Call Setting for Own Extension	1
42-03-11	Class of Service Options (Hotel/ Motel) – Change Room Status for Own Extension	1
42-03-12	Class of Service Options (Hotel/ Motel) – SLT Room Monitor	COS 01~15 = 1
42-04-01	Hotel Mode One-Digit Service Codes	No setting
42-05-01	Hotel Room Status Printer – Output Port Type	0
42-05-02	Hotel Room Status Printer – Output Destination Number	No setting
42-05-03	Hotel Room Status Printer – Wake Up Call No Answer Data	0
42-05-04	Hotel Room Status Printer – Check-Out Sheet	0

Operation

None

Hot Key-Pad

Description

The Hot Key-Pad feature allows the user to place a call without lifting the handset or pressing Speaker. When the user dials another extension number on an idle telephone with Hot Key-Pad enabled, the Speaker lights and the internal call is made. When the user dials the trunk access code from a telephone with Hot Key-Pad enabled, Speaker lights, a trunk is seized and the outgoing call is made.

Conditions

- When a user dials any digits on a station with Hot Key-Pad enabled, the Speaker key lights.
- After a user dials the trunk access code on a station with Hot Key-Pad enabled, a trunk is seized when dialing the first digit of the called party number.
- When both Hot Key-Pad and Dialing Number Preview are turned on, Hot Key-Pad has priority and Dialing Number Preview does not work.
- When both Hot Key-Pad and Hotline are turned on, Hot Key-Pad has priority and Hotline does not work.
- When placing an outgoing call with the Hot Key-Pad feature, the user must dial the trunk access code before dialing the called party number.
- The ARS feature can be used when placing outside calls with the Hot Key-Pad feature.
- When both Hot Key-Pad and VRS Fixed Messaging are turned on, VRS fixed messaging does not work.
- The Hot Key-Pad Feature also works when dialing service codes.

Default Settings

Disabled

System Availability

Terminals

All Multiline Terminals

Required Software:

None

Related Features

Central Office Calls, Placing

Class of Service

Dialing Number Preview

Hotline

Intercom

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Default
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-08-20	**Class of Service Options (Outgoing Call Service) - Hot Key Pad**	COS 01~15 = 0

Operation

To place an intercom call using Hot Key-Pad:

The multiline terminal is idle. No need to press speaker key.

1. Dial the extension.
2. Dialed extension rings.

To place a trunk call using Hot Key-Pad:

The multiline terminal is idle. No need to press speaker key.

1. Dial the trunk access code, **9** by default, and the external destination number you wish to call.

Hotline

Description

Hotline gives a multiline terminal user one-button calling and Transfer to another extension (the Hotline partner). Hotline helps co-workers that work closely together. The Hotline partners can call or Transfer calls to each other just by pressing a single key.

The Hotline feature has two applications.

- Hotline (Hotline partner)
- Ringdown Extension, Internal/External (Refer to Ringdown Extension (Hotline), Internal/External on page 1-428.)

In addition, the Hotline key shows the status of the partner's extension.

When the key is . . .	The extension is . . .
Off	Idle
On	Busy or ringing
Fast Flash	DND - All calls (option 3) or Intercom calls (option 2)

There are 128 hotlines available.

Conditions

- An extension user cannot use Hotline to pick up a call ringing their partner's extension.
- Hotline keys can be assigned to the DSS consoles.
- Hotline does not override Do Not Disturb.
- Hotline always follows the Handsfree Answerback/Forced Intercom Ringing mode set at the called extension. The Hotline caller can override the setting, if desired.
- External Hotline automatically dials a telephone number or Speed Dial - System/Group/Station number when the handset is lifted.
- If the partner's extension is busy, Hotline does not automatically activate Off-Hook Signaling.
- A Hotline is a uniquely programmed function key.

Default Settings

Disabled

Related Features

Distinctive Ringing, Tones and Flash Patterns

Direct Station Selection (DSS) Console

Do Not Disturb (DND)

Handsfree Answerback/Forced Intercom Ringing

Off-Hook Signaling

Programmable Function Keys

Ringdown Extension, Internal/External

H

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
15-02-22	**Multiline Telephone Basic Data Setup - Multiple Incoming From Intercom and Trunk**	1
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-08-09	**Class of Service Options (Outgoing Call Service) - Hotline/Extension Ringdown**	COS 01~15 = 1
20-08-19	**Class of Service Options (Outgoing Call Service) - Hotline for Speaker**	COS 01~15 = 0
20-11-06	**Class of Service Options (Hold/Transfer Service) - Unscreened Transfer (Ring Inward Transfer)**	COS 01~15 = 1
20-11-11	**Class of Service Options (Hold/Transfer Service) - Automatic On-Hook Transfer**	COS 01~15 = 1
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	COS 01~15 = 0
21-01-09	**System Options for Outgoing Calls - Ringdown Extension Timer (Hotline Start)**	5
21-11-01	**Extension Ringdown (Hotline) Assignment**	not assigned
22-01-01	**System Options for Incoming Calls - Incoming Call Priority**	1
30-05-02	**DSS Console Lamp Table - Busy Extension**	7 (On)
30-05-03	**DSS Console Lamp Table - DND Extension**	3 (RW)
30-05-09	**DSS Console Lamp Table - Hotel Status Code 1 (Hotel DSS)**	7 (On)
30-05-10	**DSS Console Lamp Table - Hotel Status Code 2 (Hotel DSS)**	1 (FL)
30-05-11	**DSS Console Lamp Table - Hotel Status Code 3 (Hotel DSS)**	2 (WK)
30-05-12	**DSS Console Lamp Table - Hotel Status Code 4 (Hotel DSS)**	3 (RW)
30-05-13	**DSS Console Lamp Table - Hotel Status Code 5 (Hotel DSS)**	5 (IL)
30-05-14	**DSS Console Lamp Table - Hotel Status Code 6 (Hotel DSS)**	3 (RW)
30-05-15	**DSS Console Lamp Table - Hotel Status Code 7 (Hotel DSS)**	6 (IW)
30-05-16	**DSS Console Lamp Table - Hotel Status Code 8 (Hotel DSS)**	4 (IR)
30-05-17	**DSS Console Lamp Table - Hotel Status Code 9 (Hotel DSS)**	3 (RW)
30-05-18	**DSS Console Lamp Table - Hotel Status Code 0 (Hotel DSS)**	0 (Off)
30-05-19	**DSS Console Lamp Table - Hotel Status Code ✱** (Hotel DSS)	4 (IR)
30-05-20	**DSS Console Lamp Table - Hotel Status Code # (Hotel DSS)**	5 (IL)
30-05-21	**DSS Console Lamp Table - VM Message Indication**	3 (RW)

Table 1-18 Extension Busy Setup

	Program 20-13-06	Program 20-02-03	BLF[1] Status	Busy Status
1	1	0	Off	No
2	1	1	On	Yes
3	0	0	On	Yes
4	0	1	On	Yes

[1]BLF is on for extension receiving a voice announced Intercom call.

Operation

To place a call to your Hotline partner:

1. Press the **Hotline** key (Program 15-07 or SC **851** : 01 + partner's extension number).

You can optionally lift the handset after this step for privacy.

To transfer your outside call to your Hotline partner:

1. Press the **Hotline** key.
2. Announce the call and hang up.
   - OR -
   Hang up to have the call wait at your Hotline partner unannounced.

If unanswered, the call recalls like a regular transferred call.

To answer a call from your Hotline partner:

1. If you hear two beeps, speak toward the telephone.
   - OR -
   If your telephone rings, lift the handset.

Howler Tone Service

Description

Howler Tone Service provides a Howler Tone when a station remains off-hook after a call is completed or when a station is off-hook and digits are not dialed in a programmed time.

Conditions

Howler tone is generated 30 seconds after a call is disconnected and the telephone is left off-hook or the telephone is left off-hook without dialing.

Default Settings

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
20-18-02	**Service Tone Timers - Busy Tone Timer**	15 (seconds)
80-01-01	**Service Tone Setup - Repeat Count**	Refer to Programming Manual.
80-01-02	**Service Tone Setup - Basic Tone Number**	Refer to Programming Manual.

Operation

None

InMail

Description

The InMail is a low cost voice mail solution that mounts on the CPU unit. Its programming is fully integrated with chassis programming. This system offers most voice mail system features customers expect.

InMail support max 16 ports when suitable licenses and MEMDB are provided.

Automated Attendant automatically answers the system incoming calls. After listening to a customized message, an outside caller can dial a system extension or use Voice Mail.

Up to 16 InMail voice mail ports are available using MEMDB and license. Configurations are available by 2 port increment license. Each reduces the total station ports available by the same number of VM ports. Integrated Voice Mail enhances the telephone system with the following features:

- **Call Forwarding to Voice Mail**
  An extension user can forward their calls to Voice Mail. Once forwarded, calls to the extension connect to that extension mailbox. The caller can leave a message in the mailbox instead of calling back later. Forwarding can occur for all calls immediately, for unanswered calls or only when the extension is busy. When a user transfers a call to an extension forwarded to Voice Mail, the call waits for the Delayed Call Forwarding time before routing to the called extension mailbox. This gives the transferring party the option of retrieving the call instead of having it go directly to the mailbox.
- **Leaving a Message**
  Voice Mail lets a multiline terminal extension user easily leave a message at an extension that is unanswered, busy or in Do Not Disturb. The caller presses their Voice Mail key to leave a message in the called extension mailbox. There is no need to call back later.
- **Transferring to Voice Mail**
  By using Transfer to Voice Mail, a multiline terminal extension user can Transfer a call to the user's or a co-worker's mailbox. After the Transfer goes through, the caller can leave a message in the mailbox.
  A station user transferring a call can transfer the call to the called party voice mail box after an internal station number is dialed while performing a screened transfer, or during intercom calls. The user calls the extension then dials the quick transfer dial access code (default = 8) and hangs up. The call is placed in the mailbox and the caller hears the personal greeting.
- **Live Record**
  The multiline terminal user just presses the InMail Record key; the ESL user dials a code. Once recorded, the Voice Messaging System stores the conversation as a new message in the user's mailbox. After calling their mailbox, a user can save, edit or delete the recorded conversation. This feature is supported only on CO or DID calls. It is not supported on internal calls.
- **Live Monitor**
  A multiline terminal user can have their idle extension emulate a personal answering machine. This lets InMail screen their calls, just like their answering machine at home. If activated, the extension incoming calls route to the user's subscriber mailbox. The Live Monitor feature is supported for external and internal calls. After the mailbox answers, the user hears the caller's incoming message. The multiline terminal user can then:
  - Let the call go through to their mailbox
  - Intercept the call before it goes to their mailbox
- **Voice Mail Overflow**
  If Voice Mail automatically answers trunks, Voice Mail Overflow can reroute those trunks to other extensions when all Voice Mail ports do not answer or, with certain software, are busy. During periods of high traffic, this prevents the outside calls from ringing Voice Mail for an inordinate amount of time. There are two types of Voice Mail Overflow: Immediate and Delayed. With immediate overflow, calls immediately reroute to other extensions when all Voice Mail ports do not answer or, with certain software, are busy. With delayed overflow, calls reroute after a preset interval. Without overflow, the outside calls ring Voice Mail until a port becomes available or the outside caller hangs up.
- **Message Center Mailbox**

A Message Center Mailbox is shared by more than one extension. Any multiline terminal that has a Message Center Key for the shared mailbox can:

- Listen to the messages stored in the shared mailbox
- Transfer calls to the shared mailbox
- Use many other Voice Mail features previously available only at an extension individual mailbox

A Message Center Mailbox helps co-workers that work together closely – such as members of the same Department Hunt Group. For example, an Hunt Group Supervisor can send important messages to the shared Message Center Mailbox, to which any Hunt Group member can respond when time allows. Each terminal's Message Center Key flashes when messages are waiting. (The Message Center Mailbox can be a mailbox for an installed, uninstalled or virtual extension.)

- **Voice Mail Caller ID**
  InMail can use ANI/Caller ID information to identify the outside caller that left a message in a user's mailbox. When the message recipient presses TI after hearing a message, they hear the time the message was sent and the outside telephone number of the message sender. Refer to Caller ID on page 1-88 for more information on setting up this feature.
- **Security Code Enhancement**
  After a subscriber sets their Security Code, they can choose to make it required for all logons or just remote logons. When enabled for all logons, the subscriber must always enter their Security Code to access voice mail, even from their own extension. If enabled just for remote logons, the subscriber can go right into voice mail from their own telephone. However, the Security Code is still required from another extension or from outside the system. The Security Code logon option is a convenience for those who normally leave their office locked or otherwise secure. Those who work in open areas should normally set their mailbox to always require a Security Code.

Voice Mail Queuing

When accessing the voice mail, the system provides a voice mail queue. If all the voice mail ports are busy, any call trying to get to the voice mail is placed in queue. As the voice mail port becomes available, the calls are connected to the voice mail in the order in which they were received.

As the Voice Mail Queue follows Department Hunting programming, the queue can hold a maximum of 10 calls. If the queue is full or if the voice mail ports are not assigned to a Department Group, the calls are handled as though no voice mail queuing feature was enabled.

The calls either access voice mail if a port is available or they receive a busy signal. The Voice Mail Queuing feature does not work with the Conversation Record feature.

Voice Mail Key

When an extension receives a voice mail, the Voice Mail key (Program 15-07-01, code 77) can be used to call the voice mail to listen to the messages. If no Voice Mail Programmable Function Key is defined (Program 15-07-01, code 77), the telephone Message Waiting LED flashes to indicate new messages.

InMail Available

InMail is a plug-in "in-skin" full-featured, DSP-based integrated Voice Mail with Automated Attendant. It is available in two models:

The InMail Automated Attendant answers incoming calls and routes them quickly and efficiently. Integrated Voice Mail features include Conversation Record, Answering Machine Emulation, and Caller ID with Return Call.

Table 1-19 InMail Part Number and Capacity

Stock Number	Equipment Name	Note
BE110730	IP4WW-CFVRS-C1 • CF for VRS Only	
BE110731	IP4WW-CFVMS-C1 • CF for VRS & 2ch In-Mail (Approx:15H)	

Stock Number	Equipment Name	Note
BE110732	IP4WW-CFVML-C1 • CF for VRS & 4ch In-Mail (Approx:40H)	
BE110755	SL-VM-CHANNEL-2 LIC • Additional In-Mail Channel License (2ch)	
BE110733	SL-VM-ADVANCE LIC • In-Mail Advanced Features License (System base) - *E-Mail Notification* - *Cascading message notification* - *Find-Me/Follow-Me* - *Password Option* - *Hotel/Motel*	
BE106339	PZ-VM21 • Daughter board for InMail Compact Flash	
BE107874 (for China)	PZ-VM21 (For China) • Daughter board for InMail Compact Flash	
Mail Boxes	Station Mailboxes 128 Routing Mailboxes 16 Group Mailboxes 16 Total Mailboxes 160	

InMail: External Transfer Available

The software allows the InMail to perform an external transfer. This allows the InMail to route an incoming Automated Attendant call out of the SL1000 system on a new trunk based on an Speed Dial number stored in a Dial Action Table.

InMail: Internal Message Notification Timer

When Message Notification places a call out, the system waits up to 30 seconds for ringback, reorder, or busy tone from the trunk. If detected, notification call out processing begins normally. If not detected, the system abandons the call and decrements the Ring No Answer (RNA) count.

InMail: Directory Dialing

Directory Dialing allows an Automated Attendant caller to reach an extension by dialing the first few letters in the extension user's name. With Directory Dialing, the caller does not have to remember the extension number of the person they wish to reach – just the name.

The following steps describe Directory Dialing:

1. When the Automated Attendant answers, it sends the call to the Main Greeting box. The caller must dial a digit to access Directory Dialing.
2. The Directory Dialing Mailbox plays the Directory Dialing Message which asks the caller to dial letters for the name of the person they wish to reach.
3. The caller dials the letters for the person's name plus #. They can dial by first name or last name, depending on how the Directory Dialing Message was recorded and the Directory Dialing Mailbox was set up.
4. InMail searches the list of programmed extension names for a match of the caller-entered letters.
5. Voice prompts announce the first three matches, and allow the caller to dial a digit (1~3) to reach one of the announced matches. Additionally, the caller can dial 4 to hear additional matches (if any).
6. The caller dials the digit for the extension they wish to reach, and InMail sends the call to that extension. The call is sent as a Screened or Unscreened transfer, depending on programming.

For callers to use Directory Dialing, the system must have a name programmed for each extension (up to 15 characters, A~Z, using upper and lower case letters). Each extension user should also have a name recorded in their Subscriber Mailbox. In addition, each extension used by Directory Dialing must be installed and have an active Subscriber Mailbox (Personal or Group).

An outside caller can route to a Master Mailbox or a Routing Mailbox programmed as a Directory Dialing Mailbox from:

- The Answer Tables Answer Schedule Override mailbox, Default mailbox, or Routing mailbox.
- A GOTO action in the Dial Action Table of a Call Routing Mailbox.

InMail: Multiple Greetings

The mailbox subscriber can record up to three greetings and make any of the three active. When a caller leaves a message in the subscriber's mailbox, they hear the active greeting. This allows the subscriber, for example, to record a greeting for work hours, after work, and during vacation. Instead of changing their greeting when they leave the office, they can activate the after work greeting instead.

If the active greeting has not been recorded, a caller leaving a message in the subscriber mailbox hears, "At the tone, you can leave your message for (extension number or name)."

Refer to the InMail System Guide for complete details on setting these features.

Conditions

- When more than eight ports are to be enabled, the MEMDB is required.
- Email forwarding requires the MEMDB and SL-VM Advance license.
- Constant Message Count is displayed on a telephone display until another activity needs the display (i.e., if a call is made or received on the telephone). To have the message count display again, the telephone needs to receive a new voice mail message or a new call into the voice mailbox.
- The Quick Transfer to Voice Mail feature is allowed when:
  - Listening to the Ring Back Tone (RBT).
  - Listening to the Call Waiting Tone (CWT).
  - In Handsfree Answerback Mode.
  - In Voice Over Mode.
- When Quick Transfer to Voice Mail is accessed, the Voice Over feature is canceled.
- While on an intercom (ICM) call, dial the Quick Transfer Access Code (default: 8) to automatically transfer to that station Voice Mail box.
- The Quick Transfer to Voice Mail is not allowed when caller is:
  - Listening to the busy tone (BT).
  - Talking on an internal line.
  - Talking on an outside line.
  - Making a conference call.
- Extension numbers cannot start with 0, 9, * or #.
- Mailboxes with extension IDs of 10-32 are not supported as these are already used by fixed system resources.
- Distribution List members can only have 2 or 3 digit extension IDs.
- Live Record does not work for monitored calls.
- Live Record does not work for conference calls.
- Fixed Call Forwarding can be used to transfer a user's unanswered calls to their voice mail. Call Forwarding does not have to be programmed manually by each user.
- Caller ID information is passed from the Voice Mail to an extension for pre-answer display on an unscreened transfer from Voice Mail.
- Off-premise notification and external extensions require access to outside lines.
- When the voice mail places a call on hold, it uses Group Hold. Any line appearances for the trunk shows the hold flash rate, however, a user cannot pick up this call (a busy signal is heard).
- Updating the system time also updates the InMail time.
- The displayed message count for New and Saved messages does not update until the mailbox user hangs up and calls back into the InMail.
- InMail and Analog Voice Mail cannot be used at the same time in the same system.
- The first port of InMail must start with the first port of a group of eight station ports that are not already used by telephones. For example one of the following ports: 1, 5, 9, 13, ...233, 237, 241, 245, 249, etc. and uses the first port assigned + the next eight consecutive ports.
- The number of speech path channels on the CPU for the In Mail and the VRS feature are shared and

depends if the MEMDB daughter board is installed.

- Without a MEMDB daughter board installed the systems supports a maximum of eight channels for VRS and/or In-Mail.
- With a MEMDB daughter board installed, the system supports a maximum of 16 channels for VRS and/or In-Mail. The maximum number of channels supported for In-Mail is eight.

- When the system has the SL-VM-ADVANCE license, the Message Waiting Indication (MWI) on a DSS Console for an extension is a Green LED. Without the SL-VM-ADVANCE license the MWI on a DSS Console for an extension is a Red LED.

Default Settings

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

- PZ-VM21
- InMail CF
- SL-VM-ADVANCE license

Related Features

Barge-In

Caller ID

Call Forwarding

Central Office Calls, Placing

Clock/Calendar Display/Time and Date

Direct Inward Line (DIL)

Hold

Message Waiting

One-Touch Calling

Programmable Function Keys

Transfer

Guide to Feature Programming

Program Number	Program Name	Default
10-09-01	DTMF and Dial Tone Circuit Setup	Resource 01~132 = 0 (Common)
11-07-01	Department Group Pilot Numbers – Dial	not assigned
11-12-08	Service Code Setup (for Service Access) – Barge-In	810

Program Number	Program Name	Default
11-12-52	Service Code Setup (for Service Access) – Live Monitoring (InMail)	725
14-01-22	Basic Trunk Data Setup – Caller ID to Voice Mail	0
14-02-10	Analog Trunk Data Setup – Caller ID	0
15-02-28	Multiline Telephone Basic Data setup – Message Waiting Lamp Color	0
15-03-01	Single Line Telephone Basic Data Setup – SLT Signaling Type	1
15-03-03	Single Line Telephone Basic Data Setup – Terminal Type	0
15-03-09	Single Line Telephone Basic Data Setup – Caller ID Function – for External Module	0
15-07-01	Programmable Function Keys	Refer to programming manual.
16-02-01	Department Group Assignment for Extensions	Refer to Programming Manual.
20-02-09	System Options for Multiline Telephones – Disconnect Supervision	1
20-06-01	Class of Service for Extensions	All extension port = Class 1 Extension 101 is Class 15 and other
20-09-01	Class of Service Options (Incoming Call Service) – Second Call for DID/DISA/DIL/ E&M	COS 01~15 = 0
20-09-02	Class of Service Options (Incoming Call Service) – Caller ID Display	COS 01~15 = 1
20-11-01	Class of Service Options (Hold/ Transfer Service) – Call Forward All	COS 01~15 = 1
20-11-02	Class of Service Options (Hold/ Transfer Service) – Call Forward When Busy	COS 01~15 = 1
20-11-03	Class of Service Options (Hold/ Transfer Service) – Call Forwarding When Unanswered	COS 01~15 = 1
20-11-04	Class of Service Options (Hold/ Transfer Service) – Call Forwarding (Both Ringing)	COS 01~15 = 1
20-11-05	Class of Service Options (Hold/ Transfer Service) – Call Forwarding with Follow Me	COS 01~15 = 1
20-11-12	Class of Service Options (Hold/ Transfer Service) – Call Forwarding Off-Premise (External Call Forwarding)	COS 01~15 = 1
20-13-01	Class of Service Options (Supplementary Service) – Long Conversation Alarm	COS 01~15=1
20-13-05	Class of Service Options (Supplementary Service) – Intercom Off-Hook Signaling	COS 01~15 = 1
20-13-06	Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)	COS 01~15=0
20-13-07	Class of Service Options (Supplementary Service) – Message Waiting	COS 01~15 = 1
20-13-13	Class of Service Options (Supplementary Service) – Continued Dialing (DTMF) Signal on ICM Call	COS 01~15 = 1
20-13-15	Class of Service Options (Supplementary Service) – Barge-In, Initiate	COS 01~15=1
20-13-16	Class of Service Options (Supplementary Service) – Barge-In, Receive	COS 01~15=1
20-13-28	Class of Service Options (Supplementary Service) – Allow Class of Service to be Changed	COS 01~15 = 0
20-13-35	Class of Service Options (Supplementary Service) – Block Camp On	COS 01~15 = 0

Program Number	Program Name	Default
22-01-04	System Options for Incoming Calls – DIL No Answer Recall Time	0 (seconds)
22-08-01	DIL/IRG No Answer Destination	0
24-02-02	System Options for Transfer – MOH or Ringback on Transferred Calls	0

Assign Trunks As Automated Attendant Trunks-Method 1

Program Number	Program Name	Default
22-02-01	Incoming Call Trunk Setup	0
22-07-01	DIL Assignment	not assigned

Assign Trunks As Automated Attendant Trunks-Method 2

Program Number	Program Name	Default
22-02-01	Incoming Call Trunk Setup	0
22-04-01	Incoming Extension Ring Group Assignment	Extension 200 (first port)

For Either Method:

Program Number	Program Name	Default
22-04-01	Incoming Extension Ring Group Assignment	Extension 200 (first port)
22-08-01	DIL/IRG No Answer Destination	0
24-02-03	System Options for Transfer – Delayed Call Forwarding Time	10 (seconds)
45-01-01	Voice Mail Integration Options – Voice Mail Department Group Number	0
45-01-02	Voice Mail Integration Options – Voice Mail Master Name	V. M.
45-01-04	Voice Mail Integration Options – Park and Page	1
45-01-05	Voice Mail Integration Options – Message Wait	1
45-01-06	Voice Mail Integration Options – Record Alert Tone Interval Time	30 (seconds)
45-01-15	Voice Mail Integration Options – Analog Voice Mail Protocol Selection	0
45-01-16	Voice Mail Integration Options – Voice Mail Fax Digit Add Assignment	not assigned
45-01-17	Voice Mail Integration Options – Reply Mailbox Number	1
45-01-18	Voice Mail Integration Options – Trunk Number Mapping	2
47-01-02	InMail System Options – InMail Master Name	InMail ## (The system substitutes the port number for the # when calling the port.)
47-01-03	InMail System Options – Subscriber Message Length	120 seconds
47-01-04	InMail System Options – Non-Subscriber Message Length	120 seconds
47-01-05	InMail System Options – Message Backup/Go Ahead Time	5 seconds
47-01-07	InMail System Options – Digital Pager Callback Number	X*M#
47-01-08	InMail System Options – Delay in Dialing Digital Pager Callback Number	30 seconds
47-01-09	InMail System Options – Wait Between Digital Pager Callout Attempts	15 minutes

Program Number	Program Name	Default
47-01-10	**InMail System Options – Wait Between Non-Pager Callout Attempts**	20 minutes
47-01-11	**InMail System Options – Wait Between Busy Non-Pager Callout Attempts**	15 minutes
47-01-12	**InMail System Options – Wait Between RNA Non-Pager Callout Attempts**	30 minutes
47-01-13	**InMail System Options – Wait for Answer Non-Pager Callout Attempts**	5 rings
47-01-14	**InMail System Options – Number of Callout Attempts**	99 rings
47-01-15	**InMail System Options – Send Pager Callout Until Acknowledged**	0
47-01-16	**InMail System Options – Name Format**	0
47-01-17	**InMail System Options – InMail Port**	0
47-02-01	**InMail Station Mailbox Options – Mailbox Type**	1
47-02-02	**InMail Station Mailbox Options – Mailbox Number**	Mailbox 1 = 200 Mailbox 2 ~ 64 = 201 ~ 263 Mailbox 65 ~ = No setting
47-02-03	**InMail Station Mailbox Options – Number of Messages**	Mailbox 1 = 99 Mailbox 2 ~ = 20
47-02-04	**InMail Station Mailbox Options – Message Playback**	0
47-02-05	**InMail Station Mailbox Options – Auto Erase/Save of Messages**	1
47-02-06	**InMail Station Mailbox Options – Message Retention**	0
47-02-07	**InMail Station Mailbox Options – Recording Conversation Beep**	1
47-02-08	**InMail Station Mailbox Options – Message Waiting Lamp**	1
47-02-09	**InMail Station Mailbox Options – Auto Attendant Direct to Voice Mail**	0
47-02-10	**InMail Station Mailbox Options – Forced Unscreened Transfer**	0
47-02-11	**InMail Station Mailbox Options – Auto Time Stamp**	0
47-02-12	**InMail Station Mailbox Options – System Administrator**	Mailbox 1 (200) = 1 Mailbox 2 ~ = 0
47-02-13	**InMail Station Mailbox Options – Dialing Option**	0
47-02-14	**InMail Station Mailbox Options – Next Call Routing Mailbox**	1
47-02-15	**InMail Station Mailbox Options – Directory List Number**	0
47-02-25	**InMail Sation Mailbox Options – Security code option**	0
47-03-02	**InMail Group Mailbox Options – Mailbox Number**	not assigned
47-03-03	**InMail Group Mailbox Options – Mailbox Type**	1
47-06-01	**Group Mailbox Subscriber Options – Number of Messages**	20
47-06-02	**Group Mailbox Subscriber Options – Message Playback Order**	0
47-06-03	**Group Mailbox Subscriber Options – Auto Erase/Save of Messages**	1
47-06-04	**Group Mailbox Subscriber Options – Message Retention**	0
47-06-05	**Group Mailbox Subscriber Options – Recording Conversation Beep**	1
47-06-06	**Group Mailbox Subscriber Options – Message Waiting Lamp**	1

Program Number	Program Name	Default
47-06-07	Group Mailbox Subscriber Options – Auto Attendant Do Not Disturb	0
47-06-08	Group Mailbox Subscriber Options – Forced Unscreened Transfer	0
47-06-09	Group Mailbox Subscriber Options – Auto Time Stamp	0
47-06-10	Group Mailbox Subscriber Options – System Administrator	0
47-06-11	Group Mailbox Subscriber Options – Dialing Option	0
47-06-12	Group Mailbox Subscriber Options – Next Call Routing Mailbox	1 (Call Routing Mailbox 01) By default, Call Routing Mailbox numbers are 01 = 16.
47-06-13	Group Mailbox Subscriber Options – Directory List Number	0
47-06-23	Group Mailbox Subscriber Options – Security code option	0
47-07-02	InMail Routing Mailbox Options – Routing Mailbox Type	Mailboxes 01 ~ 08 = 1 (Call Routing) Mailboxes 09 ~ 32 = 2 (Announcement)
47-08-01	Call Routing Mailbox Options – Dial Action Table	1 (Dial Action Table 1)
47-08-02	Call Routing Mailbox Options – Screened Transfer Timeout	15 seconds
47-08-03	Call Routing Mailbox Options – Time Limit for Dialing Commands	5 seconds
47-08-04	Call Routing Mailbox Options – Fax Detection	0
47-09-01	Announcement Mailbox Options – Next Call Routing Mailbox	0
47-09-02	Announcement Mailbox Options – Repeat Count	0
47-09-03	Announcement Mailbox Options – Hang Up After	0
47-10-01	InMail Trunk Options – Answer Table Assignment	1
47-11-01	InMail Answer Table Options – Answer Schedule Override	0
47-11-02	InMail Answer Table Options – Override Mailbox Category	0
	Override Mailbox Number	No setting
47-11-03	InMail Answer Table Options – Default Mailbox Category	Answer Table 1 = 3 Answer Table 2 ~ 8 = 0
	InMail Answer Table Options – Default Mailbox Number	Answer Table 1 = 1 Answer Table 2 ~ 8 = No setting
47-11-04	InMail Answer Table Options – Next Answer Table	0
47-12-01	InMail Answer Schedules – Schedule Type	Answer Table 1/ Schedule 1 = 2 All other schedules = 0
47-12-02	InMail Answer Schedules – Answering Mailbox Category	Answer Table 1/ Schedule 1 = 3 All Other Schedules = 0
	Answering Mailbox Number	Answer Table 1/ Schedule 1 = 1 All Other Answer Schedules = No setting
47-12-03	InMail Answer Schedules – Day of the Week	Answer Table 1 ~ 8 = 1
47-12-04	InMail Answer Schedules – Start Day	Answer Table 1/ Schedule 1 = 2 All Other Schedules = 1
47-12-05	InMail Answer Schedules – End Day	Answer Table 1/ Schedule 1 = 6 All Other Answer Schedules = 1
47-12-06	InMail Answer Schedules – Date	Answer Table 1 ~ 8 = 0000
47-12-07	InMail Answer Schedules – Schedule Start Time	Answer Table 1/ Schedule 1 = 0830 (8 : 30AM) All other schedules are 0000.

Program Number	Program Name	Default
47-12-08	**InMail Answer Schedules – Schedule End Time**	Answer Table 1/ Schedule 1 = 1700 (5 : 00 PM) All Other Schedules = 0000
47-13-01	**InMail Dial Action Tables**	Refer to Programming Manual.
80-03-01	**DTMF Tone Receiver Setup – Detect Level**	Type 1~5 = 0
80-04-01	**Call Progress Tone Detector Setup – Detect Level**	Type 1 (DT) – 0 (-25dBm) Type 2 (BT) – 0 (-25dBm) Type 3 (RBT) – 0 (-25dBm) Type 4, Type 5 – 0

Operation

Calling Your Mailbox
To call your mailbox:

With a multiline terminal, your Voice Mail key flashes green and your Message Center keys flash red when they have messages waiting. If you do not have a Voice Mail key, your Message Waiting LED flashes instead.

Multiline Terminal

1. Press your **Voice Mail** key (Program 15-07 or SC 851 : 01 + ✱8).
   - OR -

   Your mailbox number is normally the same as your extension number. You may optionally dial a co-worker's mailbox - or use this procedure to call your mailbox from a co-worker's telephone.

   - OR -
   Press **Speaker** and dial ✱8.
2. If requested by Voice Mail, enter your security code.

   Ask your Voice Mail system administrator for your security code.

   Normally, your Message Waiting (MW) LED goes out (if applicable). If it continues to flash, you have unanswered Message Waiting requests or a new General Message. See "To check your messages" below.

Single Line Telephone

1. Lift the handset and dial ✱8..

   If you are at a co-worker's telephone, you can dial the Voice Mail master number and your mailbox number instead. You can also use this procedure from your own telephone to call a co-worker's mailbox.
2. If requested by Voice Mail, enter your security code.

Checking Messages

1. Press the **Voice Mail** key once.

   The voice mail is called.

   When there are new messages, the Message Waiting LED on the telephone flashes red.

   With this option set, the MSG key can be used as a Voice Mail key for any function [calling voice mail or transfer call a to voice mail (Hold + MSG + Extension Number), etc.].

Leaving A Message (multiline terminal Only)
To leave a message in the mailbox of an unanswered extension (the extension you call can be busy, in DND or unanswered):

1. Press the **Voice Mail** key (Program 15-07 or SC 851 : code 77 + InMail pilot).
   - OR -
   Dial ✱8.

   The Voice Mail System prompts you to leave a message.

Forwarding Calls to Your Mailbox
To activate or cancel Call Forwarding:

1. Press **Speaker** (or lift the handset at the single line telephone) and choose from the following dial access codes:
   848 = Call Forward – Immediate (Program 15-07 or SC 851 : code 10)
   #1 = Call Forward – Busy (Program 15-07 or SC 851 : code 11)
   845 = Call Forward – No Answer (Program 15-07 or SC 851 : code 12)
   844 = Call Forward – Busy/No Answer (Program 15-07 or SC 851 : code 13)
2. Dial the Voice Mail master number.
3. Press **Speaker** to hang up (or hang up handset at the single line telephone).

Transferring Calls to a Mailbox
To transfer your active call to a mailbox:

Multiline Terminal

1. Press **Hold**.
2. Press the **Voice Mail** key (Program 15-07 or SC 851 : code 77 + InMail pilot).
3. Dial the number of mailbox to receive the transfer.

   This number can be a mailbox number or a co-worker's mailbox number.

   - OR -
   Press the **DSS Console** or **One-Touch** key for extension user's mailbox, which receives the transfer.

   If the Transfer destination is an extension forwarded to Voice Mail, the call waits before routing the called user's mailbox. This gives you the option of retrieving the call instead of having it picked up by Voice Mail.
4. Hang up.

   Voice Mail prompts your caller to leave a message in the mailbox you selected.

- OR -

1. Dial extension number or press a DSS Console key for the extension mailbox which receives the transfer.
2. Press the **Voice Mail** key (Program 15-07 or SC 851 : code 77 + InMail pilot)
3. Hang up.

   Voice Mail prompts your caller to leave a message in the mailbox you selected.

Single Line Telephone

1. Hookflash.
   Dial Voice Mail master number followed by destination mailbox.

   If the Transfer destination is an extension forwarded to Voice Mail, the call waits before routing the called user's mailbox. This gives you the option of retrieving the call instead of having it picked up by Voice Mail.
2. Hang up.

Recording Your Call
To record your active call in your mailbox:

Multiline Terminal

1. Press the **Voice Mail Record** key (Program 15-07 or SC 851 : code 78)

You hear a beep and your Record key flashes. The system beeps periodically to remind you that you are recording.

To stop recording, press the Voice Mail Record key again. You can restart and stop recording as required.

- OR -

1. Press **Hold**.
2. Dial **754** .

The system automatically reconnects you to your call.

To stop recording, place the call on hold then pick the call back up. You can restart and stop recording as required.

Single Line Telephone

1. Hookflash.
2. Dial **754** .

The system automatically reconnects you to your call.

To stop recording, hookflash twice. You can restart and stop recording as required.

Personal Answering Machine Emulation (multiline terminal Only)

To enable or cancel Personal Answering Machine Emulation:

1. Press **Speaker** (or lift the handset at the single line telephone) and choose from the following dial access codes:
   848 = Call Forward – Immediate
   #1 = Call Forward – Busy
   845 = Call Forward – No Answer
   844 = Call Forward – Busy/No Answer
   842 = Call Forward – Both Ring
   846 = Call Forwarding – Follow Me
2. Dial the Voice Mail master number.
3. Press **Speaker** to hang up (or hang up handset at the single line telephone).

When Personal Answering Machine Emulation broadcasts your caller's message, you can:

Your telephone must be idle (not on a call).

1. Do nothing.

The message is automatically being recorded in your mailbox. The broadcast stops when your caller hangs up.

- OR -

1. Lift the handset to intercept the call.

You connect to the caller. The system records the first part of the message in your mailbox. The line key changes from red to green.

- OR -

Press **Speaker** to cut off the message broadcast and send the call to your mailbox.

Voice Mail records the entire message in your mailbox.

Directory Dialing

Recording a Directory Dialing message:

1. Log onto the System Administrator's mailbox: **SA** (72) or press **0** to play a Help message.
2. Select Instruction Menus: **I** (4).
3. Enter the Directory Dialing Mailbox number or press # to go back to the System Administrator Options.
4. Select one of the following options:
   L (5) = Listen to the current Directory Dialing Message (if any)
   # = Exit listen mode
   R (7) = Record a new Directory Dialing Message
   - ***** = *Pause or restart recording*
   - **E (3)**= Erase recording
   - **#** = *Exit recording mode*

   E (3)= Erase the Directory Dialing Message
   # = Go back to the System Administrator options

Using Directory Dialing:

1. After the Automated Attendant answers, wait for the Directory Dialing Message.
   The Automated Attendant may ask you to dial a digit for Directory Dialing.
2. Dial the letters that correspond to the name of the person you wish to reach + #.
   - The Directory Dialing Message tells you how many letters you need to dial, and whether you should enter the person's first name or last name.
   - To exit Directory Dialing without selecting a name, dial #.
3. The Automated Attendant announces the name matches, and tells you which digit to dial (1~3) to reach each of the announced names.
   - To hear additional name matches (if any), dial 6 instead.
4. After you make your selection, the Automated Attendant routes your call to the name you select.

Schedule the Answer Schedule

Type 1 (Day of the Week) Answer Schedule Options

Type 1 (Day of Week) Example

In this example, Answer Table 1 routes calls as follows:

- Schedule 1 uses Routing Mailbox 2 and runs Sunday from 8 : 30 AM to 5 : 00 PM.
- Schedule 2 uses Subscriber Mailbox 3 and runs Wednesday from 10 : 30 AM to 5 : 00 PM.
- Schedule 3 uses Routing Mailbox 4 and runs Tuesday from 9 : 00 AM to 10 : 00 AM.
- At all other times, routing is handled by the Default Mailbox specified in 47-11-03 : Default Mailbox Category and 47-11-03 : Default Mailbox Number.

When setting up Answer Tables with multiple types, build the Answer Schedules in the following order:

- Range of Days
- Day of Week
- Date

Type 1 (Day of Week) Example		
Answer Table 1	**Answer Schedule 1** Answer Schedule 1 is a Day of Week schedule that runs Sunday from 8 : 30 AM to 5 : 00 PM.	**47-12-01 : Entry01 Schedule Type** = 1
		47-12-02 : Entry01 MB Ctg = 3 **47-12-02 : Entry01 MB Num** = 2
		47-12-03 : Entry01 Day = 1
		47-12-04 : Entry01 Start Day = 1 (Entry does not matter)
		47-12-05 : Entry01 End Day = 1 (Entry does not matter)
		47-12-06 : Entry01 Date (MMDD) = 0000 (Entry does not matter)
		47-12-07 : Entry01 Start Time = 0830 (8 : 30 AM)
		47-12-08 : Entry01 End Time = 1700 (5 : 00 PM)
	Answer Schedule 2 Answer Schedule 2 is a Day of Week schedule that runs Wednesday from10 : 30 AM to 5 : 00 PM.	**47-12-01 : Entry01 Schedule Type** = 1
		47-12-02 : Entry01 MB Ctg = 1 **47-12-02 : Entry01 MB Num** = 3
		47-12-03 : Entry01 Day = 4
		47-12-04 : Entry01 Start Day = 1 (Entry does not matter)
		47-12-05 : Entry01 End Day = 1 (Entry does not matter)
		47-12-06 : Entry01 Date (MMDD) = 0000 (Entry does not matter)
		47-12-07 : Entry01 Start Time = 1030 (10 : 30AM)
		47-12-08 : Entry01 End Time = 1700 (5 : 00PM)
	Answer Schedule 3 Answer Schedule 3 is a Day of Week schedule that runs Tuesday from 9 : 00 AM to 10 : 00 AM.	**47-12-01 : Entry01 Schedule Type** = 1
		47-12-02 : Entry01 MB Ctg = 3 **47-12-02 : Entry01 MB num** = 4
		47-12-03 : Entry01 Day = 3
		47-12-04 : Entry01 Start Day = 1 (Entry does not matter)
		47-12-05 : Entry01 End Day = 1 (Entry does not matter)
		47-12-06 : Entry01 Date (MMDD) = 0000 (Entry does not matter)
		47-12-07 : Entry01 Start Time = 0900 (9 : 00 AM)
		47-12-08 : Entry01 End Time = 1000 (10 : 00 AM)

Type 2 (Range of Days) Answer Schedule Options

Type 2 (Range of Days) Example

In this example, Answer Table 1 routes calls as follows:

- Schedule 1 uses Routing Mailbox 1 and runs Sunday through Wednesday from 8 : 30 AM to 5 : 00 PM.
- Schedule 2 uses Routing Mailbox 2 and runs Thursday and Friday from 11 : 00 AM to 1 : 00 PM.
- At all other times, routing is handled by the Default Mailbox specified in 47-11-03 : Default Mailbox Category and 47-11-03 : Default Mailbox Number.

When setting up Answer Tables with multiple types, build the Answer Schedules in the following order:

- Range of Days
- Day of Week
- Date

Type 2 (Range of Days) Example		
Answer Table 1	**Answer Schedule 1** Answer Schedule 1 is a Range of Days schedule that starts schedule that runs Sunday through Wednesday from 8 : 30 AM to 5 : 00 PM.	**47-12-01 : Entry01 Schedule Type** = 2
		47-12-02 : Entry01 MB Ctg = 3 **47-12-02 : Entry01 MB Num** = 1
		47-12-03 : Entry01 Day = 1 (Entry does not matter)
		47-12-04 : Entry01 Start Day = 1 (Sunday)
		47-12-05 : Entry01 End Day = 4 (Wednesday)
		47-12-06 : Entry01 Date (MMDD) = 0000 (Entry does not matter)
		47-12-07 : Entry01 Start Time = 0830 (8 : 30 AM)
		47-12-08 : Entry01 End Time = 1700 (5 : 00 PM)
	Answer Schedule 2 Answer Schedule 2 is a Range of Days schedule that runs Thursday and Friday from 11 : 00 AM to 1 : 00 PM.	**47-12-01 : Entry01 Schedule Type** = 2
		47-12-02 : Entry01 MB Ctg = 3 **47-12-02 : Entry01 MB Num** = 2
		47-12-03 : Entry01 Day = 1 (Entry does not matter)
		47-12-04 : Entry01 Start Day = 4 (Wednesday)
		47-12-05 : Entry01 End Day = 5 (Thursday)
		47-12-06 : Entry01 Date (MMDD) = 0000 (Entry does not matter)
		47-12-07 : Entry01 Start Time = 1100 (11 : 00 AM)
		47-12-08 : Entry01 End Time = 1300 (1 : 00 PM)

Type 3 (Date) Answer Schedule Options

Type 3 (Date) Example

In this example, Answer Table 1 routes calls as follows:

- Schedule 1 uses Routing Mailbox 1 and runs every day from 8 : 30 AM to 5 : 00 PM.
- Schedule 2 uses Routing Mailbox 9 and runs only on Christmas day from 8 : 30 AM to 5 : 00 PM.
- At all other times, routing is handled by the Default Mailbox specified in 47-11-03 : Default Mailbox Category and 47-11-03 : Default Mailbox Number.

When setting up Answer Tables with multiple types, build the Answer Schedules in the following order:

- Range of Days
- Day of Week
- Date

Type 3 (Date) Example		
Answer Table 1	**Answer Schedule 1** Answer Schedule 1 is a Range of Days schedule that starts schedule that runs every day from 8 : 30 AM to 5 : 00 PM.	**47-12-01 : Entry01 Schedule Type** = 2
		47-12-02 : Entry01 MB Ctg = 3 **47-12-02 : Entry01 MB Num** = 1
		47-12-03 : Entry01 Day = 1 (Entry does not matter)
		47-12-04 : Entry01 Start Day = 1 (Sunday)
		47-12-05 : Entry01 End Day = 1 (Sunday)
		47-12-06 : Entry01 Date (MMDD) = 0000 (Entry does not matter)
		47-12-07 : Entry01 Start Time = 0830 (8 : 30 AM)
		47-12-08 : Entry01 End Time = 1700 (5 : 00 PM)
	Answer Schedule 2 Answer Schedule 2 is a Date schedule that runs only on Christmas day from 8 : 30 AM to 5 : 00 PM.	**47-12-01 : Entry01 Schedule Type** = 3
		47-12-02 : Entry01 MB Ctg = 3 **47-12-02 : Entry01 MB Num** = 9
		47-12-03 : Entry01 Day = 1 (Entry does not matter)
		47-12-04 : Entry01 Start Day = 1 (Entry does not matter)
		47-12-05 : Entry01 End Day = 1 (Entry does not matter)
		47-12-06 : Entry01 Date (MMDD) = 1225 (December 25, Christmas day)
		47-12-07 : Entry01 Start Time = 0830 (8 : 30 AM)
		47-12-08 : Entry01 End Time = 1700 (5 : 00 PM)

InMail-Automatic Access to VM by Caller ID

Description

An InMail mailbox can be associated with a specific caller ID (CID) number. When that CID number is presented to the InMail, it automatically logs the user into their mailbox. This greatly improves VM accessibility for outside callers.

Two types of voice mail access modes exist for this feature.

1. Specifying the VM Pilot number as a DID/DIL/DISA/VRS destination.
   - OR -
   Dialing the VM pilot number after calling in from a Mobile Extension.
2. Program to forward a call to VM (102) by any of following Programs.
   - Program 22-05-01 (Incoming Ring Group)
   - Program 22-11-05 (Transfer Target number -1)
   - Program 22-11-06 (Transfer Target number -2)
   - Program 25-03-01 (Incoming Ring Group No.)
   - Program 25-04-01 (VRS/DISA Transfer Ring Group at No answer/Busy)

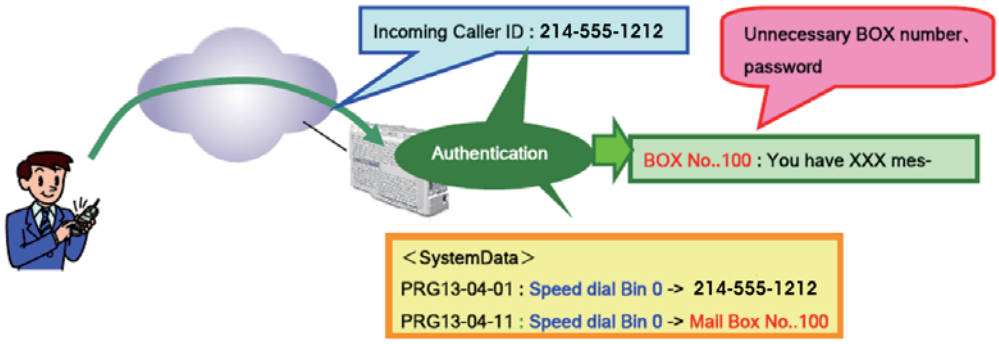


Figure 1-19 Example - User Access to Voice Mail

Conditions

- To use this feature, the voice mail box number must be set in Program 13-04-11. If not set, the system requires the normal log in procedure or entering a valid mailbox number and security code to login.
- This feature is only supported for external calls to the InMail.
- Mobile Extension users can use this feature by setting the VM box number in Program 13-04-11 which corresponds to the Speed Dial number registered in Program 15-22-01.
- Common Speed Dial area is used for this feature. Group or Station Speed Dial areas are not supported with this feature.
- When a number in the Common Speed Dial includes a trunk access code or end code (#), the Redial name indication will work if the number matches completely.
- If the same number is registered in the Common Speed Dial bin, the latest Speed Dial number is used.
- The Flexible ringing feature has priority over the InMail – Automatic Access to VM by Caller ID feature.
- To enable this feature, Program 14-01-22 (Caller ID to Voice Mail) must be set to 1.

Default Settings

Disabled

System Availability

Terminals

All Multiline Terminals

Trunks

The following Trunks support sending Caller ID:

- Analog Line
- ISDN Line (BRI)
- ISDN Line (PRI)
- SIP Line
- H.323 Line

Required Component(s)

CPU with PZ-VM21 daughter board, InMail CF and SL-VM-ADVANCE license.

Related Features

Speed Dial – System/Group/Station

Caller ID – Flexible Ringing

Mobile Extension

InMail

Guide to Feature Programming

Program Number	Program Name	Default
13-04-01	Speed Dialing Number and Name – Speed Dialing Data	not assigned
13-04-02	Speed Dialing Number and Name – Name	not assigned
13-04-11	Speed Dialing Number and Name – Automatic Access to Voice Mail by Caller ID	0
15-22-01	Mobile Extension Setup – Mobile Extension Target Setup	0
22-02-01	Incoming Call Trunk Setup	0
22-05-01	Incoming Trunk Ring Group Assignment	1
22-11-05	DID Translation Table Number Conversion – Transfer Destination Number 1	0
22-11-06	DID Translation Table Number Conversion – Transfer Destination Number 2	0
25-03-01	VRS/DISA Transfer Ring Group With Incorrect Dialing	0
25-04-01	VRS/DISA Transfer Ring Group With No Answer/Busy	0

Operation

Retrieve VM Messages

To retrieve VM messages from outside of office:

Trunk 1: 03-1234-5678 (DIL)

Outside party number: 09087654321

Program 22-02-01: Trunk 1 DIL

Program 22-07-01: VM Pilot number, 300

Program 13-04-01: Speed Dial area No.0 -> 09087654321

Program 13-04-11: Speed Dial area No.0 -> 100 (VM BOX)

1. Call DIL number.
2. After the VM is answered, user can enter VM Box 100 directly.
3. Announce the zone.

- OR -

Trunk 1: 03-1234-5678 (DID)

Outside party number: 09087654321

Program 22-02-01: Trunk 1 DID

Program 22-11-05: Set transfer destination, 102 InMail

Program 13-04-01: Speed Dial area No.0 -> 09087654321

Program 13-04-11: Speed Dial area No.0 -> 100 (VM BOX)

1. Call the DID number to set the transfer to InMail from outside party.
2. After the VM is answered, user can enter VM Box 100 directly.

To retrieve VM messages from Mobile extension:

Trunk 1: 03-1234-5678 (DIL)

Mobile extension number: 4321

Program 22-02-01: Trunk 1 DIL

Program 22-07-01: VM Pilot number, 300

Program 15-22-01: Mobile Extension Target Setup No.0 -> 4321

Program 13-04-11: Speed Dial area No.0 -> 100 (VM BOX)

1. Call DIL number.
2. After the VM is answered, user can enter VM Box 100 directly.

InMail-Cascade Message Notification

Description

If an extension user receives a new message in their mailbox, Cascading Message Notification will call them at up to five preset destinations to let them know a new voice mail message has arrived. A destination can be an outside number (such as a cell phone, pager, or home office) or a co-worker's extension.

The Cascading Message Notification destinations are set up in the Notification Schedule. Each of the five schedule entries can be individually enabled or disabled and provides options for:

- Type: Voice call or pager.
- Start Hour: The time the destinations become active.
- End Hour: The time the destinations become inactive.
- Number: The destination telephone, pager, or extension number.
- Busy Attempts: The number of times the system will try the destination when it is busy. The system cancels notification callouts for this entry when the Busy Attempts number is met.
- RNA Attempts: The number of times the system will try the destination when it is unanswered. The system cancels notification callouts for this entry when the RNA Attempts number is met.
- Security: Enables or disables the Security Code requirement for the notification destinations. For example, you may want to disable the Security Code when the destinations is your cell phone and it may be inconvenient to dial digits after answering the notification callout.

When the extension user enables Cascading Message Notification, the system will try each enabled destination that is active for the current time (i.e., in-schedule). The system will not try any destinations that are disabled or are not in-schedule. When the retries for a particular destination have been met the system will immediately move to the next destination.

Conditions

- Retry Interval timers are set on a system wide basis only.
- The pager dial string is set on a system wide basis only.
- Notification settings can be changed using the Telephone Mailbox Option Interface or system programming only.
- When the retries for a particular destination have been met the system will immediately move to the next destination even if there is only one destination active.
- Once the notification process begins, a new message does not restart the process if it is already in progress. Once the process ends (e.g., if the message is acknowledged or the maximum number of callout attempts is reached), the next new message will restart the process.
- The system determines which numbers are internal extensions or external numbers by the system dial plan settings.
- Depending on the system ARS routing maybe needed to properly route external calls.
- If no trunks are available when an outside destination is attempted it is counted as a Busy No Answer attempt.

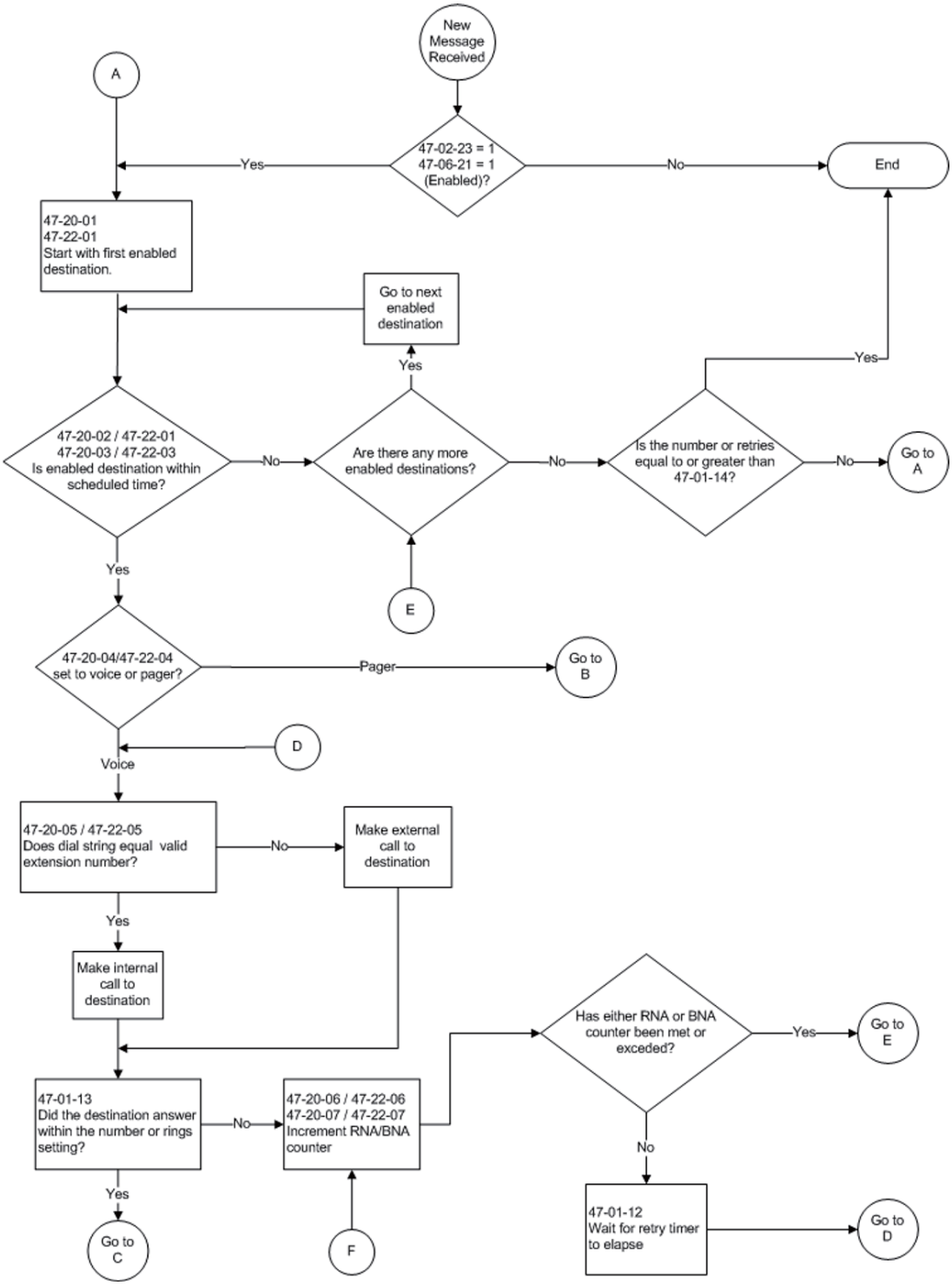


Figure 1-20 Cascade Message Notification Flow Chart-1

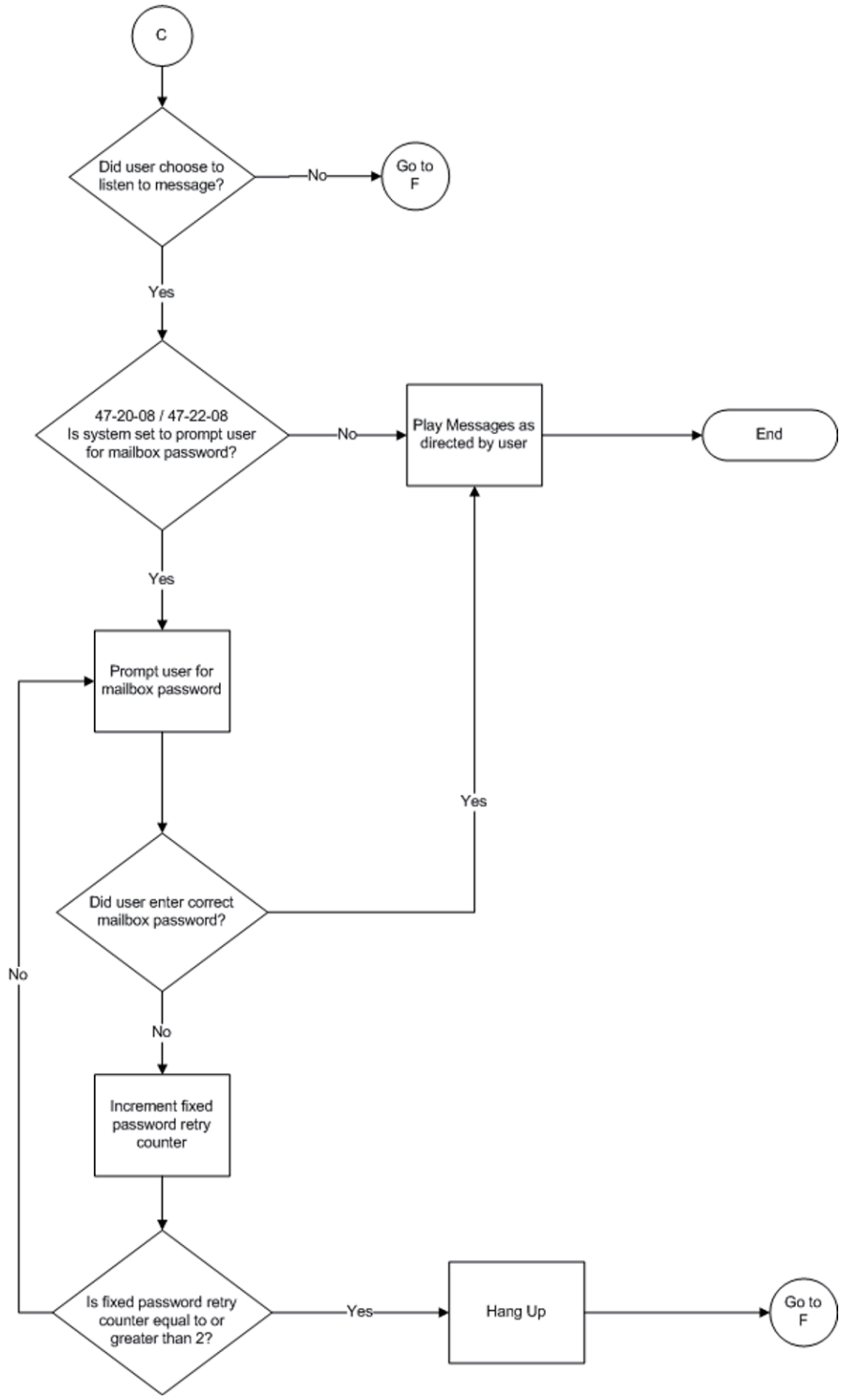


Figure 1-21 Cascade Message Notification Flow Chart-2

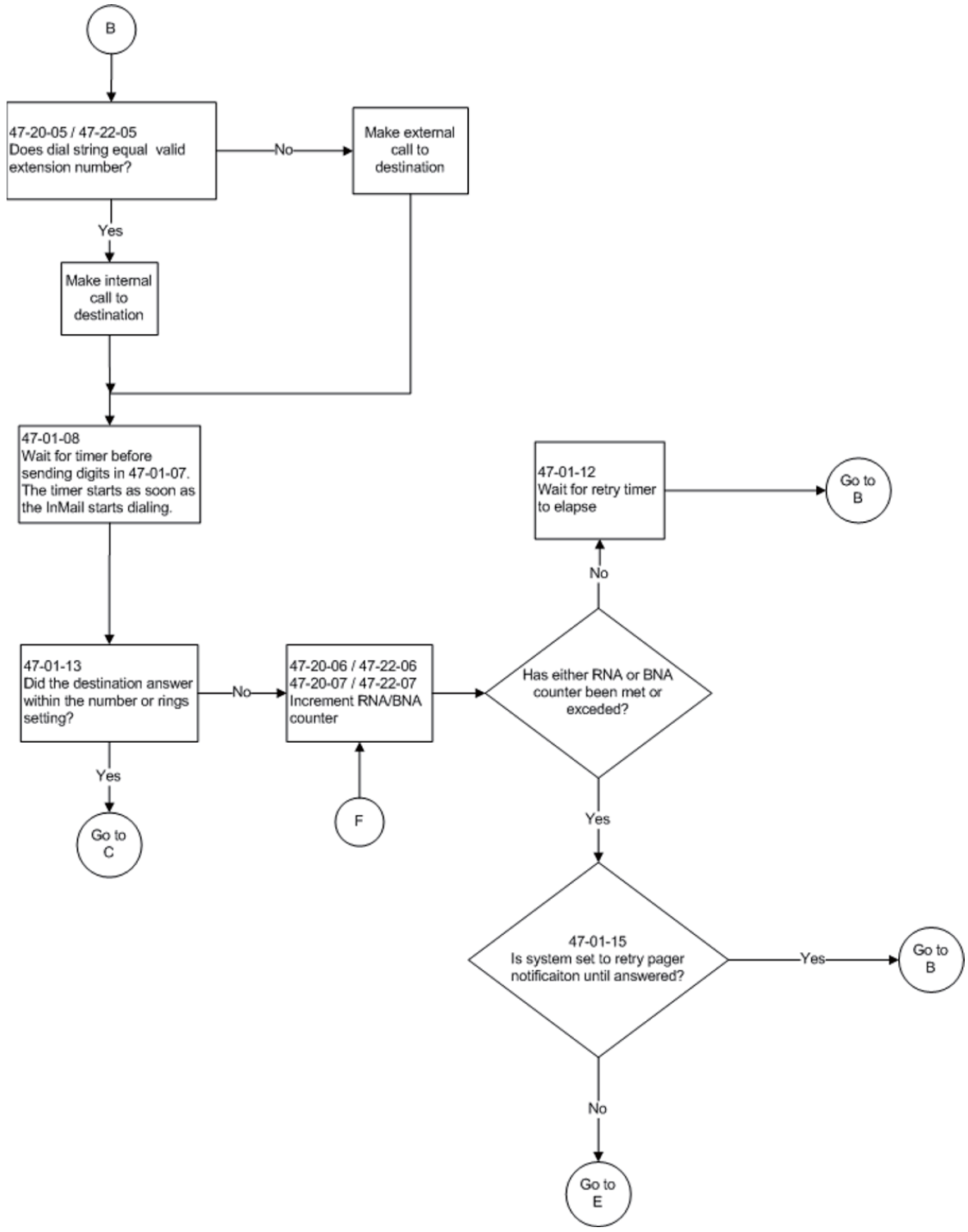


Figure 1-22 Cascade Message Notification Flow Chart-3

Message Notification to Normal Telephone Numbers

This is a basic overview of how Message Notification works to phone numbers assuming the retry attempts are at default. The system determines which numbers are internal extensions or external numbers by the system dial plan settings. Depending on the system, ARS routing maybe needed to properly route external calls.

1. The subscriber activates Message Notification for their mailbox.
2. When the subscriber receives a new message, the InMail dials the first active destination in the cascade that should receive the Message Notification.

- InMail waits up to 30 seconds (approximately five rings) for ringback, reorder, busy or voice activity from the called number. If nothing is detected, the callout is considered unanswered (RNA).

3. If the recipient answers, InMail plays the notification message ("Hello, I have a message for") and asks the recipient to dial 1 to log onto their mailbox. The recipient hears the notification message if:
   - They say "Hello" after answering the callout, or
   - The system receives answer supervision from the telco after the recipient answers the call. (Note that the recipient can skip the announcement by dialing 1 to log onto their mailbox after answering the callout – without saying "Hello".), or
   - The notification is to a system extension.
4. Once the recipient logs onto the mailbox, the notification is considered acknowledged and will not reoccur until the subscriber receives new messages.
5. If the recipient doesn't answer, the system follows the Cascading Message Notification retry attempt settings and notification will eventually stop if the call is not answered.
6. Once the notification process begins, a new message does not restart the process if it is already in progress. Once the process ends (e.g., if the message is acknowledged or the maximum number of callout attempts is reached), the next new message will restart the process.

Message Notification to Pager Numbers

This a basic overview of how Message Notification works to pager numbers assuming the retry attempts are at default. The system determines which numbers are internal extensions or external numbers by the system dial plan settings. Depending on the system, ARS routing maybe needed to properly route external calls.

1. The subscriber activates Message Notification for their mailbox.
2. When the subscriber receives a new message, InMail immediately dials the pager service.
   - InMail waits up to 30 seconds (approximately five rings) for ringback, reorder, busy or voice activity from the called number. If nothing is detected, the callout is considered unanswered.
3. After the pager service answers, InMail waits for the timer 47-01-08 then sends the dial string in 47-01-07 which causes the pager display to show the subscriber's mailbox number as well as the number of new messages in the mailbox.
   - The notification is considered acknowledged if the subscriber logs onto their mailbox.
   - If the notification is not acknowledged (within a programmable time frame, 47-01-12) the pager notification is repeated (up to the RNA attempts count, 47-20-07).
   - If the pager service doesn't answer, the system follows the Cascading Message Notification rules and notification will eventually stop if the call is not answered.

Default Settings

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

CPU with PZ-VM21 daughter board, InMail CF and SL-VM-ADVANCE license.

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
47-01-07	InMail System Options – Digital Pager Callback Number	X*M#
47-01-08	InMail System Options – Delay in Dialing Digital Pager Callback Number	30 seconds
47-01-09	InMail System Options – Wait Between Digital Pager Callout Attempts	15 minutes
47-01-11	InMail System Options – Wait Between Busy Non-Pager Callout Attempts	15 minutes
47-01-12	InMail System Options – Wait Between RNA Non-Pager Callout Attempts	30 minutes
47-01-13	InMail System Options – Wait for Answer Non-Pager Callout Attempts	5 rings
47-01-14	InMail System Options – Number of Callout Attempts	99 rings
47-02-23	InMail Station Mailbox Options – All Message Notification Enabled	1
47-06-21	Group Mailbox Subscriber Options – All Message Notification Enabled	1
47-20-01	Station Mailbox Message Notification – Notification	0
47-20-02	Station Mailbox Message Notification – Notification Begin Hour	00
47-20-03	Station Mailbox Message Notification – Notification End Hour	00
47-20-04	Station Mailbox Message Notification – Notification Type	1
47-20-05	Station Mailbox Message Notification – Notification Number	Refer to Programming Manual.
47-20-06	Station Mailbox Message Notification – Notification Busy Attempts	5
47-20-07	Station Mailbox Message Notification – Notification RNA Attempts	5
47-20-08	Station Mailbox Message Notification – Notification Security	1
47-22-01	Group Mailbox Notification Options – Notification	0
47-22-02	Group Mailbox Notification Options – Notification Begin Hour	00
47-22-03	Group Mailbox Notification Options – Notification End Hour	00
47-22-04	Group Mailbox Notification Options – Notification Type	1
47-22-05	Group Mailbox Notification Options – Notification Number	Refer to Programming Manual.
47-22-06	Group Mailbox Notification Options – Notification Busy Attempts	5
47-22-07	Group Mailbox Notification Options – Notification RNA Attempts	5
47-22-08	Group Mailbox Notification Options – Notification Security	1

Operation

To set up Cascade Notification:
Please listen to a voice announcement and follow the voice announcement.

InMail-Email Notification

Description

Email Notification automatically sends an email notification when a Subscriber Mailbox receives a new message. The email can optionally include the recorded message as a .wav file attachment. To hear the message, the email recipient double-clicks the .wav attachment to have the message play in their wav player (such as Windows Media Player).

Email Notification uses SMTP (Simple Mail Transfer Protocol) to deliver messages to the recipient's email account. If the message recipient has a mobile telephone service provider with an SMS (Short Message Service) portal, they can optionally choose to have text messages delivered right to their cell phone. In either case, Email Notification does not provide synchronization – the email account and the voice mailbox operate independently. For example, deleting the voice mail message does not automatically delete the email and visa-versa.

If Email Notification tries to deliver an email and it doesn't go through because of a connection problem (i.e., no connection or a dropped connection), it will retry every 15 minutes for 24 hours. If the email still can't go through, Email Notification cancels the delivery. Email deliveries that fail because authentication fails or the encryption mode is incorrect are immediately cancelled.

Collecting the Email Notification Data

In order for the installation site's InMail to send email notifications, it must have a valid SMTP email account assigned. To save time during programming, use the following table to help collect the system's email account information. The email account provider can supply this information. See Programming in this feature for more.

Table 1-20 InMail Email Account Information

Item	Description	System's Email Account Data
SMTP Email Account	The email account that will handle notifications sent from the InMail (*e.g., yourname@emailserver.com*).	
SMTP Server Name	The SMTP server (email provider) that will handle email for the SMTP email account. The SMTP server name is typically similar to *smtp.emailserver.com*.	
SMTP Port Number	The port the SMTP server uses for SMTP delivery.	
SMTP Encryption	Determines whether or not the SMTP server accepts plain text (unencrypted) or encrypted email (Yes or No).	
SMTP Authentication	Enter Yes if the *SMTP server requires the SMTP Email Account's* user name and password each time the system logs on. Otherwise, enter No.	
SMTP User Name	In the *SMTP Email Account*, this is normally the *your-name portion of yourname@emailserver.com*.	
SMTP Password	This is the password for the account specified in *SMTP Email Account* above.	
Email Reply To	If a notification recipient replies to a notification email, this is the address to which the reply is sent.	

Explanation of the Message Sender (From) Field

Like any other email client, Email Notification uses the From field to identify the person that left the message being delivered. In the email message, the data in the From field is formatted as *Name [Reply To]*, where:

- *Name* identifies the person that left the message.
- *Reply To*[3] is the email address used when the email recipient replies to the message.

This information is not provided in the recipient's inbox – just the actual email message.

For messages left by **Intercom** callers:

- *Name* is:
  - The extension name (if programmed).
    - *OR* -
  - The extension number (if there is no name programmed).
- *Reply To* [4] is:
  - The email address of the person that left the message (if programmed).
    - *OR* -
  - The *Reply To Email Address* data from Program 47-18-09.
    - *OR* -
  - The *Send From Email Address* data from Program 47-18-09.

For messages left by **Outside** callers:

- *Name* is always the text "Outside Caller".
- *Reply To* [4] is:
  - The *Reply To Email Address* data from Program 47-18-09.
    - *OR* -
  - The *Send From Email Address* data from Program 47-18-09.

SMS Text Message Delivery to a Cell Phone

The table below shows the basic format of a InMail email notification delivered to a cell phone as an SMS Text Message. The information is much the same as that delivered to an email account. There may be more than one text message for each notification, depending on the number of characters the provider allows in each text message (typically 120-160 characters). SMS will not send the wav file attachment, even if enabled in programming.

An extension set up for notification via SMS Text Messaging should have the Email Message as Attachment option disabled in system programming. Attempting to deliver a wav file attachment to an SMS messaging service may have undesirable results.

- SMS Text Message Notification
  The following shows a typical SMS Text Message when the InMail is set up to provide email notification only (no wav file of the actual message). In this case, the provider divided the message into two parts: one for the message header and one for the message body. This is only an example – your provider may handle similar content differently.

Table 1-21 Typical SMS Notification (No Wav File)

Description	Text
Text Message for Message Header	
Text Message Inbox:	InMail [2 OF 2]
Text Message Body: *1	MESSAGE FROM: InMail [2 OF 2] SENT: 3:51PM 9/17

*1. Your cell phone display will automatically break the text lines to best fit the screen.

Table 1-22 Typical SMS Notification (No Wav File) (Continued)

Description	Text
Text Message for Message Body	
Text Message Inbox:	SBJ:VOICE MESSAGE
Text Message Body: *1	MESSAGE FROM: XXXX SUBJ: VOICE MESSAGE FROM XXXX- (0M6S) VOICE MESSAGE ARRIVED ON MONDAY, SEPT 17@3:51 PMDURATION: 0M 6S ----------NEC [1 OF 2] SENT: 3:51PM 09/17

*1. Your cell phone display will automatically break the text lines to best fit the screen.

POP3 Login

InMail Email Notification supports POP3 Login. The logic of this method is that it allows a user to send e-mail from any location, as long as they can demonstrably also fetch their mail from the same place. Check with your email provider to see if this type of login is required.

Some Common SMTP Settings

Table 1-23 Common Email Notification SMTP Server Settings

Provider	Server Name and Account (1105-02, 08)	SMTP Port (1105-03)	Encryption (1105-04)	Authentication (1105-05, 06, 07)	Updated	Comments
Yahoo	smtp.mail.yahoo.com	465	Yes	Yes	6/28/07	Requires POP Yahoo! Mail Plus
GMail	smtp.gmail.com	465	Yes	Yes	6/28/09	
Optimum Online	mail.optonline.net	587	Yes	Yes	6/28/07	
AOL	smtp.aol.com	587	Yes	Yes	6/28/07	

Some Common SMS Portals

Table 1-24 Some Common Mobile Telephone Service Provider SMS Portals

Provider	Email Address for SMS Text Message
Some Popular Provider-Specific SMS Portals	
Alltel	yourcellphonenumber@message.alltel.com
AT&T Wireless	yourcellphonenumber@mobile.att.net OR yourcellphonenumber@mmode.net
Boost Mobile	yourcellphonenumber@myboostmobile.com
Cingular	yourcellphonenumber@mobile.mycingular.com OR yourcellphonenumber@cingularme.com
Nextel	yourcellphonenumber@messaging.nextel.com OR yourcellphonenumber@page.nextel.com
Sprint PCS	yourcellphonenumber@messaging.sprintpcs.com
T-Mobile	yourcellphonenumber@tmail.com OR yourcellphonenumber@tmomail.net
Verizon	yourcellphonenumber@vtext.com
Virgin Mobile	yourcellphonenumber@vmobl.com
A Universal SMS Portal	
Teleflip	yourcellphonenumber@teleflip.com
A More Complete SMS Portal Listing	
For a more complete SMS portal list, see http://www.livejournal.com/tools/textmessage.bml?mode=details.	

Conditions

- The E-MAIL notification feature is licensed on a per system basis.
- Refer to the InMail Feature Manual for more information about this feature.

Default Settings

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

CPU with PZ-VM21 daughter board, InMail CF and SL-VM-ADVANCE license.

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
47-02-20	InMail Station Mailbox Options – Enable E-mail Notification	0
47-02-21	InMail Station Mailbox Options – E-mail Address	No setting
47-02-22	InMail Station Mailbox Options – Include Message as Attachment	1
47-06-18	Group Mailbox Subscriber Options – Enable E-mail Notification	0
47-06-19	Group Mailbox Subscriber Options – E-mail Address	No setting
47-06-20	Group Mailbox Subscriber Options – Include Message as Attachment	1
47-18-01	InMail SMTP Setup – SMTP Enabled	0
47-18-02	InMail SMTP Setup – Server Name	No setting
47-18-03	InMail SMTP Setup – SMTP Port	25
47-18-04	InMail SMTP Setup – Encryption	0
47-18-05	InMail SMTP Setup – Authentication	0
47-18-06	InMail SMTP Setup – User Name	No setting
47-18-07	InMail SMTP Setup – Password	No setting
47-18-08	InMail SMTP Setup – E-mail Address	No setting
47-18-09	InMail SMTP Setup – Reply to Address	No setting
47-19-01	InMail POP3 Setup – Server Name	No setting
47-19-02	InMail POP3 Setup – POP3 Port	110
47-19-03	InMail POP3 Setup – S	0
47-19-04	InMail POP3 Setup – User Name	No setting
47-19-05	InMail POP3 Setup – Password	No setting
90-11-11	System Alarm Report – DNS Primary Address	0.0.0.0

Program Number	Program Name	Default
90-11-12	**System Alarm Report – DNS Secondary Address**	0.0.0.0

Operation

To Set up E-mail Notification:
Please listen to a voice announcement and follow the voice announcement.

Refer to the InMail Feature Manual for more information about this feature.

InMail-Find-Me Follow-Me

Description

Find-Me Follow-Me helps an outside caller locate an extension user who is not at their desk. If their call is unanswered and is picked up by voice mail, the caller has the option of dialing a digit to try up to three alternate Find-Me Follow-Me destinations. A destination can be an outside number (such as a cell phone or home office) or a co-worker's extension.

The Find-Me Follow-Me destinations are set up in the Find-Me Follow-Me schedule. Each of the three schedule entries can be individually enabled or disabled and provides options for Start Hour, End Hour, and destination number. If the caller chooses the Find-Me Follow-Me option, the system will try each enabled entry that is active for the current time (i.e., in-schedule). The system will not try any entries that are disabled or are not in-schedule.

When trying the destinations, Find-Me Follow-Me skips an active, in-schedule number that is busy, in DND, or is unanswered. When all active in-schedule destinations have been tried the caller can then choose to try Find-Me Follow-Me again or select another option.

You can set up Find-Me Follow-Me for an extension in system programming. In addition, an extension user can set up Find-Me Follow-Me from their Mailbox Options.

Conditions

- This feature requires SL-VM-ADVANCE license.
- Find-Me Follow-Me settings can be changed using the Telephone Mailbox Option Interface and system programming only.
- Find-Me Follow-Me can be used for standard subscriber mailboxes and Group Mailboxes set to subscriber in Program 47-03-03.
- Find-Me Follow-Me does not work for internal callers.
- Find-Me Follow-Me requires that Tandem Trunking be enabled on the line that rings into the Automated Attendant. If Tandem Trunking is not enabled, the Find-Me Follow-Me options are not available.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

CPU with PZ-VM21 daughter board, InMail CF and SL-VM-ADVANCE license.

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
14-01-13	Basic Trunk Data Setup – Trunk-to-Trunk Transfer	1
20-11-14	Class of Service Options (Hold/ Transfer Service) – Trunk-to-Trunk Transfer Restriction	COS 01~15 = 0
47-02-24	InMail Station Mailbox Options – All Find-Me Follow-Me Enabled	0
47-06-22	Group Mailbox Subscriber Options – All Find-Me Follow-Me Enabled	0
47-21-01	Station Mailbox Find-Me Follow- Me Options – Find-Me Follow-M	0
47-21-02	Station Mailbox Find-Me Follow-Me Options – Find-Me Follow-Me Begin Hour	00
47-21-03	Station Mailbox Find-Me Follow-Me Options – Find-Me Follow-Me End Hour	00
47-21-04	Station Mailbox Find-Me Follow-Me Options – Find-Me Follow-Me Number	Refer to Programming Manual.
47-23-01	Group Mailbox Find-Me Follow-Me Options – Find-Me Follow-Me	0
47-23-02	Group Mailbox Find-Me Follow-Me Options – Find-Me Follow-Me Begin Hour	00
47-23-03	Group Mailbox Find-Me Follow-Me Options – Find-Me Follow-Me End Hour	00
47-23-04	Group Mailbox Find-Me Follow-Me Options – Find-Me Follow-Me Number	Refer to Programming Manual.

Operation

To Set up Find-Me Follow-Me:
Please listen to a voice announcement and follow the voice announcement.

InMail - Language Setting

Description

The Language setting feature allows the telephone display language and the InMail mailbox language to be changed from the telephone. This can be used to change either the user's phone or another specified telephones display and InMail language if allowed in system programming.

Either a dial access code.

Conditions

- The telephone display language can be changed using dial access codes or softkeys only.
- The InMail language can be changed using dial access codes.
- The ability to change other extensions language options is allowed on a class of server basis in Program 20-13-53.
- The system will not allow an InMail language to be selected if that language prompt set has not been loaded onto the InMail CF. When an invalid language is selected an error tone is heard.

Supported Languages

- 01 (US English)
- 02 (UK English)
- 03 (Australian English)
- 04 (French Canadian)
- 05 (Dutch)
- 06 (Mexican Spanish)
- 07 (Latin America Spanish)
- 08 (Italian)
- 09 (German)
- 10 (Madrid Spanish)
- 11 (Norwegian)
- 12 (Parisian French)
- 13 (Brazilian Portuguese)
- 14 (Japanese)
- 15 (Mandarin Chinese)
- 16 (Korean)
- 17 (Iberian Portuguese)
- 18 (Greek)
- 19 (Danish)
- 20 (Swedish)
- 21 (Thai)
- 22 (Taiwan)
- 23 (Flemish)
- 24 (Turkish)

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

CPU with PZ-VM21 daughter board, InMail CF.

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
11-11-13	Service Code Setup (for Setup/ Entry Operation) – Display Language Selection for Multiline Terminal	778
11-11-68	Service Code Setup (for Setup/ Entry Operation) – IntraMail Language Selection for own Extension	764
11-11-69	Service Code Setup (for Setup/ Entry Operation) – IntraMail Language Selection for Specific Extension	765
20-13-53	Class of Service Options (Supplementary Service) – Language Selection for Specific Extension	0

Operation

To Language Setting Operation:
Please listen to a voice announcement and follow the voice announcement.

InMail Park and Page

Description

InMail Park and Page can automatically Park a call at an extension and Page the user with a recorded Paging Message announcing the parked call. The called extension user can then go to any telephone and implement Personal Park to pick up the call. With InMail Park and Page, InMail tries to locate the person instead of just sending the call to their mailbox. Additionally, there is no need for an operator or receptionist to manually answer the call, park it, and then try to track down the employee.

The Paging Message is usually recorded in the user's own voice and typically says something like, "Mike Smart, you have a call." If the Paging Message is not recorded for the extension, a built-in message announces the called party's name or extension number (if the name is not recorded).

InMail Park and Page is available for all trunk calls that are redirected to voice mail via forwarding or overflow, including transferred calls, Direct Inward Lines, and Direct Inward Dialing. Park and Page is also available for Automated Attendant Screened (STRF) and Unscreened (UTRF) Transfers. Optionally, an extension can have calls from the Automated Attendant immediately Park and Page without trying their extension first.

When InMail Park and Page intercepts the call, it normally offers the caller three options:

1. Dial **1** to leave a message in the called extension's mailbox.(The caller hears the mailbox Greeting, if recorded.)
2. Dial **2** to Park and Page.(The caller returns to these options if the Park is not picked up.)
3. Dial **3** for other options.(Normally, this routes to the extension's Next Call Routing Mailbox.)

InMail Park and Page is available at Personal and Group Subscriber Mailboxes, and can be enabled through system programming or via the subscriber's Mailbox Options Menu. InMail Park and Page is not applicable to Intercom calls.

Automated Attendant Direct to Voice Mail (DVM)

When an extension has Automated Attendant Direct to Voice Mail (DVM) enabled, all calls from the Automated Attendant go directly to the subscriber's mailbox. The extension does not ring for Automated Attendant calls. The caller hears the mailbox greeting and can leave a message, but unlike Park and Page is not normally offered any other routing options. A subscriber typically turns on DVM when they need to work at their desk undisturbed by outside calls from the Automated Attendant.

DVM can be enabled by the installer from system programming or by the extension user from their Mailbox Options Menu.

Keep in mind that DVM does not block Intercom calls from co-workers or any other outside call not routed through the Automated Attendant. For example, with DVM enabled, Direct Inward Lines and transferred outside calls to an extension work normally.

Conditions

- The Park and Page feature uses the extensions personal park location only.
- Enabling Automated Attendant Direct to Voice Mail (DVM) for a mailbox bypasses the Park and Page feature.
- The Park and Page feature uses the All Zone paging only; this cannot be changed or configured.

Default Settings

Park and Page and Automated Attendant Direct to Voice Mail are disabled.

For transferred outside calls, direct inward lines and direct inward dialing refer to Table 1-25 Park and Page Call Handling on the next page.

Table 1-25 Park and Page Call Handling

Park and Page (Call Handling) For Transferred Outside Calls, Direct Inward Line and Direct Inward Dialing			
47-02-14: Next Call Routing Mailbox	**47-02-13: Dialing Option**	**47-02-17: Enable Park and Page**	**Result**
Undefined	0 (No)	0 (No)	If unanswered, caller hears greeting and can leave a message.
Undefined	0 (No)	1 (Yes)	If unanswered, caller can dial **1** to leave a message or **2** to Park and Page.
Undefined	1 (Yes)	0 (No)	If unanswered, caller hears greeting and can leave a message.
Undefined	1 (Yes)	1 (Yes)	If unanswered, caller can dial **1** to leave a message or **2** to Park and Page.
Defined	0 (No)	0 (No)	If unanswered, caller hears greeting and can leave a message.
Defined	0 (No)	1 (Yes)	If unanswered, caller can dial **1** to leave a message, **2** to Park and Page, and **3** for other options (from the Next Call Routing Mailbox.
Defined	1 (Yes)	0 (No)	If unanswered, caller hears greeting, can leave a message, and dial options (from the Next Call Routing Mailbox).
Defined	1 (Yes)	1 (Yes)	If unanswered, caller can dial **1** to leave a message, **2** to Park and Page, and **3** for other options (from the Next Call Routing Mailbox.

For automated attendant unscreened (UTRF) and screened (STRF) transfers refer to Table 1-26 Park and Page Call Handling on this page.

Table 1-26 Park and Page Call Handling

Park and Page (Call Handling) For Automated Attendant Unscreened (UTRF) and Screened (STRF) Transfers			
47-02-17: Enable Park and Page	47-02-18: Paging Option	47-02-09: Auto Att Direct to VM	Result
0 (No)	0 (RNA)	0 (No)	If unanswered, caller hears greeting and can leave a message.*1
0 (No)	0 (RNA)	1 (Yes)	Caller immediately hears greeting and can leave a message.
0 (No)	1 (IMM)	0 (No)	If unanswered, caller hears greeting and can leave a message. *1
0 (No)	1 (IMM)	1 (Yes)	Caller immediately hears greeting and can leave a message.
1 (Yes)	0 (RNA)	0 (No)	STRF: If unanswered, caller hears greeting and can leave a message. *1 UTRF: If unanswered, caller can dial 1 to leave a message or 2 to Park and Page. *2
1 (Yes)	0 (RNA)	1 (Yes)	Caller immediately hears greeting and can leave a message.
1 (Yes)	1 (IMM)	0 (No)	Park and Page occurs immediately.
1 (Yes)	1 (IMM)	1 (Yes)	Caller immediately hears greeting and can leave a message.

*1. For a Screened Transfer (STRF) with a Next Call Routing Mailbox assigned, caller can dial 1 to leave a message or 2 for other options.

*2. For an Unscreened Transfer (UTRF) with a Next Call Routing Mailbox assigned, caller can dial 1 to leave a message, 2 to Park and Page, and 3 for other options.

System Availability

Terminals

All Terminals

Required Component(s)

CPU with PZ-VM21 daughter board, InMail CF and SL-VM-ADVANCE license.

Related Features

Park

Paging, Internal

Guide to Feature Programming

Setting Up Park and Page for Extension:

Program Number	Program Name	Default
47-02-09	InMail Station Mailbox Options – Auto Attendant Direct to Voice Mail	0
47-02-14	InMail Station Mailbox Options – Next Call Routing Mailbox	1
47-02-17	InMail Station Mailbox Options – Enable Paging	0
47-02-18	InMail Station Mailbox Options – Paging Option	0

Setting Up Park and Page for a Group Mailbox:

Program Number	Program Name	Default
47-06-07	Group Mailbox Subscriber Options – Auto Attendant Do Not Disturb	0
47-06-12	Group Mailbox Subscriber Options – Next Call Routing Mailbox	1 (Call Routing Mailbox 01) By default, Call Routing Mailbox numbers are 01 = 16.
47-06-15	Group Mailbox Subscriber Options – Enable Paging	0
47-06-16	Group Mailbox Subscriber Options – Paging Option	0

Operation

Please listen to a voice announcement and follow the voice announcement.

InMail Upload Download Audio

Description

The InMail Upload Download Audio feature allows the upload of mailbox greetings up to 1MB in size, recorded on a PC or professionally, to any valid subscriber mailbox in the system. It also allows users to listen to, download and/or delete voice mail messages from callers. Access to the InMail compact flash drive is via the HTML User Pro (WebPro).

Audio Prompt Format

In order for uploaded greetings to properly play on the InMail they must be in the proper format. Audio files not recorded in the proper format may not playback on the InMail. The proper format is:

Bit Rate	64kbps
Sampling Size	8 bits
Channel	1 (Mono)
Sampling Rate	8 KHz
Audio Format	CCiTT A-law

User Pro Access Options

There are two different User Pro logins available to make changes. To login, open an Internet browser and enter the IP of the CPU LAN port in the address line. At default, the IP address is 192.168.0.10.

User Admin Mode (UA Mode): This mode allows the user admin to access any telephone and mailbox in the system. This mode must be used to change VRS and Routing Mailbox greetings. At default the login ID is USER1 and the password is **1111**.

User Mode (UB Mode): This mode allows a user to access only their own telephone and mailbox when logged in. They will not be able to change any other telephone, mailbox, VRS or Routing Mailbox. At default the login ID is the “Extension Number” and the password is **1111**.

The following details the page layout diagram of the two different User Pro login IDs:

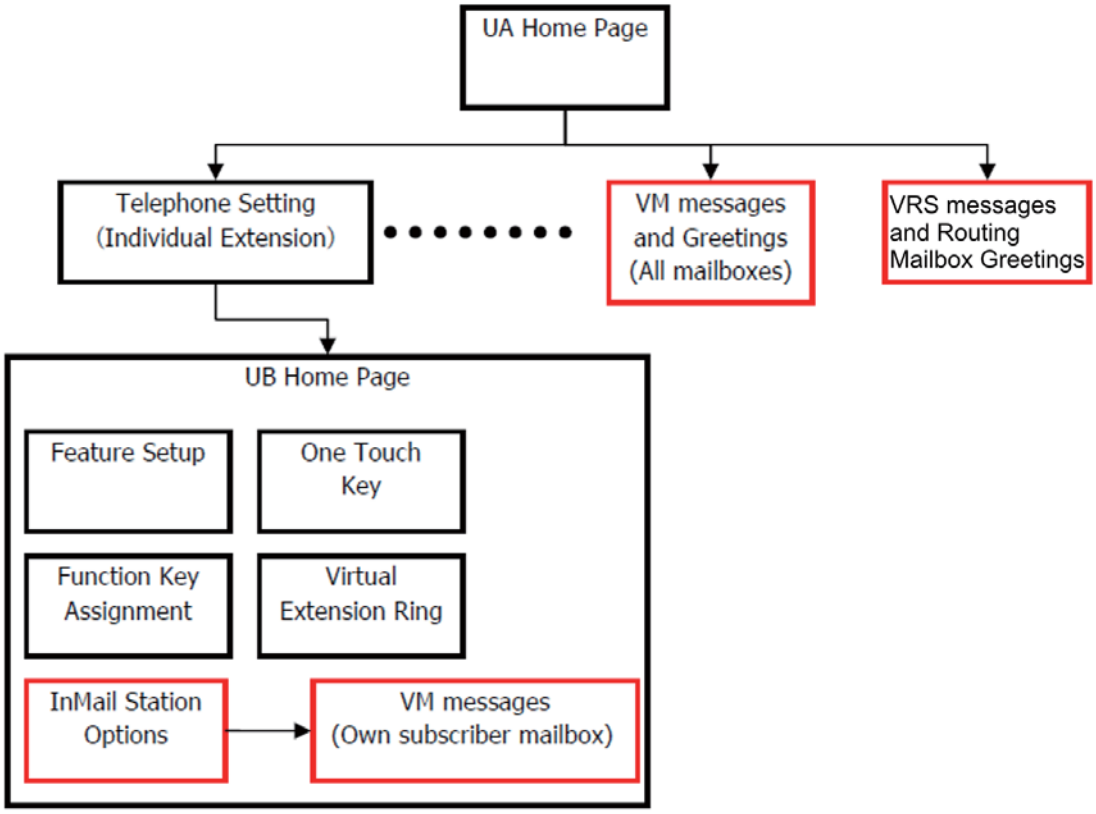


Figure 1-23 InMail User Pro Login Diagram

Message Name Format

Downloaded messages are automatically assigned a name by the system. This name includes the mailbox number the message was left in, type of message, the message number and the date and time to the second the message was left. The table below shows how to interpret the message name to determine this information.

Table 1-27 Default Incoming Ringing Tone

File Name Format	BTNNN_YYYYMMDD_HHMMSS.wav (maximum 32 characters)
B	Mailbox number (maximum eight digits) or VRS for the VRS message
T	Message Type + : Greeting or VRS message – : Recorded message
NNN	Message number (three digits)
YYYY	Year
MM	Month (1~12)
DD	Date (1~31)
HH	Hour (00~23)
MM	Minute (00~59)
SS	Second (0 ~59)

Conditions

- VRS and InMail messages are recorded in an ADPCM format which may not be easily opened on the support PC.
- It is not possible to upload/download/delete multiple files simultaneously.
- The mailbox will be inaccessible from the telephone under these conditions:
  - Mailbox XXX will not be accessible when opening the telephone setup screen of extension XXX by UA or UB mode in User Pro.
  - Mailbox XXX will not be accessible when selecting the extension XXX on the file upload/ download screen of UA mode User Pro.
  - Mailbox XXX will be inaccessible when logging in the UB mode User Pro for extension XXX.
- While uploading an audio file via User Pro the greeting is not accessible by telephone.
- When downloading/deleting an audio file via User Pro, the file is not accessible by another User Pro session or from the telephone.
- This feature is only supported using a LAN connection.
- When uploading an audio file the extension will be checked whether it is WAV or not. However, the format of the uploaded file will not be checked. If the uploaded file is not in the proper format it may not playback properly.
- When a mailbox has a new message and the message is deleted using the User Pro interface, the MWI of the mailbox will NOT be cancelled.
- The largest allowed upload file size is approximately 1MB. Files larger than this cannot be uploaded.
- There is no size limitation when downloading audio files.
- User Pro does not check the uploaded file for correct naming format (i.e., BTNNN_YYYYMMDD_HHMMSS.wav). The file name will be automatically changed when the file is written in the CF.
- The actual file name of the messages is not displayed in User Pro. The message number, modified date and file size are displayed instead. If there is no message file, "-" will be displayed and the download/delete icon will not be displayed.
- The User Pro message page does not refresh automatically, to see new messages the page must be refreshed. For instance, if a new message is received via regular operation on the system while a user is viewing the upload/download screen, the new message is not shown until the page is re-loaded by clicking the  icon.
- At default, Microsoft Windows will automatically open and play the downloaded WAV. To make **Open** or **Save** selectable, the following settings are required:
  - Windows XP
    1. Select **Control Panel** then **Folder Options**.
    2. Click on the **Files** tab.
    3. Select the **WAV** extension from the list, then click **Advanced**.
    4. Check **Confirm to open the file after download**, then click **OK**.
    5. Close the folder option by clicking **OK** again.
  - Windows Vista: It is not possible to change the save to folder option. The downloaded file is automatically opened for playback.

Default Settings

None

System Availability

Terminals

All Terminals

Required Component(s)

CPU with PZ-VM21 daughter board, InMail CF and SL-VM-ADVANCE license.

Related Features

InMail

Voice Response System (VRS) Upload Download Audio

Guide to Feature Programming

Program Number	Program Name	Default
90-02-01	**Programming Password Setup – User Name**	Refer to Programming Manual.
90-02-02	**Programming Password Setup – Password**	Refer to Programming Manual.
90-02-03	**Programming Password Setup – User Level**	Refer to Programming Manual.

Troubleshooting

The table below shows possible Error messages and Causes:

Table 1-28 Error Messages and Causes

Error Message	Cause
VMDB is not attached	The PZ-VM21 is not attached.
Mailbox XXX does not exist. (XXX = mailbox number)	The mailbox does not exist
The mailbox is being used by another session	When the mailbox is being used by another session, either PC or telephone.
There is no available space in the CF.	When there is no available space in the CF.
The file is being used by another session. Please try again later.	When the file to be downloaded is being used by another session, either PC or telephone.
The selected file has already been deleted.	When the file selected for download has already been deleted.
The file is being used by another session. Please try again later.	When the file selected for deletion is being used by another session.
The selected file has already been deleted.	When the file selected for deletion has already been deleted.
Cannot upload the file since the original file is being used by another session. Please try again later.	When the file to be replaced is being used when trying to upload the replacement.

Operation

Listening to Voice Mail Messages using User Admin Mode (UA)

All messages stored on the InMail can be accessed via the Mailbox User Mode for playback or deletion.

1. To login, open an Internet browser and enter the IP of the CPU LAN port in the address line. At default, the IP address is 192.168.0.10.
2. At the login screen enter username = USER1 and password = 1111.
3. You will then see the main menu, click on the InMail Audio Up/Download icon.
4. Choose the extension number to be changed and make sure Audio Data is set to Incoming Messages.

   The message numbers correspond to the same message number when accessed via the telephone. Message 1 is the first message, message 2 is the second message, etc.

5. To delete a message, click on the red X to the right of the appropriate message.
6. To listen to a message:
   - Click on the download icon to the right of the message you want to hear.
   - Depending on browser settings, a security prompt may appear.
   - Click on the menu and choose to allow the file to download.
   - Depending on Windows configuration, you may be prompted again to either Open or Save the message. To listen, click Open and the default WAV file player will play the message. To save the message, click on the Save icon and browse to the location where the message will be saved on a local PC.

Listening to Voice Mail Messages using Mailbox User Mode (UB)

1. To login, open an Internet browser and enter the IP of the CPU LAN port in the address line. At default, the IP address is 192.168.0.10.
2. At the login screen enter username = Extension Number and password = 1111.
3. You will then see the main menu, click on the InMail Audio Up/Download icon.

   The message numbers correspond to the same message number when accessed via the telephone. Message 1 is the first message, message 2 is the second message, etc.

4. To delete a message, click on the red X to the right of the appropriate message.
5. To listen to a message:
   - Click on the download icon to the right of the message you want to hear.
   - Depending on browser settings, a security prompt may appear.
   - Click on the menu and choose to allow the file to download.
   - Depending on Windows configuration, you may be prompted again to either Open or Save the message. To listen, click Open and the default WAV file player will play the message. To save the message, click on the Save icon and browse to the location where the message will be saved on a local PC.

Changing Mailbox Greetings using User Admin Mode (UA)

Audio files up to 1MB may be uploaded to the InMail for any mailbox greeting. In order for uploaded greetings to play on the InMail they must be in the proper format. Audio files not recorded in the proper format may not playback on the Inmail. The proper format is:

Bit Rate	64 kbps
Sampling Size	8 bits
Channel	1 (Mono)
Sampling Rate	8 KHz
Audio Format	CCiTT A-law

1. To login, open an Internet browser and enter the IP of the CPU LAN port in the address line. At default, the IP address is 192.168.0.10.
2. At the login screen enter username = USER1 and password = 1111.
3. You will then see the main menu, click on the InMail Audio Up/Download icon.
4. Choose the extension number to be changed and make sure Audio Data is set to Incoming Messages.

The greeting numbers correspond to the same greeting number when accessed via the telephone. Greeting 1 is GR1, greeting 2 is GR2 and greeting 3 is GR3. Greeting 7 is the paging greeting used with the park and page feature.

5. To delete a greeting, click on the red X to the right of the appropriate greeting.
6. To upload a greeting:
   - Under Message No, enter the greeting number to be replaced on the voice mail.
   - Browse to find the location where the greeting file is stored.
   - Click on the upload icon to the right of the selected file name.
   - Depending on file size and LAN speed, it may take several minutes to upload the greeting.
   - The uploaded greeting will appear in the assigned location.

Changing Mailbox Greetings using Mailbox User Mode (UB)

Audio files up to 1MB may be uploaded to the InMail for any mailbox greeting. In order for uploaded greetings to play on the InMail they must be in the proper format. Audio files not recorded in the proper format may not playback on the Inmail. The proper format is:

Bit Rate	64 kbps
Sampling Size	8 bits
Channel	1 (Mono)
Sampling Rate	8 KHz
Audio Format	CCiTT A-law

1. To login, open an Internet browser and enter the IP of the CPU LAN port in the address line. At default, the IP address is 192.168.0.10.
2. At the login screen enter username = Extension Number and password = 1111.
3. You will then see the main menu, click on the InMail Audio Up/Download icon.

The greeting numbers correspond to the same greeting number when accessed via the telephone. Greeting 1 is GR1, greeting 2 is GR2 and greeting 3 is GR3. Greeting 7 is the paging greeting used with the park and page feature.

4. To delete a greeting, click on the red X to the right of the appropriate greeting.
   - Under Message No, enter the greeting number to be replaced on the voice mail.
   - Browse to find the location where the greeting file is stored.
   - Click on the upload icon to the right of the selected file name.
   - Depending on file size and LAN speed, it may take several minutes to upload the greeting.
   - The uploaded greeting will appear in the assigned location.

Intercom

Description

Intercom gives extension users access to other extensions. This provides the system with complete internal calling ability.

Handsfree Answerback/Forced Intercom Ringing

Handsfree Answerback permits an extension user to respond to a voice-announced Intercom call by speaking toward the telephone, without lifting the handset. Like Handsfree, this is a convenience for workers who do not have a free hand to pick up the handset. Refer to Handsfree Answerback/Forced Intercom Ringing on page 1-232 feature for more information.

Busy Status Display

When a display multiline terminal user places an Intercom call to a busy extension, the details of the busy status (who is talking to the extension or which line is in use by the extension) can be displayed. The details of the trunk busy status (the extension using the line) can be displayed after trying to access the trunk. This feature provides a user information which can determine whether they should use the Barge-In feature for the extension or trunk. This information automatically displays for a multi-line terminal once programmed.

Conditions

- Intercom calls can ring or be voice-announced at the called extension.
- Intercom Abandoned Call Display remembers the last five Intercom calls to an extension.
- Ringing Line Preference can automatically answer ringing Intercom or trunk calls when the user lifts the handset.
- An extension can have a name assigned that identifies the extension to callers.
- Dialing **9** or any other trunk access code after dialing a busy extension results in termination of the Intercom call and a trunk is seized.
- In order for a station to retrieve a held ICM call, the station must have an ICM key assigned in 15-07 (*00).

Default Settings

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Handsfree Answerback/Forced Intercom Ringing

Intercom

Line Preference

Name Storing

Guide to Feature Programming

Program Number	Program Name	Default
11-11-13	**Service Code Setup (for Setup/Entry Operation) - Display Language Selection for Multiline Terminal**	778
15-02-01	**Multiline Telephone Basic Data Setup - Display Language Selection**	1
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-08-01	**Class of Service Options (Outgoing Call Service) - Intercom Calls**	COS 01~15 = 1
20-08-11	**Class of Service Options (Outgoing Call Service) - Protect for the Call Mode Switching from Caller**	COS 01~15 = 0
20-11-07	**Class of Service Options (Hold/Transfer Service) - Transfer Without Holding**	COS 01~15 = 0
20-13-22	**Class of Service Options (Supplementary Service) - Busy Status Display (Called Party Status)**	COS 01~15 = 0
20-17-01	**Operator Extension - Operator's Extension Number**	200
20-18-01	**Service Tone Timers - Extension Dial Tone Time**	120 (seconds)
21-01-02	**System Options for Outgoing Calls - Intercom Interdigit Time**	10 (seconds)
82-01-01 (01)	**Incoming Ring Tone - Frequency 1**	Refer to Programming Manual.
82-01-02	**Incoming Ring Tone - Frequency 2**	
82-01-03	**Incoming Ring Tone - Modulation**	2

Handsfree Answerback/Forced Intercom Ringing:

Program Number	Program Name	Default
20-02-12	**System Options for Multiline Telephones - Forced Intercom Ring (ICM Call Type)**	1
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-08-10	**Class of Service Options (Outgoing Call Service) - Signal/Voice Call**	COS 01~15 = 1
20-09-05	**Class of Service Options (Incoming Call Service) - Signal/Voice Call**	COS 01~15 = 1
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	COS 01~15 = 0
80-01-01 (28)	**Service Tone Setup - Tone 28 (Speaker Monitor Tone)**	Refer to Service tones (Service Tone #28).
80-01-02	**Service Tone Setup - Basic Tone Number**	Refer to Programming Manual.

Program Number	Program Name	Default
82-01-01	**Incoming Ring Tone - Frequency 1**	Refer to Table 1-29 Incoming Ringing Tone on this page

Table 1-29 Incoming Ringing Tone

Incoming Ring Tone Number	Tone Type	Frequency 1	Frequency 2	Modulation
Pattern 1 (Trunk Incoming)	High Mid Low	1100 660 520	1400 760 660	16Hz Modulation 16Hz Modulation 16Hz Modulation
Pattern 2 (Trunk Incoming)	High Mid Low	1100 660 520	1400 760 660	8Hz Modulation 8Hz Modulation 8Hz Modulation
Pattern 3 (Trunk Incoming)	High Mid Low	2000 1400 1100	760 660 540	16Hz Modulation 16Hz Modulation 16Hz Modulation
Pattern 4 (Trunk Incoming)	High Mid Low	2000 1400 1100	760 660 540	8Hz Modulation 8Hz Modulation 8Hz Modulation
Intercom Incoming Pattern	High Mid Low	1100 660 520	1400 760 660	8Hz Modulation 8Hz Modulation 8Hz Modulation
Alarm Sensor Pattern	High Mid Low	760 760 760	760 760 760	No Charge No Charge No Charge

Operation

To place an Intercom call:

1. At multiline terminal, press **Speaker**.
   - OR -
   At single line telephone, lift the handset.
2. Dial extension number (or **0** for your operator).

Your call may voice-announce or ring the called extension. Dial 1 to change the way your call alerts the called extension.

If the extension you call is busy or does not answer, you can dial another extension without hanging up.

To answer an Intercom call:

1. If you hear two beeps, speak toward telephone.

Your telephone picks up your voice.

- OR -
If your telephone rings, lift the handset.

To check the extension data (multiline terminal only):

1. Press the **Help** key.
2. Dial the extension number.

You display shows your telephone extension number, port number and extension/Department Group.

*You can also check any other extension numbers information by pressing **Help** + the extension number.*

3. Press **Exit** to return the normal time/date display.

To change how Intercom calls ring the extension:

1. Press **Speaker** or lift the handset.
2. Dial **823** to have calls ring your extension.
   - OR -
3. Dial **821** to have calls voice announce to your extension.

ISDN Compatibility

Description

ISDN-BRI

Integrated Service Digital Network - Basic Rate Interface (ISDN-BRI) is a Public Switched Telephone Network (PSTN) service that provides two B channels and a D channel (2B + D) for voice call trunking. The B channels provide two voice path connections. Caller ID is usually a standard feature on ISDN-BRI provided trunks. Caller ID indication displays the calling party telephone number on the LCD of the Multiline Terminal for CO incoming calls. This interface provides voice communication path only.

ISDN-PRI

ISDN-PRI (Integrated Service Digital Network - Primary Rate Interface) is a Public Switched Telephone Network (PSTN) service that provides 30 B channels and 2 D channel2 (30B+2D) for trunking. Caller ID indication displays the calling party telephone number on the LCD of the Multiline Terminal for CO incoming calls. This interface provides voice communication path only.

ISDN - BRI/PRI Features

- DID Line Service
  When configured for DID Line Service, the trunks emulate Loop Start or Ground Start trunks for outgoing calls and DID trunks for incoming calls.
- Calling Line Identification Presentation (CLIP)
  Program 10-03-05: ETU Configuration - CLIP Information Announcement, will allow the Calling Party Number IE in the Setup Message for a call when placed out an ISDN Trunk.
- Calling Party Number (CPN) Presentation from Station
  Calling Party Number (CPN) Presentation from Station allows each unique station or virtual extension 10-digit number (representing the DID number of the originating station) to be sent out over the ISDN Network, if it is programmed. If there is no Extension Calling Number assigned, the system will send the calling number for the ISDN trunk. If both the extension and trunk information is programmed, the extension information is sent as it takes priority.
- Calling Party Name:
  If programmed, Calling Party Name allows the station name to be sent out over the ISDN network. A system wide name can be programmed to be sent over the network or the name can be defined on a per station basis. If both are programmed, the system wide name takes priority over the station name.
- SMDR Includes Dialed Number
  The SMDR report can optionally print the trunk name (entered in system programming) or the number the incoming caller dialed (i.e., the dialed ISDN digits). This gives you the option of analyzing the SMDR report based on the number your callers dial. (This option also applies to a DID trunk as well.)
- Display Shows Why Caller ID is Not Available
  With Caller ID enabled, the system provides information for ISDN calls that do not contain the Caller ID information. If the Caller ID information is restricted, the telephone display shows UNAVAILABLE INFO . If the system is not able to provide Caller ID information because the Telco information is not available, then the display shows OUT-OF-STATE .

Conditions

- Primary Rate Interface (PRI):
  The system is compatible with ISDN Primary Rate Interface (PRI) services. PRI services currently supported include:
  - Basic PRI Call Control (BCC)
  - Display of incoming caller's name and number when allowed by Telco
  - Routing in the system based on the number the caller dialed
  - ISDN maintenance functions (such as In Service/Out of Service Messaging)
  - Speech and 3.1 KHz audio

  PRI capability requires the installation of 1PRIU-C1. Each PRI circuit provides 32 PRI channels (30B

+ 2D) . The T1/PRI Interface uses a single slot. When installed, the T1/PRI Interface uses the first block of 32 consecutive trunks.

- When using fractional PRI, the unit comes up as zero ports until program 10-03-06 is set to the 4/8/12/16/20/24(auto), and then reset.
- If fractional PRI has the number of ports changed, the Trunk Port number might change if they become split or fit into an empty gap of trunk ports.
- If using a CSU/DSU, Program 10-03-13 must be set to 0. If not using a CSU/DSU, Program 10-03-13 must be set to 1~7 or anything other than 0.
- Restrictions for Calling Party Name:
  The SL1000 supports receiving the name from the Network in supported formats only and cannot send the Calling Name. Refer to Table 1-30 Restrictions for Calling Party Names on this page.

Table 1-30 Restrictions for Calling Party Names

Protocols	Name Delivery Formats
NI-2	Facility Information Elements
4ESS (AT&T Custom)	Not Supported
AT&T5ESS Lucent Custom	Facility Information Element
DMS-100 (Custom) *	Display Information Element *
DMS-100 (National; ISDN) **	Facility Information Element **

* Nortel Specification NIX-A211-1
** Nortel Specification NIS-A233-1

- CO Line Service is not supported.
  ISDN - PRI cannot be configured for CO Emulation
- B-Channel to Trunk Association
  When an Incoming ISDN-BRI/PRI call is received, the system assigns the lowest trunk number of the ISDN circuit to the incoming call associated with the B-Channel. When an Outgoing call is placed using the ISDN-PRI/BRI, the system assigns the Trunk and B-Channel association according to the chart below. This is based on the Trunk-to-Trunk Group and Trunk Group Priority assignment in (Program 14-05-01).

Refer to the charts below for examples(23B):

Incoming Call

Station User → Talking on TK009

Trunk Number	B-Channel Number
9	1
10	2
11	3
12	4
13	5
14	6
15	7
16	8
17	9
18	10
19	11
20	12
21	13
22	14
...31	...23

← Incoming call from the Network on Channel 23. In most cases, the Network will control/select the B-Channel used for an incoming call.

Outgoing Call

Station user places outgoing trunk all by dialing Trunk Access code. Outgoing call is placed on the associated B-Channel. →

Trunk Number	Trunk Group	Trunk Priority	B-Channel Number
9	1	9	1
10	1	8	2
11	1	7	3
12	1	6	4
13	1	5	5
14	1	4	6
15	1	3	7
16	1	2	8
17	1	1	9
18	2	3	10
19	2	2	11
20	2	1	12
21	3	1	13
22	3	10	14
…31	3	...1	…23

In addition to T1/PRI interface ETUs, PRI also requires a CSU/DSU Unit and interconnecting cables to interface with the Telco.

- Basic Rate Interface (BRI)
  Caller ID Name to Single Line Telephone is NOT supported for ISDN (BRT) Trunks.
  The system is compatible with ISDN Basic Rate Interface (BRI) services. BRI services currently supported include:
  - Basic BRI Call Control (BCC)
  - Point-to-Point BRI Terminal Connection (no daisy-chaining)
  - Multipoint BRI Terminal Connection (daisy-chaining)

BRI services require the installation of 2BRIDB-C1. Each 2BRIDB-C1 has two BRI circuits. The 2BRIDB-C1 mounted to the 008E-A1/000E-A1 unit.
For each BRI line, two different Terminal Endpoint Unidentified (TEIs) are assigned to two different Service Profile Identifiers (SPIDs).
The two different SPIDs for each BRI line, are related to different trunk logical port numbers. One BRI provides two trunk logical ports when it is connected to a CO line. Each SPID is assigned to a different TEI. This relationship is made in the initialization of the BRI line when it is connected to the CO. This relationship between SPID and TEIs are created as follows.
LOGICAL-PORT-NUMBER + 0 = SPID-1
LOGICAL-PORT-NUMBER + 1 = SPID-2
When using the SMDR reports for BRI, all incoming BRI calls are displayed under the CLASS column as IVIN.

- Automatic Data Link Failure Recovery
  If a data link error is detected by the BRI ETU, the system tries to recover the data link and send the SPID to the central office. To provide this enhancement, the BRI ETU must be able to indicate to the system when a data link error has occurred.
  In addition to the BRI Interface ETU, BRI Services require the installation of NT1 Network Terminators and interconnecting cabling.
- CO Line Service is not supported
  ISDN-BRI cannot be configured for CO Emulation
- BRI and DID Callers with Non-Matching SPID Numbers
  This feature allows you to determine whether the system checks the called party number with the SETUP message and the SPID setup. Depending on the system programming, this can allow DID calls to be received on BRI trunks and direct them according to the DID Translation Table (Program 22-11).
- Special Conditions Related to Ordering DID Service For ISDN-BRI
  Telcos may refer to this in different ways. The reference Verizon uses to order such service is Additional Directory Numbers with no new terminating equipment (only a dialable number). When you want Additional Directory Numbers to hunt when a B-Channel is busy, the service may be called Busy Diversion.
- Calling Party Number (CPN) presentation from station is available for virtual extensions.
- The trunk setting (Program 20-19-09) for sending the caller name on outgoing ISDN calls takes priority over the same setting for the station (Program15-01-01).
- When programmed, Calling Party Name will be sent on calls that originate from a station (MLT, SLT, or IP Multiline) or an incoming trunk (Analog or ISDN).
- Calling Party Name supports up to 12 ASCII characters.
- When a call originates from a virtual extension, the Calling Party Name for the virtual extension is sent. It does not follow the setting in Program 15-18-02.
- Calling Party Name is dependant upon the carrier. The network carrier must allow the SL1000 to edit the Calling Party Name information.
- SL1000 does not support ISDN sub-addressing.

Default Settings

None

System Availability

Terminals

Not Applicable

Required Component(s)

To provide ISDN-PRI trunk connection:

- 1PRIU-C1

To provide ISDN-BRI trunk connection:

- 2BRIDB-C1

- NT-1 for each BRI (locally provided)

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Forced Trunk Disconnect

Station Message Detail Recording

Transfer

Guide to Feature Programming

ISDN - BRI Installation

Program Number	Program Name	Default
10-03-01	ETU Setup (BRIA PKG) - ISDN Line Mode	1
10-03-03	ETU Setup (BRIA PKG Setup) - Connection Type	0
10-03-04	ETU Setup (BRIA PKG Setup) - Layer 3 Timer Type	1
10-03-08	ETU Setup (BRIA PKG Setup) - Dial Sending Mode	1
10-03-09	ETU Setup (BRIA PKG Setup) - Dial Information Element	1
21-12-01	ISDN Calling Party Number Setup for Trunks - Calling Party Number Data	All trunks = No setting

ISDN - PRI Installation

Program Number	Program Name	Default
10-03-04	ETU Setup (PRTA PKG Setup) - Layer 3 Timer Type	1
10-03-06	ETU Setup (PRTA PKG Setup) - Length of Cable	2
10-03-08	ETU Setup (PRTA PKG Setup) - Dial Sending Mode	1
10-03-09	ETU Setup (PRTA PKG Setup) - Dial Information Element	1
10-03-18	ETU Setup (PRTA PKG Setup) - Type of Number	0
10-03-19	ETU Setup (PRTA PKG Setup) - Numbering Plan Identification	0
10-03-20	ETU Setup (PRTA PKG Setup) - Network Exchange Selection	0
10-03-21	ETU Setup (PRTA PKG Setup) - PRI Number of Ports	0
10-39-01	Fractional Setup	0
14-05-01	Trunk Group - Trunk Group Number	Trunk Port 1~126 = Priority 1~126
21-01-03	System Options for Outgoing Calls - Trunk Interdigit Time (External)	10 (seconds)

Program Number	Program Name	Default
21-12-01	ISDN Calling Party Number Setup for Trunks - Calling Party Number Data	All trunks = No setting

DID Services for either ISDN - BRI or PRI

Program Number	Program Name	Default
22-02-01	Incoming Call Trunk Setup	0
22-09-01	DID Basic Data Setup - Expected Number of Digits	2
22-11-01	DID Translation Number Conversion - Received Number	No setting
22-11-02	Translation Number Conversion - Target Number	No setting

Calling Party Number Presentation for either ISDN - BRI or PRI

Program Number	Program Name	Default
10-03-05	ETU Setup (PRTA PKG Setup) - CLIP Information Announcement	1
15-01-04	Basic Extension Data Setup - ISDN Caller ID	1
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-08-13	Class of Service Options (Outgoing Call Service) - ISDN CLIP	COS 01~15 = 1
21-12-01	ISDN Calling Party Number Setup for Trunks	All trunks = No setting
21-13-01	ISDN Calling Party Number Setup for Extensions	not assigned

ISDN - PRI Network Specific Assignment

Program Number	Program Name	Default
26-02-07	Dial Analysis Table for ARS/LCR - Network Specified Parameter Table	0
26-12-01	Network Specified Parameter Table for ARS - Type of Number	0
26-12-02	Network Specified Parameter Table for ARS - Numbering Plan Identification	0
44-05-11	ARS/F-Route Table - Network Specified Parameter Table	0

SMDR Dialed Digits for either ISDN - BRI or PRI

Program Number	Program Name	Default
35-02-15	SMDR Output Options - CLI/DID Number Switching	0
35-02-16	SMDR Output Options - Trunk Name or Received Dialed Number	0

General ISDN Programs

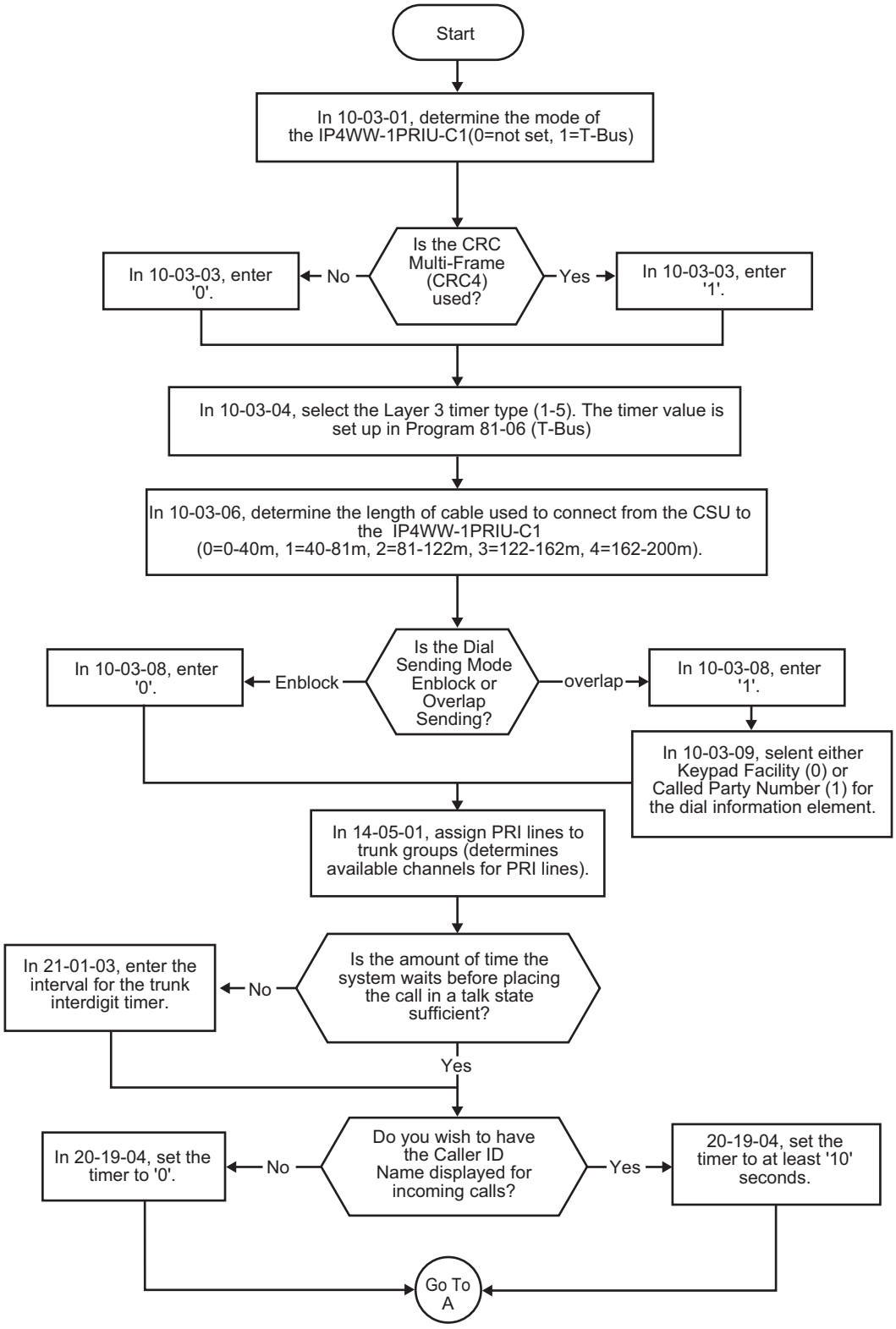
Program Number	Program Name	Default
14-01-13	Basic Trunk Data Setup - Trunk-to-Trunk Transfer	0

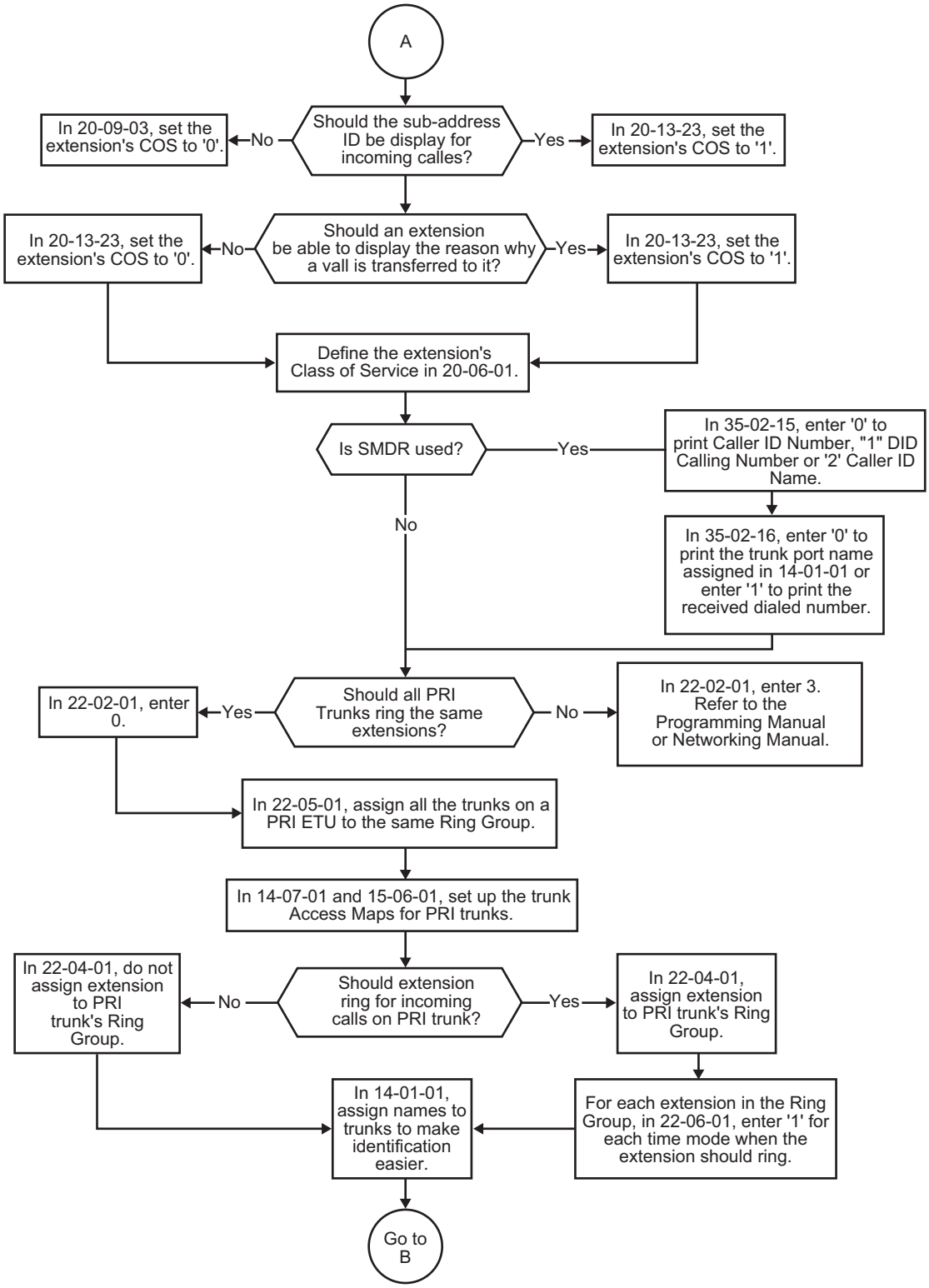
Program Number	Program Name	Default
15-02-29	**Multiline Telephone Basic Data Setup - PB Back Tone Level**	32 (0dB)
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-09-02	**Class of Service Options (Incoming Call Service) - Caller ID Display**	COS 01~15 = 1
20-09-03	**Class of Service Options (Incoming Call Service) - Sub Address Identification**	COS 01~15 = 0
20-11-11	**Class of Service Options (Hold/Transfer Service) - Auto On-Hook Transfer**	COS 01~15 = 1
20-11-14	**Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer Restriction** 0 = Off	COS 01~15 = 0
20-11-21	**Class of Service Options (Hold/Transfer Service) - Restriction for Tandem Trunking on Hang Up**	COS 01~15 = 0
20-13-23	**Class of Service Options (Supplementary Service) - Display the Reason for Transfer**	COS 01~15 = 0
20-19-04	**System Options for Caller ID - Wait Facility IE Timer**	10 (seconds)
20-25-14	**ISDN Options - No response Release Send**	0

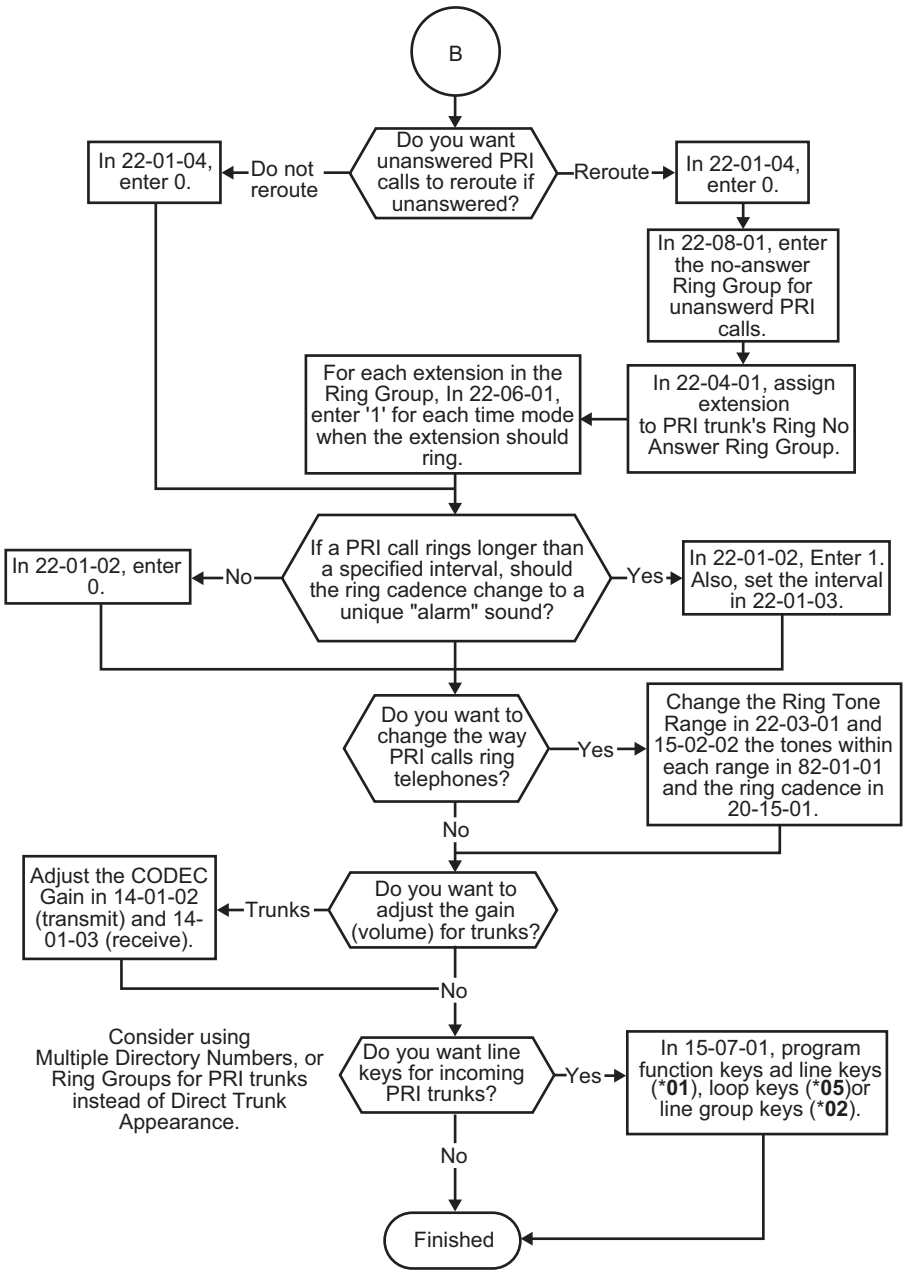
Operation

None

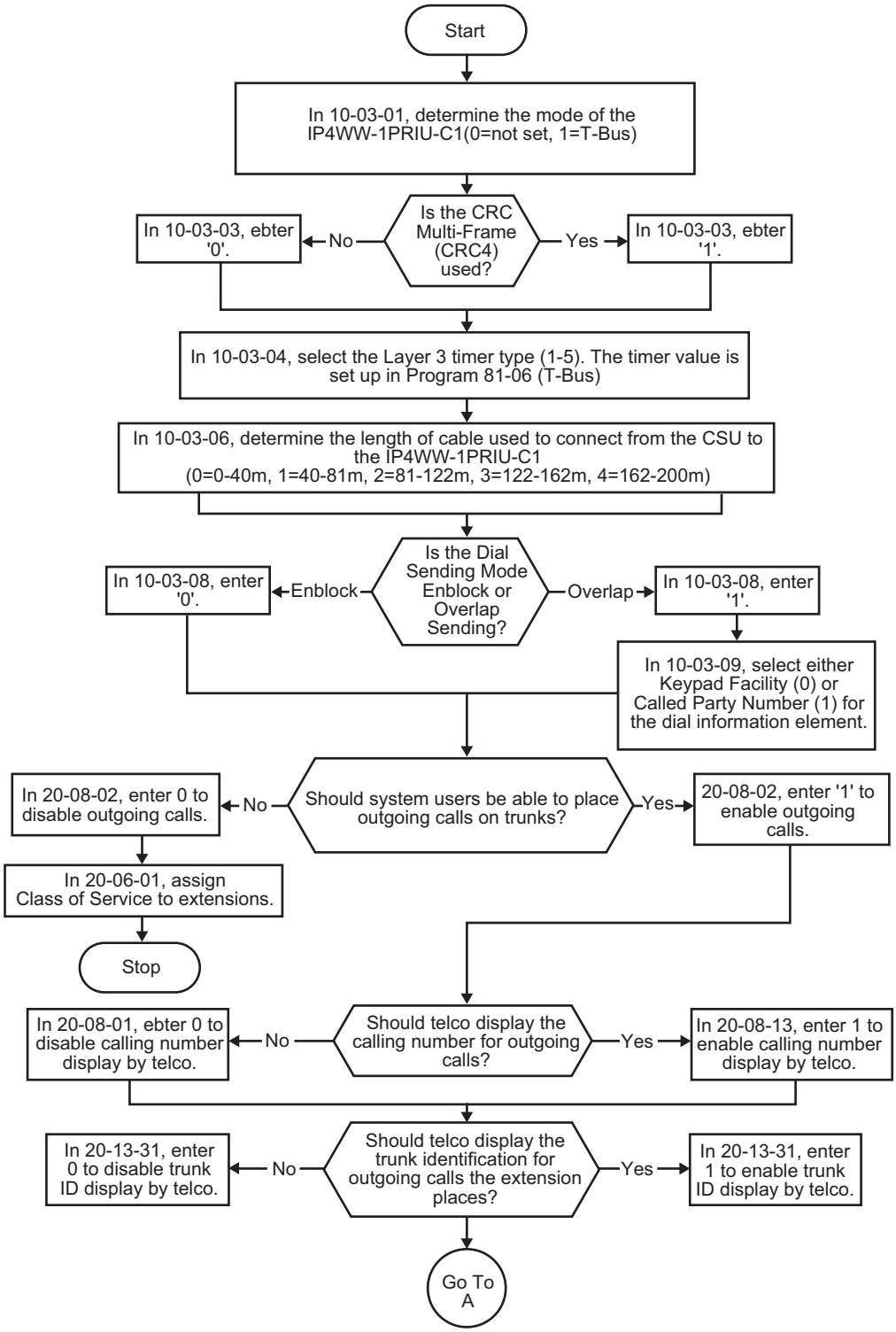
Programming Flowchart for ISDN-PRI - Answering Calls

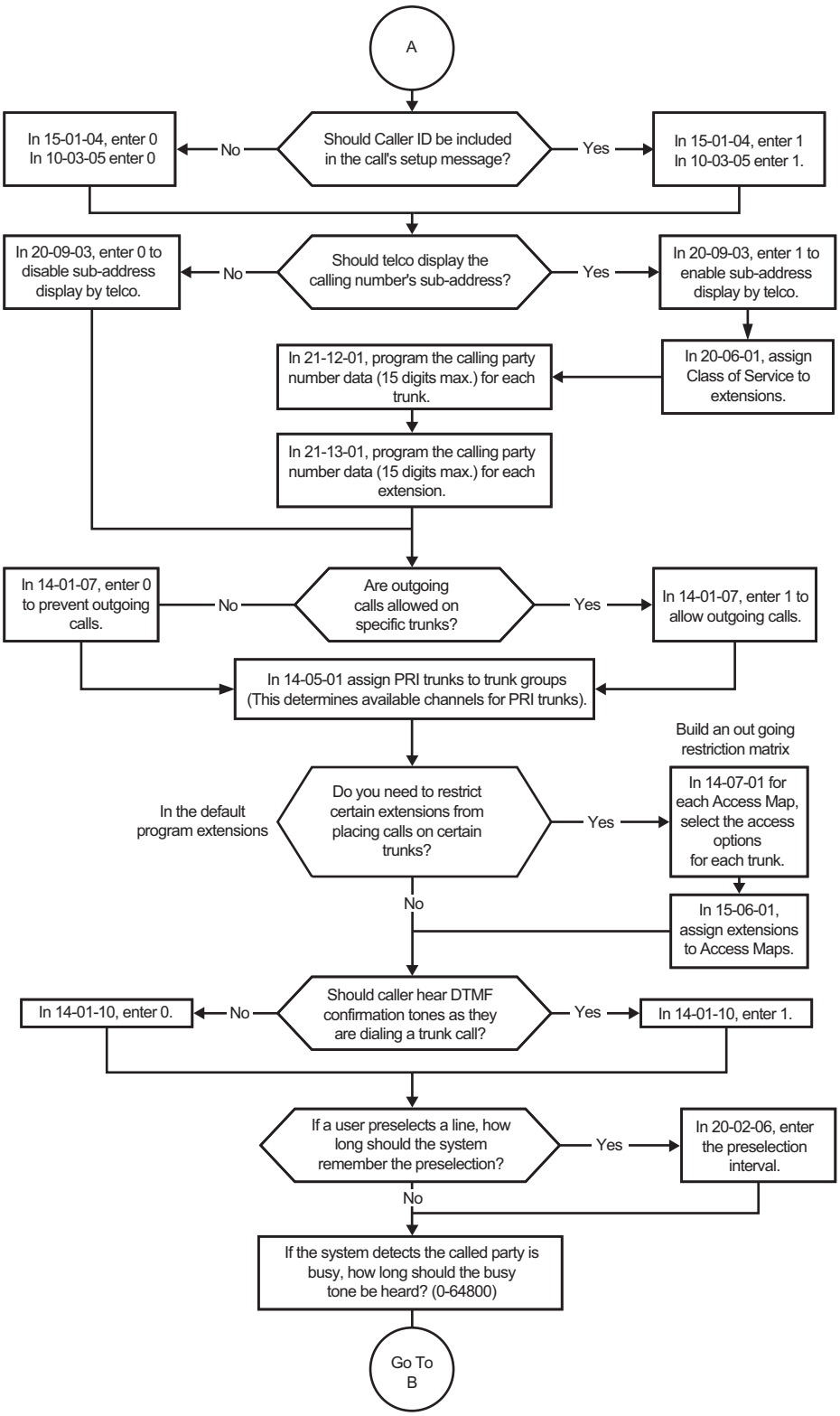


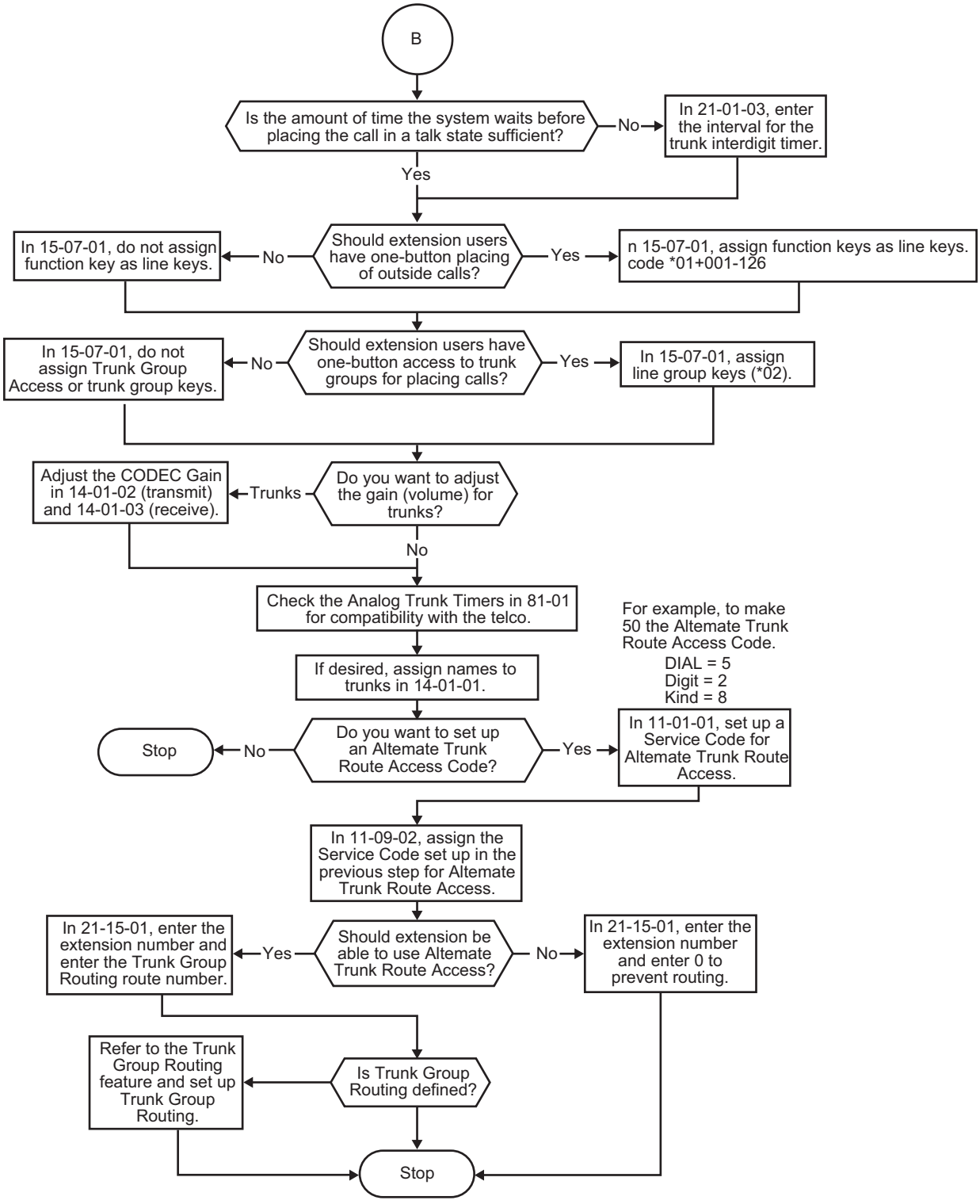

A
Should the sub-address ID be display for incoming calles?
No
In 20-09-03, set the extension's COS to '0'.
Yes
In 20-13-23, set the extension's COS to '1'.
Should an extension be able to display the reason why a vall is transferred to it?
No
In 20-13-23, set the extension's COS to '0'.
Yes
In 20-13-23, set the extension's COS to '1'.
Define the extension's Class of Service in 20-06-01.
Is SMDR used?
Yes
In 35-02-15, enter '0' to print Caller ID Number, "1" DID Calling Number or '2' Caller ID Name.
In 35-02-16, enter '0' to print the trunk port name assigned in 14-01-01 or enter '1' to print the received dialed number.
No
Should all PRI Trunks ring the same extensions?
Yes
In 22-02-01, enter 0.
No
In 22-02-01, enter 3. Refer to the Programming Manual or Networking Manual.
In 22-05-01, assign all the trunks on a PRI ETU to the same Ring Group.
In 14-07-01 and 15-06-01, set up the trunk Access Maps for PRI trunks.
Should extension ring for incoming calls on PRI trunk?
No
In 22-04-01, do not assign extension to PRI trunk's Ring Group.
Yes
In 22-04-01, assign extension to PRI trunk's Ring Group.
For each extension in the Ring Group, in 22-06-01, enter '1' for each time mode when the extension should ring.
In 14-01-01, assign names to trunks to make identification easier.
Go to B


B
Do you want unanswered PRI calls to reroute if unanswered?
Do not reroute
In 22-01-04, enter 0.
Reroute
In 22-01-04, enter 0.
In 22-08-01, enter the no-answer Ring Group for unanswerd PRI calls.
In 22-04-01, assign extension to PRI trunk's Ring No Answer Ring Group.
For each extension in the Ring Group, In 22-06-01, enter '1' for each time mode when the extension should ring.
If a PRI call rings longer than a specified interval, should the ring cadence change to a unique "alarm" sound?
No
In 22-01-02, enter 0.
Yes
In 22-01-02, Enter 1. Also, set the interval in 22-01-03.
Do you want to change the way PRI calls ring telephones?
Yes
Change the Ring Tone Range in 22-03-01 and 15-02-02 the tones within each range in 82-01-01 and the ring cadence in 20-15-01.
No
Do you want to adjust the gain (volume) for trunks?
Trunks
Adjust the CODEC Gain in 14-01-02 (transmit) and 14-01-03 (receive).
No
Consider using Multiple Directory Numbers, or Ring Groups for PRI trunks instead of Direct Trunk Appearance.
Do you want line keys for incoming PRI trunks?
Yes
In 15-07-01, program function keys ad line keys (*01), loop keys (*05)or line group keys (*02).
No
Finished

Programming Flowchart of ISDN-PRI - Placing Calls




A
Should Caller ID be included in the call's setup message?
No
In 15-01-04, enter 0
In 10-03-05 enter 0
Yes
In 15-01-04, enter 1
In 10-03-05 enter 1.
Should telco display the calling number's sub-address?
No
In 20-09-03, enter 0 to disable sub-address display by telco.
Yes
In 20-09-03, enter 1 to enable sub-address display by telco.
In 20-06-01, assign Class of Service to extensions.
In 21-12-01, program the calling party number data (15 digits max.) for each trunk.
In 21-13-01, program the calling party number data (15 digits max.) for each extension.
Are outgoing calls allowed on specific trunks?
No
In 14-01-07, enter 0 to prevent outgoing calls.
Yes
In 14-01-07, enter 1 to allow outgoing calls.
In 14-05-01 assign PRI trunks to trunk groups (This determines available channels for PRI trunks).
Build an out going restriction matrix
In the default program extensions
Do you need to restrict certain extensions from placing calls on certain trunks?
Yes
In 14-07-01 for each Access Map, select the access options for each trunk.
No
In 15-06-01, assign extensions to Access Maps.
Should caller hear DTMF confirmation tones as they are dialing a trunk call?
No
In 14-01-10, enter 0.
Yes
In 14-01-10, enter 1.
If a user preselects a line, how long should the system remember the preselection?
Yes
In 20-02-06, enter the preselection interval.
No
If the system detects the called party is busy, how long should the busy tone be heard? (0-64800)
Go To B


B
Is the amount of time the system waits before placing the call in a talk state sufficient?
No
In 21-01-03, enter the interval for the trunk interdigit timer.
Yes
Should extension users have one-button placing of outside calls?
No
In 15-07-01, do not assign function key as line keys.
Yes
n 15-07-01, assign function keys as line keys. code *01+001-126
Should extension users have one-button access to trunk groups for placing calls?
No
In 15-07-01, do not assign Trunk Group Access or trunk group keys.
Yes
In 15-07-01, assign line group keys (*02).
Do you want to adjust the gain (volume) for trunks?
Trunks
Adjust the CODEC Gain in 14-01-02 (transmit) and 14-01-03 (receive).
No
Check the Analog Trunk Timers in 81-01 for compatibility with the telco.
If desired, assign names to trunks in 14-01-01.
Do you want to set up an Altemate Trunk Route Access Code?
No
Stop
Yes
In 11-01-01, set up a Service Code for Altemate Trunk Route Access.
For example, to make 50 the Altemate Trunk Route Access Code.
DIAL = 5
Digit = 2
Kind = 8
In 11-09-02, assign the Service Code set up in the previous step for Altemate Trunk Route Access.
Should extension be able to use Altemate Trunk Route Access?
Yes
In 21-15-01, enter the extension number and enter the Trunk Group Routing route number.
No
In 21-15-01, enter the extension number and enter 0 to prevent routing.
Is Trunk Group Routing defined?
Refer to the Trunk Group Routing feature and set up Trunk Group Routing.
Stop

Last Number Redial

Description

Last Number Redial allows an extension user to quickly redial the last number dialed. For example, a user may quickly recall a busy or unanswered number without manually dialing the digits.

Last Number Redial saves in system memory the last 36 digits a user dials. The number can be any combination of digits 0~9, # and *. The system remembers the digits regardless of whether the call was answered, unanswered or busy. The system normally uses the same trunk group as for the initial call. However, the extension user can preselect a specific trunk if desired.

In a case of standard mode (Program 15-02-60 is set 0), when pressing the Redial key, the display indicates REDIAL [#] / SYS. The user can then press # to redial the number displayed, or enter a System Speed Dialing bin number to be dialed. Pressing the Redial key repeatedly will scroll through the last 10 numbers dialed.

Cursor Key Operation

In a case of standard mode (Program 15-02-60 is set 0), by pressing the Left Cursor Key the user can access the Redial and Incoming Call History menus. The flow chart below shows the menu access sequence. If the terminal is not allowed to have the Dial Preview feature, these menus cannot be accessed.

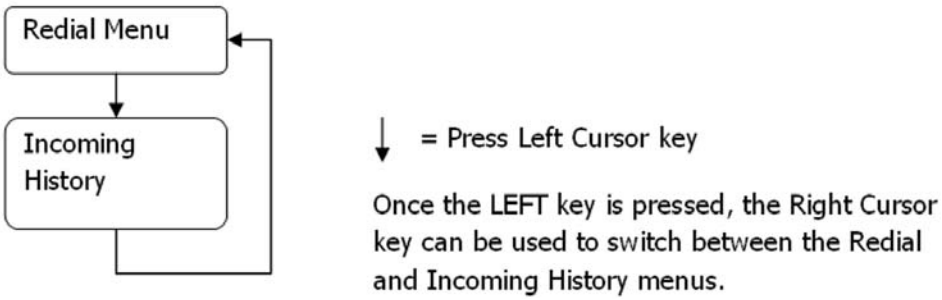


Figure 1-24 Left Cursor Key Operation Flow Chart

Conditions

- Redial List requires the use of a display telephone. Single line telephones can not use this feature.
- When using Automatic Route Selection, ARS selects the trunk for the call unless the user preselects.

Default Settings

Enabled

System Availability

Terminals

All Stations

Related Features

None

Related Features

Automatic Route Selection (ARS/F-Route)

Repeat Redial

Save Number Dialed

Guide to Feature Programming

Program Number	Program Name	Default
11-12-12	**Service Code Setup (for Service Access) - Last Number Dial**	#5
11-12-17	**Service Code Setup (for Service Access) - Clear Last Number Dialing Data**	876
15-02-13	**Multiline Telephone Basic Data Setup - Redial List Mode**	1
20-08-05	**Class of Service Options (Outgoing Call Service) - Dial Number Preview (Preset Dial)**	COS 01~15 = 1

Operation

To redial your last call (When set PRG15-02-60:0):

1. Without lifting the handset, press Redial.

   The last dialed number is displayed.

2. To redial the last number, press #.
   - OR -

   Search for the desired number from the Redial List by pressing Redial or VOLUME ▲ or VOLUME ▼ keys.
   - OR -

   Press the Left Cursor key once and the VOLUME ▲ or VOLUME ▼ keys to find number.
3. Lift the handset or press Speaker to place the call.

   The system automatically selects a trunk from the same group as your original call and dials the last number dialed.

   - OR -

1. At the multiline terminal, press Speaker or lift the handset (optional).

   The system automatically selects a trunk from the same group as your original call.

2. Press Redial.
   - OR -
   At the single line telephone, lift the handset.
3. Dial **#5**.

   The system automatically selects a trunk from the same group as your original call and dials the last number dialed.

To check the number saved for Last Number Redial (When set PRG15-02-60:0):

1. Press Redial or the Left Cursor key once.

   The stored number displays for six seconds. The stored number dials out if you: - Lift the handset,
   - Press an idle line key,
   - or -
   - Press Speaker

2. Press the Exit key.

To erase the stored number:

1. At the multiline terminal, press Speaker or lift handset.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **876** .

LCR-Least Cost Routing

Description

Least Cost Routing allows the SL1000 system to automatically select the indirect carrier defined by routing table within the system. An indirect carrier is accessed via the PSTN lines connected to the SL1000 (these are the direct carrier lines), a special access code is used to select the indirect carrier, all dialled digits are passed to the indirect carrier for routing of the call to the destination.The routing tables list the leading digits of numbers dialled by the users and the associated indirect carrier access code. It is possible to route calls to more than one indirect carrier.

Conditions

- The PSTN number accepted by the indirect carrier may vary, consult the carrier for details. Special attention must be given to Emergency calls (Police/Fire/Ambulance etc.), if you route emergency calls to an indirect carrier you must confirm that they will accept this type of call. It is normal practice to have an 'override code' that the users can dial to route the call to a chosen carrier (direct or indirect) in the event of faults with the carrier.
- F-Route/ARS operation takes place on the digits dialled by the user, before the trunk is seized. LCR will use the digits sent to line i.e after translation by F-Route/ARS.
- Toll Restriction takes place on the digits dialled by the user. Toll Restriction check will take place after any F-Route/ARS operation and before the LCR operation.
- Local area calls can not be routed via an indirect carrier that also has Cost Centre Codes enabled.This is due to the order that the digits are dialled out by the SL1000 . Local calls can be routed via an indirect carrier if Cost Centre Codes are not required.

Default Settings

Disabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

None

Related Features

Cost Centre Code

Guide to Feature Programming

Program Number	Program Name	Default
14-01-23	LCR Service	0
26-01-04	LCR Mode Option	0
26-02-01	Dial analyse Table	No setting
26-02-06	LCR Carrier Table	0
26-05-01	Delete Digits	0
26-05-02	Access Code	No setting

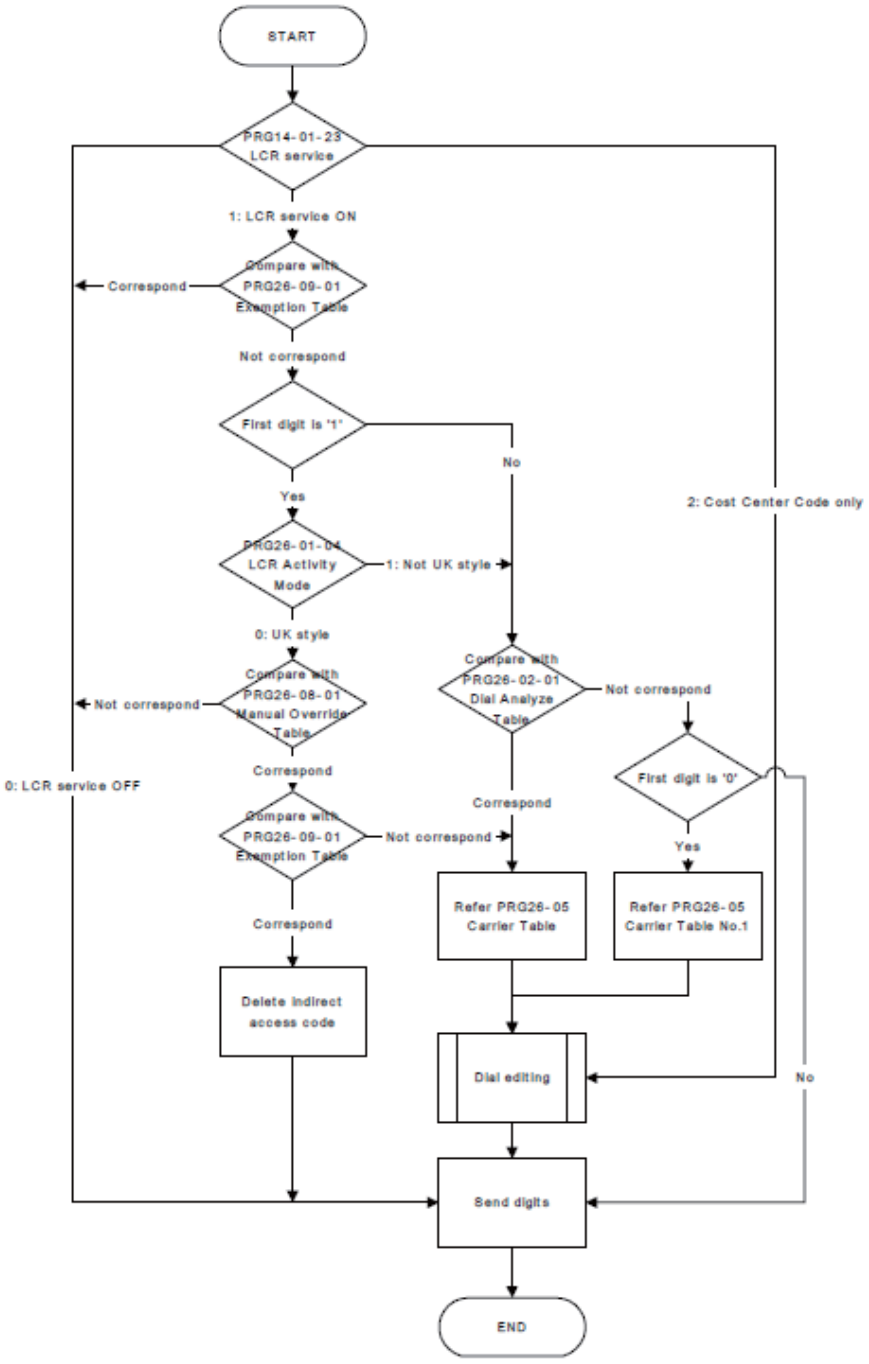
Program Number	Program Name	Default
26-05-03	**Authorization table number**	0
26-05-04	**Cost Centre Code**	0
26-06-01	**Authorization Code Table**	No Setting
26-07-01	**Cost Centre Codes**	No Setting
26-08-01	**Manual Override Access Code Table**	No Setting
26-09-01	**Manual Override Exemption Table**	999

Note 1) Change to DTMF Operation
In Program 26-05-02 the @ symbol will have different operation for Analogue trunks or ISDN trunks.
Analogue Trunks
At the point in the dialled digits where the @ appears the SL1000 will revert to DTMF dialling. This is only required when the analogue trunk is set the Loop Disconnect dialling in Program 14-02-01.
ISDN Trunks
At the point in the dialled digits where the @ appears the SL1000 will stop dialling and wait for the CONNECT from the indirect carrier. The SL1000 will then continue to dial DTMF in the B-channel. The DTMF digits will be received by the indirect carrier for routing.
This is only required for indirect carriers that have a two stage setup process where the Access code is dialled in the D-channel to the direct carrier and all other digits are dialled as DTMF in the B-channel to the indirect carrier.
Note 2) Order of LCR Routing Digits
When a user dials a number that is routed by LCR the individual LCR elements will be dialled to line as shown below.
<Access Code> <Authorisation Code> <CCC> <Delete leading digits> <Dialled digits>

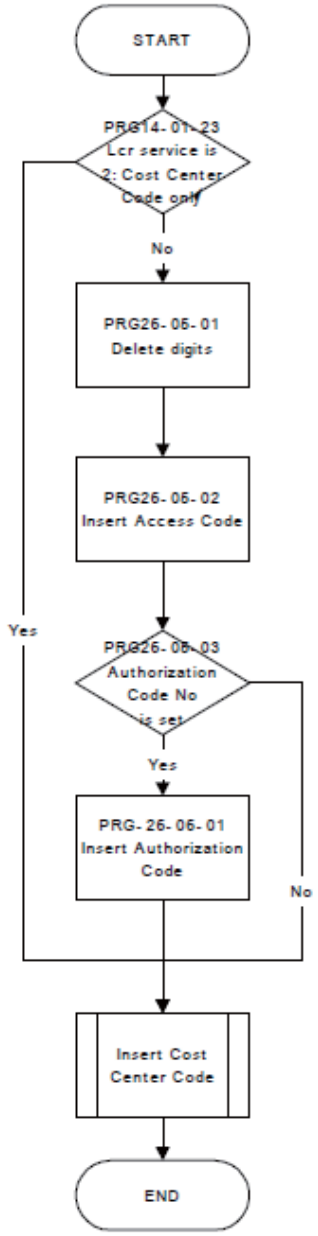
L

Operation

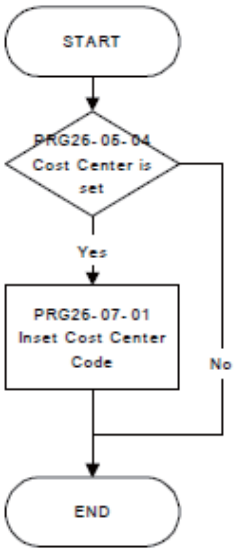
LCR Operation Flow Diagram



LCR Dial LCR Dial Editing



LCR Cost Centre Code



Line Preference

Description

Line Preference determines how a multiline terminal user places and answers calls. There are two types of Line Preference: Incoming Line Preference and Outgoing Line Preference.

Incoming Line Preference

Incoming Line Preference establishes how a multiline terminal user answers calls. When a call rings the multiline terminal, lifting the handset answers either the ringing call (for Ringing Line Preference) or seizes an idle line (for Idle Line Preference). The idle line can provide either Intercom or trunk dial tone (see Outgoing Line Preference below). Ringing Line Preference helps users whose primary function is to answer calls (such as a receptionist). Idle Line Preference is an aid to users whose primary function is to place calls (such as a telemarketer).

Outgoing Line Preference

Outgoing Line Preference sets how a multiline terminal user places calls. If a multiline terminal has Outgoing Intercom Line Preference, the user hears Intercom dial tone when they lift the handset. If a multiline terminal has Outgoing Trunk Line Preference, the user hears trunk dial tone when they lift the handset. Outgoing Line Preference also determines what happens at extensions with Idle Line Preference. The user hears either trunk (dial 9) or Intercom dial tone.

Auto-Answer of Non-Ringing Lines

With Auto-Answer of Non-Ringing Lines, an extension user can automatically answer trunk calls that ring other extensions (not their own). This would help a user that has to answer calls for co-workers that are away from their desks. When the user lifts the handset, they automatically answer the ringing calls based on Trunk Group Routing programming. The extension user's own ringing calls, however, always have priority over calls ringing other co-worker's extensions.

Conditions

- If a multiline terminal extension has more than one call ringing its line keys, Ringing Line Preference answers the calls on a first-in first-answered basis.
- DILs do not affect Incoming Line Preference operation.
- Trunks ring extensions according to Ring Group programming.
- If an extension gets trunk dial tone when the user lifts the handset, the system uses the dial 9 routing to select the trunk. This bypasses ARS.

Default Settings

Enabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

None

Related Features

Direct Inward Line (DIL)

Ring Groups

Trunk Groups

Guide to Feature Programming

Program Number	Program Name	Default
14-05-01	**Trunk Group - Trunk Group Number**	Trunk Port 1~126 = Priority 1~126
14-06-01	**Trunk Group Routing - Priority Order Number**	Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~25) and Order Numbers (1~4) = 0 (Not Specified)
14-07-01	**Trunk Access Map Setup**	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).
15-01-02	**Basic Extension Data Setup - Outgoing Trunk Line Preference**	0
15-02-10	**Multiline Telephone Basic Data Setup - Ringing Line Preference for Trunk Calls**	1
15-06-01	**Trunk Access Map for Extensions**	1
20-10-07	**Class of Service Options (Answer Service) - Automatic Off-Hook Answer**	COS 01~15 = 1
22-01-01	**System Options for Incoming Calls - Incoming Call Priority**	1
22-04-01	**Incoming Extension Ring Group Assignment**	Extension 200 (first port)
22-05-01	**Incoming Trunk Ring Group Assignment**	1
23-03-01	**Universal Answer/Auto Answer**	0

Operation

Ringing Trunk or intercom (ICM) call:

Lift the handset or press Speaker.

The setting assigned for Program 15-02-10 and Program 22-01-01 determines which call is answered first.

Long Conversation Cutoff

Description

For incoming and outgoing central office calls, each trunk can be programmed to disconnect after a defined time. The timer begins when the trunk is seized and disconnects the call after the time expires.

When used with the Warning Tone for Long Conversation feature, the system can provide a warning tone on outgoing trunks calls before the call is disconnected.

Conditions

- Long Conversation Cutoff can disconnect incoming and outgoing CO calls after a set time.
- Long conversation cutoff is controlled separately for DISA.
- Using the Warning Tone for Long Conversation feature allows users on outgoing calls to hear a warning tone prior to the call disconnecting.

Default Settings

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Direct Inward System Access (DISA)

Multiple Trunk Types

Warning Tone for Long Conversation

Guide to Feature Programming

Program Number	Program Name	Default
14-01-14	Basic Trunk Data Setup - Long Conversation Cutoff	0
14-01-15	Basic Trunk Data Setup - Long Conversation Alarm Before Cut Off	0
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-13-02	Class of Service Options (Supplementary Service) - Long Conversation Cutoff (Incoming)	COS 01~15 = 0
20-13-03	Class of Service Options (Supplementary Service) - Long Conversation Cutoff (Outgoing)	COS 01~15 = 0

Program Number	Program Name	Default
20-21-03	**System Options for Long Conversation - Long Conversation Cutoff for Incoming Call**	0 (seconds)
20-21-04	**System Options for Long Conversation - Long Conversation Cutoff for Outgoing Call**	0 (seconds)

Operation

This feature is automatic once it is programmed.

Loop Keys

Description

Loop keys are uniquely programmed function keys that simplify placing and answering trunk calls. There are three types of loop keys: Incoming Only, Outgoing Only and Both Ways.

Incoming Only Loop Keys

Incoming Only loop keys are for answering trunk calls. An extension can have an incoming loop key for a specific trunk group (fixed) or a “catch all” loop key for any trunk group (switched). Fixed loop keys allow an extension user to tell the type of call by the ringing key. Switched loop keys are ideal for an extension with a large number of feature keys. In addition, switched loop keys are a destination for any trunk not on a line key or fixed loop key. Incoming Only loop keys also receive Transferred trunk calls.

Outgoing Only Loop Keys

Outgoing Only loop keys are for placing trunk calls. An extension can have outgoing loop keys for a specific trunk group or for ARS access. When a user presses the loop key, they get dial tone from the first available trunk in the group (or from ARS if programmed). Outgoing Only loop keys help ensure that an extension will always have a key available for placing calls.

Both Ways Loop Keys

Both Ways loop keys combine the functions of both Incoming Only and Outgoing Only loop keys. Both Ways loop keys work well for extension users that handle a moderate amount of calls and don’t separate keys for incoming and outgoing calls. Both Ways loop keys also receive Transferred trunk calls.

An extension can have many loop keys - of any type. You can program an operator, for example, with four loop keys for incoming calls and four for outgoing calls.

Once a loop key call is set up, the user can handle it like any other trunk call. For example, the user can place the call on Hold, Transfer it to a co-worker or send it to a Park Orbit.

An incoming call will ring the first available loop key, beginning with the lowest numbered key. If keys 1-3 are loop keys, for example, the first incoming call rings key 1. If key 1 is busy, the next call rings key 2. If keys 1 and 2 are busy, the next call rings key 3. If all three keys are busy, additional incoming calls queue for the first available key. The terminal display will show “WAITING - LOOP KEY” if the user presses a loop key when there are additional calls waiting.

Conditions

None

Default Settings

Disabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

None

L

Related Features

Automatic Route Selection (ARS) / Central Office Calls, Answering / Central Office Calls, Placing

Program incoming and outgoing access and routing options.

Off Hook Signaling

If enabled, a user hears Call Waiting beeps if additional calls are waiting behind a loop key.

Programmable Function Keys

If you have a line and loop key for the same trunk, the line key has precedence. An incoming call rings the line key, not the loop key. When you press the loop key for an outgoing call, the line key lights.

Ring Groups

Trunks ring terminals according to their Ring Group assignments (Programs 22-04 and 22-05).

Direct Inward Dialing (DID) / Direct Inward Line (DIL) / Direct Inward System Access (DISA)

Transferred DID, DIL and DISA calls do not require ring group programming.

Guide to Feature Programming

Program Number	Program Name	Default	Note
14-05-01	Trunk Group - Trunk Group Number	Trunk Port 1~126 = Priority 1~126	
14-07-01	Trunk Access Map Setup	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).	
15-06-01	Trunk Access Map for Extensions	1	
15-07-01	Programmable Function Keys	Refer to Programming Manual.	
15-13-01	Loop Keys - Outgoing Option	0: Programming Function Key No. = 01-24	
15-13-02	Loop Keys - Incoming Option	0: Programming Function Key No. = 01-24	
20-07-10	Class of Service Options (Administrator Level) - Programmable Function Key Programming (Appearance Level)	COS 01~15 = 1	
22-04-01	Incoming Extension Ring Group Assignment	Extension 200 (first port)	
22-05-01	Incoming Trunk Ring Group Assignment	1	

Operation

To place a call on a loop key:

1. Press outgoing or both ways loop key.

You hear dial tone and the key lights green.

2. Dial number.

To answer a call on a loop key:

Listen for ringing a look for a flashing loop key.

1. Press loop key.

The key lights green and you connect to the call.

If there are additional calls waiting to be answered, your display shows: [WAITING - LOOP KEY]

To program a loop key:

1. Press the **Speaker** key.
2. Dial **852**.
3. Press the key you want to program as a loop key.
4. Dial ***05**.
5. Dial the loop key type:
   - 0 = Incoming only
   - 1 = Outgoing only
   - 2 = Both ways (incoming and outgoing)
6. Dial the loop key routing option for incoming, outgoing, or incoming and outgoing calls:
   - 000 = Trunk Group Routing or ARS (if installed)
   - 001~025 = Trunk Groups

   If you selected option 2 in step 5 above, enter the incoming Trunk Group followed by the outgoing Trunk Group.
7. Press **Speaker** to hang up.

Maintenance

Description

The SL1000 system has several utilities to assist in troubleshooting and diagnosing problems both during and after installation.

Side Tone Auto Setup

Per each analog trunk base (or whole analog trunk) most suitable Codec Filter setting for PRG81-07 can be adjustable automatically by programming PRG90-68-01 and 02.
During measuring the trunk condition, following LCD indications are provided.

- Under measuring: Measurement (x/5)
  x; number of measuring times.
- Measure complete: Complete
- Error condition: Error
- Trunk busy: Busy

After successfully complete, indication to adapt same setting to all analog trunks or not will be shown on LCD.

End of this programming system reset will occur.

Remote maintenance using PCPro

PCPro can remotely access the SL1000 for maintenance and diagnostics. Within PCPro, the debug terminal can be accessed to monitor the systems activity and logging. PCPro also has built-in reports that can display alarm data. If need be, an option in PCPro allows the technician to reset or initialize the system remotely. If the technician determines the problem is isolated to a specific slot, PCPro can reset only the slot in question.

Conditions

Side Tone Auto Setup

- Side tone measurement need to perform whole system idle state.
- When measured trunk is busy, loop off, outgoing call restricted, or select trunk is not analog trunk, in these case Error will be indicated on programming terminal LCD.

Default Settings

Enabled

System Availability

Terminals

None

Required Component(s)

None

Related Features

None

Programming

PRG 90-68-01 Adjustment Start Default = No Setting

PRG 90-68-02 1 digit data Default = 0

PRG 81-07 CODEC Filter Type Default = 0

Operation

None

Meet Me Conference

Description

With Meet Me Conference, an extension user can set up a Conference with their current call and up to 16 other internal or external parties. Each party joins the Conference by dialing a Meet Me Conference code. Meet Me Conference lets extension users have a telephone meeting - without leaving the office.

The CPU provides two blocks of 16 conference circuits, allowing each block to have any number of internal or external parties conferenced up to the block limit of 16.

Conditions

None

Default Settings

Enabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

None

Related Features

Conference

Meet Me Paging

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-07-01	Conversation Record Circuits	0	
15-07-01	Programmable Function Keys	Refer to Programming Manual.	
20-06-01	Class of Service for Extensions	All extension port = Class 1	
20-10-06	Class of Service Options (Answer Service) - Meet-Me Conference and Paging	COS 01~15 = 1	
31-01-04	System Options for Internal/External Paging - Privacy Release Time	90 (seconds)	

For additional programming for Paging, refer to the Paging External on page 1-383 and Paging Internal on page 1-388 features.

Operation

Meet Me External Conference

To make a Meet Me External Conference:

Multiline Terminal

1. While on a call, press **DND/CONF** key.
2. Dial ✱1 and the Combined Paging Zone code 1~8 (for Internal/External Zones **1~8**) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When a co-worker answers your page, press **DND/CONF** key twice.
5. Repeat steps 1~4 for each co-worker you want to add.

Single Line Telephone

1. While on a call, hookflash and dial **826** .
2. Dial **803** and the External Paging zone code (**1~8** or 0 for All Call).
   - OR -
   Dial ✱1 and the Combined Paging Zone code **1~8** (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When a co-worker answers your page, press hookflash twice.
5. Repeat steps 1~4 for each co-worker you want to add.

To join a Meet Me External Conference:

1. At the multiline terminal, press **Speaker**.
   - OR -
   At a single line telephone, lift the handset.
2. Dial **865** .
3. Dial the announced External Paging Zone code (1~3).

You connect to the other parties.

Meet Me Internal Conference

To make a Meet Me Internal Conference:

Multiline Terminal

1. While on a call, press **DND/CONF** key.
2. Dial ✱1 and the Combined Paging Zone code **1~8** (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When a co-worker answers your page, press **DND/CONF** key twice.
5. Repeat steps 1~4 for each co-worker you want to add.

Single Line Telephone

1. While on a call, hookflash and dial **826** .
2. Dial ✱1 and the Combined Paging Zone code **1~8** (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When a co-worker answers your page, press hookflash twice.
5. Repeat steps 1~4 for each co-worker you want to add.

To join a Meet Me Internal Conference:

1. At the multiline terminal, press **Speaker** (or lift the handset).
   - OR -
   At the single line telephone, lift the handset.
2. Dial **863** (if your extension is in the zone called).
   - OR -
   Dial **864** and the zone number (if your extension is not in the zone called).
   - OR -
   Press the Meet Me Conference/Paging Pickup key (PRG 15-07 or 23) if your extension is in the zone called.

Meet Me Paging

Description

Meet Me Paging allows an extension user to Page a co-worker and privately meet with them on a Page zone. The Paging zone is busy to other users while the meeting takes place. While the co-workers meet on the zone, no one else can hear the conversation, join in or make an announcement using that zone. Meet Me Paging is a good way to talk to a co-worker when their location is unknown. If the co-worker can hear the Page, they can join in the conversation.

Conditions

- With Meet Me Paging Transfer, a user can page a co-worker and have the call automatically transfer when the co-worker answers the page.
- An extension access to internal and external page zones affects the Meet Me Paging feature.
- Internal and External Paging keys simplify Meet Me Paging operation.

Default Settings

Enabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

External zone paging requires a Paging System be installed in the system.

Related Features

Meet Me Conference

Meet Me Paging Transfer

Paging, External

Paging, Internal

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
11-12-21	**Service Code Setup (for Service Access) - Meet-Me Answer to Specified Internal Paging Group**	864
11-12-22	**Service Code Setup (for Service Access) - Meet-Me Answer to External Paging**	865
11-12-23	**Service Code Setup (for Service Access) - Meet-Me Answer in Same Paging Group**	863
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.

Program Number	Program Name	Default
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-10-06	**Class of Service Options (Answer Service) - Meet-Me Conference and Paging**	COS 01~15 = 1
31-02-01	**Internal Paging Group Assignment - Internal Paging Group Number**	0 for IP Station 1 for TDM Station All Stations = 0
31-02-02	**Internal Paging Group Assignment - Internal All Call Paging Receiving**	0

For additional programming information on Paging, refer to Paging, External on page 1-383 and Paging, Internal on page 1-388 features.

Operation

Meet Me External Page

To make a Meet Me External Page:

1. At multiline terminal, press **Speaker** or pick up the handset.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **803** and the External Paging Zone code (1~3 or 0 for All Call).
   - OR -
   Dial ✱1 and the Combined Paging Zone code 1~8 (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).
3. Announce the zone.
   - OR -
1. At the multiline terminal, press the **External Paging Zone** key (Program 15-07 or SC **851** : 19 + zone).
2. Announce the zone.

To join a Meet Me External Page:

1. At the multiline terminal, press **Speaker** or pick up the handset.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **865** .
3. Dial the announced External Paging Zone (1~3).

You connect to the other party.

Meet Me Internal Page

To make a Meet Me Internal Page:

1. At the multiline terminal, press **Speaker** or pick up the handset.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **801** and dial the Internal Paging Zone code (0~9, 00~32 or 00~64).
   - OR -
   Dial ✱1 and the Combined Paging Zone code 1~8 (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).

3. Announce the zone.
   - OR -

1. At the multiline terminal, press the **External Paging Zone** key (Program 15-07 or SC **851** : 19 + zone).
2. Announce the zone.

To join a Meet Me Internal Page:

1. At the multiline terminal, press **Speaker** or pick up the handset.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **863** (if your extension is in the zone called).
   - OR -
   Dial **864** and the zone number (if your extension is not in the zone called).
   - OR -
   Press the Meet Me Conference/Paging Pickup key (Program 15-07 or SC **851** : 23) if your extension is in the zone called.

Meet Me Paging Transfer

Description

If a user wants to Transfer a call to a co-worker but they do not know where the co-worker is, they can use Meet Me Paging Transfer. With Meet Me Paging Transfer, the user can Page the co-worker and have the call automatically Transfer when the co-worker answers the Page. Since Meet Me Paging Transfer works with both Internal and External Paging, a call can be quickly extended to a co-worker anywhere in the facility.

Conditions

- An extension user can set up a conference with their current call and up to 31 other inside parties.
- An extension user can Page a co-worker and meet with them on a page zone.
- With External Paging, an extension user can broadcast an announcement over paging equipment connected to external paging zones.
- Internal Paging lets extension users broadcast announcements to other multiline terminals.
- Function keys simplify Meet Me Paging Transfer operation.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

External zone paging requires a Paging System installed in the system.

Related Features

Meet Me Conference

Meet Me Paging

Paging, External

Paging, Internal

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
11-12-21	Service Code Setup (for Service Access) - Meet-Me Answer to Specified Internal Paging Group	864
11-12-22	Service Code Setup (for Service Access) - Meet-Me Answer to External Paging	865
11-12-23	Service Code Setup (for Service Access) - Meet-Me Answer in Same Paging Group	863

Program Number	Program Name	Default
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-10-06	**Class of Service Options (Answer Service) - Meet-Me Conference and Paging**	COS 01~15 = 1
31-02-01	**Internal Paging Group Assignment - Internal Paging Group Number**	All Stations = 0
31-02-02	**Internal Paging Group Assignment - Internal All Call Paging Receiving**	0
31-03-01	**Internal Paging Group Settings - Internal Paging Group Name**	Refer to Programming Manual.

For additional programming information on Paging, refer to the Paging, External on page 1-383 and Paging, Internal on page 1-388 features.

Operation

Meet Me External Paging Transfer

To make a Meet Me External Paging Transfer:

1. At the multiline terminal, while on a call, press **Hold**.
   - OR -
   At the single line telephone, while on a call, hookflash.
2. Press the **External Paging Zone** key (Program 15-07 or SC **851** : 19 + zone or 20 for all external zones).
   - OR -
   Dial **803** and the External Paging Zone code (1~3 or 0 for All Call).
   - OR -
   Dial ✱1 and the Combined Paging Zone code 1~8 (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).
3. Announce the call.
4. From a multiline terminal, when the paged party answers, press **Transfer** or the **Transfer** softkey.
   - OR -
   From a single line telephone, when the paged party answers, hang up.

   The party is transferred.

To join a Meet Me External Paging Transfer:

1. At the multiline terminal, press **Speaker** or pick up handset.
   - OR -
   At single line telephone, lift the handset.
2. Dial **865** .
3. Dial the announced External Paging Zone (1~3).

   The Paging party is connected.

4. Stay on the line.
   From a multiline terminal, press **Transfer**.
   - OR -
   From a single line telephone, hang up.

   The party is transferred.

Meet Me Internal Paging Transfer

To make a Meet Me Internal Paging Transfer:

1. At multiline terminal, while on a call, press **Hold**.
   - OR -
   At the single line telephone, while on a call, hookflash.
2. Press **Internal Paging Zone** key (Program 15-07 or SC **851** : 21 + zone or 22 for all internal zones).
   - OR -
   Dial **801** and the Internal Paging Zone code (0~9 or 00~32).
   - OR -
   Dial ***1** and the Combined Paging Zone code 1~8 (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).
3. Announce the call.
4. From a multiline terminal, when the paged party answers, press **Transfer**.
   - OR -
   From a single line telephone, when the paged party answers, hang up.

   The party is transferred.

To join a Meet Me Internal Paging Transfer:

1. At the multiline terminal, press **Speaker** or pick up handset.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **863** (if your extension is in the zone called).
   - OR -
   Dial **864** and the zone number (if your extension is not in the zone called).
   - OR -
   Press the Meet Me Conference/Paging Pickup key (Program 15-07 or SC **851** : 23) if your extension is in the zone called.
3. Stay on the line.
   From a multiline terminal, when the paged party answers, press **Transfer**.
   - OR -
   From a single line telephone, when the paged party answers, hang up.

   The party is transferred.

Memo Dial

Description

While on an outside call, Memo Dial lets a multiline terminal user store an important number for easy redialing later on. The telephone can be like a notepad. For example, a user could dial Directory Assistance and ask for a client's telephone number. When Directory Assistance plays back the requested number, the caller can use Memo Dial to jot the number down in the telephone memory. They can quickly call the Memo Dial number after hanging up.

When a user enters a Memo Dial number, the dialed digits do not output over the trunk. Dialing Memo Dial digits does not interfere with a call in progress.

Conditions

- When Memo Dial calls out, it outdials the entire stored number. Memo Dial does not automatically strip out trunk or PBX access codes if entered as part of the stored number.
- Only one number can be stored at a time.
- If a number is already stored in Memo Dial and you are on an internal or external call and the Dial Memo Key is pressed, the number is erased.
- A user's outgoing dialing options affect how a Memo Dial call is placed.
- Memo Dial is not available at single line telephones.

Default Settings

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Central Office Calls, Placing

Last Number Redial

Save Number Dialed

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	Programmable Function Keys	Refer to Programming Manual.

Operation

To store a number while you are on a call:

1. While on a call, press **Memo Dial** key (Program 15-07 or SC **851** : 31).
2. Dial number you want to store.
3. Press **Memo Dial** key again and continue with conversation.

To call a stored Memo Dial number:

1. Do not lift the handset.
2. Press the **Memo Dial** key (Program 15-07 or SC **851** : 31).
3. Press **Speaker.**

The stored number dials out only if you store a trunk access code before the number.

- OR -
Press the **line** key.

The stored number dials out.

To check to see the stored Memo Dial number:

1. Do not lift the handset.
2. Press **Memo Dial** key (Program 15-07 or SC **851** : 31).

The stored number displays.

To cancel (erase) a stored Memo Dial number:

1. Press **Speaker**.
2. Press the **Memo Dial** key (Program 15-07 or SC **851** : 31).

Message Waiting

Description

An extension user can leave a Message Waiting indication at a busy or unanswered extension requesting a return call. The indication is a flashing MW lamp at the called extension and a steadily lit MW lamp on the calling extension. Answering the Message Waiting automatically calls the extension which left the indication. Message Waiting ensures that a user does not have to recall an unanswered extension. It also ensures that a user does not miss calls when their extension is busy or unattended. Additionally, Message Waiting lets extension users:

- View and selectively answer messages left at their extension (display multiline terminal only)
- Cancel all messages left at their extension
- Cancel messages they left at other extensions

An extension user can leave Messages Waiting at any number of extensions. Also, any number of extensions can leave a Message Waiting at the same extension. A periodic VRS announcement may remind users that they have Messages Waiting.

Conditions

- Reminder messages require a DSP daughter board for VRS messages.
- When a user responds to a Message Waiting, the system does not cancel the Message Waiting indication if the called party uses Handsfree Answerback. The system cancels the indication only if the called party lifts the handset or presses Speaker.
- With the Hotel/Motel set up, an employee with a multiline terminal can send a Message Waiting to a room telephone if allowed in system programming.
- A Message Waiting key simplifies this feature operation.
- Telephone-to-telephone Message Waiting works when the voice mail is installed.
- The MW (Message Waiting) LED may be used to indicate voice mail messages if no extension number is assigned to the voice mail key in system programming.
- If both Voice Mail Message and Message Wait indication is set, the color set for Message Wait overrides the color used for Voice Mail Message indication.

Default Settings

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Handsfree Answerback/Forced Intercom Ringing

Hotel/Motel

Programmable Function Keys

InMail

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Default	Note
11-10-16	**Service Code Setup (for System Administrator) - Leaving Message Waiting (Requires CPU to be licensed for Hotel/Motel)**	726	
11-11-09	**Service Code Setup (for Setup/Entry Operation) - Answer Message Waiting**	0	
11-11-10	**Service Code Setup (for Setup/Entry Operation) - Cancel All Messages Waiting**	873	
11-11-11	**Service Code Setup (for Setup/Entry Operation) - Cancel Message Waiting**	871	
11-16-07	**Single Digit Service Code Setup - Message Waiting**	0	
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.	
20-06-01	**Class of Service for Extensions**	All extension port = Class 1	
20-13-07	**Class of Service Options (Supplementary Service) - Message Waiting**	COS 01~15 = 1	
80-01-01 (48)	**Service Tone Setup - Repeat Count**	0 (endless)	
80-01-02 (48)	**Service Tone Setup - Basic Tone Number**	0	

Operation

To leave a Message Waiting:

1. Call busy or unanswered extension.
2. Press the **Message Waiting** key (Program 15-07 or SC **851** : 38).
3. Hang up.

With multiline terminal telephones, the Message Waiting LED lights.

To answer a Message Waiting:

When you have a message, your Message Waiting LED flashes fast for multiline terminals.

1. At the multiline terminal, press **Speaker** and dial ✱0.
   - OR-
   Press the **Message Waiting** key (Program 15-07 or SC **851** : 38).
   - OR-
   At the single line telephone, lift the handset and dial ✱0.

If the called extension does not answer, dial 0 or press your Message Waiting key to automatically leave them a message.

Normally, your Message Waiting LED goes out. If it continues to flash, you have new messages in your Voice Mail mailbox or a new General Message. See "To check your messages" below.

To cancel all your Messages Waiting:

This includes messages you have left for other extensions and messages other extension have left for you.

1. At the multiline terminal, press **Speaker**.
   - OR-
   At the single line telephone, lift the handset.
2. Dial **873** .
3. Hang up.

To cancel the Messages Waiting you have left at a specific extension:

1. At the multiline terminal, press **Speaker**.
   - OR-
   At the single line telephone, lift the handset.
2. Dial **871** .
3. Dial the number of the extension you do not want to have your messages.
4. Hang up.

To check your messages:

1. Press **Help**.
2. Dial *0.

You can have any combination of the message types in the following table on your telephone.

If you see. . .	You have. . .
VOICE MESSAGE **n MESSAGE**	New messages in your Voice Mail mailbox.
CHECK MESSAGE **VRS GENERAL MESSAGE**	A General message in Voice Mail that has not been heard.
CHECK MESSAGE **(name)**	Message Waiting requests left at your telephone by your co-workers.

3. Press VOL ▲ or VOL ▼ to scroll through your display.
4. When you find the message you want to answer, press **Speaker**. You either:
   - Go to your Voice Mail mailbox.
   - Listen to the new General Message.
   - Automatically call the extension that left you a Message Waiting.

Microphone Cutoff

Description

When On Hook state **Mute** Key lets a multiline terminal user turn off their telephone handsfree microphone or when Off Hook state handset microphone at any time. When activated, Microphone Mute prevents the caller from hearing conversations in the user's work area. The user may turn off the microphone while their telephone is idle, busy on a call or ringing.

Conditions

- When using Handsfree (On Hook) Mute key turn off handsfree microphone.
- When using Handset (Off Hook) Mute key turn off Handset microphone.
- When using Headset Mute key turn off Headset microphone.

Default Settings

Enabled (using Mute key)

System Availability

Terminals

Any Multiline Terminal

Required Component(s)

None

Related Features

Handsfree Answerback/Forced Intercom Ringing

Handset Mute/Handset Cutoff

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
15-02-50	Mute Lamp Status Change	0
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-02-11	System Options for Multiline Telephones - Handsfree Microphone Control	1

Operation

To mute your telephone handset or Handsfree microphone while on a call:

1. Press **Mute**.

To turn your telephone microphone back on:

1. Press **Mute**.

*Use **Mute** only if you pressed it initially to turn off your Handsfree microphone.*

M

Mobile Extension

Description

A mobile extension is an external telephone (preferably a mobile phone) linked to the SL1000 via a Proxy Port to operate as an internal SLT extension. The extension sends DTMF signals to the system allowing access to the system features. A registered Mobile Extension uses 1 analog port (ports are reserved in groups of 4), however, no PCB support (analog or digital) is required. The Mobile Extension port must be an unequipped extension port on the SL1000 system - no physical keyset is required on the SL1000 system.

A mobile extension cannot be used as a voice mail port.

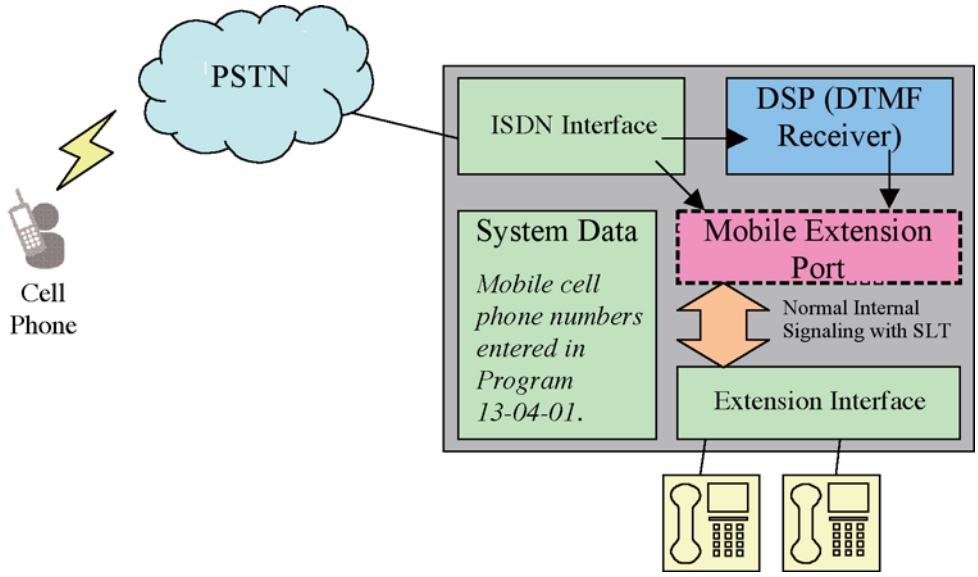


Figure 1-25 Mobile Extension Layout

This feature can currently be used with ISDN PRI trunks or SIP trunks.

It is recommended to use this feature with an ISDN PCB (PRI or BRI), however, analog trunks can be used as well.

To provide a proper disconnect, Disconnect Supervision is required for the trunks used for this feature.

The Mobile extension internal extension number (Proxy Port) is linked to a speed dial bin to provide integration.

If all external trunks are busy when a call is made to the mobile extension, ringback tone is presented giving the impression the phone is ringing.

A DID is directed to the Mobile Extension internal extension number (Proxy Port), and to provide internal dial tone to the Mobile Extension, the incoming CLI of the Mobile Extension must match the number in the Speed Dial bin. Once internal dial tone is presented, the operation is similar to an SLT user lifting the handset.

In the absence of DIDs, the VRS can be used to transfer the Mobile Extension call to the Mobile Extension extension number. This provides internal dial tone when the CLI is presented and matches the number in the associated Speed Dial bin.

Alternatively, if calling line identification routing is enabled, the relevant Speed Dial bin could be transferred to the Mobile Extension proxy port which would then provide internal dial tone.

Maximum 32 Mobile extensions can be assign in a system. Initially 4 user license are bandled, to increase the user SL-SYS-MOBILE-1 LIC is required.

Features

The features available from a Mobile Extension are listed below. As the Mobile Extension is based on an SLT port, the service codes used are as per an SLT port. Any feature not listed should be assumed to be not supported:

- Hold
- Transfer
- Incoming Ring Group member
- Department Group member
- DID
- Toll Restriction
- Class of Service
- DSS Keys
  Though DSS keys are available for the Mobile Extension, they cannot provide an exact indication of busy status if, for example, the Mobile Extension is active on a call not linked to the SL1000 .

The following service codes are supported:

Table 1-31 Supported Service Codes

Type Incoming Feature	Program	Code	Set By Mobile Extension	Set to Mobile Extension
Night Mode Switching	11-10-01	818	**Yes**	
Night Mode Switching for Other Group	11-10-12	718	**Yes**	
Call Forward - All	11-11-01	848	**Yes**	**Yes**
Call Forward - Busy	11-11-02	843	**Yes**	**Yes**
Call Forward - No Answer	11-11-03	845	**Yes**	**Yes**
Call Forward - Busy/No Answer	11-11-04	844	**Yes**	**Yes**
Call Forward - Both Ring	11-11-05	842	**Yes**	**Yes**
Call Forward - Follow-Me	11-11-07	846	**Yes**	**Yes**
Do Not Disturb	11-11-08	847	**Yes**	
Answer Message Waiting	11-11-09	*0	**Yes**	
Cancel All Messages Waiting	11-11-10	873	**Yes**	
Automatic Transfer Setup for Each Extension Group	11-11-25	702	**Yes**	
Automatic Transfer Cancellation for Each Extension Group	11-11-26	703	**Yes**	
Delayed Transfer for Every Extension Group	11-11-28	705	**Yes**	
Delayed Transfer Cancellation for Each Extension Group	11-11-29	706	**Yes**	
DND Setup for Each Extension Group	11-11-30	707	**Yes**	
DND Cancellation for Each Extension Group	11-11-31	708	**Yes**	
Pilot Group Withdrawing	11-11-35	750	**Yes**	
Station Speed Dial Number Entry	11-11-39	855	**Yes**	
Bypass Call	11-12-01	807	**Yes**	**Yes**
Conference	11-12-02	826	**Yes**	
Override (Off-Hook Signalling)	11-12-03	809	**Yes**	
Set Camp-On	11-12-04	850	**Yes**	**Yes**

M

Type Incoming Feature	Program	Code	Set By Mobile Extension	Set to Mobile Extension
Cancel Camp-On	11-12-05	870	**Yes**	**Yes**
Switching of Voice Call and Signal Call	11-12-06	812	**Yes**	
Step Call	11-12-07	808	**Yes**	**Yes**
Barge-In	11-12-08	810	**Yes**	**Yes**
Change to STG (Department Group) All Ring	11-12-09	780	**Yes**	
Station Speed Dialling	11-12-10	#2	**Yes**	
Group Speed Dialling	11-12-11	#4	**Yes**	
Trunk Group Access	11-12-14	804	**Yes**	
Specified Trunk Access	11-12-15	**#9**	**Yes**	
Internal Group Paging (Mobile Extension cannot be a member of a paging group)	11-12-19	801	**Yes**	
External Paging	11-12-20	803	**Yes**	
Meet-Me Answer to Specified Internal Paging Group	11-12-21	864	**Yes**	
Meet-Me Answer to External Paging	11-12-22	865	**Yes**	
Meet-Me Answer in Same Paging Group (although Mobile Extension cannot be paged)	11-12-23	863	**Yes**	**Yes**
Combined Paging	11-12-24	*1	**Yes**	
Direct Call Pickup - Own Group	11-12-25	856	**Yes**	**Yes**
Call Pickup for Specified Group	11-12-26	868	**Yes**	**Yes**
Call Pickup	11-12-27	*#	**Yes**	**Yes**
Call Pickup for Another Group	11-12-28	869	**Yes**	**Yes**
Direct Extension Call Pickup	11-12-29	**	**Yes**	
Park Hold	11-12-31	#6	**Yes**	
Answer for Park Hold	11-12-32	*6	**Yes**	
Group Hold	11-12-33	832	**Yes**	
Answer for Group Hold	11-12-34	862	**Yes**	
Personal (Extension) Park	11-12-35	773	**Yes**	
Door Box Access (Door Box can also ring the Mobile Extension. *# operates relay)	11-12-36	802	**Yes**	
Common Canceling Service Code	11-12-37	*9	**Yes**	
General Purpose Indication	11-12-38	883	**Yes**	
Station Speed Dialing	11-12-40	#7	**Yes**	
Voice Over	11-12-41	890	**Yes**	
Flash on Trunk lines	11-12-42	#3	**Yes**	
Enabled On Hook when Holding (SLT)	11-12-45	849	**Yes**	
Answer On Hook when Holding (SLT)	11-12-46	859	**Yes**	
Call Waiting Answer/Split Answer	11-12-47	894	**Yes**	
Account Code	11-12-48	##	**Yes**	
VM Access (InMail and VMS)	11-12-51	*8	**Yes**	
Live Recording at SLT	11-12-53	754	**Yes**	
VRS Routing for ANI/DNIS	11-12-54	882	**Yes**	

Type Incoming Feature	Program	Code	Set By Mobile Extension	Set to Mobile Extension
Tandem Trunking	11-12-57	#8	**Yes**	
Transfer into Conference	11-12-58	884	**Yes**	
Set DND for Other Extension	11-14-03	729	**Yes**	**Yes**
Cancel DND for Other Extension	11-14-04	730	**Yes**	**Yes**
Set Wake Up Call for Own Extension	11-14-05	731	**Yes**	
Cancel Wake Up Call for Own Extension	11-14-06	732	**Yes**	
Set Wake Up Call for Other Extension	11-14-07	733	**Yes**	**Yes**
Cancel Wake Up Call for Other Extension	11-14-08	734	**Yes**	**Yes**
Set Room to Room Call Restriction	11-14-09	735	**Yes**	**Yes**
Cancel Room to Room Call Restriction (Hotel)	11-14-10	736	**Yes**	**Yes**
Change Toll Restriction Class for Other Extension	11-14-11	737	**Yes**	**Yes**
Check-in	11-14-12	738	**Yes**	**Yes**
Check-out	11-14-13	739	**Yes**	**Yes**
Room Status Change for Own Extension	11-14-14	740	**Yes**	
Room Status Change for Other Extension	11-14-15	741	**Yes**	**Yes**
Room Status Output	11-14-16	742	**Yes**	
Hotel Room Monitor	11-14-17	770	**Yes**	**Yes**

Although some features may be available to the Mobile Extension, it may be advisable to disable them in Class of Service. There are also features that should be disabled in any case.

The features *to be disabled/not used* for Mobile Extension include:

- H.323 Trunks
- Analog Trunks
- Port Swap
- Hotline
- General Message
- Message Waiting
- Headset Mode for SLT
- Flexible Transfer/Virtual Loop Back
- Tandem Ringing
- Virtual extension key as Call Coverage Key for mobile extension
- Automatic Conversation Record for trunks

Caller ID Presented to the Mobile Extension for Type of Call

- Direct Internal Call - CPN of the Calling Phone is presented to the Mobile Extension.
- Direct Trunk Call with CID - Caller ID of incoming call is presented to the Mobile Extension**.
- Direct Trunk Call without CID - CPN of Mobile Extension is presented to the Mobile Extension.
- Transferred Trunk Call with CID -
  - Transferred before inter-digit timeout - Caller ID of incoming call is presented to the Mobile Extension**.
  - Transferred after inter-digit timeout - CPN of the Transferring Phone is presented to the Mobile Extension.
- Transferred Trunk Call without CID -
  - Transferred before inter-digit timeout - CPN of Mobile Extension is presented to the Mobile Extension.
  - Transferred after inter-digit timeout - CPN of the Transferring Phone's CPN is presented to the Mobile Extension.

* Only when the outbound trunks are ISDN or SIP trunks.

** ISDN will need to accept the inbound Caller ID as the Calling Party Number (CPN) presentation for the outbound call.

Table 1-32 Caller ID Sent to Mobile Telephone

Inbound Trunk	Outbound Trunk	Y/N
Analog CID	CFA Analog	N
Analog CID	CFA ISDN PRI/SIP	Y
ISDN PRI	CFA ISDN PRI/SIP	Y
ISDN PRI	CFA Analog	N
Analog CID	CFNA Analog	N
Analog CID	CFNA ISDN PRI/SIP	Y
ISDN PRI	CFNA ISDN PRI/SIP	Y
ISDN PRI	CFNA Analog	N

Conditions

- If an extension in a call forward chain has Call Forward with Both Ring, calls do not continue routing to other extensions in the chain.
- If the extension has Call Forward-Both Ring set to another extension, it will only continue to forward if the Both ring location is forwarded (B/NA or NA) to VM and no where else.
- ISDN and SIP trunks are only supported for the outbound call to the Mobile Extension.
- Analog, ISDN and SIP trunks are supported for the outbound call to the Mobile Extension.
- It is recommended that this feature uses ISDN platform (as these trunks provide answer supervision).
- The analog line must provide CLI information to allow the Mobile Extension to dial into the system to access features.
- For the *extension* DTMF, the minimum Detect Level for the DTMF Tone (Program 80-03-03) must be set to allow a minimum detection level of -25dBm. This entry is dependent on the Detect Level selected in Program 80-03-01.
- The Mobile Extension uses the * to perform a flash, so any service codes which begin with * must be changed (Programs 11-10, 11-11, 11-12, 11-13).
- To provide a proper disconnect, Disconnect Supervision is required for the trunks used for this feature.
- When an entry is made in Program 15-22-01 for a Mobile Extension, ports are reserved for Mobile Extension usage in groups of 4.
- To keep consecutive port numbering for units, you may wish to consider starting Mobile Extensions at the upper extension port range.
- The incoming Caller-ID for a call that is forwarded to a mobile extension will not be presented to the Mobile Extension.
- Calls on Mobile Extension can be easily picked up from a telephone in the system. This is done via a Barge-In key (34+Mobile Ext # or 34+*) * will Barge-In to the Extension that Call Forward Both Ring is set to. If no Forward Both Ring is set, the key will act as a basic Barge-In key.

Default Settings

No Mobile Extensions are configured.

System Availability

Terminals

Any Multiline Terminal

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Caller ID

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Station Message Detail Recording

Guide to Feature Programming

Program Number	Program Name	Default
11-02-01	Extension Numbering	Station Port No. : 1-128 = Extention No. : 200-327
11-10	Service Code Setup (for System Administrator)	Refer to Programming Manual.
11-11	Service Code Setup (for Setup/Entry Operation)	Refer to Programming Manual.
11-12	Service Code Setup (for Service Access)	Refer to Programming Manual.
13-04-01	Speed Dialing Number and Name - Speed Dialing Data	not assigned
14-01-24	Basic Trunk Data Setup - Trunk-to-Trunk Outgoing Caller ID through Mode	0
15-07-01	Programmable Function Keys	Refer to Programming Manual, Barge-In (code 34)
15-22-01	Mobile Extension Setup - Mobile Extension Target Setup	0
15-22-02	Mobile Extension Setup - Connect Confirmation	0
15-22-03	Mobile Extension Setup - Trunk Access Code	0
20-03-04	System Options for Single Line Telephones - Dial Sending Start Time for SLT or ARS	3
20-09-02	Class of Service (Incoming Call Service) - Caller ID Display	COS 01~15 = 1
21-12-01	ISDN Calling Party Number Setup for Trunks	All trunks = No setting
21-13-01	ISDN Calling Party Number Setup for Extensions	not assigned
22-11-01	DID Translation Number Conversion - Received Number	Refer to Programming Manual.
22-11-02	DID Translation Number Conversion - Target Number	Refer to Programming Manual.
80-01-01	Service Tone Setup - Tone 44, External Dial Tone	0~255 (0 ... Endless)
80-01-01	Service Tone Setup - Tone 57, Off-Hook Beep Tone - Headset Earpiece ringing Tone	Refer to Programming Manual.
80-03-01	DTMF Tone Receiver Setup - Detect Level	Type 1~5 = 0

Program Number	Program Name	Default
80-03-03	**DTMF Tone Receiver Setup - Min. Detect Level**	Type 1 = 10 (-20dBm) Type 2 = 15 (-25dBm) Type 3 = 10 (-20dBm) Type 4 = 10 (-20dBm) Type 5 = 10 (-20dBm)

Operation

With any feature, if the Mobile Extension user presses *, an existing call is placed in hold. Pressing * a second time or the timeout of the inter-digit timer returns the call to conversation mode.

Using Analog Lines with the Mobile Extension

Analog lines can be used for integration with the Mobile Extension using either DILs or VRS Auto Attendant to access the Mobile Extension Proxy Port. However, it must be noted that the ***0** Hang Up code must be used prior to terminating any call (e.g., transfer, hang up etc.) as analog trunks do not provide Disconnect Supervision.

Placing an Intercom Call to a Mobile Extension

1. Lift the handset or press **SPK**.
2. Dial the extension number assigned to the Mobile Extension.
   If the Mobile Extension is turned off, incoming calls hear a message indicating the user is not available. The setting in the DTMF Confirmation programming (Program 15-22-02) determines how the call is handled.
   Program 15-22-02 set to 0 or 1 (DTMF Confirmation Required):
   The caller is retrieved by the SL1000 and follows the no-answer programming (ring another extensions, forward to SL1000 voice mail, etc.)
   Program 15-22-02 set to 2 (No DTMF Confirmation Required):
   The caller is forwarded to the external extension voice mail, if available.

Outside Party Dialing the Mobile Extension

1. Dial the DID or DIL telephone number for the Mobile Extension.
2. System programming (DID=22-11-01 or DIL=22-07-01) must be defined.
   If the Mobile Extension is turned off, incoming callers hear a message indicating the user is not available. The setting in the DTMF Confirmation programming (Program 15-22-02) determines how the call is handled.
   Program 15-22-02 set to 0 or 1 (DTMF Confirmation Required):
   The caller is retrieved by the SL1000 and follows the no-answer programming (ring another extension, forward to SL1000 voice mail, etc.)
   Program 15-22-02 set to 2 (No DTMF Confirmation Required):
   The caller is forwarded to the external extension voice mail, if available.

Placing a Call from the Mobile Extension

1. Dial the DID or DIL telephone number for the Mobile Extension.
   If the Caller ID of the Mobile Extension matches the Speed Dial bin entry (Program 13-04 and 15-22), internal dial tone is heard by the Mobile Extension user.

2. Dial the desired Intercom number or dial the trunk access code to place an outgoing call.

Answering a Call on the Mobile Extension

1. Answer the ringing call.
2. If Program 15-22-02 is set to 0 or 1, the Mobile Extension user hears Music on Hold/ring tone. Press ✱ (within 10 seconds) to answer the call.
   This step is required when using analog trunks for the Mobile Extension feature.

Sending a Flash from the Mobile Extension

1. While on a conversation, a hook flash is returned by dialing **✱#** from the Mobile Extension.

Internal Dial Tone After Hang Up

1. When a call is finished, disconnect the call and receive internal dial tone by dialing **✱0**.

Placing/Retrieving a Call on Hold from the Mobile Extension

1. While on a call, press ✱ #.
2. To retrieve the held call, with system dial tone, press ✱ #.

Swapping Between Two Held Calls from the Mobile Extension

1. While on a call, press ✱ #.
   The first call is placed on Hold.
2. Place second call, then place on Hold by pressing ✱ #.
   The second call is placed on Hold and the first call is picked up.
3. The Mobile Extension can connect the two held calls with Automatic On-Hook Transfer if Program 20-11-11 is enabled by dialing ✱ 0.

Transferring a call from the Mobile Extension

1. With an active call, press ✱ #.
2. Dial the extension number to which the call is to be transferred.
3. Dial ✱ 0.
4. Hang up.

Call Forwarding

When setting Call Forwarding from the Mobile Extension, the service code(s) must be redefined in Programs 11-10-18, 11-11-06 and 11-11-40 and also must be defined in Programs 11-11-01 - 11-11-05 and 11-11-07.

To activate or cancel Call Forwarding to/from the Mobile Extension:

1. *When activating Call Forwarding From the Mobile Extension:*
   Dial the DID or DIL telephone number for the Mobile Extension.
   If the Caller ID of the Mobile Extension matches the Speed Dial bin entry (Program 13-04 and 15-22), internal dial tone is heard by the Mobile Extension user.
   - OR -
   When activating Call Forwarding to the Mobile Extension:
   Press **CALL** key or lift the handset.
2. Dial the service code defined in Program 11-11-01 - 11-11-05 and 11-11-07.
3. Dial Call Forwarding condition:
   1 = Set
   0 = Cancel
4. Dial destination extension or Off-Premise number.
5. Dial **✱0** (from Mobile Extension only):
   Change to Step.

To activate Call Forward Follow Me:

1. *When activating Call Forwarding From the Mobile Extension:*
   Dial the DID or DIL telephone number for the Mobile Extension.

If the Caller ID of the Mobile Extension matches the Speed Dial bin entry (Program 13-04 and 15-22), internal dial tone is heard by the Mobile Extension user.
- OR -
When activating Call Forwarding to the Mobile Extension:
Press SPK or lift the handset.

2. Dial **846**.
3. Dial Call Forwarding Condition:
   1 = Set
   0 = Cancel
4. Dial the destination extension.
5. Dial ***0** (from Mobil Extension only).
6. Hang up.

To cancel Call Forward Follow Me:

1. *When activating Call Forwarding From the Mobile Extension:*
   Dial the DID or DIL telephone number for the Mobile Extension.
   If the Caller ID of the Mobile Extension matches the Speed Dial bin entry (Program 13-04 and Program 15-22), internal dial tone is heard by the Mobile Extension user. **- OR -**
   When activating Call Forwarding to the Mobile Extension:
   Press **SPK** or lift the handset.
2. Dial **846**.
3. Dial **0**.
4. Dial destination Station to Cancel Forward Follow Me extension or Dial **0** to cancel all.
5. Dial ***0** (from Mobile Extension only).
6. Hang up.

Mobile Extension - Callback to Mobile Phone

Description

Callback to Mobile Phone allows the user to make an incoming call to a system then hang up before the system answers (like a one ring call), then the system calls back to the calling Mobile Phone using a pre-programmed number. The advantage is to reduce Mobile Phone charges for calls on a mobile extension system.

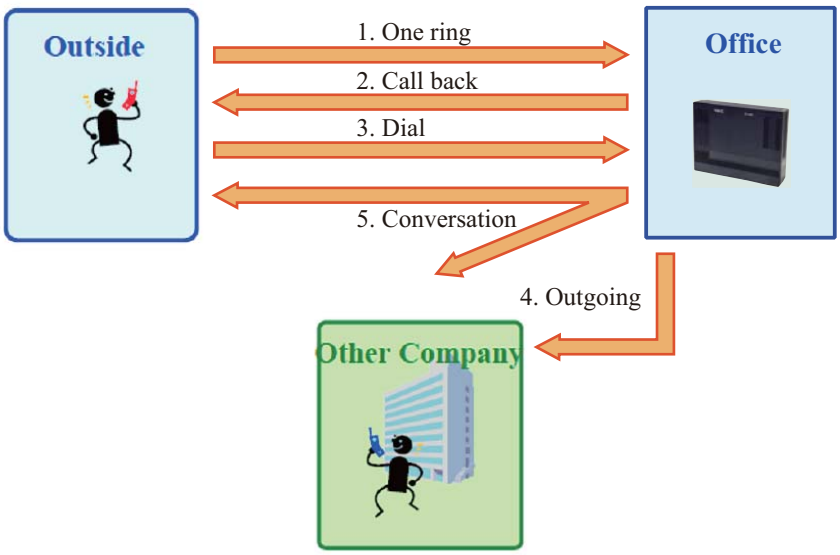


Figure 1-26 Example - Callback to Mobile Phone

After receiving a call back on a Mobile Phone, the user can call another extension or make an outgoing call via the system using the mobile extension function.

Conditions

- Mobile Extension must be programmed for this feature to work.
- In the Callback to Mobile Phone feature set Program 15-22-04 to 1. If the Mobile Phone user continues to ring over the time set in Program 22-01-12, the system answers the call as a normal Mobile Extension call.
- Callback to Mobile Phone will not proceed and no retry is made if all trunks are busy when trying to callback.
- Callback trunk routing follows Program 15-22-03 setting. When set 0 (Normal trunk access code), ARS also can be used.
- If Mobile Extension does not answer the Callback within time set in Program 20-01-16, Callback will stop. If answered the within the Callback time, the user hears an extension dial tone. A splash tone is not heard.
- If the system receives a "Disconnect" from the far end after a Callback is made, Callback will stop.
- When Calling party number is used, Callback follows the Program 21-19-01 outgoing call setting of the Mobile Extension which made the outgoing call.
- The Callback to Mobile Phone feature is not supported when using an analog trunk.
- If Flexible ringing is set, the Callback to Mobile Phone feature works in any type of Program 22-02-01 trunk setting. If Flexible ringing is not set, the Callback to Mobile Phone feature does not work if the incoming call type is “DID/DISA”.
- After answering Callback, if the system does not receive a DTMF signal from the Mobile Extension using Program 20-18-01 (Default; 30 seconds), the system disconnects the call.
- The trunk user for SMDR for Callback is tied to the extension number of Mobile Extension.
- If the user calls a Mobile Extension port during while using the Callback to Mobile Phone feature, the caller hears a busy tone.

Default Setting

No Mobile Extensions are configured.

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Caller ID

Call Forwarding

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Station Message Detail Recording

Guide to Feature Programming

Program Number	Program Name	Default
13-04-01	Speed Dialing Number and Name – Speed Dialing Data	No Setting
13-04-03	Speed Dialing Number and Name – Transfer Mode	0
13-04-04	Speed Dialing Number and Name – Transfer Destination Number	No Setting
14-01-30	Basic Trunk Data Setup – Flexible Ringing by Caller ID	1
15-22-01	Mobile Extension Setup – Mobile Extension Target Setup	0
15-22-03	Mobile Extension Setup – Trunk Access Code	0
15-22-04	Mobile Extension Setup – Call Back	0
20-01-16	System Options – Mobile Extension Callback Duration Time	15 Seconds
20-31-24	Timer Class Timer Assignment – Answer Time from Mobile Extension	3 Seconds
20-31-25	Timer Class Timer Assignment – Mobile Extension Callback Duration Time	15 Seconds
22-01-12	System Options for Incoming Calls – Mobile Extension Answer Time	3 Seconds

Operation

Receive Callback

Receive call from Mobile Extension and Callback:

Mobile Phone number: 09012345678
Incoming trunk set up: 22-02: Trk1, DIL
Mobile Extension set up: Ext150
Program 15-22-01: Speed Dial bin No, 50
Program 15-22-03: Trunk access code, 0: Use normal trunk access code
Program 15-22-04: Callback, (1) Enable

Speed Dial bin set up: No.50
Program 13-04-01: 09012345678
Program 13-04-03: Transfer mode, (1) Extension
Program 13-04-04: Destination, 150

Callback timer set up
Program 22-01-12: Answer time from Mobile Extension, 3 seconds
Program 20-01-16: Mobile Extension Callback Duration time, 15 seconds
Program 20-18-01: Extension Dial Tone Time, 30 seconds

1. Call the system Trk1 from the cell phone setting as a mobile extension (Ex 150).
2. The Mobile Phone user hangs up within 3 seconds, before system answers.
3. System makes the Callback to the cell phone.
4. Answer the Mobile Phone within 15 seconds.
5. Mobile Phone hears a dial tone and dials * before 30 seconds.

Receive call from Mobile Extension, but system answered:

1. Call the system Trk1 from the cell phone setting as a mobile extension (Ex 150).
2. Mobile Phone user continues ring for longer than 3 seconds, then system answers.
3. Mobile Phone user hears a dial tone.

Mobile Phone does not answer to Callback:

1. Call the system Trk1 from the Mobile Phone setting as a mobile extension (Ex 150).
2. The Mobile Phone user hangs up within 3 seconds, before system answers.
3. System makes the Callback to the Mobile Phone.
4. The Mobile Phone does not answer the call within 15 seconds.
5. System disconnects the call.

After Callback answered, but does not send any DTMF:

1. Call the system Trk1 from the Mobile Phone setting as a mobile extension (Ex 150).
2. The Mobile Phone user hangs up within 3 seconds, before system answers.
3. System makes the Callback to the Mobile Phone.
4. The Mobile Phone answers within 15 seconds.
5. The Mobile Phone hears a dial tone but does not send any DTMF within 30 seconds.
6. System disconnects the call.

Multiple Trunk Types

Description

The SL1000 supports many different Trunks in the system (DID, Loop Start, ISDN BRI, ISDN PRI). The system supports up to 126 trunks using expanded KSUs.

DID

Refer to the Direct Inward Dialing (DID) on page 1-166 feature for related information.

Loop Start Trunks

Loop Start Trunks can be connected to the SL1000 system. Loop Start is assigned per trunk at the associated unit. Ground Start and Loop Start Trunks can be mixed in the system per trunk.

ISDN BRI

Refer to the ISDN Compatibility on page 1-298 feature for related information.

ISDN PRI

Refer to the ISDN Compatibility on page 1-298 feature for related information.

T1-E1 Trunks

The T1/PRI/E1 Interface gives the system T1/E1 trunking ability. This unit uses a single universal slot and provides up to 24/30 trunk circuits. In additional to providing digital-quality trunking, the T1/PRI Interface allows you to have maximum trunking ability with fewer units. This in turn makes more universal slots available for other functions.

Conditions

- When adding or removing padding for trunks, use Program 14-01 for all trunks.

Default Settings

None

System Availability

Terminals

All Terminals

Required Component(s)

Any Trunk Unit

Related Features

Automatic Route Selection

Caller ID

Direct Inward Dialing (DID)

ISDN Compatibility

Guide to Feature Programming

Program Number	Program Name	Default
14-01-01	Basic Trunk Data Setup - Trunk Name	Trunk port Number: 001 ~ 126 Trunk Name: 001 ~ 126
25-07-01	System Timers for VRS/DISA - VRS/DISA Dial Tone Time	10
34-01-02	Receive Dial Type	1

Loop Start Trunks

Program Number	Program Name	Default
14-02-14	Analog Trunk Data Setup - Loop Start/Ground Start	0
14-04-01	Behind PBX Setup	0
14-05-01	Trunk Group - Trunk Group Number	Trunk Port 1~126 = Priority 1~126
22-02-01	Incoming Call Trunk Setup	0

Operation

None

Music on Hold

Description

Music on Hold (MOH) sends music to calls on Hold and parked calls. The music lets the caller know that the call is waiting, not forgotten. Without Music on Hold, the system provides silence to these types of calls. The Music on Hold source can be internal (tone) or from an external customer-provided music source (i.e., tape deck, receiver, etc.). The customer-provided source can connect to an Analog Trunk port .

Option Available for Using System Tone

The Music on Hold feature has been enhanced to allow callers to hear a system tone instead of playing the internal or external music.

In accordance with copyright law, a license may be required if radio, television broadcasts or music other than material not in the public domain are transmitted through the Music on Hold feature of telecommunications systems. NEC hereby disclaim any liability arising out of the failure to obtain such a license.

Music on Hold Source

There are 3 options available: (Program 10-04-01 & 10-04-02)
- Internal Music Tune - The tune is set by Program 10-04-02.
- External Source - ACI input via analog trunk port (COI3) (SL1000, program 10-03-02;COIU) .
- Silence - Callers on hold hear silence.

Music on Hold per DDI Number

The music on hold source can be selected for individual DDI numbers by Program 22-11-09. There are 3 options available:
- 0 - Use the music source set by Program 10-04-01.
- 1 - Back Ground Music input.

The music source will be used for incoming DDI calls only.

Music on Hold for Internal calls

The music source is set by Program 10-04-01.

Music on Hold for non-DDI Trunk calls

The music on hold source is set per trunk port by Program 14-08.

There are 2 options available:
- 0 - Use the music source set by Program 10-04-01.
- 1 - Back Ground Music input.

The music source will be used for outgoing trunk calls or incoming non-DDI calls only.

Conditions

None

Default Settings

Disabled

System Availability

Terminals

None

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-03-02	ETU Setup (COIU Unit Setup) - Select port type	0	
10-04-01	Music on Hold Setup - Music on Hold Source Selection	0	
10-04-02	Music on Hold Setup - Music on Hold Tone Selection	1	
10-04-03	Music on Hold Setup - Audio Gain Setup	32 (0dB)	
14-08-01	Music on Hold Source for Trunks - MOH Type	0	
20-06-01	Class of Service for Extensions	All extension port = Class 1	
20-07-02	Class of Service Options (Administrator Level) - Changing the Music on Hold Tone	COS 01~15 = 1	
22-11-09	DID Translation Number Conversion - Music On Hold Source	1	
22-11-10	DID Translation Number Conversion - ACI Music Source Port	1	
80-01-01	Service Tone Setup - Music On Hold Tone (Service Tone 64)	0~255 (0~Endless)	
80-01-02	Basic Tone Number	0~33 (0 = No Tone) (33=Default Time Slot)	
80-01-03	Duration Count	0~255 (0, 100~25500ms)	
80-01-04	Gain Level (dB)	0~63 (0, -15.5 ~ +15.5)	

Operation

None

Name Storing

Description

Extensions and trunks can have names instead of just circuit numbers. These names show on a multi-line terminal display when the user places or answers calls. Extension and trunk names make it easier to identify callers. The user does not have to refer to a directory when processing calls. A name can have up to 12 digits, consisting of alphanumeric characters, punctuation marks and spaces.

Additional Characters Available

When using the Name Storing feature, the system now provides additional characters which can be used. These characters are available with any option which allows Name Storing-Speed Dial - System/Group/Station, One-Touch Keys, Extension Name, Trunk Naming.

Conditions

- Display telephones use extension names for Directory Dialing.
- Single line extensions cannot program names.
- If a name is not assigned to the Extension/Virtual Extension, it does not show in the Extension Directory.
- Extension Directory only shows telephones/virtual extensions that have a name assigned in Program 15-01-01.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals with Display

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Directory Dialing

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Default
11-11-22	**Service Code Setup (for Setup/Entry Operation) - Extension Name Programming**	800
14-01-01	**Basic Trunk Data Setup - Trunk Name**	Trunk port Number: 001 ~ 126 Trunk Name: 001 ~ 126
15-01-01	**Basic Extension Data Setup - Extension Name**	STA 200 ~ 327 = No setting

Program Number	Program Name	Default
20-09-02	**Class of Service Options (Incoming Call Service) - Caller ID Display**	COS 01~15 = 1
20-13-21	**Class of Service Options (Supplementary Service) - Extension Name**	COS 01~15 = 1
20-13-47	**Class of Service Options (Supplementary Service) - Station Number Display**	COS 01~15 = 1
20-13-48	**Class of Service Options (Supplementary Service) - Station Name Display**	COS 01~15 = 1
20-13-51	**Class of Service Options (Supplementary Service) - Number and Name appear in the Directory**	COS 01~15 = 1

Operation

Refer to Table 1-33 Keys for Entering Names on this page for and explanation for using the keypad to enter names.

Table 1-33 Keys for Entering Names

Use this keypad digit . . .	When you want to. . .
1	Enter characters: **1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Å Æ Ç É Ê ì ó 0**
2	Enter characters: **A-C, a-c, 2.**
3	Enter characters: **D-F, d-f, 3.**
4	Enter characters: **G-I, g-i, 4.**
5	Enter characters: **J-L, j-l, 5.**
6	Enter characters: **M-O, m-o, 6.**
7	Enter characters: **P-S, p-s, 7.**
8	Enter characters: **T-V, t-v, 8.**
9	Enter characters: **W-Z, w-z, 9.**
0	Enter characters: **0 ! " # $ % & ' ( ) ô õ ú å ä æ ö ü α ε θ B**
*****	Enter characters: * + , - . / : ; < = > ? π Σ σ Ω ∞ ¢ £
#	**#** = Accepts an entry (only required if two letters on the same key are needed - ex: TOM). Pressing **#** again = Space. (In system programming mode, use the right arrow Softkey instead to accept and/or add a space.)
Clear/Back or **DND**	Clear the character entry one character at a time.
Flash	Clear all the entries from the point of the flashing cursor and to the right.

Navigation Key

Description

System provides following improved operation mode or features for multiline terminal user. Each mode is selectable by PRG15-02-60 and can be entered by depressing Cursor key or Center key when the terminal is idle.

Navigation mode:

End user can easily search call history, edit speed dial or change terminal LCD settings.

Directory dialing (DSX):

Directory dialing searches outside caller from the name list rather than dialing the telephone number.

Conditions

At PRG15-02-60 following 3 types of operation can be selected for each multiline terminal.

PRG15-02-60	↑(Up)	↓(Down)	←(Left)	→(Right)	Center	Note
0: Standard mode	LCD Contrast	LCD Contrast	Outgoing/ Incoming call History	Directory Dialing (SV8100)	None	
1: Advanced mode 1	None	**Directory Dialing (DSX)**	Incoming call History	Outgoing call History	**Navigation mode**	

During entering one of above features if PRG15-02-60 is changed to other mode, it is necessary to make the terminal back to idle state before using new feature.

Navigation mode

- Navigation mode provide easy handling method of Call log, such as search Missed call log and save to preferred speed dial bin with number and name if received.

Call History

- Missed Call: New incoming non answered call log
- Received Call: Answered call and checked missed call
- Dialed Number: Outgoing call log

Against above each 3 call logs, next operation is possible.

- Calling: Place Outgoing call
- Save Private Phonebook: Save to Private Speed dial bin (max 20)
- Save Common Phonebook: Save to Common Speed dial bin (default 900)
- Save Group Phonebook: Save to Group Speed dial bin (default none)
- Delete: Delete from call log

Contacts

- Search Contact: Name searches from all Speed dial bin and extension name
- New Contact: Saves new contact to Common/Group/Private Speed dial bin
- Edit Contact: Edits existing contact of Common/Group/Private Speed dial bin

Phone Setting - Display

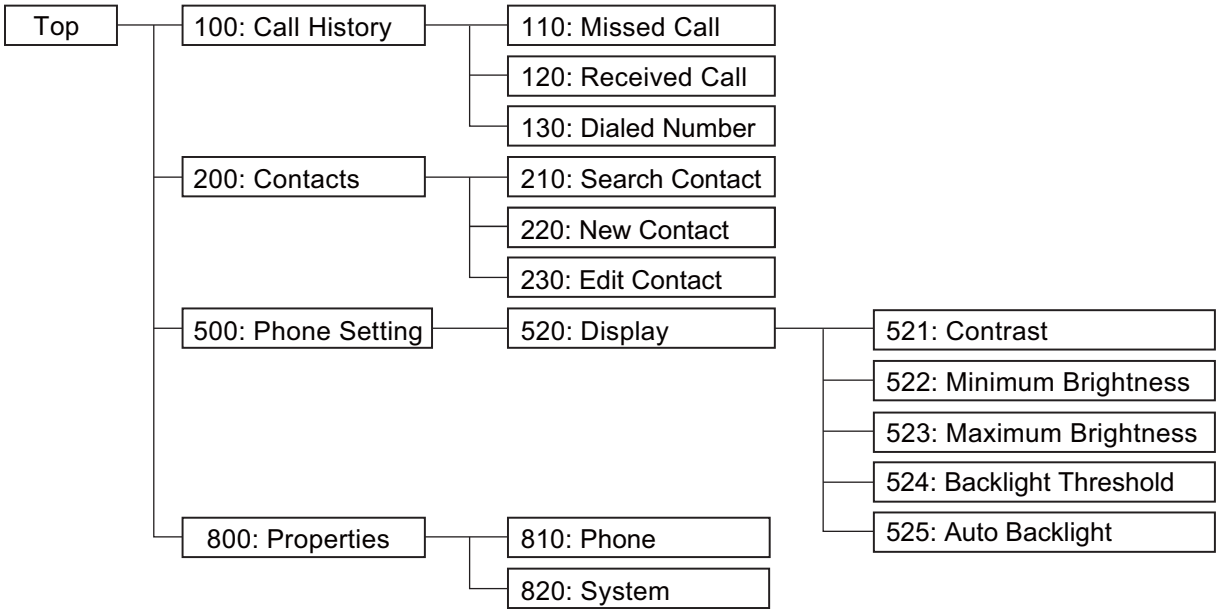
- Contrast
- Minimum Brightness
- Maximum Brightness
- Backlight Threshold
- Auto Backlight

If multiple persons save the data at the same time, same vacant bin number is used, so last saved data will be valid.

- Pressing the Center key during terminal is idle, user can enter Navigation mode. If the terminal has

incoming call or ICM Hold it can not enter the mode.

- When set in Advanced mode 1 or 2, even terminal idle BGM volume will not change by up/down cursor key. To change BGM volume it needs to press **Speaker** key first and change the BGM volume as Speaker volume level.
- CO incoming call during in Navigation mode does not affect LCD status or Cursor key operation. It continues Navigation mode.
- At SL1000 CO incoming call during in Navigation mode, up or down key operation works as a volume control.
- In Navigation mode 20 Private Speed Dial bins can be used (set at PRG13-01-02:1) beside 1000 Common Speed Dial bins, so max 1020 Speed Dial bins can be used.
- Below diagram shows supported feature and short cut number in Navigation mode.



100: Call History, 200: Contacts and 500: Phone Setting->520: Display, 800: Properties are supported.

Short Cut Code Table

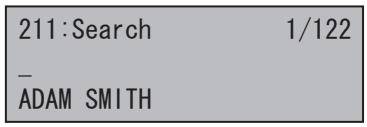
Top Level		Level 2		Level 3	
100	Call History	110	Missed Call	111	Missed call data
				~	
				11*	
		120	Received Call	121	Received call data
				~	
				12*	
		130	Dialed Number	131	Dialed call data
				~	
				13*	
200	Contacts	210	Search Contact	211	Name started from A
				212	Name started from B
				~	
				21*	Name started from J
		220	New Contact	221	Save Private Phone Book
				222	Save Common Phone Book
				223	Save Group Phone Book

		230	Edit Contact	231	Name started from A
				232	Name started from B
				~	
				23*	Name started from J
500	Phone Setting	510	Volume	511	Ring
				512	Off hook ring
				513	Page
		520	Display	521	Contrast
				522	Minimum Brightness
				523	Maximum Brightness
				524	Backlight Threshold
				525	Auto Backlight
		530	Call Forward	531	Current Forward Setting
				532	Edit
				533	Forward History
		540	Key assignments	541	Key 01
				~	
				54*	Key 10
		550	Name and Language		
		560	Text Message		
		570	Off hook Signaling	571	Co Line
				572	Hot Line
				573	Intercom
		580	Clock Alarm	581	
		590	More....	591	Background Music
				592	Key touch Tone
				593	Headset Mode
				594	Hands free Relay
				595	Automatic Call Timer
				596	Illuminated Dial Pad
				597	Auto Call Screening
				598	Incoming Paging
				599	Ring Line Prefer
800	Properties	810	Phone		
		820	System		

Directory dialing (DSX)

- Directory dialing (DSX) searches the Common/Group/Station Speed dial and Extension name list, as same as DSX. SV8100 Directory dialing searches Common and Group Speed dial only.
- 1st name and 2nd name are searched separately, if detected at both 1st name data is displayed.
- Pause between 1st and 2nd name is determined by " " (space), "." (period) or "-" (hyphen).
- When press "Short cut number 211 - 219", 21*, according to the number "A" to "J" will be indicated on LCD automatically as first search character.

• Below shows Directory dialing (DSX) mode indication.



1st line, left corner:	Shortcut code
1st line, right corner:	Position and total size of searched result
2nd line:	Cursor
3rd line:	Name

Default Settings

None

System Availability

Terminals

All Multiline terminals

Required Component(s)

408M-A1, 008E-A1

Related Features

Abbreviated Dialing/Speed Dial

Directory Dialing

Guide to Feature Programming

Program Number	Program Name	Default
15-02-60	Soft Key/Navigation key Mode	1
13-01-01	Speed Dialing Auto Outgoing Call mode	0
13-01-02	Private Speed Dial	1
13-01-03	Number of Common Speed Dial bin	900
13-02	Group Speed Dial bin	0
13-03	Speed Dial Group Assignment for Extensions	1
13-04-01	Speed Dialing data	no setting
13-04-02	Name	no setting
13-06-01	Private Speed Dial Number and Name	no setting
15-01-01	Extension Name	no setting
15-02-13	Redial List Mode	1
20-07-04	Common / group abbreviated dial registration	1
20-08-03	Common Speed dial	1
20-08-04	Group Speed dial	1

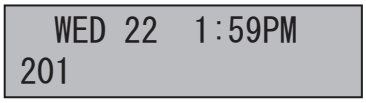
Operation

Navigation mode

Enter Navigation mode and save missed call to private phonebook.

<Program>
PRG15-02-60: Advanced Mode1

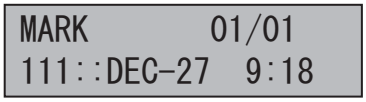
1. During terminal is idle: Press Center key to enter Navigation mode.



2. Press Center key to enter “Call History”.

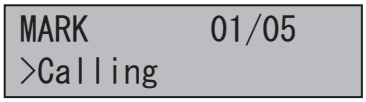
3. Press Center key to enter “Missed Call”.

4. Press Up/Down key and select one of “Missed Call” and press Center key.



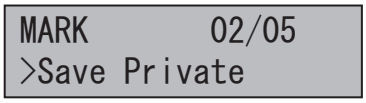
Top Left = Caller Name
Top Right = Number of Missed Call
Bottom Left = Navigation Number
Bottom Center = Month/Date/Time

5. Press Up/Down key to select the number you want to save and press Center key.



Top Left = Caller Name
Top Right = Number of Mode you can select from
Bottom = Mode name

6. Press Up/Down Key and select “Save Private”.



Top Left = Caller Name
Top Right = Number of Mode you can select from
Bottom = Mode name

7. Press Center Key to enter “Save Private”.

8. You can change the number or Press Center key to move to next categories.

```
[MIS/TEL]     1/3
>Dial:MARK
```

9. You can change the name or Press Center key to move to next categories.

```
[MIS/TEL]     1/3
>Bin:003
```

10. You can change the Bin number or Press Center key to save.

```

Save Complete !
```

11. Press Exit and exit the Navigation Mode.

Enter Navigation mode and search name from private phonebook.

<Program>

PRG15-02-60: Advanced Mode1

1. During terminal is idle: Press Center key to enter Navigation mode.

```
  WED 22  1:59PM
201
```

2. Press Down key to select “Contacts”.

```
100:OPRN LST 1/4
>Call History:00
```

3. Press Center key to enter “Contacts”.

```
200:OPRN LST 2/4
>Contacts
```

4. Press Center key to enter “Search Contact”.

```
210:OPRN LST 1/3
>Search Contact
```

5. Search Contact menu is indicated.

```
211:          1/19
NEC
```

Top Left = Navigation Key number
Top Right = Number of Contacts registered
Bottom = Name of a Contact

6. Enter "DA" to search “DAVE”

```
214:DA        1/1
DAVE
```

Top Right = Shows number of Search that has a “DA”
Bottom = Shows the Contacts

7. Press Center key and indicates number.

```
DAVE          1/1
>EXT:202
```

8. Press **Speaker** key or Off Hook to make outgoing call.

Enter Navigation mode and change phone setting - adjust LCD contrast.

<Program>

PRG15-02-60: Advanced Mode1

1. During terminal is idle: Press Center key to enter Navigation mode.

```
  WED 22  1:59PM
201
```

2. Press Down key to select “Phone Setting”.

```
100:OPRN LST 1/4
>Call History:00
```

3. Press Center key to enter “Phone Setting”

```
500:OPRN LST 3/4
>Phone Setting
```

4. Press Up/Down key and select “Display”.

```
520:OPRN LST 2/8
>Display
```

5. Press Center key to enter “Contrast”.

```
521:OPRN LST 1/1
>Contrast
```

6. Press Left or Right key to adjust Contrast.

```
      Down←  →Up
Contrast  |--- 1
```

7. Press Center key to save the change that been made.
8. Press **Exit** to exit the Navigation mode.

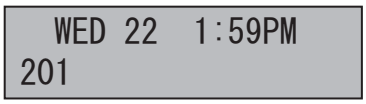
Directory dialing (DSX)

Enter Directory dialing (DSX) mode and search name from Common/Group/Station Speed dial and Extension name list.

<Program>

PRG15-02-60: Advanced Mode1

1. During terminal is idle: Press Center key to enter Navigation mode.



2. Press Down key to enter Directory dialing (DSX) mode.

3. Press the letter “D” to search the First or Last name start from “D”.

4. Then press the letter “A” to narrow the list.

5. Then search 2 matching name by Up/Down key.

6. Press **Speaker** key or Off Hook to make outgoing call.

Night Service

Description

Night Service lets system users activate one of the Night Service modes. Night Service redirects calls to their night mode destination, as determined by Assigned and Universal Night Answer programming. A user typically activates Night Service after normal working hours, when most employees are unavailable to answer calls.

- There are eight Service Modes. At default, the mode names are assigned as follows:
  - Mode 1 = No setting
  - Mode 2 = Night
  - Mode 3 = Midnight
  - Mode 4 = Rest
  - Mode 5 = Day2
  - Mode 6 = Night2
  - Mode 7 = Midnight2
  - Mode 8 = Rest2

There are 4 Service Patterns/Groups available.

Assigned Night Answer (ANA)

With Assigned Night Answer (ANA), Night Service has calls ring extensions directly. Assigned Night Answer provides an answering point for Night Service calls. For certain applications, this may be more appropriate than Universal Night Answer. For example, you could program trunks to ring the security station telephone during off hours.

For more information on assigning trunks to ring extensions, refer to Direct Inward Line (DIL) on page 1-174.

Universal Night Answer (UNA)

Universal Night Answer makes incoming calls ring over the External Paging speakers. With UNA, an employee can go to a telephone and press the flashing line key or use “Universal Answer” to pick up the call. Only ring groups calls can be used with Universal Night Answer. For more on setting up Universal Answer, refer to Central Office Calls, Answering on page 1-102.

You may also be able to use Transfer to UNA. An extension user can transfer their call to UNA (i.e., External Paging at night). Once transferred, the call rings the External Paging speakers like any other UNA call and can be picked up at any extension. You can also set up Transfer to UNA through the Voice Response System (VRS). This lets outside callers, answered by the VRS, dial a code to have their call ring External Paging.

Automatic Night Service

The system allows or denies Automatic Night Service. If allowed, the calls route according to the service patterns programmed. The Night Service programming is stored in the RAM memory. This means that if the system is not using the Automatic Night Service, for a power failure in night mode, when the power is restored, the system continues to be in night mode.

Programmable Function Key Can Toggle Night Modes

The software allows a Night Service Programmable Function Key (Program 15-07-01 or SC **851** : 09 + 0) to toggle night modes. You can determine in programming (Program 12-08-01) how many modes through which the user toggles. Note that the additional data for the Programmable Function Key must be set to 0 for the toggle function to work.

Night-mode skip for own Group

The software allows own group operation mode to skip next mode manually. Order of skip follows setting of PRG12-02, Automatic Night Service Patterns, if current mode is Day and next mode is scheduled to Rest, Skip key operation changes current mode to Rest manually. There are two method provided for Skip operation.

1. Use Service Code **787** (default)
2. Use Night Service Programmable Function Key (Program 15-07-01: 09+0) under the condition of Program 20-01-17, Day/Night change key mode set 1 (skip).

Conditions

- Almost all features are affected by Night Mode except for the following:
  - Dial Tone Detection
  - External Alarm Sensors
  - Flexible System Numbering
  - Pulse to Tone conversion
  - SMDR
  - Volume Control
- Call Arrival (CAR) keys and Virtual Extension keys do not support Day/Night Mode (09) Programmable Function keys.
- Universal Night Answer will only work when Call is sent to a ring group.
- There are separate Access Map and Ring Group programming entries for each Night Service mode (modes 1~8). Also, Universal Answer allows an extension user to pick up a Universal Night Answer (UNA) call.
- Mode Keys can be assigned as required for DSS Consoles.
- With Universal Night Answer, outside calls can ring External Paging Zones.
- Programmable Function Keys simplify activating Night Service.
- When programming Night Service function keys, multiple keys must be used for switching between each Night Service Mode.

Default Settings

System is always in the Mode 1

System Availability

Terminals

Not Applicable

Required Component(s)

None

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Direct Station Selection (DSS) Console

Paging, External

Programmable Function Keys

Ring Groups

Ecology

Guide to Feature Programming

Program Number	Program Name	Default
11-10-01	**Service Code Setup (for System Administrator) - Night Mode Switching**	818
11-10-12	**Service Code Setup (for System Administrator) - Night Mode Switching for Other Group**	718
11-10-50	**Night-mode skip (Own Group)**	787
11-12-43	**Service Code Setup (for Service Access) - Answer No-Ring Line (Universal Answer)**	#0
12-01-01	**Night Mode Function Setup - Manual Night Mode Switching**	0
12-01-02	**Night Mode Function Setup - Automatic Night Mode Switching**	0
12-02-01	**Automatic Night Service - Start Time**	Refer to Programming Manual.
12-02-02	**Automatic Night Service - End Time**	Refer to Programming Manual.
12-02-03	**Automatic Night Service - Operation Mode**	Refer to Programming Manual.
12-03-01	**Weekly Night Service Switching**	Night Mode Service Group Numbers: 01 Sunday = Time Pattern 1 02 Monday = Time Pattern 2 03 Tuesday = Time Pattern 3 04 Wednesday = Time Pattern 4 05 Thursday = Time Pattern 5 06 Friday = Time Pattern 6 07 Saturday = Time Pattern 7
12-04-01	**Holiday Night Service Switching**	not assigned
12-05-01	**Night Mode Group Assignment for Extensions**	1
12-06-01	**Night Mode Group Assignment for Trunks**	Night Mode Service Group Number = 1
12-07-01	**Text Data for Night Mode**	Text Messages for Day / Night Modes : Mode 1 = No setting Mode 2 = Night Mode 3 = M-Night Mode 4 = Rest Mode 5 = Day 2 Mode 6 = Night 2 Mode 7 = M-Night 2 Mode 8 = Rest 2
12-08-01	**Night Mode Service Range**	Range = 2
14-07-01	**Trunk Access Map Setup**	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).
15-06-01	**Trunk Access Map for Extensions**	1
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-01-17	**Day/Night change key mode**	0
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-07-01	**Class of Service Options (Administrator Level) - Manual Night Service Enabled**	COS 01~15 = 1
20-10-07	**Class of Service Options (Answer Service) - Automatic Off-Hook Answer**	COS 01~15 = 1

Program Number	Program Name	Default
22-02-01	Incoming Call Trunk Setup	0
22-04-01	Incoming Extension Ring Group Assignment	Extension 200 (first port)
22-05-01	Incoming Trunk Ring Group Assignment	1
22-08-01	DIL/IRG No Answer Destination	0
31-05-01	Universal Night Answer/Ring Over Page	0

Operation

To activate Night Service by dialing codes:

1. At a Multiline Terminal, press **Speaker**.
   - OR-
   At the single line telephone, lift the handset.
2. Dial **818** . To change a different group's mode, dial **818** + the group number (01~04).
3. Dial the Night Service Code:
   1 = Day 1 Mode
   2 = Night 1 Mode
   3 = Midnight 1 Mode
   4 = Rest 1 Mode
   5 = Day 2 Mode
   6 = Night 2 Mode
   7 = Midnight 2 Mode
   8 = Rest 2 Mode
4. Press **Speaker** or hang up.

To activate Night Service by using programmable keys:

1. Press **Night Service** key (Program 15-07-01 or SC **851** :09 + Mode code number below).
   1 = Day 1 Mode
   2 = Night 1 Mode
   3 = Midnight 1 Mode
   4 = Rest 1 Mode
   5 = Day 2 Mode
   6 = Night 2 Mode
   7 = Midnight 2 Mode
   8 = Rest 2 Mode

To transfer a call to the Universal Answer External Page zones:

1. Place the CO call on hold and dial the Transfer to Trunk Ring Group code (assigned in Program 11-15-09).

   You hear a confirmation tone.

2. Hang up.

   The call rings over the External Paging, enabling anyone to answer the call.

To skip own group current mode

Program;
PRG 11-10-50: 787
PRG 15-07-01: LK07; 09 + 0
PRG 20-01-17: 1 (skip)
PRG 12-01-01: 1 (On)
PRG 12-02:

01 = 00: 00 - 09: 00 Mode 3 [M-Night]
02 = 09: 00 - 12: 00 Mode 1 [Day]
03 = 12: 00 - 13: 00 Mode 4 [Rest]
04 = 13: 00 - 17: 00 Mode 1 [Day]
05 = 17: 00 - 18: 00 Mode 4 [Rest]
06 = 18: 00 - 22: 00 Mode 2 [Night]
07 = 22: 00 - 00: 00 Mode 3 [M-Night]
PRG 12-05-01 TEL100: Group 1
PRG 12-07-01 Mode Group 1:
Mode 1 = none
Mode 2 = [Night]
Mode 3 = [M-Night]
Mode 4 = [Rest]
PRG 20-07-01: 1 (On)

1. Current time is 17:30 and mode is Mode 4 [Rest].
2. At multiline Terminal, press Speaker or Off Hook.
3. Dial **787**, mode skip to Mode 2 [Night].
4. Press **Speaker** or On Hook.

- OR -

1. Current time is 17:30 and mode is Mode 4 [Rest].
2. Press LK07, mode skip to Mode 2 [Night].

Off-Hook Signaling

Description

Off-Hook ringing alerts a Multiline Terminal user that an incoming outside call is ringing to that station during another call. Off-Hook Signaling helps important callers get through, without waiting in line for the called extension to become free. The system provides the following Off-Hook Signaling options:

- Called Extension Block
  The called extension Class of Service may block incoming Off-Hook Signaling attempts. This is beneficial to users that do not want interruptions while on a call.
- Automatic Signaling
  Calling a busy extension automatically initiates Off-Hook Signaling. This option is useful to receptionists, operators and others that must quickly process calls. This is set in the called extension Class of Service.
- Manual Signaling
  After reaching a busy extension, manual signaling gives the caller the choice of using Off-Hook Signaling or activating other features. Extensions without automatic signaling have manual signaling. The users can dial a service code or press a Programmable Function Key to send Off-Hook Signaling to the called telephone.
- Selectable Off-Hook Signaling Mode
  The Off-Hook Signal can be muted ringing, no off-hook ringing or a beep in the handset-based on the caller's programming.
- Off-Hook Ringing
  Use this option to enable or disable an extension Off-Hook Signaling for incoming calls. If enabled, Off-Hook Signaling occurs normally. If disabled, calls queue behind the extension busy line appearance and the user gets no Off-Hook Signaling indication. The second line appearance stays idle. The caller hears ringback tone while their call waits. This is set in the called extension Class of Service.
- DID Call Waiting
  An extension can optionally have DID calls camp-on with Off-Hook/Call Wait signaling, without Off-Hook/Call Wait signaling or no signaling. This is set in the called extension Class of Service.
- Block Manual Off-Hook Signals
  This Class of Service option enables/disables a busy extension ability to block off-hook signals manually sent from a co-worker. If disabled (not blocked), callers can dial * at busy or busy/ring to signal the extension. If enabled (blocked), nothing happens when the caller dials * to off-hook signal.
- Block Camp-On
  If an extension has Block Camp-On enabled, callers to the extension cannot dial 2 to Camp-On after hearing busy or busy/ring. If the extension has Block Camp-On disabled, callers are not prevented from dialing 2 to Camp-On after hearing busy or busy/ring. This is set in the called extension Class of Service.

Conditions

- An extension user cannot Camp-On to a busy extension or leave a callback if Off-Hook Signaling has already gone through. Off-Hook Signaling allows an extension to block a caller's ability to dial # to camp-on.
- You cannot send off-hook signals to an extension busy on a Handsfree (Speakerphone) call. The called extension large LED flashes fast, with no ringing.
- The setting of Program 20-13-06 affects the BLF display for Hotline and Reverse Voice Over. Refer to Hotline on page 1-247 and Reverse Voice Over on page 1-469 features for additional information.
- You cannot send off-hook signals to an extension that is already receiving a voice announcement.
- An extension user can store the Off-Hook Signaling Service Code (809 /) under a One-Touch Key to provide quick Off-Hook Signaling access.
- An extension set as Operator in Program 20-17-01 does not follow settings in Program 20-13-05, Program 20-13-06 or Program 20-09-07 and always receives Off-Hook Signaling.
- Program 20-09-07 and 20-13-06 must be set to 1 in Class of Service for a normal extension to receive automatic Off-Hook Signaling.
- Off-Hook signaling is not supported for Wireless DECT (SIP) telephones.

Default Settings

Enabled

System Availability

Terminals

All Multiline and Single Line Terminals

Required Component(s)

None

Related Features

Callback

Call Waiting/Camp-On

Direct Inward Dialing (DID)

Handsfree and Monitor

Hotline

Intercom

One-Touch Calling

Programmable Function Keys

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Default
11-12-03	**Service Code Setup (for Service Access) - Override (Off-Hook Signaling)**	809
11-16-04	**Single Digit Service Code Setup - Intercom Off-Hook Signaling**	*
15-02-12	**Multiline Telephone Basic Data Setup - Off-Hook Ringing**	0
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-09-07	**Class of Service Options (Incoming Call Service) - Call Queuing**	COS 01~15 = 0
20-13-05	**Class of Service Options (Supplementary Service) - Intercom Off-Hook Signaling**	COS 01~15 = 1
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	COS 01~15 = 0
20-13-34	**Class of Service Options (Supplementary Service) - Block Manual Off-Hook Signaling**	COS 01~15 = 0
20-18-06	**Service Tone Timers - Interval of Call Waiting Tone**	10 (seconds)

Program Number	Program Name	Default
80-01-01 (39)	**Service Tone Setup - Repeat Count**	Refer to Programming Manual.
80-01-02 (39)	**Service Tone Setup - Basic Tone Number**	Refer to Programming Manual.

Operation

To send Off-Hook signals to an extension busy on a call:

Your extension may send off-hook signals automatically.

1. Dial service code.
   - OR -
   Press **Off-Hook Signaling** key (Program 15-07 or SC**851** : 33).

   You hear ringback.

   To have your call voice-announce, dial 1.

Receiving Off-Hook Signaling on a single line telephone while engaged on an internal or external call:

1. When Off-Hook Signaling is heard in the receiver, press the **Flash** Key to answer the call. The first call is placed on hold.
2. Press the **Flash** Key again to toggle between the two calls.

   If the single line phone hangs up with the active call, the other call on hold rings back to the single line.

One-Touch Calling

Description

One-Touch Calling gives a multiline terminal user one-button access to extensions, trunks, speed dial bins and selected system features. This saves users time when accessing co-workers, clients and features they use most often. Instead of dialing a series of codes, the user need only press the One-Touch key. An extension user can have One-Touch keys programmed for:

- Direct Station Selection - one-button access to extensions
- Station Speed Dial - one-button access to stored numbers (up to 36 digits long)
- Speed Dial - System/Group/Station - one-button access to stored speed dialing numbers
- Trunk Calling - one-button access to trunks or trunk groups
- Service Codes - one-button access to specific Service Codes

An extension user can chain dial with One-Touch Keys. For example, a user can store the number for a company Automated Attendant in key 1 and employee extension numbers in keys 2~5. The user presses key 1 to call the company, then one of keys 2~5 to ring the employee to which they want to speak.

An extension user or system administrator can optionally store a Flash command under a One-Touch key. This is helpful for One-Touch Keys used as Station Speed Dial bins. The stored Flash may be helpful to access features of the connected Telco, PBX or Centrex.

Conditions

- One-Touch keys provide a Busy Lamp Field (BLF).
- When a multiline terminal user is on a call, they can transfer to another station by pressing a DSS key for that station. It is not necessary to press Transfer to transfer to another station using a DSS key.

When a multiline terminal user is on a call, they must press transfer to transfer a call off site with a DSS key.

When a multiline terminal user is on a call, they must press transfer to transfer a call to a destination that is not a station (Voice Mail/Department group pilot, etc.).

- Pauses can be entered in the dial string of a DSS/One Touch button. The pause is entered as P in the dial string and causes the system to wait three seconds before sending the rest of the digits that follow the P (pause). Multiple pauses can be entered.
- The @ can be entered in the dial string of a DSS/One Touch button. The @ only applies to ISDN and Intercom calls. When using the @, the system waits for the destination to answer (answer supervision), and then sends the rest of the digits.
- Entering a P (pause) in a DSS/One Touch dial string can be used for CO calls, Intercom calls, or after the @ for ISDN calls.
- ARS with Max Digits is not supported when entering the @ or a P (pause) in the dial string of a DSS/One Touch button.

Default Settings

None

System Availability

Terminals

All Multiline Terminals and DSS Consoles

Required Component(s)

None

Related Features

Programmable Function Keys

Transfer

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
11-11-17	**Service Code Setup (for Setup/Entry Operation) - Programmable Function Key Programming (2-Digit Service Codes)**	851
20-13-18	**Class of Service Options (Supplementary Service) - Programmable Function Key Programming (General Level)**	COS 01~15 = 1
30-03-01	**DSS Console Key Assignment**	The DSS keys 001~060 of all DSS consoles = DSS/One-Touch key 200~259

Operation

Programmable Function Keys

To define a Programmable Function Key as a One-Touch Key:

1. Dial the service code for Function Key Programming (Program 11-11-17, **851** by default).
2. Press the key to be defined.
3. Dial **01** (DSS/One-Touch Key Operation).
4. For Direct Station Selection (Extension):
   a. Dial extension number you want assigned to that key.
   b. Press **Hold**.
   c. Press **Speaker**.
   For Personal Speed Dial:
   a. Dial the general trunk access code (**9**).
   - OR -
   Dial the Specific Trunk Service Code (**#9**) plus the trunk number (e.g., 005).
   - OR -
   Dial the Trunk Group Service Code (**804**) plus the trunk group number (e.g., 1).
   b. Dial the number you want to store.

   The total of the digits stored in steps 3 and 4 cannot exceed 24.

   *Valid entries are 0~9, # and ✳. To enter a pause, press **Transfer**. To store a Flash, press **Redial**.*

   c. Press **Hold**.
   d. Press **Speaker**.
   For Speed Dial - System/Group:

a. Dial **#2** to store a Speed Dial - System dialing number.
- OR -
Dial **#4** to store a Speed Dial - Group dialing number.

b. Dial Speed Dial number storage code (e.g., 001).

c. Press **Hold**.

d. Press **Speaker**.

For Central Office Calls, Placing (Trunk Calling):

a. Dial the general trunk access code (**9**).
- OR -
Dial the specific Trunk Service Code (**#9**) plus the trunk number (e.g., 005).
- OR -
Dial the Trunk Group Service Code (**804**) plus the trunk group number (e.g., 1).

b. Dial the telephone number to be stored.

c. Press **Hold**.

d. Press **Speaker**.

For Service Codes:

a. Dial the Service Code you want stored.

For example, if you want a One-Touch Key to automatically clear your Last Number Redial, enter 876 .

b. Press **Hold**.

c. Press **Speaker**.

Checking the One-Touch Keys

To check the function of a One-Touch key:

1. Press the **Help** key.
2. Press the **One-Touch** key.

The stored function displays.

Repeat this step to check additional keys.

3. Press the **Exit** key.

Operator

Description

When an extension user dials 0, calls are routed to a main system operator. The operator can answer and route outside calls or locate employees using the Page feature.

A maximum of eight operators is available.

Conditions

- Attendant extensions can have up to 32 incoming calls queued before additional callers hear busy tone.
- The operator extension cannot be a virtual extension.
- Extensions and trunks can be assigned to an operator group. A call to an operator that is busy rolls to the next operator in the operator group.

Default Settings

No operators are assigned.

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Attendant Call Queuing

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Default
20-01-01	System Options - Operator Access Mode	Use this program to set up priority of a call when calling an operator telephone (0=Step, 1=Circular).	0
20-17-01	Operator Extension - Operator's Extension Number	Designate an extension an operator. When an extension user dials 0 or 9 (defined by Program 11-01, Type 5), calls go to the operator selected in this program.If you do not assign an extension in Program 90-11-01, system alarms appear on the extension assigned in this option.	200
20-35-01	Extension's Operator Setting	Assign an extension to an operator group.	0
20-36-01	Trunk's Operator Setting	Allows the user to select Operator Group per trunk.	0
20-37-01	Operator Extension Group Setup	Define the initial operator extension in the operator group.	not assigned

Program Number	Program Name	Description/Comments	Default
20-38-01	**Operator Group Setting**	Use this program to set up priority of a call when calling an operator telephone.	0

Operation

Refer to the individual features for operation.

Paging, External

Description

With External Paging, a user can broadcast announcements over paging equipment connected to external Paging zones. When a user pages on of these external zones, the system broadcasts the announcement over the speakers. Like Internal Paging, External Paging allows a user to locate another employee or make an announcement without calling each extension individually.

The SL1000 system allows up to three External Paging zones.

You can use the trunk ports CO2 for External paging. Audio port configuration can be done by system programming. System can have up to 3 External Pagaing port, Base KSU port is assigned as Paging Group1, Expansion KSU1 as Group2 and Expansion KSU2 as Group3.

Combined Paging

Use Combined Paging when you want to simultaneously Page into an internal and corresponding external zone. For example, you can Page your company warehouse and outside loading dock at the same time. Combined Paging is available for zones 1~3 and All Call. Refer to Paging, Internal on page 1-388 for more on setting up Combined Paging. In addition, you can program a Function Key as a Combined Paging key. Using the External Page Function Key, when an All Call External Page Function Key is programmed, it includes both the external zones and the assigned internal zone(s). If the internal page zone is busy or there are no extensions in a page group, the announcement is made on the external zones only.

Relay Control

Relays can be used for External MOH, BGM resource, External Speaker, or Door Box control in accordance with PRG10-61-01 and PRG10-61-02 setting.

At PRG10-61-01 assign Relay to which device to be pair. (0: No setting, 1: External MOH, 2: BGM, 3: External Speaker, 4: Door Box)

In case of External Speaker or Door Box, select Speaker or Box number to be used at PRG10-61-02.

Conditions

- A Class of Service option is available in system programming to prevent display telephones from showing incoming paging information. This allows the system to save processor time and speed up system operation.
- DID and DIL trunks do not ring external page speakers. Only trunks defined as normal in Program 22-02-01 ring external page speakers.
- Paging keys can be assign on Programmable Function Keys and Direct Station Selection (DSS) Consoles to simplify External Paging operation.
- If an Analog trunk circuit has a Trunk connected, you cannot use that circuit for External Paging.
- To have outside calls ring External Paging Zones at night, refer to the Night Service feature and Program 31-05.
- Talkback paging requires bothway Speaker and need to set 0 (bothway) at PRG31-06-03.

Default Settings

No External Paging defined.

System Availability

Terminals

All Stations

Required Component(s)

- Analog Trunk port for 408M-A1
- 1- or 2-way amplifier and speakers (locally provided)

P

Related Features

Central Office Calls, Placing

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Direct Station Selection (DSS) Console

Door Box

Night Service

Paging, Internal

Programmable Function Keys

Transfer

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-13-29	Class of Service Options (Supplementary Service) - Paging Display	COS 01~15 = 1
31-01-02	System Options for Internal/External Paging - Page Announcement Duration	1200 (seconds)
31-03-01	Internal Paging Group Settings - Internal Paging Group Name	Refer to Programming Manual.
31-04-01	External Paging Zone Group	External Paging Speaker/Zones: 1~3 Speaker 1 [Basic] = 1 (Group 1) Speaker 2 [Expansion 1] = 2 (Group 2) Speaker 3 [Expansion 2] = 3 (Group 3)
31-05-01	Universal Night Answer/Ring Over Page	0
31-06-01	External Speaker Control - Broadcast Splash Tone before Paging (Paging Start Tone)	2
31-06-02	External Speaker Control - Broadcast Splash Tone after Paging (Paging End Time)	2
31-06-04	External Speaker Control - CODEC Transmit Gain Setup	32

Program Number	Program Name	Default
31-06-05	External Speaker Control - CODEC Receive Gain Setup	32
31-07-01	Combined Paging Assignments	1
31-08-01	BGM on External Paging - BGM	0

Operation

To Page into an external zone:

1. Press External Paging key (Program 15-07 or SC **851** : 19 for External Paging zones or 20 for External All Call Paging).
2. Make announcement.
   - OR -
   1. At the multiline terminal, press **Speaker** or pick up the handset.
      - OR -
      At single line telephone, lift the handset.
   2. Dial **803** and the External Paging Zone code (1~3 or 0 for All Call).
      - OR -
      Dial **∗1** and the Combined Paging Group code (1~3 or 0 for Internal/External All Call).

      Display indicates the Combined Paging as an External Page.

      If the Internal Page Zone is busy or if there are no extensions in a page group, the page may be announced as an External Page only.
   3. Make an announcement.
   4. Dial **803** and the External Paging Zone code (1~3 or 0 for All Call).
      - OR -
      Dial **∗1** and the Combined Paging Group code (1~3 or 0 for Internal/External All Call).

      Display indicates the Combined Paging as an External Page.

      If the Internal Page Zone is busy or if there are no extensions in a page group, the page may be announced as an External Page only.
   5. Make an announcement.

Paging, External (VRS)

Description

Paging, External (VRS) enables the use of prerecorded VRS messages for External Paging. The advantage of this feature is saving time for the users who regularly use External Paging with the same announcements.

Conditions

- If VRS External Paging is answered using the meet me paging service code and both parties are connected, VRS stops the announcement.
- Paging, External (VRS) does not support Internal Paging. Also, combined paging is not supported.
- The paging telephone must remain off-hook during paging. If the paging telephone hangs up during paging, VRS External paging stops.
- If an invalid VRS number is dialed or, there is no recorded VRS greeting, the caller hears an error tone.
- Paging, External (VRS) will not play the starting and ending tone if enabled. If the starting and ending tones are needed, they must be recorded in the VRS message itself.
- After the recorded VRS message is finished, the paging telephone hears a busy tone.
- When using the speaker mode on a paging telephone, the telephone becomes idle after the recorded VRS message finishes.
- The Paging, External (VRS) feature is supported with Embedded VRS.

Default Settings

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

- PZ-VM21
- InMail Compact Flash
- CPU license for VRS
- 1- or 2-way amplifier and speakers (locally provided)

Related Features

Paging, External

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Default
11-10-20	Service Code Setup (for System Administrator) – VRS - Record/Erase Message	716
11-12-20	Service Code Setup (for Service Access) – External Paging	803

Program Number	Program Name	Default
20-07-13	Class of Service Options (Administrator Level) – VRS Record (VRS Msg Operation)	COS 1~15 = 1

Operation

External VRS Messaging

To page into an external zone with VRS message:

1. Pick up the handset or press Speaker at multiline terminal.
2. Dial **803** and * then the External Paging Zone code (1-8, 0 for all call).
3. Dial VRS message Number (001-100).
4. Make announcement.
5. Press Speaker at multiline terminal or on-hook.
   - OR -
   1. Press DSS/One Touch Key programmed for External Paging.

To Program One Touch Key:

The following example shows how to program a On Touch key for External Paging zone 2 to play VRS greeting number 099.

1. Press Speaker.
2. Dial **7, 5, 1** .
3. Press Function Key to be programmed.
4. Dial 0, 1 (Function Code for DSS/One Touch Key).
5. Dial **7, 0, 3** , ***, 2, 0, 9, 9**.
6. Press **Hold**.
7. Press Speaker.

When using the Paging, External (VRS) feature, FC 20 (External All Call Paging code) cannot be used as a programmable function key.

Paging, Internal

Description

Internal Paging lets extension users broadcast announcements to other multiline terminal users. When a user makes a Zone Paging announcement, the announcement broadcasts to all idle extensions in the zone dialed. With All Call Paging, the announcement broadcasts to all idle extensions programmed to receive All Call Paging. An extension can be a member of only one Internal Paging Zone. Like External Paging, Internal Paging allows a user to locate another employee or make an announcement without calling each extension individually.

Combined Paging

Use Combined Paging when you want to simultaneously Page into an internal and corresponding external zone. For example, you can Page your company warehouse and outside loading dock at the same time. Combined Paging is available for Paging zones 1~8 and All Call. Optionally, you can change the Combined Paging assignments. For example, you can associate External Paging Zone 1 with Internal Paging Zone 4. You can program a Function Key as a Combined Paging key. When an All Call External Page Function Key is programmed, it includes both the external zones and the assigned internal zone(s). If the internal page zone is busy or there are no extensions in a page group, the announcement is made on the external zones only.

Conditions

- Internal Paging does not require an unused analog trunk port and external paging system.
- You can assign up to 50 TDM extensions to an Internal or All Call Paging Group.
- You can assign up tp 16 IP extansions to an Internal or All Call Paging Group.
- A system must have at least one extension port idle to make an Internal Page. If no extension port is idle, the extension performing the Page hears a busy signal.
- There are 32 available Internal Paging Groups (Zones).
- A Class of Service option is available in system programming to prevent display telephones from showing incoming internal paging information. This allows the system to save processor time and speed up system operation.
- An extension user can broadcast an announcement over an External Paging Zone.
- Function keys simplify Internal Paging operation.
- You must assign an extension to be in a two-digit zone in Program 31-02-01 before you can assign a function key using the **851** / service code as a two-digit Internal Group Paging Zone key.
- If Auto Hold in Program 15-02-07 is set to Cut(1), when a user presses the page key while on a trunk call, the trunk call is put on hold.
- A single line telephone can initiate an Internal Zone page, but cannot receive an Internal Zone Page.
- If an internal paging group has only IP Multiline Stations, mutlicast is used for the page. IP multiline terminals must have a gateway programmed to accomplish a multicast transmission. When an actual gateway device does not exist on the network, a dummy gateway address on the same subnet must be defined.
- When a paging group contains all IP phones, the page is sent via a multicast message from the initiating IP phone. If a paging group has IP and TDM phones, when and IP phone initiates the page, a message is sent to the CPU and the CPU sends the multicast message for the IP phones.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Single Line Telephones

Required Component(s)

None

Related Features

Meet Me Paging

Meet Me Paging Transfer

Paging, External

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
11-12-19	**Service Code Setup (for Service Access) - Internal Group Paging**	801
11-12-24	**Service Code Setup (for Service Access) - Combined Paging**	*1
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-13-29	**Class of Service Options (Supplementary Service) - Paging Display**	COS 01~15 = 1
31-01-01	**System Options for Internal/External Paging - All Call Paging Zone Name**	GRP ALL
31-01-02	**System Options for Internal/External Paging - Page Announcement Duration**	1200 (seconds)
31-02-01	**Internal Paging Group Assignment - Internal Paging Group Number**	All Stations = 0
31-02-02	**Internal Paging Group Assignment - Internal All Call Paging Receiving**	0
31-03-01	**Internal Paging Group Settings - Internal Paging Group Name**	Up to 12 Characters 01 = Group 1 02 = Group 2 : 32 = Group 32
31-07-01	**Combined Paging Assignments**	1

P

Operation

To make an Internal Page announcement:

Multiline Terminal

1. Press the zone Internal Paging key (Program 15-07 or SC **851** : 21 + 01~32 for zones (00 for All Call).
   - OR -
1. Press **Speaker** or lift the handset.
2. Dial **801** and the Paging Zone number (0~9 or 00~32).

   Dialing 0 or 00 calls All Call Internal Paging.

   - OR -
   Dial ***1** and the Combined Paging Group code 1~8 or 0 (for Internal/External All Call).

   Display indicates the Combined Paging as an External Page.

   If the Internal Page Zone is busy or if there are no extensions in a page group, the page is announced as an External Page only.
3. Make an announcement.
4. Press **Speaker** to hang up.

Single Line Telephone

1. Lift the handset.
2. Dial **801** and the Paging Zone number (0~9 or 00~32).

   Dialing 0 or 00 calls All Call Internal Paging.

   *Dial ***1** and the Combined Paging Group code 1~8 or 0 (for Internal/External All Call).*
3. Make an announcement.
4. Hang up.

Park

Description

Park places a call in a waiting state (called a Park Orbit) so that an extension user may pick it up. There are two types of Park: System and Personal. Use System Park when you want to have the call wait in a system orbit. Personal Park allows a user to Park a call at their extension so a co-worker can pick it up. After parking a call in orbit, a user can Page the person receiving the call and hang up. The paged party dials a code or presses a programmed Park key to pick up the call. With Park, it is not necessary to locate a person to handle their calls. A call parked for too long recalls the extension that initially parked it, however the call remains in the park orbit until it is answered. There are 64 Park Orbits (1~64) available for use.

Extended Park

An extension Class of Service determines whether it uses the normal Park Orbit Recall time or the Extended Park Orbit Recall time. The timers are set in system programming. When an extension with Extended Park Recall Class of Service option parks a call, it recalls after the Extended Park Orbit Recall time. When an extension with the Normal Park Orbit Recall Class of Service option parks a call, it recalls after the normal Park Orbit Recall time, however the call remains in the park orbit until it is answered.

Programmable Function Key and Service Code Available for Personal Park

The Personal Park feature is enhanced by using a Programmable Function Key or service code (3-digit or 1-digit) to place a call in Personal Park. This option is available for multiline terminals and single line sets and can be used for analog or ISDN trunks.

Conditions

- An extension user can park a call in any Park Orbit. However, an extension user can pick up only a call Parked by a member of their own Park group (see Program 24-03).
- An extension can have only one Personal Park key.
- When the terminal that has a call in Personal Park is unplugged, the Personal Park is released and the held caller is placed on Non-Exclusive Hold.
- The following table indicates what condition the service codes and Programmable Function key can be used.

Status	Using 3-Digit Service Code	Using 1-Digit Service Code	Using Personal Park Key
Speaking	Not Available	Not Available	Available
ICM Dial Tone or Busy Tone	Available	Not Available	Available
Calling Another Extension	Not Available	Available (with outside call on hold and when called extension does not answer)	Available
Receiving a Personal Park Recall	Not Available	Not Available	Available

- A user can display the Caller ID of a call in Park if Caller ID is enabled (1) in Program 20-09-02.
- Park keys can be assigned on DSS consoles.
- Calls on virtual extension keys cannot be put in Personal Park if Program 15-18-01 is set to Land on the key (1).
- Function keys simplify Park operation.
- One Touch keys programmed for Park Hold Service Code cannot be used to park calls without using Hold or Transfer.
- Call Park - Step Call is supported in the local system only.
- A parked call cannot be retrieved from Hold Dial Tone (Second dial tone).

- When a call is parked from a virtual extension, the virtual extension is released.
- When parking a call from a virtual extension, Programs 15-02-21 and 15-18-01 must be set to 1.
- Park Group assignment is by the terminal extension, not the virtual extension.
- When a call parked from a virtual extension recalls, it will ring the terminal the virtual extension is programmed on, not the virtual extension key.

Default Settings

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Call Arrival (CAR) Keys

Caller ID

Direct Station Selection (DSS) Console

Hold

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
11-12-31	Service Code Setup (for Service Access) - Park Hold	#6
11-12-32	Service Code Setup (for Service Access) - Answer for Park Hold	*6
11-12-35	Service Code Setup (for Service Access) - Station Park Hold	773
11-16-11	Single Digit Service Code Setup - Station Park Hold	not assigned
15-02-08	Multiline Telephone Basic Data Setup - Automatic Handsfree	1
15-07-01	Programmable Function Keys	Refer to Programming Manual.
15-18-01	Virtual Extension Key Enhanced Options - Virtual Extension Key Operation Mode	0
15-18-02	Virtual Extension Key Enhanced Options - Display Mode when pacing a call on Virtual Extension Key	0
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-11-19	Class of Service Options (Hold/Transfer Service) - Hold/Extended Park	COS 01~15 = 0
20-11-24	Class of Service Options (Hold/Transfer Service) - Trunk Park Hold Mode	COS 01~15 = 0

Program Number	Program Name	Default
20-11-25	**Class of Service Options (Hold/Transfer Service) - Transfer Park Call**	COS 01~15 = 0
20-11-26	**Class of Service Options (Hold/Transfer Service) - Station Park Hold Mode**	COS 01~15 = 0
20-11-27	**Class of Service Options (Hold/Transfer Service) - Call Park Automatically Search**	COS 01~15 = 1
24-01-02	**System Options for Hold - Hold Recall Callback Time**	30 (seconds)
24-01-06	**System Options for Hold - Park Hold Time - Normal**	90 (seconds)
24-01-07	**System Options for Hold - Park Hold Time - Extended (Recall)**	300 (seconds)
24-03-01	**Park Group - Park Group Number**	1

Operation

To Park a call in a system orbit:

You can Park Intercom or trunk calls.

1. Press the **Park** key (Program 15-07 or SC **852** : ✱04 + orbit).

   The Park key LED lights.

   If you hear busy tone, the orbit is busy. Try another orbit.

2. Use Paging to announce call.
3. Press **Speaker** to hang up.

   If not picked up, the call recalls to you.

   - OR -

   1. At the multiline terminal, press **Hold**.

      - OR -

      At a single line telephone, hookflash.

   2. Dial **#6** and the Park orbit (01~64).

      If you hear busy tone, the orbit is busy. Try another orbit.

      *If you hear a busy tone, the orbit is busy. Dial **#6** ✱ if enabled in Program 20-11-27 (Call Park AutoSearching) to search for an idle park location in ascending order.*

   3. Use Paging to announce the call.
   4. Press **Speaker** to hang up.

      If not picked up, the call recalls to you.

      The parked call recalls after the Park Hold Time (Program 24-01-06). The call rings the extension to which it recalled for the Hold Recall Callback Time (Program 24-01-02). The call then goes on Hold for the Park Hold Time, then recalls again for the Hold Recall Callback Time. The call continues to cycle between Hold and recall until the extension user answers the call or the outside party hangs up.

To pick up a parked call:

1. Lift the handset.
2. Press the **Park** key (Program 15-07 or SC **852** : ✱04 + orbit).
   - OR -
1. At the multiline terminal, press **Speaker**.
   - OR -
   At single line telephone, lift the handset.
2. Dial **✱6** and the Park orbit (01~64).

To park a call at your extension:

1. Do not hang up.
2. Press the **Personal Park** key (Program 15-07 or SC **852** : ✱07).
   - OR -
   Press Hold and dial **773** .
   - OR -
   Press **Hold** and the **Personal Park** key (Program 15-07 or SC **852** : ✱07).

   At a single line telephone, hookflash instead of pressing HOLD.

   A confirmation tone is heard and the call is parked at your extension. If the extension has a Personal Park key, the key flashes.

   The Personal Park single-digit service code (Program 11-16-11) cannot be used in this operation.
3. Page your co-worker to pick up the call.
4. Press **Speaker** to hang up (or hang up at the single line telephone).

   If not picked up, the call recalls to you.

To Park an outside call at your extension after trying to call a co-worker:

1. While on a call, press **Hold**.
2. Dial a co-worker's extension number.

   The co-worker does not answer.
3. Press the **Personal Park** key (Program 15-07 or SC **852** : ✱07).
   - OR -
   Dial the Personal Park single digit code (Program 11-16-11).

   The Intercom call to the co-worker is dropped. A confirmation tone is heard and the outside call is parked at your extension.

   If the co-worker answers the call, the outside call rings back after the intercom call is completed. The call can then be placed in Personal park if desired.

To pick up a call parked at your extension:

1. Press the **Personal Park** key (Program 15-07 or SC **852** : ✱07).
   - OR -
   Press **Speaker** and dial **773** .

   *At a single line telephone, skip pressing **Speaker**.*

   The Personal Park single-digit service code (Program 11-16-11) cannot be used in this operation.

   *If it recalls the extension, pressing the **Personal Park** key or flashing **Speaker** answers the call.*

To answer a call parked at a co-worker's extension:

1. Press **Speaker**, dial ** plus the co-worker's extension number.

   *At a single line telephone, skip pressing **Speaker**.*

To display Caller ID for a call in Park:

With Program 15-02-08 set to 0 (preselect) for this feature.

1. With Program 15-02-08 set to 0 (preselect) and a call in Park, press the **Park** key. (Program 15-07 or SC **852** : *04).

Call Park-Step Call:
To Park a call in the first available system orbit:

You can Park Intercom or trunk calls.

1. Press **Hold** or **Transfer**.
2. Dial **#6**.

   If you hear a busy tone, the orbit is busy. Proceed to step 3.

3. Dial *.

   Program 20-11-27 must be enabled in the Multiline Terminals Class of Service.

4. Press **Speaker** to hang up.

   If not picked up, the call will recall to you.

   - OR -

   1. Press **Hold** or **Transfer**.
   2. Press the **DSS/BLF** key programmed as **#6 *** (The Park location will be displayed in the LCD).
   3. Press **Speaker** to hang up.

P

PBX Compatibility/Behind PBX

Description

You can connect your telephone system trunks to Centrex/PBX lines, rather than to Telco trunk circuits. This makes the trunk inputs to the system Single Line type compatible Centrex/PBX extensions, rather than Telco circuits. PBX Compatibility lets the system be a node (i.e., satellite) in a larger private telephone network. To place outside calls when the system is behind a PBX, telephone system users must first dial the PBX trunk access code (usually 9).

The system provides the following PBX Compatibility options:

- PBX Trunk Access Code Screening
  The system can monitor the numbers users dial and screen for PBX trunk access codes. The system can screen up to four groups of trunk access codes. The codes can have one or two digits, consisting of the digits 0~9, # and ✱. (You use Line Key 1 as a wild card entry.)
- PBX Trunk Toll Restriction
  The system can provide the Toll Restriction for the PBX trunk, or restriction can be handled solely by the connected PBX. If the telephone system provides the restriction, it restricts the digits dialed after the PBX access code.
- PBX Call Restriction
  When the telephone system does the Toll Restriction, it can further restrict users from dialing PBX extensions. In this case, the only valid numbers are those dialed after the PBX trunk access code. The only PBX facility telephone system users can access are the PBX outside trunks.
- Automatic Pause
  The system automatically pauses when it sees a PBX trunk access code during manual dialing, Speed Dialing, Last Number Redial, Repeat Redial and Save Number Dialed. This gives the connected PBX time to set up its trunk circuits.

Conditions

- When using Account Codes, do not use ✱ in a PBX access code. Otherwise, after the ✱, the trunk stops sending digits to the central office.
- The system automatically pauses after it finds a PBX access code in a Speed Dialing bin.
- If Speed Dialing routes a call to a PBX trunk, it does not automatically insert a PBX access code. It outdials the digits just as they are stored.
- Users answer incoming calls on PBX trunks just like other trunks. All relevant access and Ring Group programming applies.
- Except for dialing the PBX access code, users place calls on PBX trunks just like other trunks. All relevant access programming applies. Refer to the Central Office Calls, Placing on page 1-102 feature for more details.
- You can have DILs route from the connected PBX. Users can access these trunks for outgoing PBX calls. All PBX Compatibility restrictions and programming apply.
- Flash may allow access to certain PBX features - like Transfer. Make sure you program Flash for compatibility with the connected PBX.
- The system does not provide automatic Pulse to Tone Conversion after outdialing the PBX trunk access code.
- You can program incoming DISA trunks to be outgoing PBX trunks. All PBX Compatibility restrictions and programming apply.
- PBX trunks can follow normal system Toll Restriction.
- Users can get outbound access to PBX trunks through Trunk Groups and/or Trunk Group Routing. All PBX Compatibility restrictions and programming apply.
- If the system routes a call to a PBX trunk, it does not automatically insert the PBX access code. It outdials the call just as the user dialed it.

Default Settings

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Account Code Entry

Central Office Calls, Answering

Central Office Calls, Placing

Code Restriction/Toll Restriction

Direct Inward Line (DIL)

Direct Inward System Access (DISA)

Flash

Pulse to Tone Conversion

Ring Groups

Abbreviated Dialing/Speed Dial

Trunk Group Routing

Trunk Groups

Guide to Feature Programming

Program Number	Program Name	Default
14-01-01	Basic Trunk Data Setup - Trunk Name	Trunk port Number: 001 ~ 126 Trunk Name: 001 ~ 126
14-01-02	Basic Trunk Data Setup - Transmit Level	32 (0dB)
14-01-08	Basic Trunk Data Setup - Toll Restriction	1
14-02-01	Analog Trunk Data Setup - Signaling Type (DP/DTMF)	2
14-02-02	Analog Trunk Data Setup - Ring Detect Type	0
14-04-01	Behind PBX Setup	0
21-04-01	Toll Restriction Class for Extensions	2
21-05-12	Toll Restriction Class - PBX Call Restriction	0
21-06-08	Toll Restriction Table Data Setup - PBX Access Code	Table 1~4 = No Setting

Operation

To place a call over a PBX trunk:

1. At multiline terminal, press **Speaker** and dial **804** .
   - OR -
   At single line telephone, lift the handset and dial **804** .
2. Dial PBX trunk group number (**01~25**).
3. Dial PBX access code and number.
   - OR -
   1. At the multiline terminal only, press **PBX trunk group** key (Program 15-07 or SC **852** : ✱02 + group).
   2. Dial PBX access code and number.

   - OR -
   1. At the multiline terminal, press **Speaker** and dial **9** .
      - OR -
      At the single line telephone, lift the handset and dial **9**.
   2. Dial the PBX access code and number.

   - OR -
   1. At the multiline terminal, press **Speaker**.
      - OR -
      At the single line telephone, lift the handset.
   2. Dial **#9** .
   3. Dial the PBX trunk number (e.g., 05 for line 5).
   4. Dial the PBX access code and number.

   - OR -
   1. Press the **PBX trunk key** (Program 15-07 or SC **852** : ✱01 + 1 to 126).
   2. Dial the PBX access code and number

      In all cases above, Toll Restriction may prevent your call.

PC Programming

Description

The SL1000 has three different methods for programming. The first is via the Telephone, the second is by PCPro and third by WebPro.

PCPro is a Microsoft Windows based application. It allows the technician/system administrator to download a database from the system, make changes, and then upload.

The WebPro application is a browser base. It allows the technician/end user to make a change to the system/terminal. No special installation program is required.

An overview of the three programming applications is shown below.

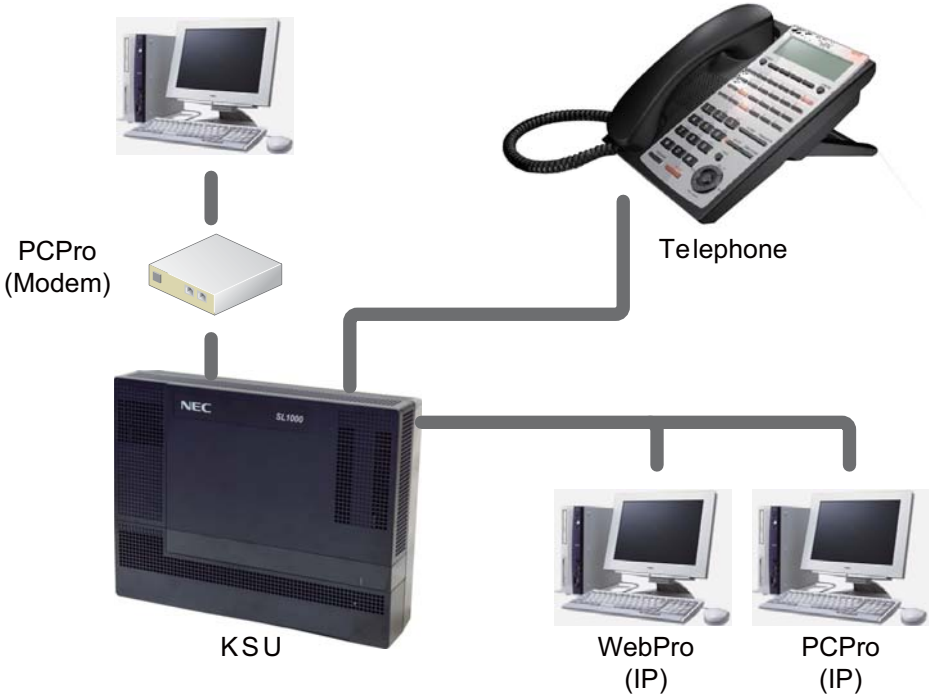


Figure 1-27 PC Programming Overview

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WebPro System Programming

WebPro can be used to edit system programming from a Web browser. System Data, License Information, and Modification History are among the items that can be viewed in WebPro (refer to WebPro Home Page on this page).

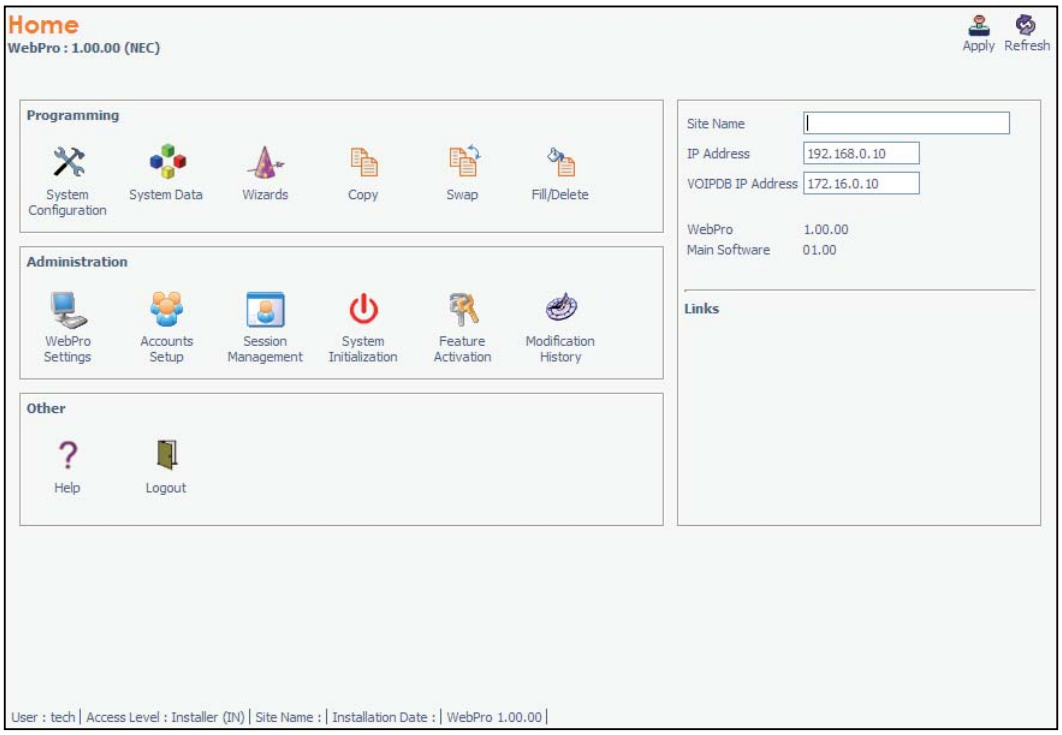

Figure 1-28 WebPro Home Page

WebPro End User Programming

WebPro has an End User Login for which extensions can program functions for their own extension. They can program Function keys, Virtual Extension ringing assignment, Station Speed Dial, InMail features, Station Name, Call Forwarding, Display Language, Ring Tone and End User Password.

To login to the WebPro End User Programming, input the system IP (default: 192.168.0.10) like you would logging into WebPro. Use the extension number as the User Name and the password is assigned in Program 90-28-01 (default: 1111).

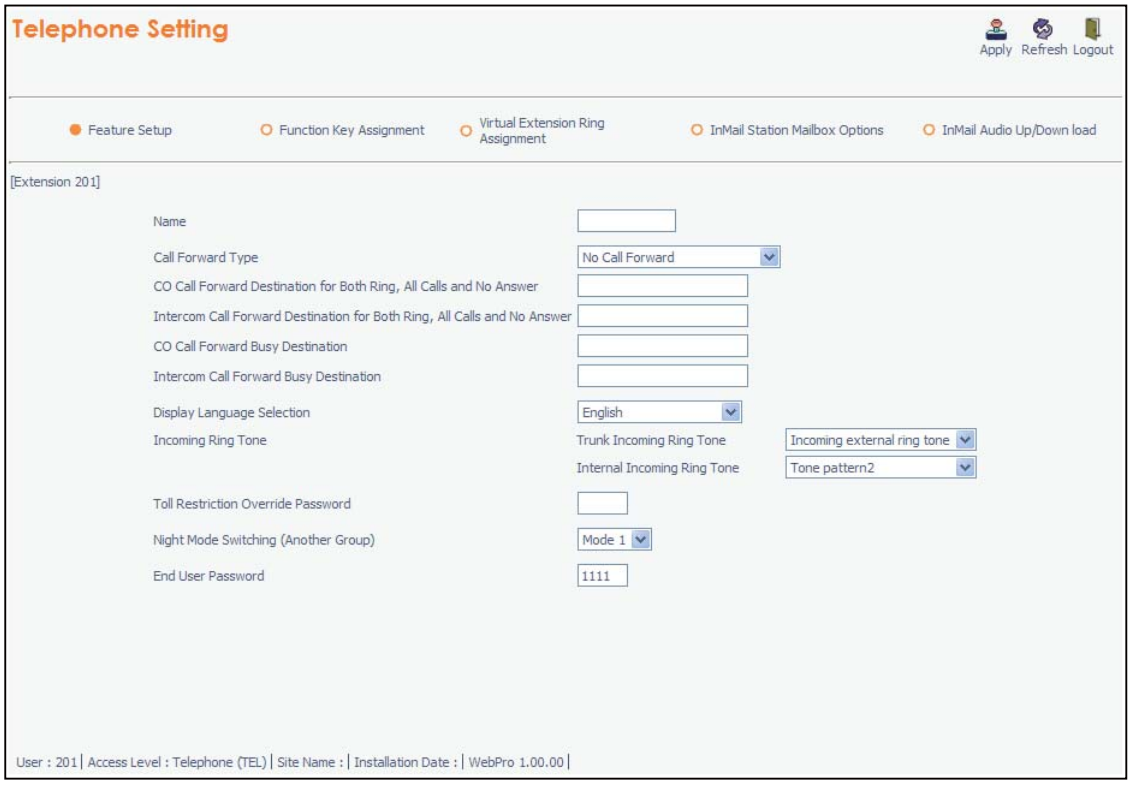

Figure 1-29 WebPro End User Screen

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Conditions

- When connecting via a dial up connection, a Dial Up Connection (PPP) must be configured in Windows Network Connections.
- When uploading via a Dial Up connection, uploading card configuration (Hardware Upload) is not supported.
- The hardware/software requirements to run PCPro :

Item	Requirement
CPU	Pentium® III 598MHz (minimum) Pentium 4 2.5GHz (recommended)
Memory	128MB of RAM, 256MB (recommended)
Operating System (OS)	Windows XP or Microsoft Vista Windows 7 (32– and 64–bit)
Other	Microsoft Internet Explorer 6.0 or higher
Communication Port	LAN, or Modem
Disk Space	35MB for PCPro (minimum)
TCP Port	TCP port 8000 must be open between the terminal and the host PC for uploading/ downloading via LAN. PCPro/WebPro TCP port is set for 8000 at default, but can be changed via WebPro using Program 90-38-02. Program 90-38-02 is not accessible from Telephone Programming or PCPro. TCP port 5963 is required to be open if the Debug Terminal is going to be used.
Screen Resolution	800 x 600 (minimum) 1024 x 760 (recommended)

- The hardware/software requirements to run WebPro :

Item	Requirement
Browser	MS Internet Explorer 6.0 (or higher) *Mozilla® Firefox®* 1.0.3 (or higher)

Item	Requirement
Network	IP connection to the KTS
Screen Resolution	800 x 600 (minimum) 1024 x 760 (recommended)

- You can have a maximum of four users logged into WebPro same time.
- You can have up to two phones in programming mode same time.
- You can have total of four users in programming mode at same time. This can be a any mix of Telephone programming user and Webpro user as long as it wont exceed four users.
- Only One user can be logged into PC PRO. While user is logged into PC PRO Webpro, Telephone programming couldnt be used.
- When programming via WebPro/PCPro, it requires you to logout before the system fully applies the changes.
- In the System Data configuration window, you can open/close the system data by clicking the system data you want to open/close.
- Some programs may needs the system to reset/reboot order for the system to effect the change that been made. These Programs are: 10-12-01, 10-12-02, 10-12-03, 10-12-04, 10-13-01, 10-13-02, 10-13-03, 10-14, 10-15, 10-16-01, 10-16-02, 10-16-03, 10-16-04, 20-01-03, 47-01-01, 80-01, 80-02-01, 80-02-02, 80-02-03, 80-02-04, 80-03, 80-04, 84-03-01, 84-03-02, 84-03-06, 84-03-07, 84-03-08, 84-05-01, 84-09 and 84-10.
- When uploading the system. if the system has a MEMDB installed you must upload the file that was taken from MEMDB or upload the flle that is for MEMDB.

Default Settings

None

System Availability

Terminals

None

Required Component(s)

PCPro apilication to use PCPro.

Web Browser to use WebPro.

For requirement check "Condition".

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
10–12–01	**CPU Network Setup - IP Address**	192.168.0.10
10–12–02	**CPU Network Setup - Subnet Mask**	255.255.255.0
10–12–03	**CPU Network Setup - Default Gateway**	0.0.0.0

Program Number	Program Name	Default
11–15–14	**Service Code Setup, Administrative (for Special Access) - Modem Access**	840
22–02–01	**Incoming Call Trunk Setup**	0
22–07–01	**DIL Assignment**	not assigned
90–02–01	**Programming Password Setup - User Name**	Refer to Programming Manual.
90–02–02	**Programming Password Setup - Password**	Refer to Programming Manual.
90–02–03	**Programming Password Setup - User Level**	Refer to Programming Manual.
90–26–01	**Program Access Level Setup - Maintenance Level**	Refer to Programming Manual.
90–28–01	**User Programming Password Setup - Password**	1111

Operation

None

PCPro and WebPro Comparison

The table below gives a quick feature comparison of PCPro and WebPro.

Feature		Feature Application		Comments
		PCPro	WebPro	
Installation Program		Y	-	
File Handling	File New / Open / Save / Save As	Y	-	
	File Properties	Y	-	PCPro supports save/view/modify System Site Information, password protect files, add notes, connection settings.
	Version Conversion	Y	-	PCPro can convert databases between different System versions.
Programming Modes	Offline	Y	-	Ability to program offline and upload to the System at a later date.
	Live Update	Y	Y	Changes made in WebPro apply immediately. No upload is required. PCPro has Interactive Mode to make live changes.
Remote Connection	Upload	Y	-	PCPro can download the database from the System to allow backups.
	Download	Y	-	
	Connection Accounts	Y	-	PCPro supports Modem and IP connections. WebPro supports only IP.
Accounts		Y	Y	WebPro: Refer to Program 90-02 in the Programming Manual.

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Feature			Feature Application		Comments
			PCPro	WebPro	
Programming	Screen Help Text :	System Data Help Text	Y	Y	Help in WebPro is more simplified than in PCPro.
		Control Hint Text	Y	Y	
	Smart Links		Y	-	
	Smart Labels		Y	Y	
	Smart Controls		Y	-	
	Validation		Y	Y	
	Multi-Assignments :	Extension Numbers	Y	-	PCPro provides special screens that allow multiple values to be set easily. This applies mainly to table data. These screens shorten the programming time.
		Line Keys (CAP)	Y	-	
		Line Keys (General)	Y	-	
		Account Codes	Y	-	
	Defaults :	View	Y	-	
	Copy :	System Data Level	Y	Y	Copy items in an individual program.
		Group Level	Y	Y	Copy data for ports (telephone/trunk).
	Modification Tracking (See also Modification History.)		Y	-	PCPro keeps track of changes made to a database. This includes : 1. Changes made to a database that are not yet saved. 2. Changes made to database that are not yet uploaded.
Wizards			Y	Y	
Configuration Screens	Blade Configuration		Y	-	PCPro provides special screens that shorten the programming time to setup core System features.
	Class of Service		Y	-	
	Night Mode Switching		Y	-	
	Trunk Access Maps		Y	-	
	Trunk Groups		Y	-	
	Department Groups		Y	-	
	Direct Inward Dialing		Y	-	
	Ring Groups		Y	-	
	Timers (Trunk / Telephone)		Y	-	
QuickSearch			Y	Y	WebPro has a simplified search facility. It applies only to programs. PCPro provides extensive searching on Programs and Wizards.
Reports	System Data		Y	-	PCPro can generate various reports based on values in the database.
	Verify		Y	-	
	Maintenance		Y	-	
	CAP Keys		Y	-	
	Numbering Plan		Y	-	
	Class of Service		Y	-	
	Modification History		Y	-	

Feature		Feature Application		Comments
		PCPro	WebPro	
Import / Export	Speed Dials	Y	-	PCPro allows import/export of speed dials (csv file).
Program Help	Help Pages	Y	Y	WebPro has more simplified help than PCPro.
Security	Application Login	Y	Y	User name/password protection to login to PCPro/WebPro.
	KTS Connection Login	Y	-	PCPro connections to a System are user name/password protected.
	File Open	Y	-	You can password protect a PCPro saved database.
Debug / Capture	CPU Unit Debug Capture	Y	-	PCPro provides a tool for capturing debug information from the CPU Unit.
Modification History		Y	-	PCPro keeps a running list of all the modifications made to a system databases. It also tracks uploads/ downloads.
System Initialize		Y	Y	This is the ability to initialize the System.
System Time Setting		Y	Y	This sets the time on the System.
Software Updates	Firmware Upload	Y	-	The System software and firmware can be upgraded via PCPro.
Licensing / Feature Activation	KTS Feature Activation	Y	Y	Licensed System features can be activated via PCPro/WebPro. You can also see what is licensed.

Power Failure Transfer

Description

Power Failure Transfer ensures that a customer has access to the Central Office network during a power outage. The CO/PBX tip and ring are automatically transferred to a correspond Single Line Telephone .

Conditions

- The single line telephones that are installed must provide dialing signal accepted by the outside exchange (Dial Pulse or Dual Tone Multifrequency).
- Single line telephones and outside lines connected during power failure are fixed one-to-one.
- System features cannot be activated from single line telephone when Power Failure Transfer is in operation.
- When power is restored to the system the call in progress on Power Failure Transfer is maintained.
- Refer to the SL1000 System Hardware Manual for the PFT Connections.
- Power Failure phone need to be connected to HBI port 8. Total 12 Power Failure phones can be connected.

Default Settings

None

System Availability

Terminals

Single Line Telephone

Required Component(s)

408E-A1

408M-A1

Related Features

None

Guide to Feature Programming

None

Operation

None

Prime Line Selection

Description

Prime Line Selection allows a multiline terminal user to place or answer a call over a specific trunk by just lifting the handset. The user does not have to first press keys or dial codes. This simplifies handling calls on a frequently used trunk.

Prime Line Selection has the following two modes of operation:

- Outgoing Prime Line Preference
  Lifting the handset seizes the Prime Line. Outgoing Prime Line Preference would help a telemarketer who always needs a free line to call prospective clients. The telemarketer just lifts the handset and the Prime Line is always available. (Outgoing Prime Line Preference may be affected by Incoming Prime Line Preference - refer to the Programming section of this feature.)
- Incoming Prime Line Preference
  When the Prime Line rings the extension, lifting the handset answers the call. Incoming Prime Line Preference could benefit the Service Department dispatcher who must quickly answer customer's service calls and then dispatch repair technicians. When a customer calls in, the dispatcher lifts the handset to get their call. (Incoming Prime Line Preference can optionally seize an idle line appearance - refer to the Programming section of this feature.)

Conditions

- Prime Line Selection can be assigned for Wireless DECT(SIP) and single line telephones, however, the telephones cannot access ICM dial tone.
- Prime Line Selection directly interacts with line preference.

Default Settings

Disabled

System Availability

Terminals

Any Station

Required Component(s)

None

Related Features

Central Office Calls, Placing

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Direct Inward System Access (DISA)

Line Preference

P

Guide to Feature Programming

Program Number	Program Name	Default
14-05-01	**Trunk Group - Trunk Group Number**	Trunk Port 1~126 = Priority 1~126
14-06-01	**Trunk Group Routing - Priority Order Number**	Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~25) and Order Numbers (1~4) = 0 (Not Specified)
14-07-01	**Trunk Access Map Setup - Trunk Port Number**	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).
15-01-02	**Basic Extension Data Setup - Outgoing Trunk Line Preference**	0
15-02-10	**Multiline Telephone Basic Data Setup - Ringing Line Preference for Trunk Calls**	1
15-06-01	**Trunk Access Map for Extensions**	1
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-08-21	**Class of Service Options (Outgoing Call Service) -Automatic Trunk Seizing by Pressing Speaker Key**	COS 01~15 = 0
21-02-01	**Trunk Group Routing for Extensions**	1
22-01-01	**System Options for Incoming Calls - Incoming Call Priority**	1
22-04-01	**Incoming Extension Ring Group Assignment**	Extension 200 (first port)
22-05-01	**Incoming Trunk Ring Group Assignment**	1

Operation

To place a call on your Prime Line:

1. Lift the handset.

You hear dial tone on your Prime Line.

To answer a call on your Prime Line:

1. Lift the handset.

Depending on your Line Preference programming, you either answer the Prime Line or get dial tone on the idle line appearance.

Private Line

Description

A Private Line is a trunk reserved for a multiline terminal for placing and answering calls. A user with a Private Line always knows when important calls are for them. Additionally, the user has their own trunk for placing calls that is not available to others in the system.

Conditions

- Incoming Only - The multiline terminal has a Private Line only for incoming calls. The user cannot place calls on the Private Line.
- Outgoing Only - The multiline terminal has a Private Line only for outgoing calls. The Private Line does not ring for incoming calls.
- Both Ways - The multiline terminal has a Private Line for both incoming and outgoing calls.
- Private Lines do not follow Call Forwarding if not Direct Inward Line (DIL).
- Other programmed options for outgoing calls also affect a Prime Line.
- Calls to extensions with DND active do not follow Call Forwarding programming. Direct Inward Line (DIL) calls ring an idle Department Group member, then follow Program 22-08 then Program 22-05.
- An extension user can have Line Preference options applied to their Private Line.
- A Private Line can also be a Prime Line.
- You should always program a line key for each Private Line.
- Private Lines are available on single line telephones.
- Private Lines follow normal Toll Restriction.
- An extension user can transfer their Private Line. If other users have hold access, the destination can answer the transferred Private Line and place it on Hold.
- NEC does not recommend assigning ringdown to a private line.

Default Settings

Disabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Call Forwarding

Central Office Calls, Placing

Do Not Disturb (DND)

Line Preference

Prime Line Selection

Programmable Function Keys

Single Line Telephones

Toll Restriction

Transfer

InMail

Guide to Feature Programming

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Program Number	Program Name	Default
14-01-09	Basic Trunk Data Setup - Private Line	0
14-07-01	Trunk Access Map Setup - Trunk Port Number	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).
15-06-01	Trunk Access Map for Extensions	1
15-07-01	Programmable Function Keys	Refer to Programming Manual.
21-02-01	Trunk Group Routing for Extensions	1
22-02-01	Incoming Call Trunk Setup	0
22-04-01	Incoming Extension Ring Group Assignment	Extension 200 (first port)
22-05-01	Incoming Trunk Ring Group Assignment	1
22-07-01	DIL Assignment	not assigned

Operation

To place a call on your Private Line:

1. Press **Private Line** key and then press **Speaker** or lift the handset.
2. Dial the number.

To answer a call on your Private Line:

1. Press **Private Line** key and then press **Speaker** or lift handset.

To place a call from your Multiline Terminal on you Private Line:

1. Press the **Private Line** key, then press **Speaker** or lift the handset.
2. Dial the number.

To answer a call from your Multiline Terminal on your Private Line:

1. Press **Private Line** key or press **Speaker** or lift handset.

To place a call on your Private line from a single line telephone:

1. Pick up handset.

   Private Line dial tone is heard.

2. Dial the number.

To answer a call on you Private Line from a single line telephone:

1. Lift the handset.

Programmable Function Keys

Description

Each multiline terminal has Programmable Function Keys. Programmable Function Keys simplify placing calls, answering calls and using certain features. You can customize the function of a multiline terminal programmable keys from each multiline terminal. Depending on your telephone style, you can have up to 24 Programmable Function keys.

Conditions

- When a key is programmed using service code **852** , that key cannot be programmed with a function using the **851** code until the key is undefined (000). For example with a Park Key programmed by dialing **852** + ✱04 must be undefined by dialing 000 before it can be programmed as a Voice Over key by dialing **851** + 48.
- Using Program 92-01 to copy a multiline terminal Programmable Function Keys, copies all the keys whether or not they exist on the telephone to which the programming is being copied. This may cause confusion when trying to define a key which is already defined but which does not exist on the telephone (displays as DUPLICATE DATA). It is recommend to either clear these non-existent keys or to copy only from an extension which has the same or fewer number of keys than the extension to which the programming is being copied.
- Speed Dialing and One-Touch Calling also offer quick access to calls and features.
- Programming a 60-button console requires separate programming.
- Below shows example of function key and LCD display indication (Program 15-07-01 Function Key Assignment).

FunctionNum-ber	Function	Display
00	None	[All Blank]
01	DSS/One-Touch	DSS
02	Microphone Key (ON/OFF)	MIC KEY
03	DND Key	DND KEY
04	BGM (ON/OFF)	BGM
05	Headset	HEADSET
07	Conference Key	CONFERENCE
10	Call Forward - Immediate	FORWARD
11	Call Forward - Busy	TRANSFER-BUSY
12	Call Forward - No Answer	TRANSFER-NO ANS
13	Call Forward - Busy/No Answer	TRANSFER-B/N
14	Call Forward - Both Ring	FWD-DUAL RING
15	Follow Me	FOLLOW ME

If a key is programmed as a DSS/One-Touch key for a station that is set for Call Forward All Calls or Do Not Disturb, the DSS/One-Touch key flashes.

Refer to the SL1000 Programming Manual for a complete list of Function Numbers.

- One-Touch keys programmed for Park Hold Service Code cannot be used to park calls without using Hold or Transfer.
- Pauses can be entered in the dial string of a DSS/One Touch button. The pause is entered as P in the dial string and causes the system to wait three seconds before sending the rest of the digits that follow the P (pause). Multiple pauses can be entered.
- The @ can be entered in the dial string of a DSS/One Touch button. The @ only applies to ISDN and

Intercom calls. When using the @, the system waits for the destination to answer (answer supervision), and then sends the rest of the digits.

- Entering a P (pause) in a DSS/One Touch dial string can be used for CO calls, Intercom calls, or after the @ for ISDN calls.
- DSS/One-Touch keys can be used for one-touch transfer.
- DSS keys can distinguish whether the telephone is set for DND/Call Forward All Calls of if the telephone is off-hook.
- When a Ring Group call rings a station, a BLF Indication for this station shows idle or busy based on Class of Service option (20-13-49).
- All features programmed under one touch keys are still subject to class of service restrictions.
- If you change the extension assigned to a port in Program 11-02, the line key programming does not follow. However, if you move the extension using the Station Relocation Feature, the line key programming does follow.
- In order for a station to retrieve a held ICM call, the station must have an ICM key assigned in 15-07 (*00).

Default Settings

The first 12 keys on a telephone are Line keys (e.g., key 01 = line 001). The remaining keys are unassigned.

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Direct Station Selection (DSS) Console

One-Touch Calling

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-07-10	**Class of Service Options (Administrator Level) - Programmable Function Key Programming (Appearance Level)**	COS 01~15 = 1
20-13-18	**Class of Service for Options (Supplementary Service) - Programmable Function Key Programming (General Level)**	COS 01~15 = 1
20-13-49	**Class of Service for Options (Supplementary Service) - BLF Indication on CO Incoming State**	COS 01~15 = 0

Operation

To change a 2-digit programmable key:

1. Press **Speaker**.
2. Dial **851** for 2-digit codes.
3. Press the key you want to program.
4. Enter the 2-digit key function, any additional information needed for the key and press **Hold**.

For available functions codes refer to Program 15-07 in the SL1000 Programing Manual.

To undefine a key, enter 00.

To change a 3-digit programmable key:

1. Press **Speaker**.
2. Dial **852** for 3-digit codes.
3. Press the key you want to program.
4. Enter the 3-digit key function and any additional information needed for the key.

For available functions codes, refer to Program 15-07 in the SL1000 Programing Manual.

To undefine a key, enter 000.

When a key is programmed using service code 852 , that key cannot be programmed with a function using the 851 code until the key is undefined (000). For example with a Park Key programmed by dialing 852 + ×04 must be undefined by dialing 000 before it can be programmed as a Voice Over key by dialing 851 + 48.

To check the function of a programmable key:

1. Press the **Help** key.
2. Press the programmable key.

The programmed function displays.

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Programming from a Multiline Terminal

Description

System Programming can be performed from any display multiline terminal. Most programming changes become effective immediately. Other programming changes become effective after the data is backed up from temporary memory to permanent memory.

Conditions

- Up to two telephones can be in programming mode anytime.
- A maximum of four users can be logged into WebPro anytime.
- Four WebPro users and two phone programming users can be logged in at the same time for a total of six users in programming mode simultaneously. However, the two phone programming users do not show up in session management in WebPro.
- PCPro can be logged in with only one user. This is allowed only if no other users are logged into programming mode (PCPro, WebPro, or Phone). Also, if a user is connected to the switch via PCPro, no other user can log in through PCPro, WebPro, or Phone Programming.
- Programming from a multiline terminal can require a password to enter programming.

Default Settings

Enabled

System Availability

Terminals

Multiline terminals with display

Required Component(s)

- 408M-A1
- 408E-A1
- 008E-A1

Required Software

None

Related Features

PC Programming

Guide to Feature Programming

Program Number	Program Name	Default
90-02-01	**Programming Password Setup - User Name**	Refer to Programming Manual.
90-02-02	**Programming Password Setup - Password**	Refer to Programming Manual.

Program Number	Program Name	Default
90-02-03	**Programming Password Setup - User Level**	0 = Prohibited User 1 = MF (Manufacturer Level) 2 = IN (Installer Level) 3 = SA (System Administrator Level 1) 4 = SB (System Administrator Level 2) 5 = UA (User Programming Level 1) Please refer to Programming Manual.

Operation

Refer to the SL1000 Programming Manual for additional information.

Pulse to Tone Conversion

Description

An extension can use Pulse to Tone Conversion on trunk calls. Pulse to Tone Conversion lets a user change their extension dialing mode while placing a call. For systems in a Dial Pulse area, this permits users to access dial-up OCCs (Other Common Carriers - such as MCI) from their DP area. The user can, for example:

- Place a call to an OCC over a DP trunk.
- Depending on programming:
  Manually implement Pulse to Tone Conversion
  - OR -
  Wait 10 seconds.
- Dial the OCC security code and desired number. The system dials the digits after the conversion as DTMF.

Conditions

Pulse to Tone Conversion is valid only for Dial Pulse trunks (Program 14-02-01, options 0 or 1).

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

408M-A1

408E-A1

Related Features

Central Office Calls, Placing

Multiple Trunk Types

Guide to Feature Programming

Program Number	Program Name	Default
14-02-01	Analog Trunk Data setup - Signaling Type (DP/DTMF)	2
14-02-07	Analog Trunk Data Setup - DP to DTMF Conversion Options	2

Operation

To convert your telephone dialing to tone after placing your call on a pulse line:

1. Place a call over pulse line.
2. Dial **#** to switch the DP trunk to DTMF dialing.

Redial Function

Description

Users can press Redial to cycle through the last 10 outside numbers dialed. Pressing **#** redials the number displayed. Users can also press Redial and dial a System Speed Dial bin number to access System Speed Dial.

Names stored as common speed dial or extension name can be displayed for redialed numbers.

Conditions

- Redial List requires a display telephone.
- When set PRG15-02-60 :0, Redial feature work by pressing left cursor key, then [#] / SYS menu is displayed on LCD. When set PRG15-02-60 :1 or 2, pressing left cursor key enter Incoming call log for Redial function. Refer Navigation key feature section.
- Stored name for Redial Function is cleared when the system is reset.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Last Number Redial

Guide to Feature Programming

None

Operation

When set PRG15-02-60 :0 case.

To redial the last number dialed:

For SL1000 Telephones Only:

1. Press the left **Cursor** key.
   REDIAL [#] / ABB is displayed along with the last dialed number.
2. Press the **up** or **down** arrow to view the number to dial.
3. Press **#** or press **Speaker** or lift the handset or press an idle trunk key.
   - OR -
   For SL1000 :
   1. Press the **List** softkey
   2. Press **Redial**. REDIAL -01 is displayed along with the last dialed number.
   3. Press the up and down arrow to view the number to dial.
   4. Press the **#** key or press **Speaker** or lift the handset or press and idle trunk key.

To scroll through the last 10 outside numbers dialed:

1. Press **Redial**. Each time the Redial key is pressed, it displays the next most recentlydialed number.
2. When the desired number is displayed, press the **#** key or press **Speaker** or lift the handset.
   - OR -
   1. Press the **List** softkey.
   2. Press **Redial**.
   3. Press the up and down arrow to view the number to dial.
   4. Press **#** or press **Speaker** or lift the handset.

To access a System Speed Dial bin:

For SL1000 Telephones Only:

1. Press the left **Cursor** key.
   REDIAL [#] / ABB is displayed along with the last dialed number.
2. Dial the System Speed Dial bin number.
   The number stored in that bin is displayed for your preview.
3. Press **#** or press **Speaker** or lift the handset or press and idle trunk key.

To view saved name history of outgoing calls:

For SL1000 Telephones Only:

1. Press the left **Cursor** key.
   REDIAL [#] / ABB is displayed along with the last dialed number.
2. Tap the **Cursor** key up or down to refresh the list, if the redialed number has a matching common speed dial bin or extension number associated with it, the name information from Program 13-04-02 or 15-01-01 is displayed.
3. Press **Speaker** or lift the handset to dial the number.

The name information will not display after dialing.

Remote (System) Upgrade

Description

With PC Programming, the SL1000 can be remotely upgraded to a newer version of main system software. When a new version of main system software is released, a firmware package file is provided. Using PCPro application, a technician can remotely upgrade the firmware on the CPU Unit. The upgrade can be applied immediately, or at a scheduled date and time. Remote Upgrade is supported only via a LAN connection.

Conditions

- When doing a Firmware Upgrade, the telephone system can become sluggish during the file transfer portion of the update. You should perform updates after hours, even if the update is scheduled. The file transfer happens when the update is set. For example, at 2:00PM a technician schedules an update to happen at 12:00AM. When he/she clicks start (2:00PM), it begins transferring the file to the MEMDB thumbdrive on the CPU Unit. At this time the telephone system experiences sluggishness until the file transfer is complete. When the time turns to 12:00AM, the telephone system resets and switches to the new firmware.
- The Package file needed is provided by NEC at the time the new version of main system software is released.
- MEMDB thumbdrive is required to be connected to the CPU Unit for Remote (System) Upgrade. During the Firmware Upgrade, the Package file is copied to the MEMDB and extracted. The system then resets and boots up.
- Up to two versions of firmware are kept on the MEMDB thumbdrive. One version is the current version that the CPU Unit used to boot up from. The other version is the new version that is used on the next boot up. If the boot up fails when switching to the new version, the CPU Unit can revert back to the old version.
- The CPU Unit boots from its Flash Memory if no MEMDB thumbdrive is installed.
- The time to upload a firmware package file is directly related to the file size. Generally, it takes a few minutes.
- Remote Upgrade is supported only via LAN connection. A modem connection is not supported for Remote Upgrade.

Default Settings

At default, both PCPro and WebPro are set to Update Immediately after the upload.

System Availability

Terminals

None

Required Component(s)

PCPro

Related Features

PC Programming

Guide to Feature Programming

Refer to PC Programming.

Operation

PCPro

1. Obtain the firmware package file from NEC.
2. Open and login to PCPro.
3. Connect to the system.
4. Under the Communications menu, choose the **Firmware Update** option.
5. In the Firmware Update Type Window, Select the Firmware Update From PCPro and Click OK.
6. In the firmware update window, browse to the location of the Firmware Package file. For example, the file name might be 'MainSWv0.36.pkg'.
7. Select the schedule type :
   - Immediately after upload
   - At the time ...
     - *If you choose At the time…, select the date and time you want the CPU Unit to reset and switch over to the new software version.*
8. Click **Run (Start)**. PCPro uploads the firmware package file, and updates the system at the time you specified in step 6.

Repeat Redial

Description

If a multiline terminal user places a trunk call that is busy or unanswered, they can have Repeat Redial try it again later on. The user does not continually have to try the number again - hoping it goes through. Repeat Redial automatically retries it until the called party answers (the number of retries is based on system programming).

Conditions

- Lifting the handset during a callout cycle cancels Repeat Redial.
- Other programmed options for outgoing calls can affect how a Repeat Redial call is placed. Refer to Central Office Calls, Placing options as needed.
- For systems with Automatic Route Selection (ARS), ARS selects the trunk for the Repeat Redial call.
- Single line telephones cannot use Repeat Redial.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Automatic Route Selection (ARS/F-Route)

Central Office Calls, Placing

Last Number Redial

Save Number Dialed

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-08-07	**Class of Service Options (Outgoing Call Service) - Repeat Redial**	COS 01~15 = 1
21-08-01	**Repeat Dial Setup - Repeat Redial Count**	3
21-08-02	**Repeat Dial Setup - Repeat Redial Interval Time**	60 (seconds)
21-08-03	**Repeat Dial Setup - Repeat Dial Calling Timer**	30 (seconds)

Program Number	Program Name	Default
21-08-04	**Repeat Dial Setup - Time for Send Busy Tone for ISDN Trunk**	0 (seconds)

Operation

To use Repeat Redial (if the outside party you call is unavailable or busy):

1. Place a trunk call.

   Listen for busy tone or ring no answer.

2. Press the **Repeat Redial** key (Program 15-07 or SC **851** : 29).

   Repeat Redial key flashes while you wait for the system to redial.

3. Press **Speaker** to hang up.

   The system periodically redials the call.

4. Lift the handset when called party answers.

   When using trunks with answer supervision the Repeat Redial feature automatically cancels.

To cancel Repeat Redial:

1. Press **Repeat Redial** key (Program 15-07 or SC **851** : 29). (Also refer to Last Number Redial on page 1-311.)

Resident System Program

Description

When power is supplied to the system, the hardware configuration is scanned and Resident System Program default values are assigned including terminal types (e.g. DSS Console). This enables immediate operation, even before the system is programmed to accommodate the individual site requirements.

R

Conditions

- Default assignments for multiline terminals are: LK01~LK12 corresponds to CO01~CO12.
- DSS Console to Extension assignments for Attendant Add-On Consoles are not assigned.
- Default Attendant Add-On Console key assignments are:
  DSS Keys = 001~060
  Stations = 200~259
- First Initialization of the system returns all programming values to default. Press and hold the S1 (Load Switch) and press the Power switch. Continue to hold the S1 switch for approximately 5~10 seconds before releasing. The system boots loading Resident System Programming.

Default Settings

None

System Availability

Terminals

Not Applicable

Required Component(s)

None

Related Features

None

Guide to Feature Programming

None

Operation

None

Ring Groups

Description

Ring Groups determine how trunks ring extensions. Generally, trunks ring extensions only if Ring Group programming allows. For example, to make a trunk ring an extension:

- Assign the trunk and the extension to the same Ring Group.
- In the extension Ring Group programming, assign ringing for the trunk.

Any number of extensions and trunks can be in a specific group. The system allows:

- Ring Groups = 1~25
- In-Skin Voice Mail = 102

If an extension has a line key for the trunk, Ring Group calls ring the line key. If the extension does not have a line key, the trunk rings the line appearance key. If an extension has a key for a trunk that is not in its ring group, the trunk follows Access Map programming.

Conditions

- DIL trunks disregard ring group programming until DIL overflow.

Default Settings

All trunks are in Ring Group 1. Extensions 200 ring for trunk calls and all other extensions only flash.

System Availability

Terminals

All Multiline Terminals and Single Line Telephones

Required Component(s)

None

Related Features

Automatic Route Selection (ARS/F-Route)

Direct Inward Line (DIL)

Direct Inward Dialing (DID)

Direct Inward System Access (DISA)

ISDN Compatibility

Night Service

Programmable Function Keys

R

Guide to Feature Programming

Program Number	Program Name	Default	Note
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.	
20-13-49	**Class of Service Options (Supplementary Service) - BLF Indication on CO Incoming State**	COS 01~15 = 0	
15-13-01	**Loop Keys - Outgoing Option**	0: Programming Function Key No. = 01-24	
15-13-02	**Loop Keys - Incoming Option**	0: Programming Function Key No. = 01-24	
22-01-04	**System Options for Incoming Calls - DIL No Answer Recall Time**	0 (seconds)	
22-02-01	**Incoming Call Trunk Setup**	0	
22-04-01	**Incoming Extension Ring Group Assignment**	Extension 200 (first port)	
22-05-01	**Incoming Trunk Ring Group Assignment**	1	
22-06-01	**Normal Incoming Ring Mode**	1	
22-08-01	**DIL/IRG No Answer Destination**	0	
22-11-05/06	**DID Translation Table - Transfer Target 1 & 2**	0	
22-12-01	**DID Intercept Ring Group**	1	
25-03-01	**VRS/DISA Transfer Ring Group With Incorrect Dialing**	0	

Use the charts below to program the following example:

For this extension . . . *1*2			
301	Trunk 1 Rings	Trunk 2 Flashes	Trunk 3 Flashes
302	Trunk 1 Flashes	Trunk 2 Rings	Trunk 3 Flashes
303	Trunk 1 Flashes	Trunk 2 Flashes	Trunk 3 Rings

*1. Trunks ring the same in the day as at night.
*2. MLT has trunk appearances not CAP keys.

Program 22-04 : Incoming Extension Ring Group Assignment			
Ring Group*1>	1	2	3
Trunk 1	X	--	--
Trunk 2	--	X	--
Trunk 3	--	--	X

*1. Make the same PRG 22-04 entry for all Night Service modes.

X = Trunk assigned to indicated Ring Group

Program 22-05 : Incoming Trunk Ring Group Assignment			
Ring Group >	1	2	3
Ext. 301	1	0*1	0*1
Ext. 302	0*1	1	0*1

*1. To allow extension user to answer flashing line, be sure to give extension incoming access to the trunk in Program 14-07 and Program 15-06.

Program 22-05 : Incoming Trunk Ring Group Assignment			
Ext. 303	0*1	0*1	1

1 = Extension rings
0 = Extension does not ring

Operation

Refer to Central Office Calls, Answering on page 1-102.

Ringdown Extension (Hotline), Internal/External

Description

With a Ringdown Extension, a user can call another extension, outside number, or Speed Dialing number by just lifting the handset. The call automatically goes through - there is no need for the user to dial digits or press additional keys. Ringdown Extensions are frequently used for lobby telephones, where the caller just lifts the handset to get the information desk or off-site Reservation Desk.

After the Ringdown Extension user lifts the handset, ringdown occurs after a programmable time. Depending on the setting of this time, the extension user may be able to place other calls before the ringdown goes through.

This feature can also be used as an off-hook alarm application. For example, if a patient in a care facility fails to return the handset to the cradle, it routes to a care givers station after a programmed time.

This feature is sometimes known as a Hotline.

Conditions

- Ringdown extension has no effect on an extension current (active) call.
- The Ringdown Extension user can lift the handset or press Speaker to initiate ringdown.
- If the Ringdown/Hotline destination is a speed dial bin, the appropriate service code must precede the bin number.
- Ringdown Extension can use Speed Dial - System/Group/Station numbers (and follow their trunk routing) as the destination number.
- Ringdown Extension follows Call Forwarding. For example, the ringdown destination can forward their calls. When the Ringdown Extension user lifts the handset, ringdown automatically calls the extension to which calls are forwarded.
- If the Ringdown Extension user hears busy tone when they lift the handset, they can Camp-On to the destination, leave a Callback or activate Off-Hook Signaling.
- The ringdown destination user can activate Do Not Disturb. When the Ringdown Extension user lifts the handset, they hear DND. If enabled, the Ringdown Extension user can override the destination DND.
- If the destination extension has Handsfree Answerback enabled, the call voice announces. If the destination extension has Forced Intercom Ringing enabled, the call rings.
- A Virtual Extension can be a ringdown destination. This would allow a front door key to be programmed on every extension.
- Delayed Ringdown can occur by setting the Hotline Start Timer. However, Ringdown does not occur if the Hotline Start Timer is set longer than the Extension Dial Tone Timer.
- The @ code is used to make an outbound call automatically forward to a DISA Trunk or to VM Auto Attendant. This code can be used only on ISDN outbound calls. Internal calls and analog outbound calls are not supported.

Default Settings

Disabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Callback

Call Forwarding

Call Waiting/Camp-On

Do Not Disturb (DND)

Handsfree Answerback/Forced Intercom Ringing

Off-Hook Signaling

Virtual Extensions

Guide to Feature Programming

Program Number	Program Name	Default
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-08-01	**Class of Service Options (Outgoing Call Service) - Intercom Calls**	COS 01~15 = 1
20-08-09	**Class of Service Options (Outgoing Call Service) - Hotline/Extension Ringdown**	COS 01~15 = 1
21-01-09	**System Options for Outgoing Calls - Ringdown Extension Timer (Hotline Start)**	5 (seconds)
21-11-01	**Extension Ringdown (Hotline) Assignment**	not assigned

Operation

To place a call if your extension has ringdown programmed:

1. Lift the handset.

If you want to place a trunk call, press a line key before lifting the handset.

Depending on the setting of your ringdown timer, you may be able to dial an Intercom call before your ringdown goes through.

If the destination has Handsfree Answerback enabled, your call voice announces. If the destination has Forced Intercom Ringing enabled, your call rings.

To answer a call if you are another extension ringdown destination:

1. Speak toward telephone to answer incoming voice announcement.
   - OR -
   Lift the handset or press **Speaker** to answer ringing Intercom call.

Room Monitor

Description

Room Monitor lets an extension user listen to the sounds in a co-workers area. For example, the receptionist could listen for sounds in the warehouse when it is left unattended. To use Room Monitor, the initiating extension *and* the receiving extension must activate it.

When using multiline terminals for monitoring, an extension user can Monitor only one extension at a time. However, many extensions can Monitor the same extension at the same time. However, only one single line telephone can monitor another single line telephone at a time.

Room Monitor for Single Lines

This option enables you to monitor the room status through your single line telephones. Between multiline terminals, the monitored room status is picked up by the telephone microphone and the activity is heard through the speaker of the monitoring multiline terminal. Between single line telephones, at the station to be monitored, a user goes off-hook and dials a service code and the extension number of the monitoring telephone. At the monitoring station, a user goes off-hook and dials a service code and the extension number of the monitored telephone. The activity of the area where the monitored telephone is placed can then be heard at the monitoring telephone. This service is available until the handset of the monitored telephone is placed on-hook.

Room Monitor by intercom call (DSX Base)

- Room Monitor can simply start by calling Room Monitored set terminal. During Room monitoring by pressing **Talk** softkey at monitoring terminal both way talk is available. Adding both way talk, monitored terminal can make conference call by **Talk** softkey if multiple terminals are monitoring.
  To provide this feature, following PRG need to set On.
  PRG 20-13-55: Intercom call to room monitor (COS of Room Monitored)
  PRG 20-13-11: Room Monitoring
  PRG 20-13-12: Room Monitored
- Setup for Room Monitored terminal is simply pressing **DND** key plus dial **5**.
- Room Monitored terminal can display the Monitoring extension number on it's LCD.
- Only Multiline terminal can be set as Monitored terminal. IP multiline terminal or SLT are not supported.
- When Monitored terminal canceled the monitored condition by **DND** plus dial **0** or pressing Function key, Monitoring terminal setting also cleared automatically.

The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversation or other sound activities, whether or not contemporaneous with transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to a telephone conversation, such as using a beep tone or other notification methods or requiring the consent of all parties to the telephone conversation, prior to monitoring or recording the telephone conversation. Some of these laws incorporate strict penalties.

Conditions

- Room Monitor is for listening only. It does not allow for conversation between the monitoring and monitored extensions.
- An extension user cannot monitor an Attendant.
- A multiline terminal user cannot monitor a single line telephone and a single line telephone cannot monitor a multiline terminals.

- Room Monitor for single line telephones can be used with the Hotel/Motel feature.
- For a multiline terminal, Room Monitor requires uniquely programmed function keys.
- Call Arrival (CAR) Key (virtual extension) keys do not support Room Monitor Programmable Function keys (code 39).

Default Settings

Disabled

System Availability

Terminals

Multiline Terminals and Single Line Telephones

Required Component(s)

None

Related Features

Hotel/Motel

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
11-14-17	**Service Code Setup (for Hotel) - Hotel Room Monitor**	770
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-13-11	**Class of Service Options (Supplementary Service) - Room Monitor, Initiating Extension**	COS 01~15 = 0
20-13-12	**Class of Service Options (Supplementary Service) - Room Monitor, Extension Being Monitored**	COS 01~15 = 0
20-13-55	**Intercom call to room monitor**	0
42-03-12	**Class of Service Options (Hotel/Motel) - SLT Room Monitor**	COS 01~15 = 1

R

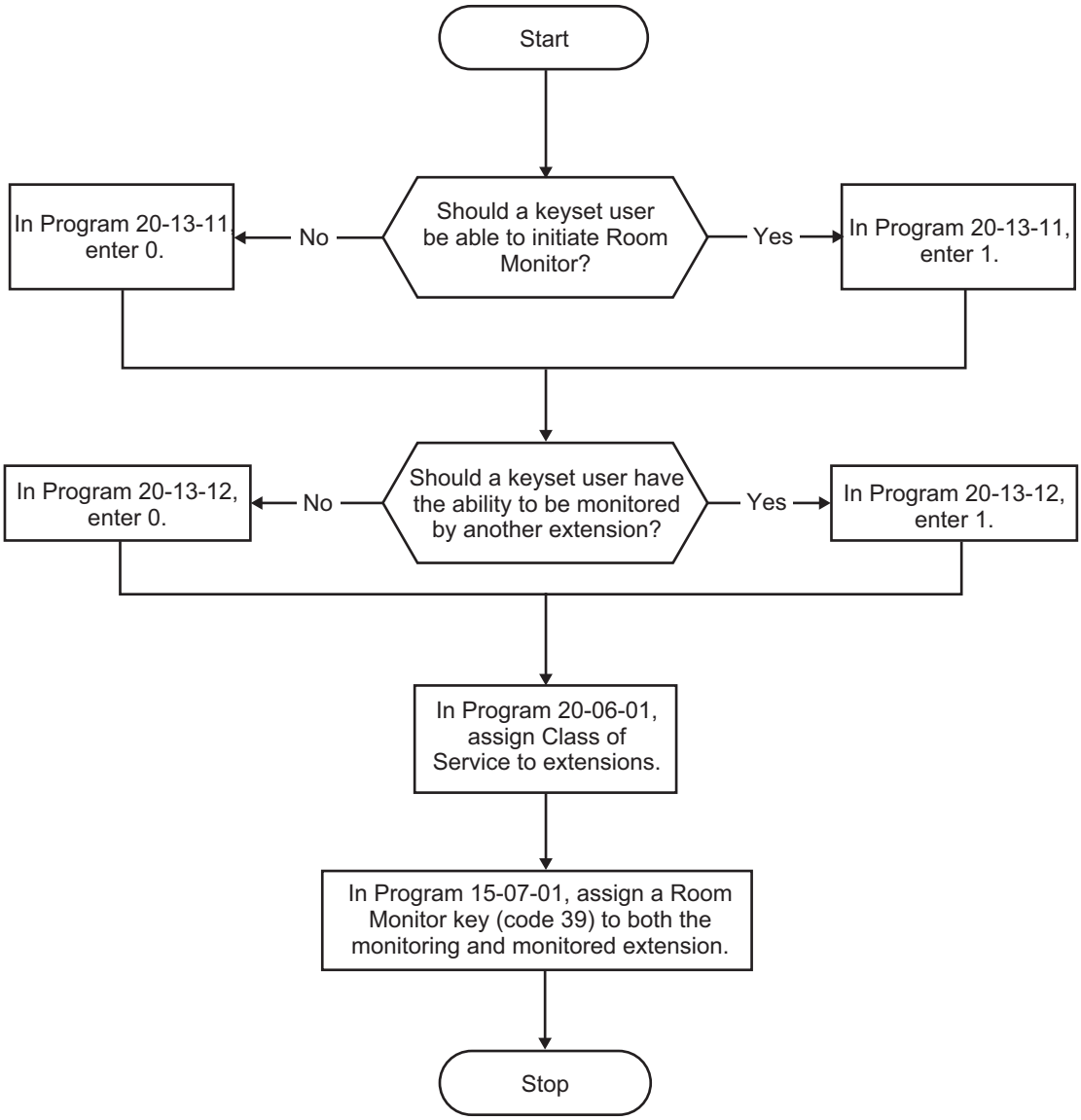

Figure 1-30 Multiline Room Monitoring

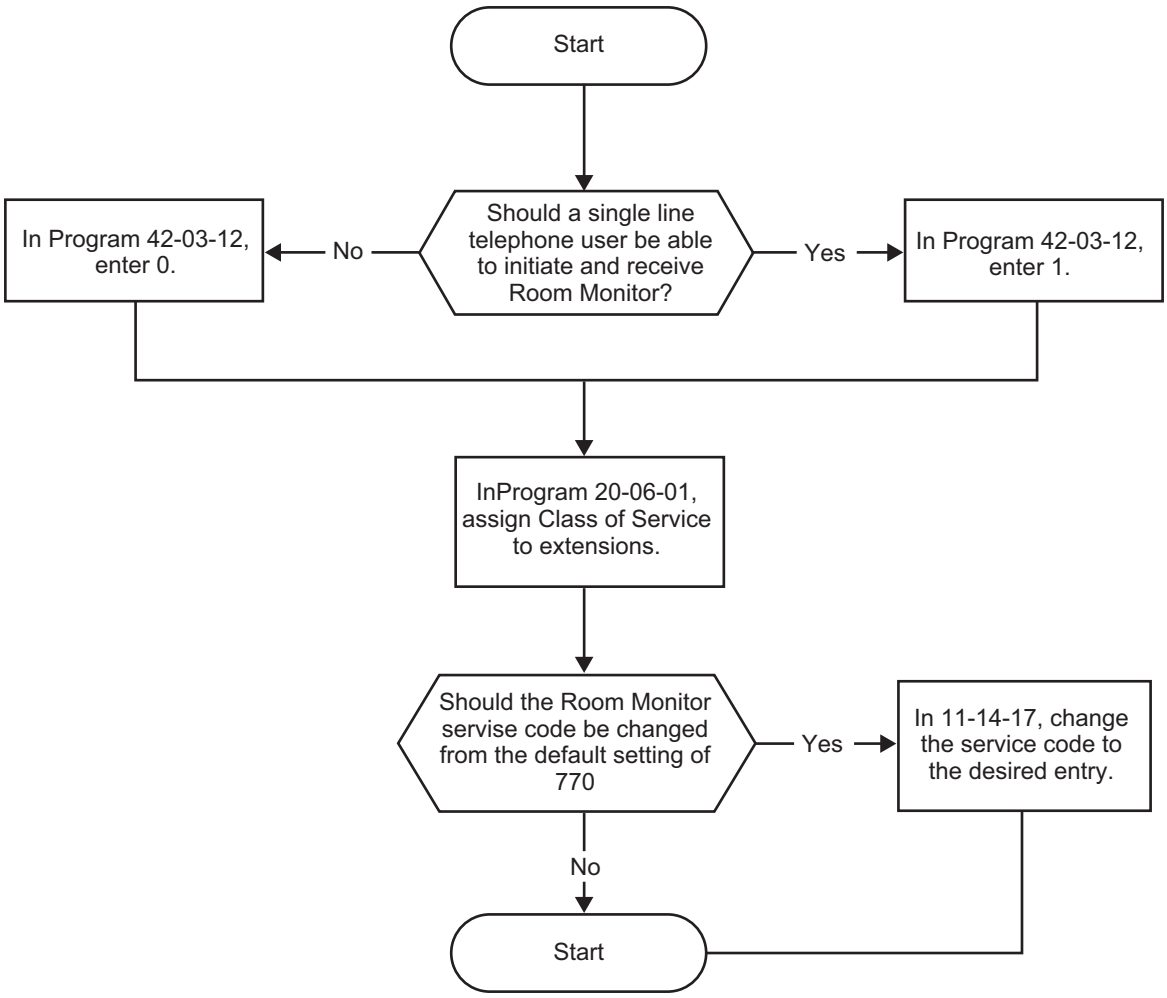

Figure 1-31 Single Line Telephone Room Monitoring

Operation

You must activate Room Monitor at the extension initiating the monitor and at the extension you want to monitor. You can only listen to one extension at a time.

Multiline Terminals:

To activate Room Monitor from an idle Multiline Terminal (initiating extension):

1. Press the **Room Monitor** key (Program 15-07 or SC **851** : 39).
2. Dial the number of extension you want to monitor.

You can place and answer other calls while Room Monitor is active.

To activate Room Monitor from an idle Multiline Terminal (extension to be monitored):

1. Press **Room Monitor** key (Program 15-07 or SC **851** : 39).
2. Dial the number of the extension where you are located.

For example, if you are at extension 206, dial 206.

You can place and answer other calls while Room Monitor is active.

To cancel Room Monitor (at either extension):

1. Press the **Room Monitor** key at both the initiating extension and the monitored extension.

Single Line Telephones:

To activate Room Monitor (at the initiating extension):

1. Lift the handset at the telephone which is monitoring another telephone.
2. Dial **770** .
3. Dial **2**.
4. Dial number of extension number, which will be monitored.

You can place and answer other calls while Room Monitor is active.

To activate Room Monitor (at the extension to be monitored):

1. Lift the handset at the telephone to be monitored.
2. Dial **770** .
3. Dial **1**.
4. Dial number of the extension number, which is monitoring the telephone.
5. Place the handset on the desk, placing the handset transmitter towards the room.

You cannot place or answer other calls while Room Monitor is active.

To cancel Room Monitor (at either extension):

1. Hang up the handsets for both the monitored and the monitoring telephones.

Room Monitor by intercom call (DSX Base)

To activate Room Monitor (at the extension to be monitored):
PRG 20-13-12: 1 (On) to Ext100.

1. Press **DND** key.
2. Press **Set**, **More**, then **Mon** Softkey.
   - OR -
   1. Press **DND** key.
   2. Dial **5**.

To activate Room Monitor (at the initiating extension):
PRG 20-13-11: 1 (On) to Ext101.
PRG 20-13-55: 1 (On) to Ext100.
Ext100 is set as Room Monitored extension.

1. At Ext101 makes ICM call to Ext100.
2. Room Monitor starts automatically.
3. Press **Talk** Softkey at Ext101 and starts ICM ring to Ext100.
4. At Ext100 Off hook and talk to Ext101.
5. At either On Hook both Ext back to Monitoring and Monitored state.

To activate Room Monitor (multiple initiating extension case):
PRG 20-13-11: 1 (On) to Ext101 and Ext102.
PRG 20-13-55: 1 (On) to Ext100.
Ext100 is set as Room Monitored extension.

1. At Ext101 and Ext102 make ICM call to Ext100.
2. Room Monitor started automatically.
3. Press **Talk** Softkey at Ext100 and starts Conf call with Ext101 and Ext102.
4. At Ext102 On hook backs to Monitoring state, and Ext100 and Ext101 remain ICM talk.
5. At either On Hook both Ext back to Monitoring and Monitored state.

Save Number Dialed

Description

Save Number Dialed allows an extension user to save their last outside number dialed and easily redial it later on. For example, an extension user can recall a busy or unanswered number without manually dialing the digits. The system retains the saved number until the user stores a new one in its place or clears the stored one.

Save Number Dialed saves in system memory a dialed number of up to 36 digits. The number can be any combination of digits 0~9, # and ✱. The system remembers the digits regardless of whether the call was answered, unanswered or busy. The system normally uses the same trunk group as for the initial call. However, the extension user can preselect a specific trunk if desired.

Conditions

- For systems with Automatic Route Selection, ARS selects the trunk for the call unless the user preselects.
- Function keys simplify Save Number Dialed operation.

Default Settings

Enabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Automatic Route Selection (ARS/F-Route)

Central Office Calls, Placing

Dial Tone Detection

Last Number Redial

Programmable Function Keys

Repeat Redial

Guide to Feature Programming

Program Number	Program Name	Default
11-12-13	Service Code Setup (for Service Access) - Saved Number Dial	815

Program Number	Program Name	Default
11-12-18	Service Code Setup (for Service Access) - Clear Saved Number Dialing Data	885
15-07-01	Programmable Function Keys	Refer to Programming Manual.

Operation

To save the outside number you just dialed (up to 36 digits):

Use this feature before hanging up.

Multiline Terminal

1. Press the **Save Number Dialed** key (Program 15-07 or SC **851** : 30).

Single Line Telephone

1. Hookflash.
2. Dial **815** .

To redial a saved number:

Multiline Terminal

1. Press an idle trunk line key.

   This selects a specific trunk for the call.

2. Press the **Save Number Dialed** key (Program 15-07 or SC **851** : 30).

   The stored number dials out.

- OR -

1. Press **Speaker**.
2. Dial **815** .
   - OR -
   Press **Save Number Dialed** key (Program 15-07 or SC **851** : 30).

   Save Number Dialed automatically selects a trunk from the same group as your original call.

The stored number dials out.

Single Line Telephone

1. Go off-hook.
2. Dial **815** .

To view the number you have saved from a multiline terminal with a display:

1. Press the **Save Number Dialed** key (Program 15-07 or SC **851** : 30).

   The stored number displays for 10 seconds.

   The stored number dials out if you:
   - *Lift the handset,*
   - *Press an idle line key,*
   - *Press the Speaker key.*

2. Press the **Exit** key.

To clear your saved number:

Multiline Terminal

1. Press **Speaker**.
2. Dial **885** .
3. Press **Speaker** to hang up.

Single Line Telephone

1. Lift the handset and dial dial **885** .
2. Hang up.

S

Secondary Incoming Extension

Description

Secondary Incoming Extensions (SIEs) are incoming appearance keys of actual stations assigned in the system. SIE keys are assigned to programmable function keys and can appear on an individual station, or multiple stations. Incoming internal calls, ringing DIL/DID/CO Transfer calls, or call forwarded calls can be picked up from an SIE.

Conditions

- Calls can be originated from a Secondary Incoming Extension, but the actual station cannot place or answer calls.
- Off-Hook ringing is provided with calls ringing to Secondary Incoming Extensions.
- Secondary Incoming Extensions are forwarded when the actual station is set for call forwarding.
- SIE keys can appear on an individual station, or multiple stations.
- A station can have more than one SIE key assigned.
- Up to 32 calls can be queued waiting on an SIE key.
- When a Secondary Incoming Extension call is received and answered while the user is on an outside line, the first call can be automatically put on hold.
- If a trunk call rings a Secondary Incoming Extension, to answer the call, the station must be programmed with the direct trunk appearance key and the SIE must be programmed to allow the call to come off the SIE key and appear on the line.
- The same SIE key cannot be programmed on multiple programmable function keys on the same multiline terminal.
- An SIE key does not ring during an Intercom Voice call to the actual station.
- If multiple CAR/SIE/VE keys are ringing on a station at the same time, the CAR/SIE/VE key on the lowest Line Key is answered first.

Default Settings

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Call Waiting/Camp-On

Call Arrival (CAR) Keys

Virtual Extensions

S

Guide to Feature Programming

Program Number	Program Name	Default
11-04-01	**Virtual Extension Numbering**	No Setting
15-01-01	**Basic Extension Data Setup - Extension Name**	200 ~ 327 = No setting
15-02-07	**Multiline Telephone Basic Data Setup - Automatic Hold for CO lines**	1
15-02-21	**Multiline Telephone Basic Data Setup - Virtual Extension Access Mode (When idle Virtual Extension key pressed)**	2
15-02-30	**Multiline Telephone Basic Data Setup - Toll Restriction Class**	1
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
15-08-01	**Incoming Virtual Extension Ring Tone Setup**	0 (Tone Pattern 1)
15-09-01	**Virtual Extension Ring Assignment**	0
15-10-01	**Incoming Virtual Extension Ring Tone Order Setup**	priority order: 1 = 0 (Tone Pattern 1) 2 = 1 (Tone Pattern 2) 3 = 2 (Tone Pattern 3) 4 = 3 (Tone Pattern 4)
15-11-01	**Virtual Extension Delayed Ring Assignment**	0
15-18-01	**Virtual Extension Key Enhanced Options - Virtual Extension Key Operation Mode**	0
15-18-02	**Virtual Extension Key Enhanced Options - Display mode when placing a call on Virtual Extension Key**	0
20-04-03	**System Options for Virtual Extensions - CAR/SIE/Virtual Extension Delay Interval**	10 (seconds)
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-07-10	**Class of Service Options (Administrator Level) - Programmable Function Key Programming (Appearance Level)**	COS 01~15 = 1
20-10-08	**Class of Service Options (Answer Service) - Virtual Extension Off-Hook Answer**	COS 01~15 = 0
20-13-27	**Class of Service Options (Supplementary Service) - Busy on Seizing Virtual Extension**	COS 01~15 = 1
21-01-15	**System Options for Outgoing Calls - Outgoing Disable on Incoming Line (Toll Restriction)**	0
23-04-01	**Ringing Line Preference for Virtual Extensions**	0

Operation

To answer a call ringing a SIE key:

1. Press the flashing **SIE** key.

To program a SIE key on a phone:

1. Press **Speaker**.
2. Dial **852** .
3. Press the key you want to program.
4. Dial ✱03.
5. Dial the number of the extension you want to appear on the key.
6. Press **Hold** once for Immediate Ring, (skip to step 8 for Delayed Ring).
7. Dial the mode number in which the key rings.
8. Press hold a second time for Delayed Ring, or Skip to step 10.
9. Dial the mode number in which the key delays ringing.
10. Press **Speaker**.

S

Secretary Call (Buzzer)

Description

Secretary Call lets two co-workers alert each other without disturbing their work. To have Secretary Call, both co-workers must have multiline terminals with Secretary Call buzzer keys. When a user presses their buzzer key, the system alerts the called extension by sending a splash tone and flashing the called extension buzzer key. The called user can respond by placing an intercom call to the calling party.

The called extension buzzer key continues to flash and the splash tone is heard until either user cancels the Secretary Call. A secretary could use this feature, for example, to get a message through to the boss in an important meeting. After being alerted, the boss could call the secretary when it is most convenient.

An extension can have a Secretary Call key for any number of extensions, limited only by the available number of programmable keys.

Conditions

- Secretary Call is not available to single line telephone users.
- Secretary Call does not set up an Intercom call.
- When assigning Secretary Call, a user enters the associated extension numbers, not port numbers.
- Secretary Call requires a uniquely programmed function key.

Default Settings

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	Programmable Function Keys	Refer to Programming Manual.

Operation

To buzz your secretary or boss:

1. Do not lift the handset.
2. Press the buzzer key (Program 15-07 or SC **851** : 41 + secretary extension).

Your boss or secretary hears ringing.

Your buzzer key lights steadily.

Your boss's or secretary's buzzer key flashes fast.

The telephone continues to ring until the Secretary Call key is pressed.

To check to see who left you a Secretary Call:

1. Do not lift the handset.
2. Press the **Help** key.
3. Press the **Secretary Call** key that flashed.
4. Press the **Exit** key.

To answer your Secretary Call indication:

1. Place an Intercom call to the extension that called you.

To cancel a Secretary Call you left at another extension:

1. Press the lit **Secretary Call** key.

To cancel a Secretary Call left at your extension:

1. Do not lift the handset.
2. Press the flashing **Secretary Call** key.

Secretary Call Pickup

Description

Secretary Call Pickup lets a multiline terminal user easily reroute calls intended for a co-worker to themselves. By pressing a Secretary Call Pickup key, the user can have all calls to a co-worker's telephone ring or voice-announce theirs instead. Secretary Call Pickup is a simplified type of Call Forward with Follow Me for employees that work closely together. This feature could be helpful to customer service representatives that must frequently cover each other's clients. When a representative leaves their desk, an associate could press the Secretary Call Pickup key to intercept all their calls.

An extension can have a Secretary Call Pickup key for any number of extensions, limited only by the available number of programmable keys.

Conditions

- Secretary Call Pickup is not available to single line telephone users.
- An extension user can also have Call Forwarding with Follow Me reroute a co-worker's calls to themselves.
- A multiline terminal can have a Secretary Call Pickup key for a single line telephone.

Default Settings

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Call Forwarding with Follow Me

Programmable Function Keys

Secretary Call (Buzzer)

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.

Operation

To activate Secretary Call Pickup:

1. Press your **Secretary Call Pickup** key (Program 15-07 or SC **851** : 42 + boss extension).

Your Secretary Call Pickup key lights and the boss's telephone display shows "BOSS FWD>>".

Calls intended for covered extension, ring your telephone instead.

To cancel Secretary Call Pickup:

1. Press your lit **Secretary Call Pickup** key (Program 15-07 or SC **851** : 42 + boss extension).

To check a key Secretary Call Pickup assignment:

1. Press the **Help** key.
2. Press your **Secretary Call Pickup** key (Program 15-07 or SC **851** : 42 + boss's extension).
3. Press the **Exit** key.

Security

Description

This system supports following built-in simple security features in a system.

- *Warning Message (Watch mode)*
  Automatically and periodically send the Watching (VRS) Message from built-In Speaker on Multiline terminal or external paging adapter during night mode.
  Enable to accommodate with 3rd Party PIR (Passive Infrared Sensor) or Emergency Button to provide security feature such as Auto-Emergency Call with Warning (VRS) Message sending.
- *Room Monitoring from Outside*
  Access Multiline terminal from outside to monitor the room sound
- *Remote Inspection*
  Automatically ring the terminal with pre-programmed schedule in order to check whether users answer or not. If not answered Emergency Call is placed to predefined destination automatically.

Conditions

Warning Message (Watch Mode)

- Watch mode can provide “Watching message” in a preprogrammed interval via internal paging group terminals and/or external paging group during defined schedule such as night time.
- Watch mode start and stop automatically according to PRG20-47-01 setting.
- Watch mode can start and stop manually by Service code (PRG11-12-63) or function key (**✱32**) assignment.
- To connect security sensor it need to set PRG 20-46-01 Sensor mode (1; on) and connect to Door Phone port instead of Door phone.
- Security sensor can be connected 6, 7 port of 408M-A1 . Max 8 sensors can be connected. PRG82-21 needs to set up according to used sensor.
- Security sensor can start and stop automatically according to PRG20-48-01 setting.
- Security sensor can start and stop manually by Service code (PRG11-12-64) or function key (**✱33** assigned).
- When system received sensor detection, following 1, 2 or both will be happened.
  1. Repeated “Warning message“ is provided via internal paging group terminals and/or external paging group.
  2. Emergency call can be placed to pre-programmed destination with pre-recorded VRS message. After finishing VRS message, destination person can monitor the situation using Multiline terminal defined at PRG20-46-10. Also By pressing * key from outside it is possible to make both way talk.
- If all VRS channels are busy, tone will be provided instead of VRS message, such as Watch, Warning or for destination message.
- If VRS message itself is not recorded, tone will be provided.
- VRS message can be provided from extension Speaker only when extension is idle. But if Watch or Warning message happened during normal paging is working, normal paging will stop and send Watch or Warning message.
- If Watch message and Warning message occurred simultaneously, Warning message have high priority.
- If multiple Sensor detected and multiple Warning message occurred at same time, latest detected Sensor’s Warning message will be provided.
- Activation or stop of Sensor itself has to operate according to used sensor specification.
- If outgoing call restriction is set, emergency call number needs to pre-registered in restriction allow table, then emergency call can go through. Also even all trunk are busy, the call has high priority and can go out.
- If destination does not answer to emergency call, system repeat placing call specified times set at PRG20-46-08.
- To stop Warning message or emergency call, Service code for cancel “Warning message” (PRG11-12-62) needs to set.

- During Watching mode or Security sensor “On” state, even system reset occurred these modes will be continued after boot up.

• During sending “Warning message” or placing emergency call, if system reset occurred these state will be cleared. So after boot up “Warning message” or placing emergency call will stop.
• If Sensor mode is set (PRG20-46-01;1) and SLT is connected instead of sensor, off hook of SLT makes situation like sensor has detected.

Room Monitoring from outside

- To work Room Monitoring feature, caller ID of outside caller and monitored extension number have to set. Monitored extension can be set at PRG13-04-03/04, also these PRG can be set by pressing **Transfer** key at Speed Dial name setting screen of outside caller.

1. Press **Transfer** key.
2. Select TRF Mode, 3 (Remote Monitor).
3. Enter monitored extension number and press **HOLD** key.

- Room monitor can be work only when set extension is idle state, other state busy tone (ISDN trunk) or ringback tone (Analogue trunk) will be sent to outside caller. During Room Monitor is working the terminal have “Remote Monitored” indication on LCD and can not be operated.
- By pressing * key from outside it is possible to make both way talk.
- If same outside caller number is register to both Room Monitor and Distinctive ring, feature set in youngest Speed Dial bin is used.
- If same outside caller number is register to multiple Room monitor extension, youngest Speed Dial bin setting is used.

Remote Inspection

- When Remote inspection is set to the terminal, “Confirm” and “Ring time” are displayed on Multiline terminal LCD.
- If Remote inspection set terminal is busy (receiving another incoming call or on call state), inspection ring will be start after finishing these previous call.
- When the terminal does not answer to inspection ringing over the time set at PRG20-45-03, emergency call will be placed to pre-programmed destination with pre-recorded VRS message.
- After finishing VRS message, destination person can start monitoring of inspection terminal. Also by pressing * key from outside it is possible to make both way talk.
- If outgoing call restriction is set, emergency call number needs to pre-registered in restriction allow table, then emergency call can go through. Also even all trunk are busy, the call has high priority and can go out.
- If destination does not answer to emergency call, system repeat placing call specified times set at PRG20-45-07.
- Max 6 extension can be set as Remote Inspection terminal.
- If all VRS channels are busy, tone will be provided instead of VRS message, such as for inspection message or for destination message.
- If VRS message itself is not recorded, tone will be provided.

Emergency call destination Must be set considering this feature’s purpose.

Emergency Call 1

Emergency calls when “Security Sensor” or “Remote Inspection” performed, SMDR can record these call class as follows.

- Security Sensor: SAD
- Remote Inspection: WAD

Emergency Call 2

Emergency calls when “Security Sensor” or “Remote Inspection” performed, alarm report can record these alarm and alarm display terminal indicates following on LCD.

- Security Sensor: 31: Sensor detect
- Remote Inspection: 32: Confirm dial

Recording Emergency Call

By setting 90-20-11 (1; Report), Emergency calls can be recorded on security report.
- Max 50 records can be saved.

Default Settings

None

System Availability

Terminals

All Multiline terminals and Single Line Telephones

Required Component(s)

408M-A1, 408E-A1, 008E-A1

PZ-VM21 with VRS CF

Related Features

Paging Internal, External

Voice Response System (VRS)

Speed Dial

Guide to Feature Programming

Program Number	Program Name	Default
11-10-45 (Room Monitoring)	**Room Monitor Permit**	710
13-04-01 (Room Monitoring)	**Abbreviated Dial Data**	No Setting
13-04-03 (Room Monitoring)	**Transfer Mode**	0
13-04-04 (Room Monitoring)	**Transfer Destination Number**	No setting
15-07 (Room Monitoring)	**Programmable Function Key**	Refer to Programming Manual.
20-21-05 (Room Monitoring)	**Long conversation cut off when Room Monitoring**	180
11-10-49 (Remote Inspection)	**Auto Dial Setting for Remote Inspection**	719
20-45-01 (Remote Inspection)	**Ring Terminal for Remote Inspection**	No setting
20-45-02 (Remote Inspection)	**Ring Time Setting**	0000
20-45-03 (Remote Inspection)	**Ring Timer**	0
20-45-04 (Remote Inspection)	**Auto Dial Number Area Setting**	0

Program Number	Program Name	Default
20-45-05 (Remote Inspection)	VRS Message for Answer	0
20-45-06 (Remote Inspection)	VRS Message for Auto Dial	0
20-45-07 (Remote Inspection)	Time of Repeat Auto Dial	0
20-45-08 (Remote Inspection)	Auto Dial Calling Time	0
20-45-09 (Remote Inspection)	Interval Timer for Emergency Call	0
35-02-23 (Remote Inspection)	Watch Auto Dialing	1
10-03-05 (Watch mode)	Select Port type	0
11-10-46 (Watch mode)	Watch Message Setting	714
11-10-47 (Watch mode)	Warning Message Setting	715
11-10-48 (Watch mode)	Auto Dial Setting for Security Sensor	717
11-12-62 (Watch mode)	Security Sensor Reset	816
11-12-63 (Watch mode)	Watch Mode Start	817
11-12-64 (Watch mode)	Security Sensor Mode Start	819
15-07 (Watch mode)	Programmable Function Key	Refer to Programming Manual
20-44-01 (Watch mode)	Internal Paging Group for Watch Message	0
20-44-02 (Watch mode)	External Paging Group for Watch Message	0
20-44-03 (Watch mode)	VRS Message for Watch Mode	0
20-44-04 (Watch mode)	Interval Timer for Watch Message	0
20-46-01 (Watch mode)	Sensor Mode	0
20-46-02 (Watch mode)	Internal Paging Group for Warning Message	0
20-46-03 (Watch mode)	External Paging Group for Warning Message	0
20-46-04 (Watch mode)	VRS Message for Warning	0
20-46-05 (Watch mode)	Auto Dial Number Area Setting	0
20-46-06 (Watch mode)	VRS Message for Answer	0
20-46-07 (Watch mode)	Auto Dial Wait Timer	30
20-46-08 (Watch mode)	Time of Repeat Auto Dial	3
20-46-09 (Watch mode)	Auto Dial Calling Time	30

Program Number	Program Name	Default
20-46-10 (Watch mode)	**Monitored Terminal**	No setting
20-46-11 (Watch mode)	**Interval Timer for Emergency Call**	0
20-47-01 (Watch mode)	**Watch Mode time pattern**	0
20-48-01 (Watch mode)	**Security Sensor time pattern**	0
35-02-22 (Watch mode)	**Security Auto Dialing**	1
82-21-01 (Watch mode)	**Sensor Type**	0
82-21-02 (Watch mode)	**Sensor Alarm detect minimum level**	24 (120ms)
82-21-03 (Watch mode)	**Sensor Idle detect minimum level**	24 (120ms)
90-10-01	**Alarm Type**	Refer to Programming Manual.
90-10-02	**Report**	Refer to Programming Manual.
90-20-11	**Security Sensor Dial Record**	1

Operation

Warning Message (Watch Mode)

< Program >
PRG11-10-20: 716 ; Record, Erase VRS message SC716 .
PRG11-10-46: 714 ; Watch message setting
PRG11-12-63: 817 +1/0; Watch Mode Start/Stop.
PRG15-07-01: Set “*32” to Function key.
PRG20-44-01:1; Internal paging group, 1
PRG20-44-02:1; External paging group, 1
PRG20-44-03:1; VRS message number for watching, 1
PRG20-44-04:5; Interval time of Watching message, 5 minutes.
PRG20-47-01:1; Watch mode time pattern, 1

To record Watching message to VRS 001:

1. Press **Speaker+716+7+001** at terminal.
2. After beep tone, record message.
3. Press **Speaker** and finish recording.

Set up Watch mode

1. Press **Speaker**+714 at terminal.
2. Dial Internal paging group number, “01”.
3. Dial external paging group number, “1”.
4. Dial Interval time of Watching message, “05”.
5. Dial VRS message number for watching, “001”.
6. After beep tone, record the message.
7. Press **Speaker** and finish recording.

To start Watch mode

1. Press **Speaker+817 +1** at terminal.
   - OR -
2. Press **Function** key (**✱32**) at Multiline terminal and **Function** key turn on Red.
   - OR -
3. Watch mode time pattern 1 comes time to start.
4. Each 5 minutes interval, Watching message send to internal page group 1 and external page group 1.

To stop Watch mode

1. Press **Speaker+817 +0** at terminal
   - OR -
2. Press red on **Function** key (**✱32**) at Multiline terminal and **Function** key turn off.
   - OR -
3. Watch mode time pattern 1 comes time to stop.

Warning Message (Use Security Sensor and Warning message)

< Program >
PRG11-10-47: 715 ; Warning message setting
PRG11-10-48: 717 ; Auto Dial Setting for Security Sensor
PRG11-12-62: 816 ; Security Sensor Reset
PRG11-12-64: 819 +1/0; Security Sensor Mode Start/Stop
PRG15-07-01: Set “✱33” to Function key
PRG20-46-01: 1; Sensor mode, on
PRG20-46-02: 1; Internal paging group, 1
PRG20-46-03: 1; External paging group 1
PRG20-46-04: 1; VRS message number for warning, 1
PRG20-46-05: 999; Speed dial bin number, 999
PRG20-46-06: 2; VRS message number for destination answer, 2
PRG20-46-07: 30; Auto Dial Wait Timer, 30 sec
PRG20-46-08: 3; Times of auto repeat dial, 3
PRG20-46-09: 30; Auto dial calling time, 30 sec
PRG20-46-10: 200; Monitored terminal number, 200
PRG20-46-11: 30; Interval of Auto Dial, 30 sec
PRG20-48-01: 1; Security sensor time pattern, 1

Set up Warning message

1. Press **Speaker+715** at terminal.
2. Dial Security sensor number, “1”.
3. Dial Internal paging group number, “01”.
4. Dial external paging group number, “1”.
5. Dial VRS message number for warning, “001”.
6. After beep tone, record the message.
7. Press **Speaker** and finish recording.

Set up Auto Dial Setting for Security Sensor

1. Press **Speaker+717** at Multiline terminal.
2. Dial Security sensor number (1-6), “1”.
3. Dial Speed dial bin number to use, “999”.
4. Dial emergency call destination number “xxx-xxx” and press **Hold** key.
5. Dial monitored terminal number, “200”.
6. Dial VRS message number for destination answer, “002”.
7. After beep tone, record the message.
8. Press **Speaker** and finish recording.

To start Security Sensor operation

1. Press **Speaker+819 +1** at terminal
   - OR -
2. Press **Function** key (*33) at multiline terminal and Function key turn on Red.
   - OR -
3. Security Sensor time pattern 1 comes time to start.

To stop Security Sensor operation

1. Press **Speaker+819 +0** at terminal.
   - OR -
2. Press red on **Function** key (*33) at multiline terminal and Function key turn off.
   - OR -
3. Security Sensor time pattern 1 comes time to stop.

When detect Security Sensor On

1. Warning message send to internal page group1 and external page group 1.
2. Place outgoing call automatically according to speed dial bin 999.
3. When destination answered send VRS message 2.
4. After finishing VRS message 2, destination person can monitor through extension 200. By pressing “*” key from outside it is possible to make both way talk.

When send Warning message

When send Warning message, but does not place emergency call case:
PRG20-46-05 is set table number, which has no setting.

When place emergency call

When place emergency call, but does not send Warning message case:
PRG20-46-02 to PRG 20-46-03 should be set to “0”.

Room Monitoring from outside

< Program >
PRG11-10-45: 710 +1/0; Remote Monitor enable/disable.
PRG13-04-01: Abbreviated Dial Data; set outside telephone number which makes room monitor.

PRG13-04-03: 3; Transfer mode set “Remote monitor”.
PRG13-04-04: 200; Set monitored terminal number.
PRG15-07-01: Set “**#**03” to **Function** key.

To start Room Monitor

1. Press **Speaker+ 710 +1**+monitored terminal number, “200”.
   - OR -
   Press **Function** key (**#**03)+1+monitored dial number, “200” and **Function** key turn on Red (slow flash).
2. Place incoming call from telephone which number is set at PRG13-04-01.
3. Room Monitor start at extension 200.
4. By pressing * key from outside it is possible to make both way talk.

To stop Room Monitor

1. Press **Speaker+ 710 +0**+monitored terminal number, “200”.
   - OR -
   Press red flash **Function** key (**#**03)+0+monitored dial number, “200”.
2. Place outside call from telephone which number is set at PRG13-04-01.
3. Call ring at extension 200.

Remote Inspection

< Program >
PRG11-10-49: 719 ; Auto Dial Setting for Remote
PRG20-45-01: 200; Remote Inspection terminal, 200
PRG20-45-02: 12:00; Ringing start time, 12 o’clock noon
PRG20-45-03: 3; ringing continue time, 3 minutes
PRG20-45-04: 999; Speed dial bin number, 999
PRG20-45-05: 1; VRS message number when inspected extension answered, 1
PRG20-45-06: 2; VRS message number when emergency call destination answered, 2
PRG20-45-07: 3; Times of auto repeat dial, 3
PRG20-45-08: 30; Auto dial calling time, 30 sec
PRG20-45-09: 30; Interval of Auto Dial, 30 sec

S

Set up Remote Inspection

1. Press **Speaker+719** at Multiline terminal.
2. Dial Remote Inspection terminal number (1-6).
3. Dial 1 (set).
4. Dial Remote Inspection extension number, “200”.
5. Dial Ringing start tine, “1200”.
6. Dial ringing continue time, “03”.
7. Dial Speed dial bin number to use, “999”.
8. Dial emergency call destination number “xxx-xxx” and press **Hold** key.
9. Dial VRS message number when inspected extension answered, “001”.
10. After beep tone, record the message and press **#** key.
11. Dial VRS message number when emergency call destination answered, “002”.
12. After confirmation tone, record the message.
13. Press **Speaker** and finish recording.

To Cancel the Remote Inspection

1. Press **Speaker+719** at Multiline terminal.
2. Dial Remote Inspection terminal number (1-6).
3. Dial 0 (cancel).

When answered the Remote Inspection ring

1. At 12:00 o’clock start ringing at extension 200.
2. When answered VRS message 1 is played.
3. After finishing VRS 1 message, the call is disconnected.

When Not answered the Remote Inspection ring

1. At 12:00 o’clock start ringing at extension 200.
2. Continue ringing over 3 minutes.
3. Stop ringing at extension 200 and place outgoing call automatically according to speed dial bin 999.
4. When destination answered send VRS message 2.
5. After finishing VRS message 2, destination person can automatically monitor through extension 200.
6. By pressing * key from outside it is possible to make both way talk.

Selectable Display Messaging

Description

An extension user can select a preprogrammed Selectable Display Message for their extension. Display multiline terminal callers see the selected message when they call the user's extension. Selectable Display Messaging provides personalized messaging. For example, an extension user could select the message GONE FOR THE DAY. Any display multiline terminal user calling the extension may hear a DND signal and then see the message. See table below for a list of the standard messages.

An extension user can add digits for date, time or telephone number after messages 1~8 and 10 (up to 16 characters). For example, an extension user could select the message ON VACATION UNTIL and then enter the date. Callers see the original message followed by the appended date. They could then tell when the user is coming back from vacation. The system allows all telephones to use the Selectable Display Messaging feature at the same time.

All telephones are able to use Selectable Display Messaging at one time.

The default messages are:

Table 1-34 Selectable Display Messaging Defaults

No.	Message	Change "#" to...
1	IN MEETING UNTIL ##:##	Time (when meeting done)
2	MEETING ROOM - ########	Room Name or extension
3	COME BACK ##:##	Time (when returning)
4	PLEASE CALL ###########	11 digits (telephone number)
5	BUSY CALL AFTER ##:##	Time (when returning)
6	OUT FOR LUNCH BACK ##:##	Time (when returning)
7	BUSINESS TRIP BACK ##/##	Date (when returning)
8	BUSINESS TRIP ##########	10 digits (where reached)
9	GONE FOR THE DAY	
10	ON VACATION UNTIL ##/##	Date (when returning)
11~20	MESSAGE 11~20	

Conditions

- The # cannot be used in a Message.
- When Selectable Display Messaging is set as DND All, all other DND modes are canceled when Selectable Display Messaging is canceled.

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals with Display

Required Component(s)

None

Related Features

Do Not Disturb (DND)

Programmable Function Keys

S

Guide to Feature Programming

Program Number	Program Name	Default
11-11-14	**Service Code Setup (for Setup/Entry Operation) - Text Message Setting**	836
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-01-02	**System Options - Text Message Mode**	0
20-02-07	**System Options for Multiline Telephones - Time and Date Display Mode**	1
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-13-19	**Class of Service Options (Supplementary Service) - Selectable Display Messaging (Text Messaging)**	COS 01~15 = 1
20-16-01	**Selectable Display Messages**	Refer to Programming Manual.

Table 1-35 Selectable Display Message - Character Entry Chart

Use this keypad digit . . .	When you want to. . .
1	Enter characters: **1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Å Æ Ç É Ê ì ó 0**
2	Enter characters: **A-C**, **a-c**, **2**.
3	Enter characters: **D-F**, **a-f**, **3**.
4	Enter characters: **G-I**, **g-i**, **4**.
5	Enter characters: **J-L**, **j-l**, **5**.
6	Enter characters: **M-O**, **m-o**, **6**.
7	Enter characters: **P-S**, **p-s**, **7**.
8	Enter characters: **T-V**, **t-v**, **8**.
9	Enter characters: **W-Z**, **w-z**, **9**.
0	Enter characters: **0 ! " # $ % & ' ( ) ô õ ú å ä æ ö ü α ε θ B**
*	Enter characters: * + , - . / : ; < = > ? π Σ σ Ω ∞ ¢ £
#	Accepts a numeric entry from the user when setting a display message. e.g., time or date. Back at ##:##
Clear/Back or **DND**	Clear the character entry one character at a time.
Flash	Clear all the entries from the point of the flashing cursor and to the right.

Operation

To select a message:

1. Press **Speaker**.
2. Dial **836** .
   -OR-
   Press the Text Message key (Program 15-07 or SC **851** : 18) + enter digits to append (if needed) + Speaker to hang up. Skip the remaining steps.
3. Enter message number
4. + enter digits to append (if needed) + Speaker to hang up. Skip the remaining steps.
5. (Optional for messages 1~8 and 10.)
   Dial the digits you want to append to the message.

   You can append messages 1~8 and 10 with digits (e.g., the time when you will be back). Enter the time in 24-hour format.
6. Press **Speaker** to hang up.

Intercom calls to extensions with Selectable Display Messaging set receive a DND signal and receive the display message on their telephone display instead of ringing the extension based on the setting in Program 20-01-02.

To allow calls to ring through and have the message displayed on the calling extension display, cancel DND by pressing DND + 0.

To cancel a message:

1. Press **Speaker** and the **Text Message** key (Program 15-07 or SC **851** : 18).
2. Press **Speaker** to hang up.

Using the Text Message Service Code to select a message:

1. Press **Speaker** and dial the Text Message service code (Program 11-11-14).
2. Dial the Selectable Display Message number to be used (**01~20**).
   (Optional messages 1~8, and 10, dial the digits you want to append to the message.)
3. Press **Speaker** to hang up.

To cancel, repeat Step 1 and hang up.

Selectable Ring Tones

Description

An extension user can change the way trunks or internal calls ring their telephone. Selectable Ring Tones allow an extension user to set up unique ringing for their calls. This is important in a crowded work area where several telephones are close together. Because their telephone has a characteristic ring, the user always can tell when their telephone is ringing.

Conditions

None

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Distinctive Ringing, Tones and Flash Patterns

Guide to Feature Programming

Program Number	Program Name	Default
11-11-20	**Service Code Setup (for Setup/Entry Operation) - Change Incoming CO and ICM Ring Tones**	820
11-11-21	**Service Code Setup (for Setup/Entry Operation) - Check Incoming Ring Tones**	811
15-02-02	**MultiLine Telephone Basic Data Setup - Trunk Ring Tone**	2
15-02-03	**Multiline Telephone Basic Data Setup - Extension Ring Tone**	8
15-08-01	**Incoming Virtual Extension Ring Tone Setup**	0
15-10-01	**Incoming Virtual Extension Ring Tone Order Setup**	0 = Tone Pattern 1 1 = Tone Pattern 2 2 = Tone Pattern 3 3 = Tone Pattern 4 4 = Incoming Extension Ring Tone 5 = Tone Pattern 5 6 = Tone Pattern 6 7 = Tone Pattern 7
22-03-01	**Trunk Ring Tone Range**	0

Table 1-36 Intercom or Trunk Ring Setting

1 = High	5 = Ring Tone 2
2 = Mid Range	6 = Ring Tone 3
3 = Low	7 = Ring Tone 4
4 = Ring Tone 1	8 = Ring Tone 5

Operation

To change your extension incoming ring tones:

1. Press **Speaker**.
2. Dial **820** .
3. Dial **1** to set Intercom ring; **2** to set trunk ring.
4. Dial code for the desired ring pattern (**1~8**).
5. Press **Speaker** to hang up.

To listen to the incoming ring choices:

1. Press idle **Speaker**.
2. Dial **811** .
3. Dial **1** to listen to Intercom ring; **2** to listen to trunk ring.
4. *For Intercom Ring:*
   Dial the code for the ring pattern you want to hear (**1~8**).
   - OR -
   For Trunk Ring:
   Dial code for the ring pattern you want to hear (Ring 1~3, Melody 4~8). If you select Ring 1~3, a second screen prompts for the tone pattern (1~4).
5. Press **Speaker** to hang up.

Serial Call

Description

Serial Call transfers a call so it automatically returns to the transferring extension. Serial Calling saves transferring steps between users. For example, a Customer Service Representative (CSR) has a client on the telephone who needs technical advice. The CSR wants to send the call to Technical Service, but needs to advise the client of certain costs when Technical Service is done. Rather than transferring the call back and forth, the CSR can use Serial Call to Technical Service and announce, “I have Ted on the telephone. I need to talk to him again. Just hang up when you’re done and I’ll get him back.”

Conditions

- The transferring extension can remain off-hook to auto-receive the callback or hang up and it rings back to them.
- Serial Call requires a uniquely programmed function key (Program 15-07 or SC **851** : 43) or assigning the Transfer key as Call Back in (Program 15-02-05=1).
- Serial Call is not available to single line telephones.
- Serial Call can be activated only during a supervised transfer.

Default Settings

Disabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

None

Related Features

Programmable Function Keys

Transfer

Guide to Feature Programming

Program Number	Program Name	Default
15-02-05	**Multiline Telephone Basic Data Setup - Transfer Key Operation Mode**	0
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.

Operation

To place a Serial Call to a co-worker:

1. Place or answer a call.
2. Press **Hold** or **Transfer**.
3. Dial co-worker's extension number.

   Co-worker must lift the handset to respond to your announcement.

4. Press the Serial Call key (Program 15-07 or SC **851** : 43).
   - OR -
5. Press Transfer key if Program 15-02-05 is set to Call Back (Serial Call).
6. When MLT Display shows WAIT TRF extension can hang up.

   When your co-worker hangs up the call, the system makes an automatic live transfer back to your extension.

Single Line Telephones

Description

The system is compatible with Dial Pulse and DTMF analog single line telephones (SLTs). Single line telephone users can dial codes to access many of the features available to multiline terminal users. With single line telephones, you can have your system simulate PBX type operation.

There are 128 single line telephones available (note that this number may be restricted due to system power requirements).

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When installing single line telephones you must have:

- A port on a 408M-A1/408E-A1/008E-A1 for each single line telephone installed.
- If you have DTMF sets, at least one block reserved on the CPU for analog extension DTMF reception.

DTMF Dial Out Timer Added

A program is added for DTMF dialing, Program 20-03-07 : System Options for Single Line Telephones-Trunk Call Dial Forced Sending Start Time (Forced Dial). When Program 20-03-03 : System Options for Single Line Telephones - SLT DTMF Dial to Trunk Lines is set to 0 (receive all digits before sending), the system follows the timers in Program 20-03-04 and Program 20-03-07.

The timer in Program 20-03-04 System Options for Single Line Telephones - Dial Sending Start Time for SLT or ARS resets when the user dials another digit.

The timer in Program 20-03-07 System Options for Single Line Telephones - Trunk Call Dial Forced Sending Start Time (Forced Dial) does not reset when a digit is dialed. The user must finish dialing all the digits before this timer expires (entries: 0~64800 seconds, default: 0).

Conditions

- Dial Pulse single line telephones cannot access any feature that requires the user to dial # or ✱.
- A single line telephone can initiate an Internal Zone page, but cannot receive an Internal Zone Page.
- When a Ring Group call rings a single line station, the BLF indication shows busy.
- Stutter Dial Tone is supported to Single Line Telephones for Voice Mail Message Waiting.
- The 1632M KSU has 20 resources for DTMF receiving and Dial Tone detection. When a 1632ME EXP with EXIFE-C1 is installed there are 32 resources available.
- When Program 10-09-01 is set to 0 (Common) and Program 14-02-10 (Caller ID) is set to 1 (Yes), all DTMF/Dial Tone Detection resources are always allocated to analog trunks, not analog extensions. However, if Program 14-02-10 (Caller ID) is set to 0 (No), all DTMF/Dial Tone Detection resources can be used for both analog trunks and analog extensions.

Default Setting

Single line telephones function as soon as they are installed and properly programmed.

System Availability

Terminals

Analog Single Line Telephones(DP and DTMF type)

Required Component(s)

408M-A1

408E-A1

008E-A1

Related Features

Single line telephone users have access to the following features:

- Speed Dialing
- Account Codes
- Alarm
- Automatic Route Selection (ARS/F-Route)
- Barge-In
- Call Forwarding
- Call Forwarding with Follow Me
- Call Forwarding/DND Override
- Call Waiting/Camp-On
- Callback
- Central Office Calls, Answering
- Central Office Calls, Placing
- Conference
- Department Calling
- Department Step Calling
- Directed Call Pickup
- Do Not Disturb
- Door Box
- Flash
- Forced Trunk Disconnect
- Group Call Pickup
- Hold
- Intercom
- Last Number Redial
- Line Preference
- Meet Me Conference
- Meet Me Paging
- Meet Me Paging Transfer
- Message Waiting
- Night Service
- Off-Hook Signaling
- Paging
- PBX Compatibility
- Ringdown Extension
- Save Number Dialed
- Toll Restriction
- Transfer
- Trunk Queuing and Camp-On
- Warning Tone for Long Conversation
- Voice Mail

Data Communications

Refer to the individual features for additional descriptive, programming and operational information.

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-03-01	ETU Setup (HBI PKG: 2 SLT)	0	
10-03-03	ETU Setup (LCA PKG Setup) - Transmit Gain Level (S-Level)	32 (0dB)	
10-03-04	ETU Setup (LCA PKG Setup) - Receive Gain Level (R-Level)	32 (0dB)	
10-09-01	DTMF and Dial Tone Circuit Setup	Resource 01 - 132 = 0 (Common)	
15-03-01	Single Line Telephone Basic Data Setup - SLT Signaling Type	1	
15-03-03	Single Line Telephone Basic Data Setup - Terminal Type	0	
15-03-05	Single Line Telephone Basic Data Setup - Trunk Polarity Reverse	0	
15-03-06	Single Line Telephone Basic Data Setup - Extension Polarity Reverse	0	
15-03-07	Single Line Telephone Basic Data Setup - Enabled On-Hook When Holding (SLT)	1	
15-03-08	Single Line Telephone Basic Data Setup - Answer On-Hook when Holding (SLT)	1	
15-03-09	Single Line Telephone Basic Data Setup - Caller ID Function - For External Module	0	
15-03-10	Single Line Telephone Basic Data Setup - Caller ID Name	1	
15-03-11	Single Line Telephone Basic Data Setup - Caller ID Type	0	
15-03-14	Single Line Telephone Basic Data Setup - Forwarded Caller ID Display Mode	0	
20-03-01	System Options for Single Line Telephones - SLT Call Waiting Answer Mode	0	
20-03-02	System Options for Single Line Telephones - Ignore Received DP Dial on DTMF SLT Port	0	
20-03-03	System Options for Single Line Telephones - SLT DTMF Dial to Trunk Lines	0	
20-03-04	System Options for Single Line Telephones - Dial Sending Start Time for SLT or ARS	3	
20-03-05	System Options for Single Line Telephones - SLT Operation Mode	0	
20-03-06	System Options for Single Line Telephones - Headset Ringing Start Time	5 (seconds)	
20-03-07	System Options for Single Line Telephones - Trunk Call Dial Forced Sending Start Time (Forced Dial)	0 (seconds)	
20-06-01	Class of Service for Extensions	All extension port = Class 1	
20-13-13	Class of Service Options (Supplementary Service) - Continued Dialing (DTMF) Signal on ICM Call	COS 01~15 = 1	

Program Number	Program Name	Default	Note
20-15-01	**Ring Cycle Setup - Normal Incoming Call on Trunk**	2	
20-15-03	**Ring Cycle Setup - Incoming Internal Call**	8	
20-15-05	**Ring Cycle Setup - DID/DDI**	8	
80-03-01	**DTMF Tone Receiver Setup - Detect Level**	Type 1~5 = 0	
80-03-02	**DTMF Tone Receiver Setup - Start delay time**	Type 1~5 = 0	
80-03-03	**DTMF Tone Receiver Setup - Min. detect level**	Type 1 = 10 (-20dBm) Type 2 = 15 (-25dBm) Type 3 = 10 (-20dBm) Type 4 = 10 (-20dBm) Type 5 = 10 (-20dBm)	
80-03-04	**DTMF Tone Receiver Setup - Max. detect level**	2 (-2dBm)	
80-03-05	**DTMF Tone Receiver Setup - Forward twist level**	Type 1 ~ 5 = 5 (6dBm)	
80-03-06	**DTMF Tone Receiver Setup - Backward twist level**	Type 1 ~ 5 = 0 (1dBm)	
80-03-07	**DTMF Tone Receiver Setup - ON detect time**	Type 1 = 1 (30ms) Type 2 = 1 (30ms) Type 3 = 1 (30ms) Type 4 = 1 (30ms) Type 5 = 1 (30ms)	
80-03-08	**DTMF Tone Receiver Setup - OFF detect time**	Type 1 = 1 (30ms) Type 2 = 1 (30ms) Type 3 = 1 (30ms) Type 4 = 1 (30ms) Type 5 = 1 (30ms)	
80-04-01	**Call Progress Tone Detector Setup - Detection Level**	Type 1 (DT) = 0 (-25dBm) Type 2 (BT) = 0 (-25dBm) Type 3 (RBT) = 0 (-25dBm) Type 4 = 0 Type 5 = 0	
80-04-04	**Call Progress Tone Detector Setup - No tone time**	Type 1 (DT) = 132 (3990ms) Type 2 (BT) = 132 (3990ms) Type 3 (RBT) = 132 (3990ms) Type 4 = 0 Type 5 = 0	

Operation

Refer to the individual features listed in the Related Features section above in this feature.

Station Hunt

Description

After calling a busy extension, a call immediately hunts to the next available member of the Hunt Group (Department Group). The caller does not have to hang up and place another Intercom call if the first extension called is unavailable.

Conditions

- If required, use this option to change the Department Step Calling Single Digit Service Code (default code not assigned).
- A function key for Department Step Calling can be assigned (code 36).
- In Program 20-08-12, enable (1) or disable (0) an extension user ability to use Department Step Calling.

Default Settings

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Department Calling

Department Step Calling

Guide to Feature Programming

Program Number	Program Name	Default
11-16-01	**1 Digit Service Code Setup - Step Call**	4
16-01-03	**Department Group Basic Data Setup - Department Routing When Busy (Auto Step Call)**	0
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-09-07	**Class of Service Options (Incoming Call Service) - Call Queuing**	COS 01~15 = 0
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	COS 01~15 = 0

Operation

To make a Step Call:

1. Place a call to a busy extension.

Station Message Detail Recording

Description

Station Message Detail Recording (SMDR) provides a record of the system trunk calls. Typically, the record outputs to a customer-provided printer, terminal or SMDR data collection device. SMDR allows you to monitor the usage at each extension and trunk. This makes charge-back and traffic management easier.

SMDR provides the following options:

- **Abandoned Call Reporting**
  The SMDR report includes calls that rang into the system but were unanswered (i.e., abandoned). SMDR can include all abandoned calls or only those abandoned calls that rang longer than the specified duration. The Abandoned Call Report helps you keep track of lost business.
- **Blocked Call Reporting**
  When Toll Restriction blocks a call, you can have SMDR print the blocked call information. Or, you can have SMDR exclude these types of calls. With Blocked Call Reporting, you can better customize Toll Restriction for the site application.
- **Customized Date Format**
  The SMDR header can show the report date in one of three formats: American, European or Japanese. Set the format for your preference.
- **Transferred Call Tracking**
  SMDR shows each extension share of a transferred call. If an outside call is transferred among four extensions, SMDR shows how long each of the callers stayed on the call.
- **Data Call Tracking**
  Data Call Tracking can log the system internal data calls. Since SMDR normally logs external (trunk) data calls, Data Call Tracking lets you get a complete picture of data terminal activity.
- **Digit Counting**
  With Digit Counting, SMDR can selectively keep track of toll calls. For example, if the digit count is nine, SMDR does not include toll calls in the home area code. Digit Counting permits SMDR to include only the calls you want to monitor.
- **Digit Masking**
  Digit Masking lets you X out portions of the number dialed on the SMDR report. A digit mask of seven, for example, masks out all exchange codes (NNXs) and local addresses. Digit Masking makes it easier to keep track of calling patterns, without having to interpret each individual number. You can also use Digit Masking to block out access and security codes.
- **Duration Monitoring**
  SMDR can include calls of any duration, or only those that last longer than the interval you specify. If you want to keep track of all trunk activity, use a short duration. To keep track of only significant usage, use a longer duration.
- **Extension Exclusion**
  You can selectively exclude extensions from the SMDR report. This ensures privacy for high-profile callers. For example, the company attorney negotiating a merger may not want his calls to show up on an in-house report.
- **PBX Call Reporting**
  If your system is behind a PBX, you can have SMDR monitor all traffic into the PBX or just calls placed over PBX trunks. The SMDR record can include all PBX calls (including calls to PBX extensions) or just calls that include the PBX trunk access code.
- **Trunk Exclusion**
  Use Trunk Exclusion to exclude certain trunks not subject to per-call charges (like WATS lines) from the SMDR report. This makes call accounting easier, since you review only those calls with variable costs.
- **Usage Summaries**
  SMDR can automatically print daily, weekly and monthly call activity summaries. Each summary includes the total number of regular trunk calls and ISDN trunk calls, and the costs for each type. The daily report prints every day at midnight. The weekly report prints every Sunday night at midnight.

The monthly report prints at midnight on the last day of the month.

- **Extension Name or Number**
  The SMDR report can include an extension name or extension number. Choose the method that makes it easier for you to track call usage.

(The LAN port only provides information through LAN-capable programs, such as HyperTerminal. Printing of the SMDR information must be done from within that program.)

SMDR Enhanced for Caller ID

The SMDR output is enhanced to include up to 16 or 24 characters of the Caller ID name information (depending on the view option selected in Program 35-02-18). You can select to display the Caller ID number or name or the DID number. If you want to display the Caller Name in the DIALLED NO./CLI and ACCOUNT area, select 2 in the updated Program 35-02-15 and 1 in Program 35-02-17.

If the Caller ID name is not received, the area for Caller ID Name is left blank.

Sample SMDR Report

For example, with Program 35-01-09 = 0 (Format for NA) and Program 35-02-17 = 1 (Caller ID Name), if a call is received with the Caller ID Name of NEC Infrontia Corporation (24 characters), the following SMDR record is displayed:

CLASS	TIME	DATE	LINE	DURATION	STATION	DIALLED No./CLI	ACCOUNT
POT	10:52	12/09	002	00:00:10	2001	2142623801	08754
PIN	10:52	12/09	001	00:00:20	2017	2142623802	NECinfrontia Corp.
PIN	10:53	12/09	002			2142623801	NO ANSWER

If Program 35-02-18 = 1 (Caller ID Name Output Method) is set to line feed, the SMDR displays as follows:

CLASS	TIME	DATE	LINE	DURATION	STATION	DIALLED No./CLI	ACCOUNT
POT	10:52	12/09	002	00:00:10	2001	2142623801	08754
PIN	10:52	12/09	001	00:00:20	2017	2142623802	NECinfrontia Corp.
NEXT NECinfrontia Corp.							
PIN	10:53	12/09	002			2142623801	NO ANSWER

Table 1-37 SMDR Report Definitions

Report Headings	Definitions
Call Record Number	SMDR record number (consecutive)
CLASS	Type of call (see Class Definitions below)
TIME	Time call placed or answered. (For Transferred calls, shows time user picked up Transfer.)
DATE	Date the call was made
LINE	Trunk number used for call
DURATION	The time the call lasted. (For Transferred calls, shows how long user was on call after answering the Transfer.)
STATION	Extension number of call owner (i.e., extension that first placed or answered call) (For Transferred calls, there can be more than one owner - depending on how many extensions shared the call.)
DIALLED No./CLI	For outgoing calls, the number dialed or, for incoming calls, the Caller ID information
ACCOUNT	Account Code number entered by extension user

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Report Headings	Definitions
Class Definitions	
POT	Outgoing trunk call
POTA	Outgoing trunk call placed using Toll Restriction Override
PIN	Incoming trunk calls
POTP	Outgoing trunk call with Personal Code
POTW	Outgoing trunk call by using Walking Toll Restriction
ALB	All lines in group are busy (group number follows TIME field)
BRD	Call blocked due to Toll Restriction
BFL	SMDR Buffer Full
NEXT	Calling Party Name for previous record
PTRS	Transferred call (Incoming/Outgoing)
IVIN	BRI/PRI inbound trunk call
IVOT	Outgoing BRI/PRI trunk call
IVOTP	Outgoing BRI/PRI trunk call with Personal Code
ITRS	Transferred BRI/PRI call (Incoming/Outgoing)
SDTA	Internal Data Call
IDIN	Incoming Tie Line call
IDOT	Outgoing Tie Line call
SAD	Outgoing call from sensor
WAD	Outgoing call form remote inspection

Table 1-38 SMDR Report Format with Program 35-02-14 Set to '0'

Character Position	Field Definition
Header Line 1	
1~60	Spaces
61~70	MM/DD/YYYY
71	Space
72~75	PAGE
76	Space
77~79	Report page number (e.g., 001)
CR & LF	Carriage return and line feed
Header Line 2	
1~5	CLASS
6	Space
7~10	TIME
11~14	Spaces
15~18	LINE
19~22	Spaces
23~30	DURATION
31~32	Spaces
33~39	STATION

Character Position	Field Definition
40~44	Spaces
45~51	DIALLED
52	Space
53~59	No./CLI
60~63	Spaces
64~70	ACCOUNT
CR & LF	Carriage return and line feed
LF	Line feed
SMDR Record	
1~4	Call type (e.g., POT for outgoing)
5	Space
6~10	Time in 24 hour clock (HH:MM)
11	Space
12~21	LINE
22	Space
23~30	Call Duration (HH:MM:SS)
31	Space
32~41	Station number or name
42	Space
43~62	Number dialed (20 digits maximum)
63	Space
64~79	Account number or NO ANSWER

Table 1-39 SMDR Report Format with Program 35-02-14 Set to '1'

Character Position	Field Definition
Header Line 1	
1~60	Spaces
61~70	MM/DD/YYYY
71	Space
72~75	PAGE
76	Space
77~79	Report page number (e.g., 001)
CR & LF	Carriage return and line feed
Header Line 2	
1~5	CLASS
6	Space
7~10	TIME
11	Spaces
12~15	DATE
16~17	Spaces
18~21	LINE

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Character Position	Field Definition
22	Space
23~30	DURATION
31~32	Spaces
33~39	STATION
40~44	Spaces
45~51	DIALLED
52	Space
53~59	No./CLI
60~63	Spaces
64~70	ACCOUNT
CR & LF	Carriage return and line feed
LF	Line feed
SMDR Record	
1~4	Call type (e.g., POT for outgoing)
5	Space
6~10	Time in 24 hour clock (HH:MM)
11	Space
12~16	DATE
17	Space
18~21	LINE
22	Space
23~30	Call Duration (HH:MM:SS)
31	Space
32~41	Station number or name
42	Space
43~62	Number dialed (20 digits maximum)
63	Space
64~79	Account number or NO ANSWER

Table 1-40 SMDR Summary Report

OUTGOING CALL/COST SUMMARY

FOR DAY OF nn/nn/nn

TOTAL NO. OF OUTGOING PSTN CALLS: 0

TOTAL NO. OF OUTGOING ISDN CALLS: 0

NO. OF OUTGOING PSTN CALLS COSTED: 0 COST: 0

NO. OF OUTGOING ISDN CALLS COSTED: 0 COST: 0

OUTGOING CALL/COST

SUMMARY FOR WEEK ENDING nn/nn/nn

TOTAL NO. OF OUTGOING PSTN CALLS: 49

```
                TOTAL NO. OF OUTGOING ISDN CALLS: 0
                NO. OF OUTGOING PSTN CALLS COSTED: 0 COST: 0
                NO. OF OUTGOING ISDN CALLS COSTED: 0 COST: 0


OUTGOING CALL/COST SUMMARY
FOR MONTH ENDING nn/nn/nn
                TOTAL NO. OF OUTGOING PSTN CALLS: 49
                TOTAL NO. OF OUTGOING ISDN CALLS: 0
                NO. OF OUTGOING PSTN CALLS COSTED: 0 COST: 0
                NO. OF OUTGOING ISDN CALLS COSTED: 0 COST: 0
```

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Conditions

- SMDR data does not include Intercom calls.
- The SMDR call buffer stores 320 calls. The buffer stores calls when the SMDR device is unavailable. When the buffer fills, the oldest record is deleted to allow the new record to be saved.
- When SMDR reports are enabled using the same port as the Traffic Reporting feature (example: 147), the SMDR blocks the Traffic reports. Unplug the cable and plugging it back in to allow Traffic reports to print.
- SMDR requires a connection to the CPU LAN.
- If no answer is received, NO ANSWER is displayed regardless of the system programing for the Caller ID display option.
- The setting in Program 35-02-18 works regardless of the entry in Program 35-02-15 or 35-02-17.
- When Program 35-02-18 is set to 1, the first and second lines are sometimes separated. When the buffer is full, the overflowed data may not be shown.
- The special characters used in the system cannot be output to the SMDR - they are converted to (_).
- To use the PBX Call Reporting option, program system for behind PBX operation.

Default Settings

Disabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

PBX Compatibility/Behind PBX

Traffic Reports

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Guide to Feature Programming

Program Number	Program Name	Default
10-12-01	CPU Network Setup - IP Address	192.168.0.10
10-20-01	LAN Setup for External Equipment - TCP Port	External Device 1 ~10 = 0 External Device 12~14 = 0
10-20-03	LAN Setup for External Equipment - Keep Alive Time	30
14-01-06	Basic Trunk Data Setup - SMDR Printout	1
14-04-01	Behind PBX Setup	0
15-01-03	Basic Extension Data Setup - SMDR Printout	1
20-07-18	Class of Service Options (Administrator Level) - SMDR Printout Accumulated Extension Data	COS 01~15 = 1
20-07-19	Class of Service Options (Administrator Level) - SMDR Printout Department Group (STG) Data	COS 01~15 = 1
20-13-20	Class of Service Options (Administrator Level) - SMDR Printout Accumulated Account Code Data	COS 01~15 = 1
20-13-36	Class of Service Options (Supplementary Service) - Call Duration Timer Display	COS 01~15 = 1
35-01-01	SMDR Options - Output Port Type	3
35-01-03	SMDR Options - Header Language	0
35-01-04	SMDR Options - Omit Digits	0
35-01-05	SMDR Options - Minimum Digits	0
35-01-06	SMDR Options - Minimum Call Duration	0
35-01-07	SMDR Options - Minimum Ring Time (For Incoming Calls)	0
35-01-08	SMDR Options - Format Selection	1
35-02-01	SMDR Output Options - Toll Restricted Cal	1
35-02-02	SMDR Output Options - PBX Calls	1
35-02-03	SMDR Output Options - Trunk Number or Name	1
35-02-04	SMDR Output Options - Summary (Daily)	1
35-02-05	SMDR Output Options - Summary (Weekly)	1
35-02-06	SMDR Output Options - Summary (Monthly)	1
35-02-07	SMDR Output Options - Toll Charge Cost	1
35-02-08	SMDR Output Options - Incoming Call	1
35-02-09	SMDR Output Options - Extension Number or Name	0
35-02-10	SMDR Output Options - All Lines Busy (ALB) Output	0
35-02-12	SMDR Output Options - DID Table Name Output	0
35-02-13	SMDR Output Options - CLI Output When DID to Trunk	0
35-02-14	SMDR Output Options - Date	0
35-02-15	SMDR Output Options - CLI/DID Number Switching	0
35-02-16	SMDR Output Options - Trunk Name or Received Dialed Number	0
35-02-17	SMDR Output Options - Print Account Code or Caller Name ofIncoming Call	0
35-02-18	SMDR Output Options - Print Mode for Caller Name of Incoming Call	0

Program Number	Program Name	Default
35-02-19	SMDR Output Options - Dialed Number Output Format	0
35-02-20	SMDR Output Options - External CFW Information Mode	0
35-03-01	SMDR Port Assignment for Trunk Group	1
35-04-01	SMDR Port Assignment for Department Groups	1
80-05-01	Date Format for SMDR and System - Date Format	2

SMDR flowcharts are located on the following pages.

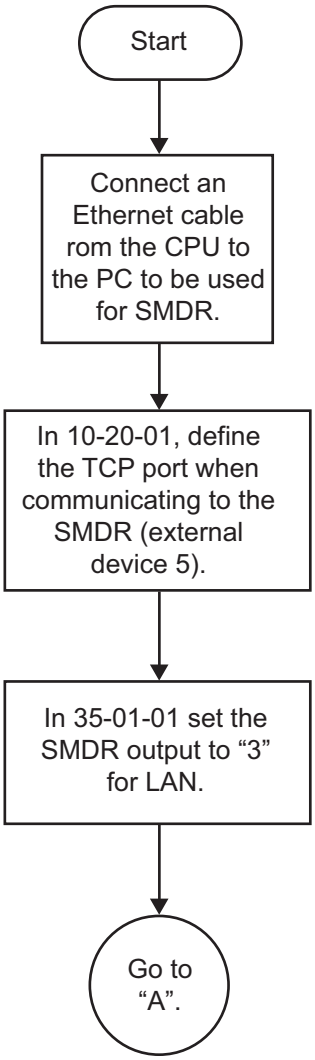

Figure 1-32 SMDR with a CPU Connection Ethernet

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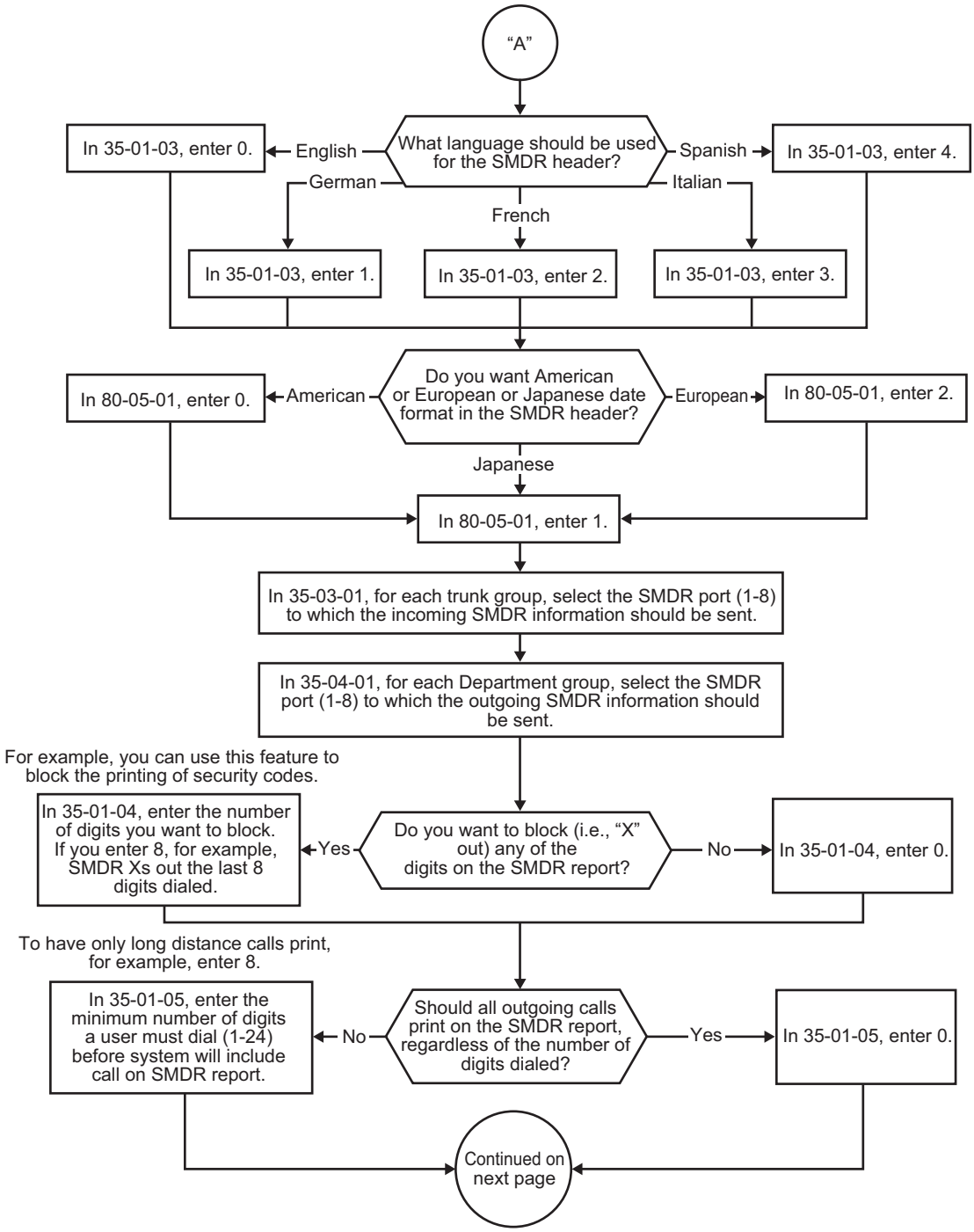

Figure 1-33 SMDR Flowchart

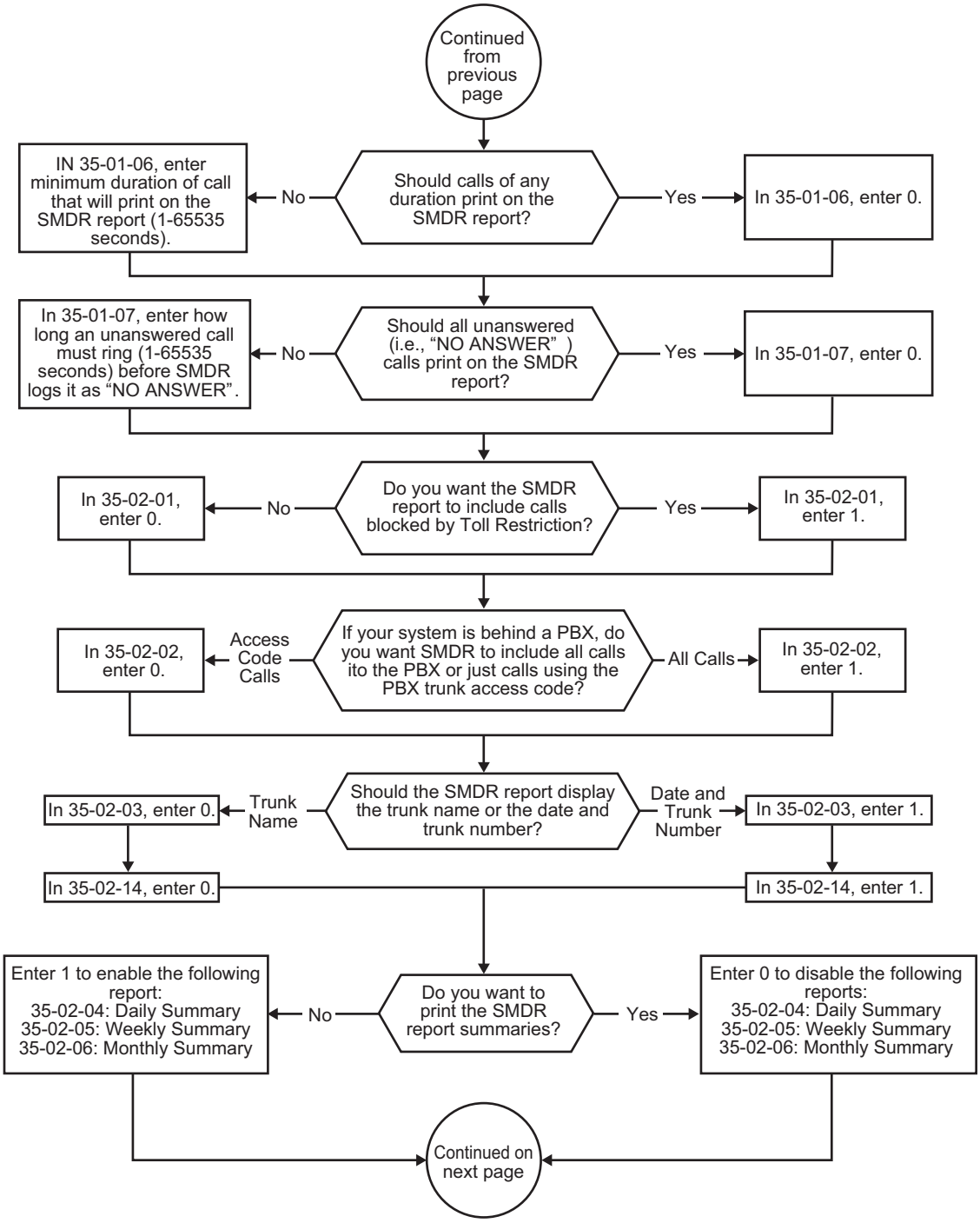

Figure 1-34 SMDR Flowchart (Continued)

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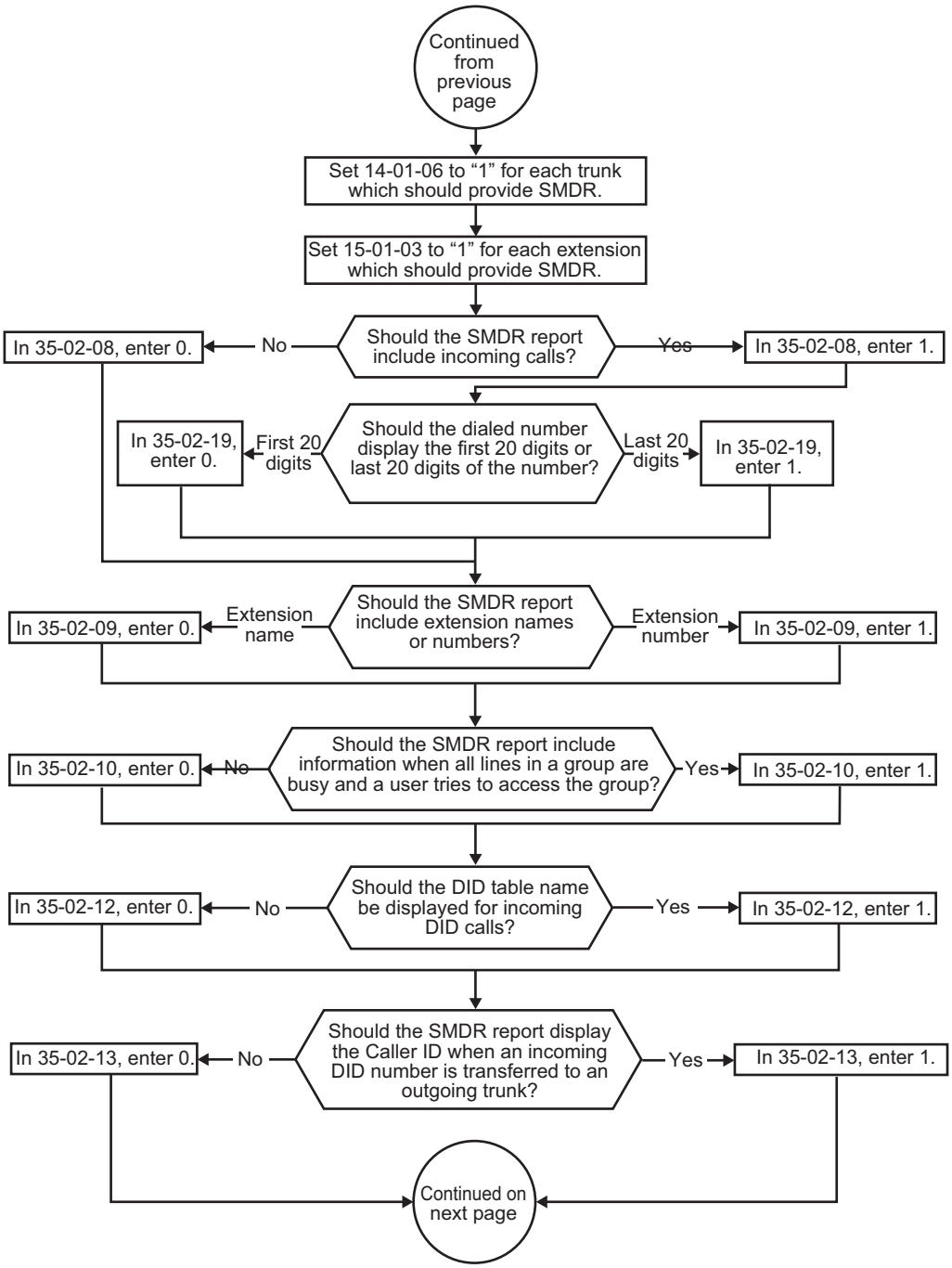


Figure 1-35 SMDR Flowchart (Continued)

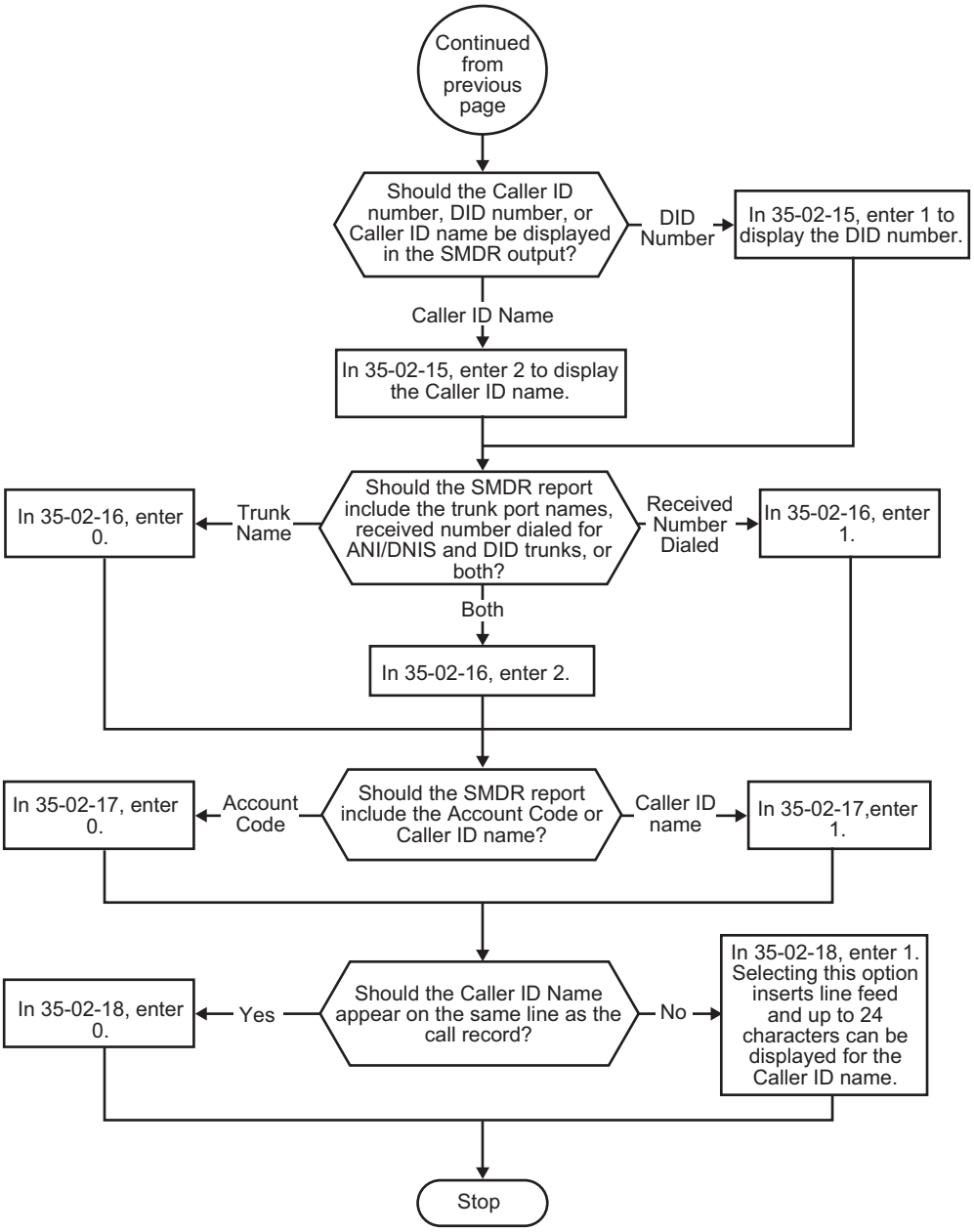


Figure 1-36 SMDR Flowchart (Continued)

Operation

Once installed and programmed, SMDR operation is automatic.

Station Name Assignment - User Programmable

Description

This feature allows a user to program the Station Name for their telephone extension or any extension within the system. The name is displayed on the multiline terminal LCD when an intercom call is placed.

Conditions

- Display telephones use extension names for Directory Dialing.
- Single line telephone extensions cannot program names.

Default Settings

Enabled

System Availability

Terminals

All display Multiline Terminals

Required Component(s)

None

Related Features

Directory Dialing

Name Storing

Guide to Feature Programming

Program Number	Program Name	Default
11-11-22	**Service Code Setup (for Setup/Entry Operation) - Extension Name Programming**	800
15-01-01	**Basic Extension Data Setup - Extension Name**	STA 200~327 = No Setting
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-13-21	**Class of Service Options (Supplementary Service) - Extension Name**	COS 01~15 = 1

Operation

To program your extension name:

1. Press **Speaker**.
2. Dial **800** .
   - OR -
   Press the **Extension Name Change** key (Program 15-07 or SC **851** : 55).
3. Press **Hold**.
4. Enter the name. (Refer to Table 1-34 Selectable Display Messaging Defaults on page 1-455.)

   Your name can be up to 12 digits maximum.
5. Press **Hold**.
6. Press **Speaker** to hang up.

To program any extension name:

1. Press **Speaker**.
2. Dial **800** .
   - OR -
   Press the **Extension Name Change** key (Program 15-07 or SC**851** : 55).
3. Enter the extension number to be named.
4. Enter a name. (Refer to Table 1-41 Keys for Entering Names on this page.)

   The name can be have to 12 digits maximum.
5. Press **Hold**.
6. Press **Speaker** to hang up.

Table 1-41 Keys for Entering Names

Use this keypad digit . . .	When you want to. . .
1	Enter characters: **1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Å Æ Ç É Ê ì ó 0**
2	Enter characters: A-C, a-c, 2.
3	Enter characters: D-F, d-f, 3.
4	Enter characters: G-I, g-i, 4.
5	Enter characters: J-L, j-l, 5.
6	Enter characters: M-O, m-o, 6.
7	Enter characters: P-S, p-s, 7.
8	Enter characters: T-V, t-v, 8.
9	Enter characters: W-Z, w-z, 9.
0	Enter characters: **0 ! " # $ % & ' ( ) ô õ ú å ä æ ö ü α ε θ B**
*	Enter characters: * + , - . / : ; < = > ? π Σ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: TOM). Pressing # again = Space. (In system programming mode, use the right arrow Softkey instead to accept and/or add a space.)
Clear/Back or **DND**	Clear the character entry one character at a time.
Flash	Clear all the entries from the point of the flashing cursor and to the right.

Station Relocation

Description

Station Relocation allows a station to be moved from one location to another, without having to reprogram the station data. The station features and extension number are the same after it is moved to the new location.

Conditions

- This feature can be used to swap or relocate multiline and single line terminals.
- The destination extension must be idle. If the station is not idle, busy tone is heard.
- If the Extension Swap service code is dialed from an extension that does not have an extension swap password programmed, busy tone is heard.
- If the Extension Swap service code is dialed from an extension whose Class of Service does not allow Extension Data Swap, busy tone is heard.
- If the destination extension entered is not a valid extension, busy tone is heard.
- The following user setting data is relocated with the extension. All other user setting data is either not relocated or cleared.
  - DND
  - Call Forwarding
  - Memo Dial
  - Last Number Dial History
  - Saved Number Dial
  - Incoming History
  - Mute LED Status
  - VM MW LED Status

Refer to the Programming section in this feature for system programs that are swapped.

Default Settings

None

System Availability

Terminals

All Multiline Terminals and Single Line Telephones

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Default
11-15-12	Service Code Setup, Administrative (for Special Access - Extension Data Swap	not assigned

Program Number	Program Name	Default
20-13-42	**Class of Service Options (Supplementary Service) - Extension Data Swap Enabling**	COS 01~15 = 1
92-05-01	**Extension Data Swap Password - Password**	not assigned

The following programs are swapped when Station Relocation is used:

- Program 11-02 Extension Numbering
- Program 12-05 Night Mode Group Assignment for Extensions
- Program 13-03 Speed Dialing Group Assignment for Extensions
- Program 15-01 Basic Extension Data Setup
- Program 15-02 Multiline Telephone Basic Data Setup
- Program 15-03 Single Line Telephone Basic Data Setup
- Program 15-06 Trunk Access Map for Extensions
- Program 15-07 Programmable Function Keys
- Program 15-08 Incoming Virtual Extension Ring Tone Setup
- Program 15-09 Virtual Extension Ring Assignment
- Program 15-10 Incoming Virtual Extension Ring Tone Order Setup
- Program 15-11 Virtual Extension Delayed Ring Assignment
- Program 15-12 Conversation Recording Destination for Extensions
- Program 15-14 Programmable One-Touch Keys
- Program 16-02 Department Group Assignment for Extensions
- Program 20-06 Class of Service for Extensions
- Program 21-02 Trunk Group Routing for Extensions
- Program 21-04 Toll Restriction Class for Extensions
- Program 21-07 Toll Restriction Override Password Setup
- Program 21-10 Dial Block Restriction Class Per Extension
- Program 21-11 Extension Ringdown (Hotline) Assignment
- Program 21-13 ISDN Calling Party Number Setup for Extensions
- Program 21-15 Individual Trunk Group Routing for Extensions
- Program 21-19 IP Trunk (SIP) Calling Party Number Setup for Extension
- Program 23-02 Call Pickup Groups
- Program 23-03 Universal Answer/Auto Answer
- Program 23-04 Ringing Line Preference for Virtual Extensions
- Program 24-03 Park Group
- Program 26-04 ARS Class of Service
- Program 30-02 DSS Console Extension Assignment
- Program 31-02 Internal Paging Group Assignment
- Program 42-02 Hotel/Motel Telephone Setup

Operation

To exchange two terminals:

1. Pick up the handset or press **Speaker**.
2. Dial the Extension Data Swap Service Code - not assigned at default (Program 11-15-12).
3. Dial the Extension Data Swap Password - not assigned at default (Program 92-05-01).
4. Dial the extension to be swapped with or relocated to.
5. When successfully completed, confirmation tone will be heard and the display will show completed.
6. Press **Speaker** twice to exit.

Tandem Ringing

Description

Tandem Ringing allows an extension user to have two telephones with one telephone number. For example, extension 205 (the master telephone) sets Tandem Ringing with extension 206. When extension 205 receives an incoming call, both extensions 205 and 206 ring. Callers would dial the master extension number (extension 205 in this example). When either the master telephone or slave telephone is in use, the other telephone cannot be used for outgoing calls or incoming calls.

The multiline terminal must be paired with either a single line telephone or a Wireless DECT (SIP) handset. It cannot be paired with another multiline terminal or a SIP terminal.

A single line telephone must be paired with another single line telephone or a Wireless DECT (SIP) handset. It cannot be paired with a multiline telephone or a SIP terminal.

Conditions

- The slave telephone cannot call the master telephone.
- Extension numbers up to four digits can be registered on the Tandem Ringing key. Extension numbers over as well cannot be registered.
- If Tandem Ringing is enabled, and one of the extensions is busy, no additional calls can be received or placed from either telephone.
- Tandem Ringing can support up to 128 pairs of Tandem Ringing extensions.
- The extension user which enables Tandem Ringing is the master, while the slave telephone is the extension entered by the user while setting up the feature.
- A slave telephone ignores the settings for DND and follows the master telephone settings instead.
- Voice Call is not supported on a multiline terminal with Tandem Ringing.
- Calls placed on Hold while Tandem Ringing is active, immediately recall if the handset is placed On-hook.
- A slave telephone ignores the settings for Ring Groups and follows the master telephone settings instead.
- To transfer calls between the two Tandem Ringing stations, a System Park Orbit should be used.
- A message waiting indication set for the master telephone only lights the message waiting LED on the master telephone.

Default Settings

Disabled

System Availability

Terminals

Master Telephone:

TDM Multiline Terminals or Single Line telephones

Slave Telephone:

Single Line telephones or a Wireless DECT (SIP) handset.

Required Component(s)

ID using Wireless DECT (SIP) handsets (Refer to Wireless DECT (SIP) on page 1-617.

Related Features

Call Forwarding

Call Forwarding/Do Not Disturb Override

Direct Station Selection (DSS) Console

Do Not Disturb (DND)

Hold

Intercom

Message Waiting

Ring Groups

Multiple Trunk Types

Guide to Feature Programming

Program Number	Program Name	Default
11-11-41	**Service Code Setup (for Setup/Entry Operation) - Tandem Ringing**	744
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
30-03-01	**DSS Console Key Assignment**	The DSS keys 001~060 of all DSS consoles = DSS/One-Touch key 200~259

Operation

To set up Tandem Ringing:

1. Press **Speaker** at the extension considered to be the master telephone (optional).
2. Dial **744** .
   - OR -
   Press the Tandem Ringing key (Program 15-07 or SC **851** : 80).
3. Dial **1** to set the feature.
4. Enter the extension number to be considered the slave telephone (the telephone that rings when the master extension rings).
   A confirmation tone is heard (if **Speaker** was used).
5. Press **Speaker** to hang up (if the key is lit).
   While the feature is active, if either the master or slave telephone is on a call, no calls can be placed or answered at the other extension until the busy telephone has hung up. Multiline Terminals indicate TANDEM IN USE in the display and single line telephone users hear a busy signal when the handset is lifted.

To cancel Tandem Ringing:

1. Dial **744** .
   - OR -
   Press the **Tandem Ringing** key (Program 15-07 or SC **851** : 80).
2. Dial **0** to cancel the feature.

Tandem Trunking (Unsupervised Conference)

Description

Tandem Trunking allows an extension user to join two outside callers in a Trunk-to-Trunk Conference. The extension user can then drop out of the call, leaving the trunks in an Unsupervised Conference. The extension user that established the conference is not part of the conversation. The conference continues until either outside party hangs up. The extension user that set up the conference can end the tandem call anytime.

The number of simultaneous conference calls is limited by the number of conference circuits in the system. Due to this fact, the maximum number of conference calls cannot exceed the limits defined below:

The CPU provides two blocks of 16 conference circuits, allowing each block to have any number of conferences with any number of internal or external parties conferenced as long as the total number of conference channels used does not exceed the block limit of 16.

Tandem Trunking could help an office manager, for example, put two outside sales people in touch. The office manager could:

- Answer a call from one salesperson
- Place a call to the second salesperson
- Set up the Trunk-to-Trunk Conference
- Drop out of the call

The office manager could terminate the conference anytime.

There are four methods for Tandem Trunking:

- Method A - Tandem Trunking from Conference
  An extension user can set up Tandem Trunking (Unsupervised Conference) by dialing a 3-digit service code (**#8**) or a uniquely programmed Transfer key.
- Method B - Tandem Trunking with Transfer Key
  This method allows an extension user to easily set up an Unsupervised Conference with a call they have placed on Hold. It uses a uniquely programmed Transfer key to set up a tandem call.
- Method C - Automatic Tandem Trunking on Hang Up
  This method allows an extension user to easily set up an Unsupervised Conference without having to place the conference call on Hold. A Class of Service option is available, which allows or denies an extension user from automatically setting up a Conference/Tandem Trunking call after hanging up the telephone.
- Method D - Automatic Tandem Trunking Setup to Speed Dial Number
  This method allows an extension user to easily set up an Unsupervised Conference with a call they have placed on Hold. A Class of Service option is available, which allows or denies an extension user from automatically setting up a Conference/Tandem Trunking call after hanging up the telephone.

Trunk Continue/Disconnect Codes Added

Software enhances the forced trunk release option with the Tandem Trunking and DISA features. Users can be allowed to use a Continue or Disconnect service code. The Continue service code extends the conversation a programmed time. If the user enters the Disconnect service code, the call is disconnected immediately.

EXAMPLE:

The following example indicates how a call is handled with the system programmed as follows:

- Program 14-01-25: 1 (Continued/Discontinued Trunk-to-Trunk Conversation)
- Program 20-28-01: # (Conversation Continue Code)
- Program 20-28-02: No Setting (No Conversation Disconnect Code is entered)

- Program 20-28-03: 180 (Conversation Continue Time)
- Program 24-02-07: 600 (Only used with Trunk-to-Trunk Transfer Release Warning Tone)
- Program 24-02-10: 30 (Only used with Disconnect Trunk-to-Trunk)
- Program 25-07-07: 600 (Long Conversation Warning Tone Timer)
- Program 25-07-08: 30 (Long Conversation Disconnect)

1. An external call connects to an external number (either by transferring with Tandem Trunking or by DISA caller).
2. After 10 minutes (Tandem Trunking = Program 24-02-07 or DISA = Program 25-07-07), a warning tone is heard and the user dials # (Program 20-28-01) to extend the conversation.
3. After three minutes (Program 20-28-03), the warning tone is heard again. After 30 seconds (Tandem Trunking = Program 24-02-10 or DISA = Program 25-07-08), the call is disconnected.

Conditions

- Tandem Trunking requires loop start trunks with disconnect supervision.
- The maximum number of simultaneous trunk-to-trunk conferences allowed is determined by the Conference feature setup. Refer to the Programming section for this feature.
- The Continue/Disconnect code must be DTMF.
- With an analog trunk, the Continue/Disconnect code may work using DTMF sounds from the opposite side trunk. With an ISDN trunk, Program 14-01-25 must be enabled to detect the Continue/Disconnect code.
- The Continue/Disconnect code is not accepted while dialing a trunk.
- Continue/Disconnect codes do not work if all receivers are busy.
- A trunk can be set up to automatically tandem trunk/forward to an outside telephone number or Speed Dial - System/Group Dialing bin.
- Other programmed options for incoming and outgoing calls can affect how calls are handled. Refer to Central Office Calls, Answering/Central Office Calls, Placing and check or program these options as needed.
- DISA calls also use the same Continue/Disconnect codes.
- After initiating an unsupervised conference, selecting one of the line keys allows you to barge-in to the conference.
- If the station that barges into an unsupervised conference hangs up, the conference is terminated.
- A Trunk-to-Trunk transfer can be established by the following operation:

1. While talking to an outside party, press Hold.
2. Access a second outside line and dial the desired number.
3. Press Transfer to complete the Trunk-to-Trunk transfer.

When the second call is to be transferred to another station (Not Trunk-to-Trunk), the user should press Hold at step 3, then dial the desired station, and press Transfer to complete the transfer.

Default Settings

Disabled

System Availability

Terminals

Multiline Terminals and Single Line Telephones

Required Component(s)

None

Related Features

Call Forwarding, Off-Premise

Central Office Calls, Answering

Central Office Calls, Placing

Direct Inward System Access (DISA)

T

Guide to Feature Programming

Method A - Tandem Trunking from Conference

Program Number	Program Name	Default
11-12-57	Service Code Setup (for Service Access) - Tandem Trunking	#8
14-01-04	Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls	32 (0dB)
14-01-05	Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls	16 (-8dB)
14-01-13	Basic Trunk Data Setup - Trunk-to-Trunk Transfer	0
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-07-11	Class of Service Options (Administrator Level) - Forced Trunk Disconnect (analog trunk only)	COS 01~15 = 1
20-11-14	Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer Restriction	COS 01~15 = 0
20-11-21	Class of Service Options (Hold/Transfer Service) - Restriction for Tandem Trunking on Hang Up	COS 01~15 = 0
20-11-22	Class of Service Options (Hold/Transfer Service) - Restricted Unsupervised Conference	COS 01~15 = 0
20-13-08	Class of Service Options (Supplementary Service) - Conference	COS 01~15 = 1
20-13-10	Class of Service Options (Supplementary Service) - Barge-In Monitor	COS 01~15 = 0
24-02-07	System Options for Transfer - Trunk-to-Trunk Transfer Release Warning Tone	1800 (seconds)
24-02-10	System Options for Transfer - Disconnect Trunk-to-Trunk	0 (seconds)
25-07-07	System Timers for VRS/DISA - Ling Conversation Warning Tone Time	30 (seconds)
25-07-08	System Timers for VRS/DISA - Long Conversation Disconnect Time	15 (seconds)

Method B - Tandem Trunking with Transfer Key

Program Number	Program Name	Default
14-01-04	Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls	32 (0dB)

Program Number	Program Name	Default
14-01-05	**Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**	16 (-8dB)
14-01-13	**Basic Trunk Data Setup - Trunk-to-Trunk Transfer**	0
14-02-12	**Analog Trunk Data Setup - Detect Network Disconnect Signal**	0
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-07-11	**Class of Service Options (Administrator Level) - Forced Trunk Disconnect (analog trunk only)**	COS 01~15 = 1
20-11-14	**Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer Restriction**	COS 01~15 = 0
20-11-21	**Class of Service Options (Hold/Transfer Service) - Restriction for Tandem Trunking on Hang Up**	COS 01~15 = 0
20-13-10	**Class of Service Options (Supplementary Service) - Barge-In Monitor**	COS 01~15 = 0
24-02-07	**System Options for Transfer - Trunk-to-Trunk Transfer Release Warning Tone**	1800 (seconds)
24-02-10	**System Options for Transfer - Disconnect Trunk-to-Trunk**	0 (seconds)
25-07-07	**System Timers for VRS/DISA - Long Conversation Warning Tone Time**	30 (seconds)
25-07-08	**System Timers for VRS/DISA - Long Conversation Disconnect Time**	15 (seconds)
81-01-03	**COT Initial Data Setup - Clear Signal (Open Loop) Detection Time**	59 (295ms)

Method C - Tandem Trunking on Hang up

Program Number	Program Name	Default
14-01-04	**Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls**	32 (0dB)
14-01-05	**Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**	16 (-8dB)
14-01-13	**Basic Trunk Data Setup - Trunk-to-Trunk Transfer**	0
14-02-12	**Analog Trunk Data Setup - Detect Network Disconnect Signal**	0
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-07-11	**Class of Service Options (Administrator Level) - Forced Trunk Disconnect (analog trunk only)**	COS 01~15 = 1
20-11-11	**Class of Service Options (Hold/Transfer Service) - Automatic On-Hook Transfer**	COS 01~15 = 1
20-11-14	**Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer Restriction**	COS 01~15 = 0
20-11-21	**Class of Service Options (Hold/Transfer Service) - Restriction for Tandem Trunking on Hang Up**	COS 01~15 = 0
24-02-07	**System Options for Transfer - Trunk-to-Trunk Transfer Release Warning Tone**	1800 (seconds)
24-02-10	**System Options for Transfer - Disconnect Trunk-to-Trunk**	0 (seconds)

Program Number	Program Name	Default
25-07-07	System Timers for VRS/DISA - Long Conversation Warning Tone Time	30 (seconds)
25-07-08	System Timers for VRS/DISA - Long Conversation Disconnect Time	15 (seconds)
81-01-03	COT Initial Data Setup - Clear Signal (Open Loop) Detection Time	59 (295ms)

T

Method D - Tandem Trunking to Speed Dial Number

Program Number	Program Name	Default
11-10-06	Service Code Setup (for System Administrator) - Setting the Automatic Transfer for Each Trunk Line	833
11-10-07	Service Code Setup (for System Administrator) - Canceling the Automatic Transfer for Each Trunk Line	834
11-10-08	Service Code Setup (for System Administrator) - Setting the Destination for Automatic Trunk Transfer	835
13-04-01	Speed Dialing Number and Name - Speed Dialing Data	not assigned
13-04-02	Speed Dialing Number and Name - Name	not assigned)
13-04-03	Speed Dialing Number and Name - Transfer Mode	0
13-04-04	Speed Dialing Number and Name - Transfer Destination Number	not assigned
13-04-05	Speed Dialing Number and Name - Incoming Ring Pattern	0
14-01-04	Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls	32 (0dB)
14-01-05	Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls	16 (-8dB)
14-01-13	Basic Trunk Data Setup - Trunk-to-Trunk Transfer	0
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-07-05	Class of Service Options (Administrator Level) - Set/Cancel Automatic Trunk-to-Trunk Transfer	COS 01~15 = 1
20-07-11	Class of Service Options (Administrator Level) - Forced Trunk Disconnect (analog trunk only)	COS 01~15 = 1
24-02-07	System Options for Transfer - Trunk-to-Trunk Transfer Release Warning Tone	1800 (seconds)
24-02-10	System Options for Transfer - Disconnect Trunk-to-Trunk	0 (seconds)
24-04-01	Automatic Trunk-to-Trunk Transfer Target Setup	999
25-07-07	System Timers for VRS/DISA - Long Conversation Warning Tone Time	30 (seconds)
25-07-08	System Timers for VRS/DISA - Long Conversation Disconnect Time	15 (seconds)

Trunk Disconnect Continue/Disconnect Codes

Program Number	Program Name	Default
14-01-25	**Basic Trunk Data Setup - Continued/Discontinued Trunk-to-Trunk Conversation**	0
20-28-01	**Trunk to Trunk Conversation - Conversation Continue Code**	not assigned
20-28-02	**Trunk to Trunk Conversation - Conversation Disconnect Code**	not assigned
20-28-03	**Trunk to Trunk Conversation - Conversation Continue Time**	0 (seconds)
24-02-07	**System Options for Transfer - Trunk-to-Trunk Transfer Release Warning Tone**	1800 (seconds)
24-02-10	**System Options for Transfer - Disconnect Trunk-to-Trunk**	0 (seconds)
25-07-07	**System Timers for VRS/DISA - Long Conversation Warning Tone Time**	30 (seconds)
25-07-08	**System Timers for VRS/DISA - Long Conversation Disconnect Time**	15 (seconds)
80-01-02 (35)	**Service Tone Setup - Basic Tone Number**	0~33 0 = No Tone 33 = Default Time Slot

Operation

Method A - Tandem Trunking from Conference

To set up a Tandem Call:

1. Place or answer first trunk call.
2. Press **Conf** softkey or **DND/CONF** key.
3. Place or answer second trunk call.
4. To set up the tandem call, press **Conf** softkey or **DND/CONF** key twice.

   This sets up a Conference between you and both outside parties.

5. Press **Transfer**.
   - OR -
   Press **Hold** and dial **#8** or the service code set for Unsupervised Conference/Tandem Trunking in Program 11-12-57.

   The line keys for the trunks blink green as long as the Unsupervised Conference continues.

To end the Tandem Call:

1. Press either flashing **line** key.

   The line keys light steadily (green). You can listen (i.e., monitor) to the call or rejoin the conversation, based on the setting in Program 20-13-10.

2. Press **Speaker** or hang up.

   If Program 20-13-10 is set to 0, the Conference ends and the line keys go out.

*If Program 20-13-10 is set to 1, to manually disconnect the Conference, Forced Trunk Disconnect (i.e., Press the line key + **724** or the service code set of Forced Trunk Disconnect in Program 11-10-26) must be used by an extension other than the originating extension.*

Method B - Tandem Trunking with Transfer Key

To set up a Tandem Call:

1. Place or answer first trunk call.
2. Press **Hold** to place the first trunk call on hold.
3. Place a second trunk call.
4. Press **Transfer**.

This sets up an Unsupervised Conference with both outside parties.

The line keys for the trunks light solid red.

*To disconnect the Conference, use Forced Trunk Disconnect (i.e., Press the line key + **724** or the service code set of Forced Trunk Disconnect in Program 11-10-26) must be used by an extension other than the originating extension.*

Single Line Telephone
To set up a Tandem Call:

1. Place or answer first trunk call.
2. Press hookflash and dial **826** .
3. Place or answer second trunk call.
4. To set up the tandem call, press hookflash and dial **#8**.
5. Hang up.

This sets up a Conference between both outside parties.

Method C - Tandem Trunking on Hang up

To set up a Tandem Call:

1. Place or answer first trunk call.
2. Press **Hold** to place the first trunk call on hold.
3. Place a second trunk call.
4. Hang up.

This sets up an Unsupervised Conference with both outside parties.

The line keys for the trunks light solid red.

To disconnect the Conference, use Forced Trunk Disconnect (i.e., Press line key + 724 or the service code set of Forced Trunk Disconnect in Program 11-10-26).

Single Line Telephone
To set up a Tandem Call:

1. Place or answer first trunk call.
2. Press hookflash.
3. Place or answer second trunk call.
4. To set up the tandem call, hang up.

This sets up a Conference between both outside parties.

*To disconnect the Conference, use Forced Trunk Disconnect [i.e., Dial the trunk access code **#9** + trunk number) + **724** or the service code set of Forced Trunk Disconnect in Program 11-10-26].*

Method D - Automatic Tandem Trunking Using Speed Dialing

To set Automatic Tandem Trunking:

1. Dial service code 833 (or the service code set for Set Automatic Transfer per Trunk).
2. Dial the desired trunk number (Trunk Number: 001~126).
3. Hang up.

The line key for the trunk is solid red as long as the Unsupervised Conference continues.

*To disconnect the Conference, use Forced Trunk Disconnect (i.e., Press the line key or **#9** plus the trunk number + **724**).*

To cancel Automatic Tandem Trunking:

1. Dial service code 834 (or the service code set for Disable Automatic Transfer per Trunk).
2. Dial the desired trunk number (Trunk Number: 001~126).
3. Hang up.

*To disconnect the Conference, Forced Trunk Disconnect (i.e., Press the line key or **#9** plus the trunk number + **724** or the service code set of Forced Trunk Disconnect in Program 11-10-26).*

To set and change the destination of the Automatic Tandem Trunk call:

1. Dial service code 835 (or the service code set for Set Destination for Automatic Trunk-to-Trunk Transfer).
2. Dial the desired trunk number (Trunk Number: 001~126).
3. Dial the destination Number (trunk access code is not needed).
4. Dial the desired time mode (Time Mode: 1~8).
5. Press **Hold**.
6. Hang up.

*To disconnect the Conference, use Forced Trunk Disconnect (i.e., Press the line key or **#9** plus the trunk number + **724**).*

Continue/Disconnect Codes

To use the Continue code to extend a Tandem Trunk call:

1. An external call connects to an external number either by transferring with Tandem Trunking or by DISA caller.
2. After the programmed time (Program 24-02-07), a warning tone is heard and the user dials the Continue code (Program 20-28-01) to extend the conversation.
3. After the programmed time (Program 20-28-03), the warning tone is heard again. After the programmed time (Program 24-02-10), the call is disconnected.

Tone Override

Description

The multiline terminal user that calls a busy station and receives a call waiting tone can generate a Tone Override that is heard by the originator and busy station. The busy station user can place the existing call on hold to answer the Override.

Conditions

- One Tone Override at a time can be received at a multiline terminal.
- Tone Override can be accomplished only after receiving a BUSY tone.
- Tone Override originate is allowed from a single line telephone until the PBR times out.
- Virtual Extensions do not support Tone Override.

Default Settings

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Call Waiting/Camp-On

Data Line Security

Guide to Feature Programming

Program Number	Program Name	Default
11-12-03	Service Code Setup (for Service Access) - Override (Off-Hook Signaling)	809
11-16-04	Single Digit Service Code Setup - Intercom Off-Hook Signaling	*
15-02-12	Multiline Telephone Basic Data Setup - Off-Hook Ringing	0
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-09-01	Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/DIL Override	COS 01~15 = 0
20-09-07	Class of Service Options (Incoming Call Service) - Call Queuing	COS 01~15 = 0
20-13-05	Class of Service Options (Supplementary Service) - Intercom Off-Hook Signaling	COS 01~15 = 1

Program Number	Program Name	Default
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	COS 01~15 = 0
20-13-34	**Class of Service Options (Supplementary Service) - Block Manual Off-Hook Signaling**	COS 01~15 = 0
20-13-35	**Class of Service Options (Supplementary Service) - Block Camp On**	COS 01~15 = 0
20-18-06	**Service Tone Timers - Interval of Call Waiting Tone**	10 (seconds)
80-01-01 (39)	**Service Tone Setup - Basic Tone Number**	0~255 (0~Endless)
80-01-02 (39)	**Service Tone Setup - Ring Busy Tone**	0~33 (0=No Tone, 33=Default Time Slot)

Operation

To send Off-Hook signals to an extension busy on a call:

Your extension may send Off-Hook signals automatically.

1. Dial **809** (Program 11-12-02).
   - OR -
   Press the **Off-Hook Signaling** key (Program 15-07-01 code 33).

   You hear Ring Busy Tone.

   The called extension hears Call Alert Notification.

To answer Tone Override:

1. Receive Tone Override.
2. Press Hold and talk with the party.

Traffic Reports

Description

The system provides the ability to send data to a PC connected to the SL1000 . The telephone call traffic data for each extension is captured for use with the Station Message Detail Recording (SMDR) feature.

Call Traffic

The total of outgoing call frequency, outgoing call duration, incoming call frequency, answer frequency, incoming call duration, ringing duration for each line and extension, and abandon call frequency for each line is logged. The total of incoming calls, answer frequency, call duration for each line and extension, and abandon call frequency of each line is logged and the data is outputted to the PC. The system totals the hour, day, week, and month for each terminal and trunk number. This information is used by the SMDR feature. The extension which is totaled is determined by system programming. The system outputs this data to the PC for the total period.

Conditions

- The SMDR call buffer stores 320 calls. The buffer stores calls when the SMDR device is unavailable. When the buffer fills, the oldest record is deleted to allow the new record to be saved.
- If connected to the output device, the reports print hourly. If not connected and the data is not output at the end of the hour, the traffic data is overwritten by new incoming data.
- The traffic data is lost if power failure occurs.
- Traffic Reports require connection to the serial connector on the CPU. Additional programming and a customer-provided printer are also required. Refer to the SL1000 System Hardware Manual for more on setting up and connecting to the SL1000 system.
- SMDR provides additional information about the system trunk calling patterns. Refer to Station Message Detail Recording on page 1-468 for more information.

Default Settings

Disabled

System Availability

Terminals

All Terminals

Traffic Total Report - Sample Report

Terminal	OTG	Duration	Cost	ICM	Answer	Duration	Ringing	Abandon
301	54	01:45:14	720	326	115	02:11:52	00:09:36	
301	92	02:37:22	1855	84	84	01:58:31	00:04:19	
LINE001	- —	- —	- —	79	71	01:05:26	- —	8

Term	Definition
Terminal	Terminal Number/Called Party Number (maximum 24 digits)
OTG	Outgoing Call Frequency/number of outgoing calls (maximum 65535 calls)
Duration	Call Duration for an Outgoing Call
Cost	Call Charge (Not Used)

Term	Definition
ICM	Incoming Call Frequency/number of incoming calls (maximum 65535 calls)
Answer	Answer Frequency (maximum 65535 calls)
Duration	Call Duration for an Incoming Call
Ringing	Ringing Duration
Abandon	Number of Abandoned Calls (maximum 65535 calls)

Related Features

Station Message Detail Recording

Guide to Feature Programming

Program Number	Program Name	Default
10-20-01	**LAN Setup for External Equipment - TCP Port**	Refer to Programming Manual.
90-20-01	**Traffic Report Data Setup - Call Traffic Output**	0
90-20-03	**Traffic Report Data Setup - All Line Busy Output**	0
90-20-04	**Traffic Report Data Setup - DTMF Receiver Busy Output**	0
90-20-05	**Traffic Report Data Setup - Dial Tone Detector Busy Output**	0
90-20-06	**Traffic Report Data Setup - Caller ID Receiver Busy Output**	0
90-20-07	**Traffic Report Data Setup - Voice Mail Channel All Busy Output**	0
90-20-09	**Traffic Report Data Setup - Attendant Channel All Busy Output**	0
90-20-10	**Traffic Report Data Setup - Base Station All Busy Output**	0
90-21-01	**Traffic Report Output - Output Port Type**	1

Operation

None

Transfer

Description

Transfer permits an extension user to send an active Intercom or outside call to any other extension in the system. With Transfer, any extension user can quickly send a call to the desired co-worker. A call a user transfers automatically recalls if not picked up at the destination extension. This assures that users do not lose or inadvertently abandon their transfers. While a transferred call is ringing an extension the system can optionally play ringback tone or Music on Hold to the caller.

The system allows the following types of transfers:

- Screened Transfer
  The transferring user announces the call to the destination before hanging up.
- Unscreened Transfer
  The transferring party extends the call without an announcement.
- Extension (Department) Groups Transfer
  The Transferring party sends the call to a Department instead of an extension.
- Transfer Without Holding
  A user presses a busy line key and waits for the call to complete. The system automatically sends them the call when the internal caller hangs up.

Automatic On-Hook transfer Operation

With Automatic On-Hook Transfer, a transfer goes through as soon as the transferring user hangs up. For example, extension 204 can answer a trunk, press Transfer, dial 205 and hang up. The system extends the call to extension 205. Without Automatic On-Hook Transfer, the call would stay on Hold at extension 204 when the user hangs up. To extend the call, the user at extension 204 would have to press the Transfer key again before hanging up.

Each method has advantages. Automatic On-Hook Transfer makes transferring calls easier. However, users have to be more aware of how they handle their calls on Hold. Without Automatic On-Hook Transfer, extending a call becomes a two-step operation - but separate from placing calls on Hold.

Prevent Recall of Transferred Call

The Class of Service program has an option that allows you to prevent a Transferred call from recalling the originating extension if the call is not answered.

Transfer Call into Conference/Existing Call

This feature allows either a multiline terminal or single line telephone user with Barge-In ability to transfer a call into an existing call. This call can be a 2-party call, a Conference call, or a Barge-In Conference. The system allows Intercom and trunk calls to be transferred into a Conference call. This allows, for example, an attendant to locate co-workers and then transfer them into an existing telephone meeting. There is no need for the attendant to locate all the parties at the same time and sequentially add them into the Conference.

Transfer to Trunk Ring Group Available

It is possible to transfer a trunk call to the trunk defined ring group (defined in Program 22-05-01: Incoming Trunk Ring Group Assignment). The trunk then rings the defined extensions for the ring group.

This also allows the transferred call to ring over the External Paging (Program 31-05: Universal Night Answer/Ring Over Page) so that an employee can answer the call from any available telephone.

To enable this feature, the system has a program option, Program 11-15-09: Service Code Setup Administrative (for Special Access) - Transfer to Trunk Ring Group Code (not assigned at default). When a call is transferred using this service code, it is transferred to the ring group destination for that incoming trunk. For example, trunk 2 is in Ring Group 4. When the call is transferred using this service code, the trunk rings all extensions programmed for Ring Group 4 or rings the External Paging Group for Ring Group 4, depending on how the system is programmed.

Program 22-04-01: Extension Ring Group Assignment and Program 22-05-01: Incoming Trunk Ring Group Assignment must be programmed to allow an extension access to the ring groups. If the call is not answered, it can overflow to the destination defined in Program 22-08-01: DIL/IRG No Answer Destination.

This service code can also be used with the VRS. This provides the caller listening to the VRS message with the ability to transfer their call and have it ring the external page. The code the caller would dial is defined in Program 25-06-02: VRS/DISA One-Digit Code Attendant Setup.

Transfer Key Can Place Call on Hold

While on a call, and the Transfer key is pressed, the call is placed on hold.

Conditions

- An existing call can be transferred into a call with Barge-In enabled.
- Unscreened Transfers from voice mail show pre-answer Caller ID information.
- With Transfer to Busy Extensions enabled (Program 24-02-01 = 1), Call Forwarding with Both Ringing offers a unique option. A transferred call waits for either the forwarding or destination extension to become free. The call goes through to the extension that first becomes available. If neither extension becomes free in the Transfer Recall Time, the call recalls the transferring extension.

  With Transfer to Busy Extensions disabled (Program 24-02-02 = 0), you must also set Program 20-09-07 for the extensions COS to 0 to disable call queuing and Program 20-13-06 to set Automatic Off-hook Signaling to manual.
- An existing call can be transferred into a conference call.
- Meet Me Paging Transfer allows the user to page a co-worker and have the call automatically transferred when the co-worker answers the page.
- When transferring, an extension user can press a One-Touch key instead of dialing the extension number.
- Serial calls allow for transferring a call so it automatically returns to the transferring extension when completed.
- When a multiline terminal user is on a call, they can transfer to another station by pressing a DSS key for that station. It is not necessary to press Transfer to transfer to another station with a DSS key.

  When a multiline terminal user is on a call, they must press transfer to transfer a call off site with a DSS key.
- The following features require certain tones be changed in Program 80-01-02. Refer to the table in the InMail feature programming section for settings:
  - Call Holding
  - Busy Greeting
  - Call Screening
  - Await Answer Transfer
- A Trunk-to-Trunk transfer can be established by the following operation:
  1. While talking to an outside party, press Hold.
  2. Access a second outside line and dial the desired number.
  3. Press Transfer to complete the Trunk-to-Trunk transfer.

  When the second call is to be transferred to another station (Not Trunk-to-Trunk), the user should press Hold at step 3, then dial the desired station and press Transfer to complete the transfer.
- If station A calls Station B, and station A puts station B on hold and then calls station C, station C cannot transfer the call.

Default Settings

Enabled

System Availability

Terminals

All Multiline Stations

Required Component(s)

None

Related Features

Barge-In

Call Waiting/Camp-On

Caller ID

Call Forwarding

Conference

Meet Me Paging Transfer

One-Touch Calling

Quick Transfer to Voice Mail

Serial Call

Guide to Feature Programming

Program Number	Program Name	Default
11-12-58	Service Code Setup (for Service Access) - Transfer into Conference	884
11-15-09	Service Code Setup Administrative (for Special Access) - Transfer to Incoming Ring Group	not assigned
15-02-05	Multiline Telephone Basic Data Setup - Transfer Key Operation Mode	0
15-02-24	Multiline Telephone Basic Data Setup - Conference Key Mode	0
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-02-04	System Options for Multiline Telephones - Retrieve the Line After Transfer	0
20-03-01	System Options for Single Line Telephones - SLT Call Waiting Answer Mode	0
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-09-07	Class of Service Options (Incoming Call Service) - Call Queuing	COS 01~15 = 0

Program Number	Program Name	Default
20-11-06	**Class of Service Options (Hold/Transfer Service) - Unscreened Transfer (Ring Inward Transfer)**	COS 01~15 = 1
20-11-07	**Class of Service Options (Hold/Transfer Service) - Transfer Without Holding**	COS 01~15 = 0
20-11-08	**Class of Service Options (Hold/Transfer Service) - Transfer Information Display**	COS 01~15 = 1
20-11-11	**Class of Service Options (Hold/Transfer Service) - Automatic On-Hook Transfer**	COS 01~15 = 1
20-11-18	**Class of Service Options (Hold/Transfer Service) - No Recall**	COS 01~15 = 0
20-11-20	**Class of Service Options (Hold/Transfer Service) - No Callback**	COS 01~15 = 0
20-13-06	**Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)**	COS 01~15 = 0
20-13-10	**Class of Service Options (Supplementary Service) - Barge-In Monitor**	COS 01~15 = 0
20-13-15	**Class of Service Options (Supplementary Service) - Barge-In, Initiate**	COS 01~15 = 1
20-13-16	**Class of Service Options (Supplementary Service) - Barge-In, Receive**	COS 01~15 = 1
20-13-17	**Class of Service Options (Supplementary Service) - Barge-In Tone/Display (Intrusion Tone)**	COS 01~15 = 1
20-13-32	**Class of Service Options (Supplementary Service) - Deny Multiple Barge-Ins**	COS 01~15 = 0
20-14-11	**Class of Service Options For DISA - DISA/Tie Trunk Barge-In**	COS 01~15 = 0
20-18-07	**Service Tone Timers - Intrusion Tone Repeat Time**	0 (seconds)
21-01-03	**System Options for Outgoing Calls - Trunk Interdigit Time (External)**	10 (seconds)
22-04-01	**Incoming Extension Ring Group Assignment**	Extension 200 (first port)
22-05-01	**Incoming Trunk Ring Group Assignment**	1
22-08-01	**DIL/IRG No Answer Destination**	0
24-02-01	**System Options for Transfer - Busy Transfer**	0
24-02-02	**System Options for Transfer - MOH or Ringback on Transferred Calls**	0
24-02-03	**System Options for Transfer - Delayed Call Forwarding Time**	10 (seconds)
24-02-04	**System Options for Transfer - Transfer Recall Time**	30 (seconds)
24-02-05	**System Options for Transfer - Message Wait Ring Interval Time**	30 (seconds)
25-06-01	**VRS/DISA One-Digit Code Attendant Setup - Next Attendant Message Number**	0
25-06-02	**VRS/DISA One-Digit Code Attendant Setup - Destination Number**	not assigned)
31-05-01	**Universal Night Answer/Ring Over Page**	0

Operation

Transferring Trunk Calls

To Transfer a trunk calls to a co-worker's extention:

1. At the multiline terminal, press **Transfer**.
   - OR -
   At a single line telephone, hookflash.

   You hear Transfer dial tone.

2. Dial the co-worker's extension number.

   If the extension is busy or does not answer, you can dial another extension number or press the line key to return to the call. In addition, you may be able to hang up and have the call Camp-On.

   SLT users can retrieve the call by pressing hookflash. If a call has been transferred and the SLT user has hung up the handset, the call can be retrieved by dialing ✶✶ and the extension number to which it had been transferred.

3. Announce the call and press **Transfer** (Program 15-07 or SC **851** : 06) or hang up.

   If you do not have Automatic On-Hook Transfer, you must press Conf (Program 15-02-24=1) or your Transfer Programmable Function Key to Transfer the call.

   If your co-worker does not want the call, press the flashing line key to return to the call.

   Single line telephone users can retrieve the call by pressing hookflash. If a call has been transferred and the SLT user has hung up the handset, the call can be retrieved by dialing ✶✶ and the extension number to which it had been transferred.

   If you do not want to screen the call, hang up without making an announcement.

To answer a call ttransferred to your extention:

1. Lift the handset or press **Speaker** when a co-worker announces the call.

Transferring without Holding

To Transfer without holding (multiline terminal only):

1. Lift the handset.
2. Press busy line or press **Speaker**.
3. When original caller hangs up, you are connected.

Transferring Intercom Calls

To Transfer your Intercom call:

1. At the multiline terminal, press **Hold**.
   - OR -
   At single line telephone, hookflash.
2. Dial extension to receive your call.

   If the extension is busy, does not answer or does not want the call, you can dial another extension number or press the lit line key to return to the call. In addition, you may be able to hang up and have the call Camp-On.

   Single line telephone users can retrieve the call by pressing hookflash. If a call has been transferred and the SLT user has hung up the handset, the call can be retrieved by dialing ✶✶ and the extension number to which it transferred.

3. Announce your call and press **Transfer** (Program 15-07 or SC **851** : 06) or hang up.

With Automatic On-Hook Transfer
When you hang up, the call is automatically transferred.

Without Automatic On-Hook Transfer
You must press your Transfer Programmable Function Key to Transfer the call.
To Transfer the call unscreened, press your Transfer Programmable Function Key and hang up without making an announcement.

Transferring a Call into a Conference/Existing Call

1. While on a call, press **Transfer** and dial service code defined in Program 11-12-58.

The display shows Transfer to Conf. ICM Dial.

2. Enter the extension number of the co-worker currently on a Conference call to which the call should be transferred.

To cancel the transfer, press the flashing line key to retrieve the call.

If an error tone is heard, Barge-In is not enabled for the extension and the call does not go through . Retrieve the call by pressing the flashing line key or hang up and the call recalls the extension.

3. The transferred call is incorporated into the conference call.

The callers hear the Barge-In tone if enabled in Program 20-13-17.

If a call is transferred into a Barge-In Conference (an existing 2-party call into which an extension user has used the Barge-In feature to join), the Conference becomes a regular 4-party Conference call.

4. Hang up.

Transferring a Call to a Trunk Ring Group

1. While on a call, press **Transfer**.
2. Dial the Transfer to Ring Group service code defined in Program 11-15-09.

You hear confirmation tone.

3. Hang up.

The call is transferred to the trunk ring group defined in Program 22-05-01 and all assigned extensions in the group (Program 22-04-01) ring or it rings the External Paging, enabling anyone to answer the call.

Tranferring an Intercom or Trunk Call using a DSS/One-Touch Key

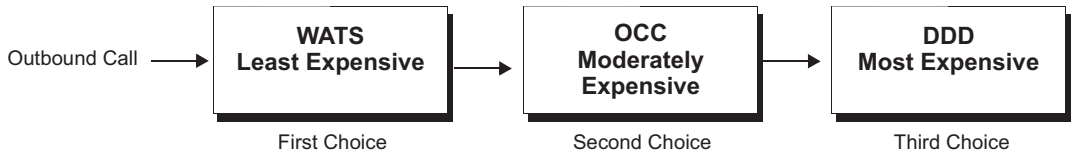
1. While on a call, press the **DSS/One-Touch** key.
2. Announce the call or hang up.

Trunk Group Routing

Description

Trunk Group Routing sets outbound call routing options for users that dial the Trunk Group Routing code (9) for trunk calls. Trunk Group Routing routes calls in the order specified by system programming. If a user dials 9 and all trunks in the first group are busy, the system may route the call to another group. When you are setting up your system, Trunk Group Routing helps you minimize the expense of toll calls. For example, if your system has outbound line groups, use Trunk Group Routing to route calls to the cheapest lines first.

There are 25 available Trunk Groups and 25 Routes.



Conditions

- DISA (Program 25-10) have separate Trunk Group Routing programs.
- The system uses Trunk Group Routing programming (Program 14-06) when setting up Ringing Line Preference.
- Use trunk group programming to set the order in which users access trunks within a specific trunk group.
- Dialing 9 activates ARS, overriding trunk group routing if ARS service is turned on.
- Call Forwarding, Off-Premise is not supported when using Alternate Trunk Group Routing.

Default Settings

Enabled (All trunks are in Group 1)

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Automatic Route Selection (ARS/F-Route)

Central Office Calls, Placing

Direct Inward Dialing (DID)

Dial Tone Detection

Multiple Trunk Types

Programmable Function Keys

Prime Line Selection

Trunk Groups

Guide to Feature Programming

Program Number	Program Name	Default
11-01-01	**System Numbering - Service Code**	Refer to Programming Manual.
11-09-01	**Trunk Access Code - Trunk Access Code**	9
11-09-02	**Trunk Access Code - 2nd Trunk Route Access Code**	not assigned
14-05-01	**Trunk Group - Trunk Group Number**	Trunk Port 1~126 = Priority 1~126
14-06-01	**Trunk Group Routing - Priority Order Number**	Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~25) and Order Numbers (1~4) = 0 (Not Specified).
14-07-01	**Trunk Access Map Setup - Trunk Port Number**	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).
15-06-01	**Trunk Access Map for Extensions**	1
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
21-02-01	**Trunk Group Routing for Extensions**	1
21-15-01	**Individual Trunk Group Routing for Extensions**	0
23-03-01	**Universal Answer/Auto Answer**	0
25-10-01	**Trunk Group Routing for DISA**	1
25-12-01	**Alternate Trunk Group Routing for DISA**	0
34-03-01	**Trunk Group Routing**	1

Operation

To place a call using Trunk Group Routing

1. At the multiline terminal, press **Speaker**.
   - OR -
   At single line telephone, lift the handset.
2. Dial **9** .
3. Dial number.
   - OR -

1. At the multiline terminal, press Trunk Group Routing key (Program 15-07 or SC **852** : ✱05).
2. Dial the number.

Trunk Groups

Description

Trunk Groups let you optimize trunk usage for incoming and outgoing calls. Each group can be accessed by an Access Code plus the group number. There are 25 available Trunk Groups and you set the access order in trunk group programming.

Conditions

- Unless a user preselects a trunk, Trunk Group programming selects the trunk Speed Dialing used for trunk calls.
- If a user dials a number that is not programmed in ARS, the system can route the call to a trunk group.
- All DID trunks of the same type should be placed in the same trunk group. These trunk groups must then be assigned to a DID Translation Table.
- Trunks ring extensions according to Ring Group programming.

Default Settings

All trunks are in group 1.

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Automatic Route Selection (ARS/F-Route)

Central Office Calls, Placing

Dial Tone Detection

Direct Inward Dialing (DID)

Programmable Function Keys

Ring Groups

Trunk Group Routing

Guide to Feature Programming

Program Number	Program Name	Default	Note
10-09-01	**DTMF and Dial Tone Circuit Setup**	Resource 01 - 132 = 0 (Common)	

Program Number	Program Name	Default	Note
11-12-14	**Service Code Setup (for Service Access) - Trunk Group Access**	804	
14-02-11	**Analog Trunk Data Setup - Next Trunk in Rotary if No Dial Tone**	0	
14-05-01	**Trunk Group - Trunk Group Number**	Trunk Port 1~126 = Priority 1~126	
14-06-01	**Trunk Group Routing - Priority Order Number**	Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~25) and Order Numbers (1~4) = 0 (Not Specified).	
14-07-01	**Trunk Access Map Setup - Trunk Port Number**	Access Map 1 = Trunk Ports 1~126 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~126 = Trunk Ports 1~126 assigned with option 0 access (No access).	
15-06-01	**Trunk Access Map for Extensions**	1	
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.	
15-13-01	**Loop Keys - Outgoing Option**	0: Programming Function Key No. = 01-24	
15-13-02	**Loop Keys - Incoming Option**	0: Programming Function Key No. = 01-24	
20-02-02	**System Options for Multiline Telephones - Trunk Group Access Key Operating Mode**	0	
20-29-01	**Timer Class for Extension - Day/Night Mode 1~8, Class Number**	0	
20-31-04	**Timer Class Timer Assignment - Intercom Interdigits Time (Intercom I/D Timer)**	10 (seconds)	
21-01-02	**System Options for Outgoing Calls - Intercom Interdigit Time**	10 (seconds)	
21-01-05	**System Options for Outgoing Calls - Disconnect Time When Dial Tone Not Detected**	0 (seconds)	

T

Operation

To place a call over a Trunk Group

1. At the multiline telephone, press **Speaker**.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **804** .
3. Dial trunk group number (001~025).
4. Dial number.

- OR -

1. Press the **Trunk Group** key (Program 15-07 or SC **852** : ✱02 + group).
2. Dial the number.

To answer an incoming trunk group call:

1. Lift the handset.
2. Press the flashing Trunk Group key.

Trunk Queuing/Camp-On

Description

Trunk Queuing permits an extension user to queue (wait in line) on-hook for a busy trunk or trunk group to become free. The system recalls the queued extension as soon as the trunk is available. The user does not have to manually retry the trunk later. Trunk Queuing lets the caller know when the call can go through. If the extension user does not answer the Trunk Queuing ring, the system cancels the queue request.

With Trunk Camp-On, an extension user can queue (wait in line) Off-Hook for a busy trunk or trunk group to become free. The caller connects to the trunk when the trunk becomes free. As with Trunk Queuing, the user does not have to manually retry the trunk later.

Any number of extensions may simultaneously queue or Camp-On for the same trunk or trunk group. When a trunk becomes free, the system connects the extensions in the order that the requests were left.

Conditions

- With Automatic Route Selection (ARS), Trunk Queuing automatically queues for the least costly route.
- A user can camp-on or leave a callback request for an extension.
- Other programmed options for outgoing calls can affect how a call is placed. Check or program these options as needed (e.g., access line etc.).
- Using a Programmable Function Key can simplify the trunk queuing operation.

Default Settings

Enabled

Related Features

Automatic Route Selection (ARS/F-Route)

Call Waiting/Camp-On

Callback

Central Office Calls, Placing

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Default
11-12-04	Service Code Setup (for Service Access) - Set Camp-On	850
11-12-05	Service Code Setup (for Service Access) - Cancel Camp-On	870
11-16-05	Single Digit Service Code Setup - Camp-On	#
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-01-08	System Options - Trunk Queuing Callback Time	15 (seconds)
20-01-09	System Options - Callback/Trunk Queuing Cancel Time	64800 (seconds)

Program Number	Program Name	Default
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-11-07	**Class of Service Options (Hold/Transfer Service) - Transfer Without Holding**	COS 01~15 = 0
20-29-01	**Timer Class for Extensions**	0
20-31-01	**Timer Class Timer Assignment - Trunk Queuing Callback Duration Time**	15 (seconds)
20-31-02	**Timer Class Timer Assignment - Callback / Trunk Queuing Cancel Time**	64800 (seconds)

Operation

To queue for a busy trunk:

1. Try to access the busy trunk.
2. Dial **850** or press **Trunk Queuing/Camp-On** key (Program 15-07 or SC **851** : 35).
3. Hang up to leave a Trunk Queuing request.
   - OR -
   Wait Off-Hook to Camp-On to the trunk.

To answer when Trunk Queuing calls you back:

1. Lift the handset.

To cancel a Trunk Queuing/Camp-On request:

1. At the multiline terminal, press idle **Speaker**.
   - OR -
   At the single line telephone, lift the handset.
2. Dial **870** .
3. At the multiline terminal, press **Speaker** to hang up.
   - OR -
   At the single line telephone, hang up.

Uniform Call Distribution (UCD)

Description

With Uniform Call Distribution (UCD), an extension user can call an idle extension in a preprogrammed UCD Group (Department Group - 32 Department Groups available) by dialing the group pilot number. For example, this would let a caller dial the Sales department just by knowing the Sales department pilot number. The caller would not have to know any of the Sales department extension numbers.

Use Log Out/Log In

An extension user can log out and log in to a UCD (Department) group. By logging out, the user removes their extension from the group. Once logged out, UCD (Department Calling) bypasses their extension. When they log back in, UCD (Department Calling) routes to their extension normally. All users can dial a code to log in or log out of their UCD (Department Calling) Group. A multiline terminal can optionally have a function key programmed for one-button log in and log out.

Enhanced Hunting

UCD (Department Calling) is enhanced with expanded hunting abilities. Hunting sets the conditions under which calls to a UCD (Department Group) pilot number cycles through the members of the group. The hunting choices are:

- Busy
  A call to the pilot number only hunts past a busy group member to the first available extension. A call rings on an unanswered extension until it is answered, or the caller hangs up.
- Not Answered
  A call to the pilot number cycles through the idle members of a UCD (Department Calling) group. The call continues to cycle until it is answered or the calling party hangs up. However, if the next station in the cycle is busy when a new call comes in, the call queues to the busy agent. New calls do not hunt past a busy agent.
- Busy or Not Answered
  A call to the pilot number cycles through the idle members of a UCD (Department Calling) group. The call continues to cycle until it is answered or the calling party hangs up.

If all members of the UCD (Department) group are busy, an incoming or transferred call to the group pilot number queues for an available member. Each group has a queue that can hold any number of waiting calls. If a display telephone is waiting in queue, the user sees: WAITING (group name). If a transferred call in queue is an outside call, and the system has a DSP daughter board installed with the VRS compact flash, the queued caller hears, “Please hold on. All lines are busy. Your call will be answered when a line becomes free.”

The VRS can also transfer calls to UCD (Department) groups. Refer to the Voice Response System (VRS) on page 1-531 feature for more information on setting up the VRS.

The system prevents hunting to a UCD (Department) group extension if it is:

- Busy on a call
- In Do Not Disturb
- Call Forwarded
- Logged Out

Conditions

- When a DIL rings to a UCD (Department) groups, the DIL may follow overflow programming (Program 22-01-04 and Program 22-08-01).
- If an extension has Call Forwarding set, the system does not hunt to the forwarded extension.

Default Settings

Disabled

Priority Routing

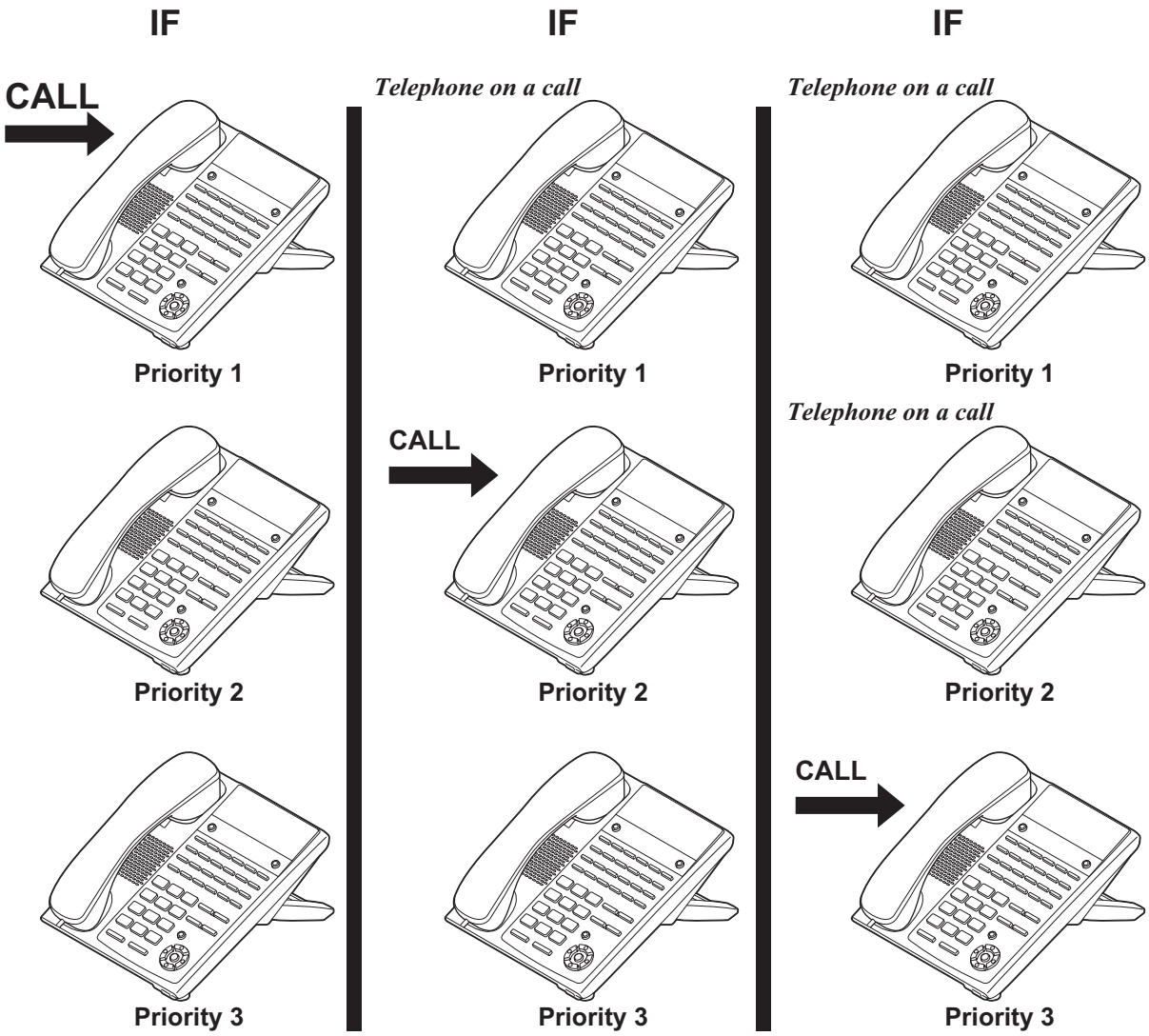


Figure 1-37 Uniform Call Distribution (UCD) Priority Call Routing

Circular Routing

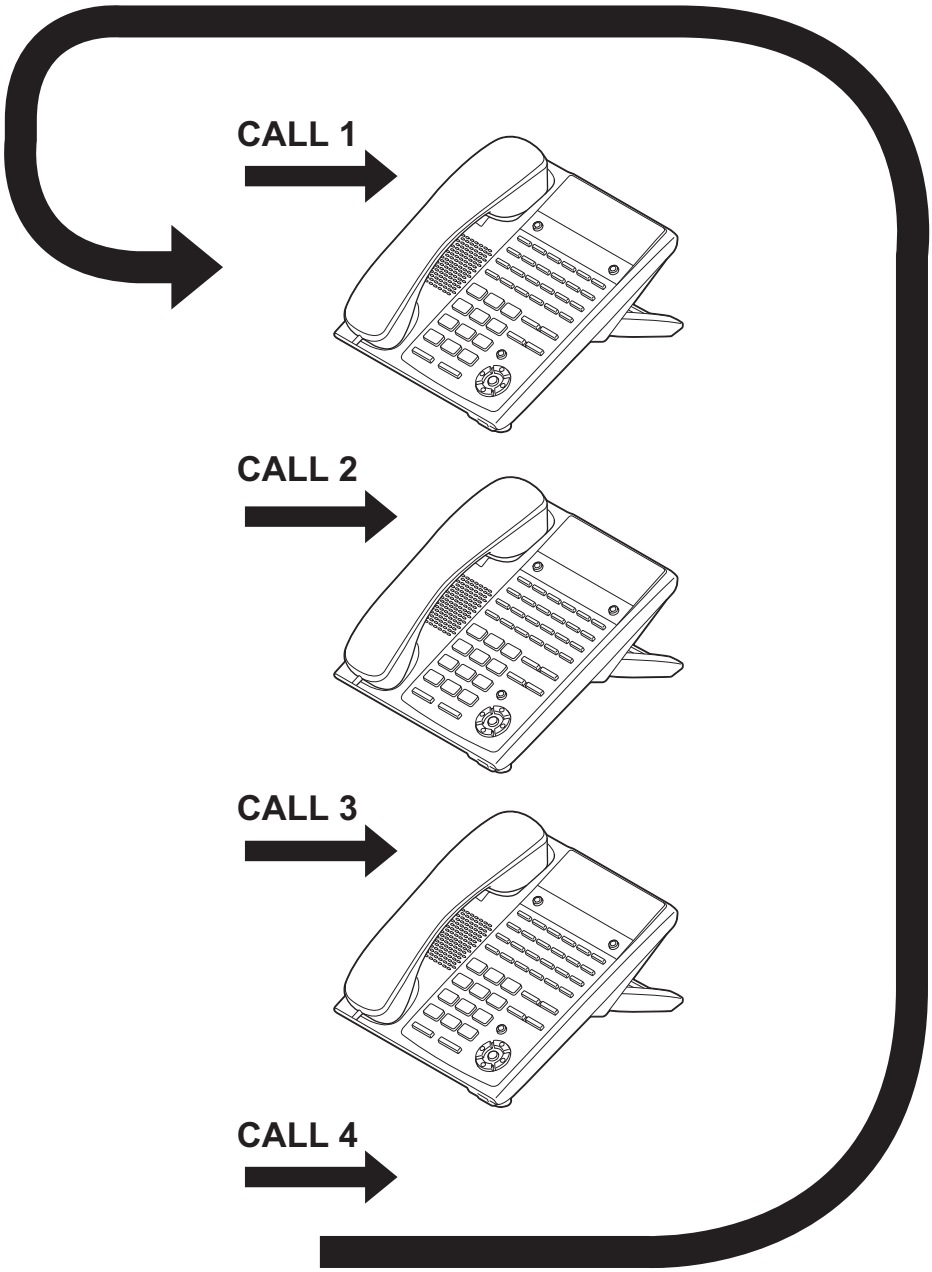


Figure 1-38 Uniform Call Distribution (UCD) Circular Routing

System Availability

Terminals

All Stations

Required Component(s)

PZ-VM21 and VRS Compact Flash (for Delay Announcements)

Related Features

Call Forwarding

Transfer

InMail

Voice Response System (VRS)

Guide to Feature Programming

The items highlighted in gray are read only and cannot be changed.

Program Number	Program Name	Default
11-07-01	Department Group Pilot Numbers -Dial	not assigned
15-07-01	Programmable Function Keys	Refer to Programming Manual.
16-01-01	Department Group Basic Data Setup - Department Name	not assigned
16-01-02	Department Group Basic Data Setup - Department Calling Cycle	0
16-01-03	Department Group Basic Data Setup - Department Routing When Busy (Auto Step Call)	0
16-01-04	Department Group Basic Data Setup - Hunting Mode	0
16-01-05	Department Group Basic Data Setup - Extension Group All Ring Mode Operation	0
16-01-06	Department Group Basic Data Setup - STG Withdraw Mode	0
16-01-07	Department Group Basic Data Setup - Call Recall Restriction for STG	0
16-01-09	Department Group Basic Data Setup - Department Hunting No Answer Time	15 (seconds)
16-01-10	Department Group Basic Data Setup - Enhanced Hunt Type	0
16-02-01	Department Group Assignment for Extensions	Refer to Programming Manual.
16-03-01	Secondary Department Group	not assigned
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-09-07	Class of Service Options (Incoming Call Service) - Call Queuing	COS 01~15 = 0
20-11-17	Class of Service Options (Hold/Transfer Service) - Department Group Trunk-to-Trunk Transfer (Each Telephone Group Transfer)	COS 01~15 = 1
20-13-06	Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)	COS 01~15 = 0
20-13-14	Class of Service Options (Supplementary Service) - Department Calling (PLT No Called Extension)	COS 01~15 = 1
22-02-01	Incoming Call Trunk Setup	0
22-07-01	DIL Assignment	not assigned
24-02-05	System Options for Transfer - Message Wait Ring Interval Time	30 (seconds)

Program Number	Program Name	Default
24-02-08	**System Options for Transfer - Delayed Transfer Timer for All Department Groups**	10 (seconds)
24-05-01	**Department Group Transfer Target Setup**	999

Operation

To call a UCD Group:

1. At the multiline terminal, press the **Speaker** key.
   - OR -
   At single line telephone, lift the handset.
2. Dial the UCD group (department) extension or pilot number.

The system routes the call to the first free telephone in the (UCD group) department.

To log out of your UCD (Depatment Calling) Group:

While you are logged out, UCD (Department Calling) cannot route calls to your extension.

1. Press the **Speaker** key.
2. Dial **750** and **1**.
   - OR -
   Press **Uniform Call Distribution Log In** key (Program 15-07 or SC **851** : 46).

The key lights while you are logged out.

To log back in to your UCD (Department Calling) Group:

While you log back in, Uniform Call Distribution routes calls to your extension.

1. Press the **Speaker** key.
2. Dial **750** and **0**.
   - OR -
   Press **UCD (Department Calling) Log In** key (Program 15-07 or SC **851** : 46).

The key goes out when you log back in.

User Programming Ability

Description

A station user can perform programming functions. Speed Group Dialing and Function Keys are just two features programmable from a station.

Conditions

- Multiline Terminals must be idle an Off-Hook and have entered the service code when programming any function.

Default Settings

None

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Abbreviated Dialing/Speed Dial

Clock/Calendar Display/Time and Date

Code Restriction/Toll Restriction

One-Touch Calling

Programmable Function Keys

Guide to Feature Programming

None

Operation

None

Virtual Extensions

Description

Virtual Extensions are available software extensions on the Basic and Expanded Port Packages. A Virtual Extension assigned to a line key, can appear and ring on an individual station or multiple stations and be used for outbound access.

Up to 50 VE keys are provided.

Conditions

- The 128 available ports/Extensions are assigned on a per extension basis for Virtual EXtension key mode.
- The 128 available ports/Extensions are assigned per extension for CAR key mode or Virtual Extension key mode.
- More than one extension can share a Virtual Extension key.
- An extension can have more than one Virtual Extension key assigned.

Assigning a Virtual Extension key of the extension the key is assigned on is not supported.

- Up to 32 incoming calls can be queued to busy Virtual Extension key.
- You cannot have a CAR key and Virtual Extension on the same telephone.
- Virtual Extensions do not support the following features:
  - Barge-In
  - Conference
  - Conference, Voice Call/Privacy Release
  - Reverse Voice Over
  - Tone Override
  - Voice Over
- When a valid system station calls a Virtual Extension appearing on another station, Voice and MW softkeys appear in the display of the calling station, but they do not operate.
- When talking on a Virtual Extension you cannot mute the handset.
- Incoming calls to a virtual extension that appear on stations that are used with the CTI applications, PC Assistant, or PC Attendant, do not show up as a second call in the CTI application.
- Calls on Virtual Extension keys cannot be put in Personal Park if Program 15-18-01 is set to Land on the key (1).
- If multiple CAR/SIE/VE keys are ringing on a station at the same time, the CAR/SIE/VE key on the lowest Line Key is answered first.
- Virtual Extension Keys assigned as code *03 do not support Voice Mail Message Indication on Line Keys.
- Busy Virtual Extensions cannot be Tone overridden.
- Class of service feature Program 20-11-20: No Call Back (transfer recall disable) is not supported for calls from a physical extension to a virtual extension.
- When a call is parked from a virtual extension, the virtual extension is released.
- When parking a call from a virtual extension, Programs 15-02-21 and 15-18-01 must be set to 1.
- Park Group assignment is by terminal extension, not the virtual extension.
- When a call parked from a virtual extension recalls, it will ring the terminal where the virtual extension is programmed to, not the virtual extension key.
- When an internal station-to-station call is made to a virtual extension, the name and number of the calling party does not appear in the display of the station the virtual extension resides on until the call is answered.
- A door box cannot ring a virtual extension.
- If a user dials a number not programmed in ARS, Program 26-01-03 determines if the system should route over the trunk group settings defined in Program 21-02 or play an error tone.
- When using ARS Class of Service, with Program 26-01-03 set to (1) "Play Warning Tone", Any trunk

pointed or transferred to a virtual that is Call Forward Off-Premise will not complete. For a virtual to Call Forward Off-Premise, Program 26-01-03 must be set to "Route to trunk group" and the call will follow the trunk group settings of the trunk, assigned in Program 21-03.

- When using ARS Class of Service, with Program 26-01-03 set to (1) "Play Warning Tone" or transferred to a virtual that is call forwarded off premise will always follow ARS Class 1 routing properties.

Default Settings

Not Assigned

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Call Waiting/Camp-On

Call Arrival (CAR) Keys

Secondary Incoming Extension

Guide to Feature Programming

Program Number	Program Name	Default
11-04-01	**Virtual Extension Numbering**	No Setting
15-01-01	**Basic Extension Data Setup - Extension Name**	STA 200~327 = No Setting
15-02-21	**Multiline Telephone Basic Data Setup - Virtual Extension Access Mode (when idle Virtual Extension key pressed)**	2
15-02-30	**Multiline Telephone Basic Data Setup - Toll Restriction Class**	1
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
15-08-01	**Incoming Virtual Extension Ring Tone Setup**	0 (Tone Pattern 1)
15-09-01	**Virtual Extension Ring Assignment**	0
15-10-01	**Virtual Incoming Extension Ring Tone Order Setup**	Order 1 Pattern 0 = 0 (Tone Pattern 1) Order 2 Pattern 1 = 1 (Tone Pattern 2) Order 3 Pattern 2 = 2 (Tone Pattern 3) Order 4 Pattern 3 = 3 (Tone Pattern 4)
15-11-01	**Virtual Extension Delayed Ring Assignment**	0
15-18-01	**Virtual Extension Key Enhanced Options - Virtual Extension Key Operation Mode**	0
15-18-02	**Virtual Extension Key Enhanced Options - Display Mode when pacing a call on Virtual Extension Key**	0
20-02-19	**Virtual Extension Mode**	0

Program Number	Program Name	Default
20-04-03	**System Options for Virtual Extensions - Virtual Extension Delay Interval**	10 (seconds)
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-07-10	**Class of Service Options (Administrator Level) - Programmable Function Key Programming (Appearance Level)**	COS 01~15 = 1
20-10-08	**Class of Service Options (Answer Service) - Virtual Extension Off-Hook Answer**	COS 01~15 = 0
20-13-27	**Class of Service Options (Supplementary Service) - Busy on Seizing Virtual Extension**	COS 01~15 = 1
21-01-15	**System Options for Outgoing Calls - Outgoing Disable on Incoming Line (Toll Restriction)**	0
23-04-01	**Ringing Line Preference for Virtual Extensions**	0

Operation

To answer a call ringing a Virtual Extension:

1. Press the flashing **Virtual Extension** key.
   - OR -
   Go off-hook.

   Program 20-10-08 needs to be set to on (1) for extension Class of Service.

To place a call to a Virtual Extension:

1. Go off-hook.
2. Dial the Virtual Extension, or press the **Virtual Extension** key.

   The operation depends on the setting in Program 15-02-21.

To place a call from a Virtual Extension:

1. Press the **Virtual Extension** key.

   The operation depends on the setting in Program 15-02-21.

2. Place an intercom call or dial a trunk access code to seize an outside line and place your call.

To program a Virtual Extension key on a telephone:

1. Press **Speaker**.
2. Dial **852** .
3. Press the key you want to program.
4. Dial **∗03**.
5. Dial the number of the extension you want to appear on the key.
6. Press **Hold** once for Immediate Ring (skip to step 8 for Delayed Ring).
7. Dial the mode number in which the key rings.
   1 = Day 1
   2 = Night 1
   3 = Midnight 1
   4 = Rest 1
   5 = Day 2
   6 = Night 2

7 = Midnight 2
8 = Rest 2

8. Press **Hold** for a second time for Delayed Ring, or Skip to step 10.
9. Dial the mode number in which the key delay rings.
   1 = Day 1
   2 = Night 1
   3 = Midnight 1
   4 = Rest 1
   5 = Day 2
   6 = Night 2
   7 = Midnight 2
   8 = Rest 2
10. Press **Speaker**.

Voice Mail Integration (Analog)

Description

The system provides telephone users with comprehensive Voice Mail features. Voice Mail ends the frustration and cost of missed calls, inaccurate written messages and telephone tag. This frees busy receptionists and secretaries for more productive work.

External voice mail requires available analog station ports based on the number of voice mail ports connected.

Integrated voice mail enhances the telephone system with the following features:

- **Call Forwarding to Voice Mail**
  An extension user can forward their calls to Voice Mail. Once forwarded, calls to the extension connect to that extension mailbox. The caller can leave a message in the mailbox instead of calling back later. Forwarding can occur for all calls immediately, for unanswered calls or only when the extension is busy. When a user transfers a call to an extension forwarded to Voice Mail, the call waits for the Delayed Call Forwarding time before routing to the called extension mailbox. This gives the transferring party the option of retrieving the call instead of having it go directly to the mailbox.
- **Leaving a Message**
  Voice Mail lets a multiline terminal extension user easily leave a message at an extension that is unanswered, busy or in Do Not Disturb. The caller just presses their Voice Mail key to leave a message in the called extension mailbox. There is no need to call back later.
- **Transferring to Voice Mail**
  By using Transfer to Voice Mail, a multiline terminal extension user can Transfer a call to the user's or a co-worker's mailbox. After the Transfer goes through, the caller can leave a message in the mailbox.

Voice Mail Queuing

When accessing the voice mail, the system provides a voice mail queue. If all the voice mail ports are busy, any calls trying to get to the voice mail are placed in queue. As the voice mail ports become available, the calls are connected to the voice mail in the order in which they were received.

As the Voice Mail Queue follows Department Hunting programming, the queue can hold a maximum of 10 calls. If the queue is full or if the voice mail ports are not assigned to a Department Group, the calls are handled as though no voice mail queuing feature is enabled. The calls either access voice mail if a port is available or they receive a busy signal.

The Voice Mail Queuing feature does not work with the Conversation Record feature.

Voice Mail Key

When an extension receives a voice mail, the Voice Mail key can be used to call the voice mail to listen to the messages.

Analog Voice Mail Protocol Leading and Trailing Digits Assignment

The Analog Voice Mail Protocol Leading Digits (chassis to VM) and the Trailing Digits format can be changed.

The following chart illustrates the input data for PRG 45-04-01~PRG 45-04-09 (Voice Mail Digit Add Assignment) based on the setting in Program 45-01-15 (Analog Voice Mail Protocol Selection) and Program 45-01-17 (Reply Mailbox Number). If PRG 45-01-15 is set to Fixed (0) it uses the Fixed Memory Location for the Leading Digits or, if set to Program (1) it uses PRG 45-04-01~PRG 45-04-09 for the Leading Digits. If Program 45-01-17 is set to 0 (No), it does not have the calling party in the Trailing Digits.

The default values for Program 45-04-01~Program 45-04-09 are not assigned.

Use the chart below to determine what leading and trailing digits will be sent to the Analog Voice Mail System.

Program	Program 45-01-15 (0 = Fixed) Program 45-01-17 (1=Yes or 0=No)	Program 45-01-15 (1 = Program) Program 45-01-17 (1=Yes)	Program 45-01-15 (1=Program) Program 45-01-17 (0=No)	Description
45-04-01 - **Remote Logon (Internal)** Up to four digits * Default not assigned	***1XXX	Up to four digits + XXX	Up to four digits + XXX	Remote Log-On (Internal) • Internal call to VM from extension XXX. • User has not indicated intent to enter mail box.
45-04-02 - **Direct Logon** Up to four digits * Default not assigned	#XXX	Up to four digits + XXX	Up to four digits + XXX	Direct Log-On • Connect user to mail box for extension XXX.
45-04-03 - **Transfer Message** Up to four digits * Default not assigned	***2YYY ***2XXXYYY	Up to four digits + YYY Or Up to four digits + XXXYYY	Up to four digits + YYY	Transfer Message • User is transferring a call to VM • Record a message to be placed in mail box of extension YYY. Record Message for Called Extension (QVM) • Record a message to be placed in mail box of extension YYY. • Store source extension number XXX for automatic reply feature.
45-04-04 - **Forward-All** Up to four digits * Default not assigned	***3UUUZZZ	Up to four digits + UUUZZZ	Up to four digits + ZZZ	Forward-All • Extension or Trunk UUU that called extension ZZZ and was forwarded to the Voice Mail Box of extension ZZZ.
45-04-05 - **Forward-Busy** Up to four digits * Default not assigned	***4UUUZZZ	Up to four digits + UUUZZZ	Up to four digits + ZZZ	Forward-Busy • Extension or Trunk UUU that called extension ZZZ and was forwarded to the Voice Mail Box of extension ZZZ.
45-04-06 - **Forward RNA** Up to four digits * Default not assigned	***5UUUZZZ	Up to four digits + UUUZZZ	Up to four digits + ZZZ	Forward RNA • Extension or Trunk UUU that called extension ZZZ and was forwarded to the Voice Mail Box of extension ZZZ.

Program	Program 45-01-15 (0 = Fixed) Program 45-01-17 (1=Yes or 0=No)	Program 45-01-15 (1 = Program) Program 45-01-17 (1=Yes)	Program 45-01-15 (1=Program) Program 45-01-17 (0=No)	Description
45-04-07 - **Remote Logon** Up to four digits * Default not assigned	***6TTT	Up to four digits + TTT	Up to four digits + TTT	Remote Log-on • External call to Voice Mail from Trunk TTT. • Play welcome greeting and connect user to prompt.
45-04-08 - **Conversation Recording** Up to four digits * Default not assigned	***8NNN	Up to four digits + NNN	Up to four digits + NNN	Conversation Recording • Record a message to be placed in voice mail box of extension NNN.
45-04-09 - **Clear Down String** Up to four digits * Default not assigned	9999	Up to four digits	Up to four digits	Clear down string. • Terminate

*=If leading digits are blanks, nothing will be sent to the Analog VM as integration.

Conditions

- The periodic reminder message requires a PZ-VM21 board for Voice Response System (VRS).
- Ring Group calls do not follow extension call forwarding to voice mail.
- Only one Voice Mail system can be installed in an SL1000 system (Analog or Digital, but not both in same system). This restriction is because only one Department Group can be assigned for Voice Mail.
- If installing an Analog Voice Mail System, any Analog station port (SLT port) can be assigned to support the Analog Voice Mail system.
- If installing a InMail system (In-Skin product), an Analog station port (SLT port) can be assigned to support the sending of DTMF tones and Disconnect Signal to support a Fax server or other like products.
- When using Programmed (45-01-15 = 1) integration and 45-04-XX is blank, no trailing digits are sent. You can allow only the trailing digits to be sent by setting 45-05-XX to 1.
- Stutter Dial Tone is supported to Single Line Telephones for Voice Mail Message Waiting.

Default Settings

Disabled

System Availability

Terminals

All Stations

Required Component(s)

408M-A1

408E-A1

008E-A1

Related Features

Barge-In

Caller ID

Direct Inward Line (DIL)

Hold

Message Waiting

One-Touch Calling

Programmable Function Keys

Transfer

Guide to Feature Programming

Program Number	Program Name	Default
10-09-01	DTMF and Dial Tone Circuit Setup	Resource 01 - 132 = 0 (Common)
11-07-01	Department Group Pilot Numbers - Dial	not assigned
11-11-50	Service Code Setup (for Setup/Entry Operation) - Set Message Waiting Indication	No Setting
11-11-51	Service Code Setup (for Setup/Entry Operation) - Cancel Message Waiting Indication	No Setting
15-02-35	Multiline Telephone Basic Data Setup - Message Waiting Lamp Cycle for Calling Extension	7
15-02-36	Multiline Telephone Basic Data Setup - Message Waiting Lamp Cycle for Called Extension	3
15-02-37	Multiline Telephone Basic Data Setup - Voice Mail Message Wait Lamp Color	1
15-02-38	Multiline Telephone Basic Data Setup - Voice Mail Message Wait Lamp Cycle	3
15-03-01	Single Line Telephone Basic Data Setup - SLT Signaling Type	1
15-03-03	Single Line Telephone Basic Data Setup - Terminal Type	0
15-03-09	Single Line Telephone Basic Data Setup - Caller ID Function - For External Module	0
15-03-16	Single Line Telephone Basic Data Setup - Special DTMF Protocol Send	0
15-07-01	Programmable Function Keys	Refer to Programming Manual.
16-01-01	Department Group Basic Data Setup - Department Name	not assigned
16-01-02	Department Group Basic Data Setup - Department Calling Cycle	0
16-01-03	Department Group Basic Data Setup - Department Routing When Busy (Auto Step Call)	0
16-01-04	Department Group Basic Data Setup - Hunting Mode	0
16-01-05	Department Group Basic Data Setup - Extension Group All Ring Mode Operation	0

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Program Number	Program Name	Default
16-01-06	Department Group Basic Data Setup - STG Withdraw Mode	0
16-01-07	Department Group Basic Data Setup - Call Recall Restriction for STG	0
16-01-09	Department Group Basic Data Setup - Department Hunting No Answer Time	15 (seconds)
16-01-10	Department Group Basic Data Setup - Enhanced Hunt Type	0
16-02-01	Department Group Assignment for Extensions	Refer to Programming Manual.
20-02-09	System Options for Multiline Telephones - Disconnect Supervision	1
20-03-01	System Options for Single Line Telephones - SLT Call Waiting Answer Mode	0
20-06-01	Class of Service for Extensions	All extension port = Class 1
20-11-01	Class of Service Options (Hold/Transfer Service) - Call Forward All	COS 01~15 = 1
20-11-02	Class of Service Options (Hold/Transfer Service) - Call Forward When Busy	COS 01~15 = 1
20-11-03	Class of Service Options (Hold/Transfer Service) - Call Forwarding When Unanswered	COS 01~15 = 1
20-11-04	Class of Service Options (Hold/Transfer Service) - Call Forwarding (Both Ringing)	COS 01~15 = 1
20-11-05	Class of Service Options (Hold/Transfer Service) - Call Forwarding with Follow Me	COS 01~15 = 1
20-11-12	Class of Service Options (Hold/Transfer Service) - Call Forwarding Off Premise (External Call Forwarding)	COS 01~15 = 1
20-13-01	Class of Service Options (Supplementary Service) - Long Conversation Alarm	COS 01~15 = 1
20-13-02	Class of Service Options (Supplementary Service) - Long Conversation Cutoff (Incoming)	COS 01~15 = 0
20-13-03	Class of Service Options (Supplementary Service) - Long Conversation Cutoff (Outgoing)	COS 01~15 = 0
20-13-04	Class of Service Options (Supplementary Service) - Call Forward/DND Override (Bypass Call)	COS 01~15 = 1
20-13-05	Class of Service Options (Supplementary Service) - Intercom Off-Hook Signaling	COS 01~15 = 1
20-13-06	Class of Service Options (Supplementary Service) - Automatic Off-Hook Signaling (Automatic Override)	COS 01~15 = 0
20-13-07	Class of Service Options (Supplementary Service) - Message Waiting	COS 01~15 = 1
20-13-12	Class of Service Options (Supplementary Service) - Room Monitor, Extension Being Monitored	COS 01~15 = 0
20-13-13	Class of Service Options (Supplementary Service) - Continued Dialing (DTMF) Signal on ICM Call	COS 01~15 = 1
20-13-16	Class of Service Options (Supplementary Service) - Barge-In, Receive	COS 01~15 = 1
20-13-28	Class of Service Options (Supplementary Service) - Allow Class of Service to be Changed	COS 01~15 = 0
20-13-35	Class of Service Options (Supplementary Service) - Block Camp On	COS 01~15 = 0
22-02-01	Incoming Call Trunk Setup - Incoming Type	0
22-04-01	Incoming Extension Ring Group Assignment	Extension 200 (first port)

Program Number	Program Name	Default
22-07-01	DIL Assignment	not assigned
22-08-01	DIL/IRG No Answer Destination	0
24-02-02	System Options for Transfer - MOH or Ringback on Transferred Calls	0
24-02-03	System Options for Transfer - Delayed Call Forwarding Time	10 (seconds)
40-07-01	Voice Prompt Language Assignment for VRS	2
45-01-01	Voice Mail Integration Options - Voice Mail Department Group Number	0
45-01-02	Voice Mail Integration Options - Voice Mail Master Name	V. M.
45-01-04	Voice Mail Integration Options - Park and Page	1
45-01-05	Voice Mail Integration Options - Message Wait	1
45-01-06	Voice Mail Integration Options - Record Alert Tone Interval Time	30 (seconds)
45-01-15	Voice Mail Integration Options - Analog Voice Mail Protocol Selection	0
45-01-16	Voice Mail Integration Options - Voice Mail FAX Digit Add Assignment	not assigned
45-01-17	Voice Mail Integration Options - Reply Mail Box Number	1
45-01-18	Voice Mail Integration Options - Trunk Number Mapping	2
45-04-01	Voice Mail Digit Add Assignment - Remote Logon (Internal)	not assigned
45-04-02	Voice Mail Digit Add Assignment - Direct Logon	not assigned
45-04-03	Voice Mail Digit Add Assignment - Transfer Message	not assigned
45-04-04	Voice Mail Digit Add Assignment - Forward-All	not assigned
45-04-05	Voice Mail Digit Add Assignment - Forward-Busy	not assigned
45-04-06	Voice Mail Digit Add Assignment - Forward RNA	not assigned
45-04-07	Voice Mail Digit Add Assignment - Remote Logon	not assigned
45-04-08	Voice Mail Digit Add Assignment - Conversation Recording	not assigned
45-04-09	Voice Mail Digit Add Assignment - Clear Down String	not assigned
45-05-01	Voice Mail Send Protocol Signal Without Additional Digits - Remote Log-On Internal	0
45-05-02	Voice Mail Send Protocol Signal Without Additional Digits - Direct Log-On	0
45-05-03	Voice Mail Send Protocol Signal Without Additional Digits - Transfer Message/QVM	0
45-05-04	Voice Mail Send Protocol Signal Without Additional Digits - Forward-All	0
45-05-05	Voice Mail Send Protocol Signal Without Additional Digits - Forward-Busy	0
45-05-06	Voice Mail Send Protocol Signal Without Additional Digits - Forward RNA	0
45-05-07	Voice Mail Send Protocol Signal Without Additional Digits - Remote Log-On	0
45-05-08	Voice Mail Send Protocol Signal Without Additional Digits - Conversation Recording	0

V

Program Number	Program Name	Default
45-05-09	**Voice Mail Send Protocol Signal Without Additional Digits - Clear Down String**	0
80-03-01	**DTMF Tone Receiver Setup - Detect Level**	Type 1~5 = 0
80-03-02	**DTMF Tone Receiver Setup - Start delay time**	Type 1~5 = 0
80-03-03	**DTMF Tone Receiver Setup - Min. detect level**	Type 1 = 10 (-20dBm) Type 2 = 15 (-25dBm) Type 3 = 10 (-20dBm) Type 4 = 10 (-20dBm) Type 5 = 10 (-20dBm)
80-03-04	**DTMF Tone Receiver Setup - Max. detect level**	2 (-2dBm)
80-03-05	**DTMF Tone Receiver Setup - Forward twist level**	Type 1~5 = 5 (6dBm)
80-03-06	**DTMF Tone Receiver Setup - Backward twist level**	Type 1~5 = 0 (1dBm)
80-03-07	**DTMF Tone Receiver Setup - ON detect time**	Type 1~5 = 1 (30ms)
80-03-08	**DTMF Tone Receiver Setup - OFF detect time**	Type 1~5 = 1 (30ms)
80-04-01	**Call Progress Tone Detector Setup - Detection Level**	Type 1 (DT) = 0 (-25dBm) Type 2 (BT) = 0 (-25dBm) Type 3 (RBT) = 0 (-25dBm) Type 4 = 0 Type 5 = 0
80-04-02	**Call Progress Tone Detector Setup - Min. Detection Level**	0~15 Type 1 (DT) = 15 (-25dBm) Type 2 (BT) = 15 (-25dBm) Type 3 (RBT) = 15 (-25dBm) Type 4 = 0 Type 5 = 0
80-04-03	**Call Progress Tone Detector Setup - S/N Ratio**	Type 1 (DT) = 4 (-20dB) Type 2 (BT) = 4 (-20dB) Type 3 (RBT) = 4 (-20dB) Type 4 = 0 Type 5 = 0
80-04-04	**Call Progress Tone Detector Setup - No Tone Time**	Type 1 (DT) = 132 (3990ms) Type 2 (BT) = 132 (3990ms) Type 3 (RBT) = 132 (3990ms) Type 4 = 0 Type 5 = 0
80-04-05	**Call Progress Tone Detector Setup - Pulse Count**	Type 1 (DT) = 1 Type 2 (BT) = 1 Type 3 (RBT) = 1 Type 4 = 0 Type 5 = 0
80-04-06	**Call Progress Tone Detector Setup - ON minimum time**	Type 1 (DT) = 63 (1920ms) Type 2 (BT) = 12 (390ms) Type 3 (RBT) = 25 (780ms) Type 4 = 0 Type 5 = 0
80-04-07	**Call Progress Tone Detector Setup - ON maximum time**	Type 1 (DT) = 0 Type 2 (BT) = 20 (630ms) Type 3 (RBT) = 40 1230ms) Type 4 = 0 Type 5 = 0
80-04-08	**Call Progress Tone Detector Setup - OFF minimum time**	Type 1 (DT) = 1 (60ms) Type 2 (BT) = 12 (390ms) Type 3 (RBT) = 52 (1590ms) Type 4 = 0 Type 5 = 0
80-04-09	**Call Progress Tone Detector Setup - OFF maximum time**	Type 1 (DT) = 1 (60ms) Type 2 (BT) = 14 (450ms) Type 3 (RBT) = 80 (2430ms) Type 4 = 0 Type 5 = 0

Operation

Calling your Mailbox

To call your mailbox:

Multiline Terminal

1. Press your **Voice Mail** key (Program 15-07 or SC **851** : 77).
   - OR -
   Press **Speaker** and dial the Voice Mail Master Number. After Voice Mail Answers, dial your mailbox number.

   Your mailbox number is normally the same as your extension number. You may optionally dial a co-worker's mailbox - or use this procedure to call your mailbox from a co-worker's telephone.

2. If requested by Voice Mail, enter your security code.

   Ask your Voice Mail system administrator for your security code.

   Normally, your Message Waiting LED goes out (if applicable). If it continues to flash, you have unanswered Message Waiting requests or a new General Message.

Single Line Telephone

1. Lift the handset and dial ***8**.

   If you are at a co-worker's telephone, you can dial the Voice Mail master number and your mailbox number instead. You can also use this procedure from your own telephone to call a co-worker's mailbox.

2. If requested by Voice Mail, enter your security code.

Recording your Call

Multiline Terminal

To record your active call in your mailbox:

1. Press **Voice Mail Record** key (Program 15-07 or SC **851** : code 78).

   You hear two beeps and your Record key flashes. The beeps periodically repeat to remind you that you are recording.

   To stop recording, press the Voice Mail Record key again. You can restart and stop recording as required.

   - OR -

1. Press **Hold**.
2. Dial **754** .

   The system automatically reconnects you to your call.

   To stop recording, place the call on hold then pick the call back up. You can restart and stop recording as required.

Single Line Telephone

1. Hookflash.
2. Dial **754** .

   The system automatically reconnects you to your call.

   To stop recording, hookflash twice. You can restart and stop recording as required.

Voice Mail Message Indication on Line Keys

Description

Voice Mail Message Indication on Line Keys indicates a new voice mail message on Line Keys or DSS/BLF keys.

Conditions

- When a DSS key of an installed extension is pressed when flashing it calls that extension.
- You have to use a Voice Mail key (code 77) to get the indication when there is a new message. It can also be used for installed extensions.
- Voice Mail key calls the VM and logs into the mail box.
- If an Voice Mail key for extension A is placed on extension A, the Large LED lights on extension A for new message indication. Also the Voice Mail key flashes green.
- Voice Mail LED is a higher priority then any other status for the DSS/BLF key.
- The enabling or disabling of Voice Mail Indication on BLF enables the station with the message to show up on other telephones. It does not enable/disable stations from seeing the BLF indication.
- Virtual Extension Keys assigned as code ✱03 do not support Voice Mail Message Indication on Line Keys.

Default Setting

Not allowed

System Availability

Terminals

All Multiline Terminals

Required Component(s)

VM (Digital or Analog)

Related Features

Class of Service

Direct Station Selection (DSS) Console

Programmable Function Keys

InMail

Voice Mail Integration (Analog)

Guide to Feature Programming

Program Number	Program Name	Default
15-07-01	Programmable Function Keys	Refer to Programming Manual.
20-13-41	Class of Service Options (Supplementary Service) - Voice Mail Message Indication on DSS	COS 01~15 = 0

Program Number	Program Name	Default
30-01-01	**DSS Console Operating Mode**	0
30-02-01	**DSS Console Extension Assignment - Extension Number**	not assigned
30-03-01	**DSS Console Key Assignment**	The DSS keys 001~060 of all DSS consoles = DSS/One-Touch key 200~259
30-05-02	**DSS Console Lamp Table - Busy Extension**	7 (On)
30-05-03	**DSS Console Lamp Table - DND Extension**	3 (RW)
30-05-09	**DSS Console Lamp Table - Hotel Status Code 1 (Hotel DSS)**	7 (On)
30-05-10	**DSS Console Lamp Table - Hotel Status Code 2 (Hotel DSS)**	1 (FL)
30-05-11	**DSS Console Lamp Table - Hotel Status Code 3 (Hotel DSS)**	2 (WK)
30-05-12	**DSS Console Lamp Table - Hotel Status Code 4 (Hotel DSS)**	3 (RW)
30-05-13	**DSS Console Lamp Table - Hotel Status Code 5 (Hotel DSS)**	5 (IL)
30-05-14	**DSS Console Lamp Table - Hotel Status Code 6 (Hotel DSS)**	3 (RW)
30-05-15	**DSS Console Lamp Table - Hotel Status Code 7 (Hotel DSS)**	6 (IW)
30-05-16	**DSS Console Lamp Table - Hotel Status Code 8 (Hotel DSS)**	4 (IR)
30-05-17	**DSS Console Lamp Table - Hotel Status Code 9 (Hotel DSS)**	3 (RW)
30-05-18	**DSS Console Lamp Table - Hotel Status Code 0 (Hotel DSS)**	0 (Off)
30-05-19	**DSS Console Lamp Table - Hotel Status Code ✱** (Hotel DSS)	4 (IR)
30-05-20	**DSS Console Lamp Table - Hotel Status Code # (Hotel DSS)**	5 (IL)
30-05-21	**DSS Console Lamp Table - VM Message Indication**	3 (RW)

V

Operation

To program a DSS/BLF key on a telephone:

1. Press **Speaker**.
2. Dial **851** .
3. Press the key you want to program.
4. Dial **01**.
5. Dial the number of the extension you want to appear on the key.
6. Press **Hold**.
7. Press **Speaker**.

To program a Voice Mail key on a telephone:

1. Press **Speaker**.
2. Dial **851** .
3. Press the key you want to program.
4. Dial **77**.
5. Dial the number of the extension you want to appear on the key.
6. Press **Speaker**.

Voice Response System (VRS)

Description

The PZ-VM21 daughter board provides the option for the Voice Response System (VRS) which gives the system voice recording and playback ability. The CFVRS CompactFlash card provides up to 100 system messages (General Message, Automated Attendant greetings, and the Preamble).

- **General Message** - provides a prerecorded message to which any user can listen
- **Automated Attendant (Operator Assistance)** - answers incoming calls, plays a greeting to the caller and then lets the caller directly dial a system extension
- **Transfer to the VRS** - allows any extension user to Transfer their outside call to the VRS
- **Voice Prompting Messages** - plays call and feature status messages to users
- **Time, Date and Station Number Check** - lets a multiline terminal extension user quickly hear a recording for the time, date, or the extension number

VRS Messages

The VRS allows you to record up to 100 VRS messages. You allocate these messages for Automated Attendant greetings, the General Message, and the Preamble message. The maximum duration for any message is two minutes - this is not programmable. VRS messages are stored on a Compact Flash drive, and do not require battery back up.

Any on-premise extension caller can listen, record and erase VRS Messages (unless restricted in programming). DISA and DID callers can listen and record VRS messages (unless restricted in programming).

General Message

A General Message is a prerecorded message available to all callers. A General Message typically contains important company information that all employees should hear. To hear the General Message, an employee can go to any multiline terminal and press 4 (for General Message). You can restrict the ability to record the General Message in an extension Class of Service. This allows you to give recording ability to the System Administrator or Communications Manager, for example, but not any other employee. The Message Waiting LED at each telephone flashes when a new General Message is recorded. After the extension user listens to the message, the Message Waiting LED goes out.

Park and Page

When an extension user is away from their telephone, Park and Page can let them know when they have a call waiting to be answered. The Personal Greeting and Park & Page options can have up to 200 total messages (note that the Park & Page feature uses two messages). To enable Park and Page, the user records a Personal Greeting along with an additional Paging announcement. Park and Page then answers an incoming call and plays the Personal Greeting to the caller. The caller then listens to Music on Hold (if available) while the system broadcasts the prerecorded Paging announcement. When the extension user hears the Page, they can go to any telephone and use Directed Call Pickup to intercept the call. Refer to Call Forwarding on page 1-57, Paging, External on page 1-383, Paging, Internal on page 1-388, and Park on page 1-391.

Automated Attendant (Operator Assistance)

Automated Attendant automatically answers outside calls, plays a prerecorded greeting and then lets the outside callers directly dial system extensions, Department Calling Groups and Voice Mail. Automated Attendant provides immediate answering and routing of outside calls without the need for an operator or dispatcher. Automated Attendant provides:

- **Single Digit Dialing**
  Single Digit Dialing allows Automated Attendant callers to dial extensions, Department Calling Groups, and Voice Mail by pressing a single digit. For example, your Automated Attendant can greet

calls with, “Thank you for calling. To place an order, dial 1. To check on an existing order, dial 2. To speak with an operator, dial 0.” You can set up single digit dialing for each VRS Message programmed to answer outside calls via the Automated Attendant. This allows you to set up day/night/holiday greetings or unique greetings for each incoming trunk. (Keep in mind that, with a default system, if you assign destinations to digits 3, 4 and 5, outside callers cannot dial system extensions.)

- **Simultaneous Call Answering**
  With VRS installed, the Automated Attendant can answer up to 16 calls (Needs License and MEMDB) simultaneously.
- **Flexible Routing**
  The outside caller can directly dial any system extension, Department Calling Group or Voice Mail. If the caller dials a busy extension, Automated Attendant allows them to dial another extension or wait for the busy extension to become free.
- **Automatic Overflow**
  Automatic Overflow can automatically redirect a call if it cannot go through. This can happen if all VRS ports are busy, if the called extension does not answer, or if the caller misdials or waits too long to dial. (This occurs if the caller is using a dial pulse telephone.) When the call overflows, it rings a designated Ring Group or the Voice Mail system.
- **Programmable Automated Attendant Greetings**
  You can record a different greeting for each trunk answered by the Automated Attendant. The greetings can be different in the day, at night or on holidays or weekends. You can also have a special greeting if the caller misdials. You record the greetings just the way you want. For example, “Dial the 3-digit extension number you wish to reach, dial 500 for Sales or dial 600 for Customer Service.” When assigning and recording Automated Attendant greetings, you can choose among the 100 VRS messages.

VRS Waiting Message

Using VRS Waiting Message, the system can automatically answer an incoming trunk call first (either a normal trunk or one designated for a department group) to let the outside caller hear a recorded message when the call is not answered in a programmed time. With this feature, the call keeps ringing at the same destination until it is answered or until other programming, takes affect.

This feature can use up to two messages for an incoming call and the duration between the messages is programmable. These messages are repeated and, between these messages, either ring back tone or Music on Hold can be played.

This feature has two different modes:

- **Permanent Mode**
  This mode sets the feature using system programming and is available for the following types of calls.
  - Normal Incoming Call
    When the call is not answered or a user presses the VRS Waiting Message function key, this feature is initiated. The waiting message is played until other no-answer program (e.g. transfer to another incoming ring group or disconnect) takes affect.
  - Designated Call for the Department Group
  - When a department group receives a call from a DID, DIL or DISA and all terminals in the group are busy, the call is put in a queue and VRS Waiting Message is also initiated. The waiting message is played until other no-answer program (e.g. transfer to another incoming ring group or disconnect) takes affect or a terminal becomes available to receive the department call.
- **Manual Mode**
  This mode can be programmed by pressing the VRS Waiting Message function key from a multiline terminal to set this feature for each incoming ring group. This mode can be used for normal incoming calls only.

The following programs would be used to define the VRS Waiting Message feature and the trunk overflow:

- 11-10-20: Service Code Setup (for System Administrator) - VRS - Record/Erase Message
- 15-07: Programmable Function Keys
  Automatic Answer with Delay Message Setup (Function Number 52)

Function Key 52 can be used to enable the VRS Waiting Message feature when Program 22-01-10 is set to 1 (Changed by Manual Operation).

Automatic Answer with Delay Message Start (Function Number 53)

Function Key 53 can be used to play the VRS Waiting Message immediately when Function Key 53 + the ringing Trunk Appearance Key are pressed.

- 20-07-13: Class of Service Options (Administrator Level) - VRS Record (VRS Msg Operation)
- 20-15-11: Ring Cycle Setup - VRS Waiting Message Incoming Call
- 22-01-04: System Options for Incoming Calls - DIL No Answer Recall Time
- 22-01-08: System Options for Incoming Calls - DID Pilot Call No Answer Timer
- 22-01-10: System Options for Incoming Calls - VRS Waiting Message Operation
- 22-01-11: System Options for Incoming Calls - VRS Waiting Message Interval Time
- 22-08-01: DIL/IRG No Answer Destination
- 22-14-01~07: VRS Delayed Message for IRG
- 22-15-01~07: VRS Waiting Message for Department Group
- 25-07-02: System Timers for VRS/DISA - VRS/DISA No Answer Time
- 25-07-03: System Timers for VRS/DISA - Disconnect after VRS/DISA retransfer to IRG

Transfer to the VRS

Any extension user can Transfer their outside call to the VRS. This lets their caller take advantage of the Automated Attendant's extensive routing abilities. To Transfer the call, the user places the call on Hold, dials the unique VRS service code (set up in system programming : default **882**), and hangs up.

Voice Prompting Messages

The VRS feature provides the system with Voice Prompting Messages. These Voice Prompting Messages tell the extension user the status or progress of their call.

The following table shows the available Voice Prompting Messages.

Preamble

You can use the Preamble message to set up an Auto-Answer with Greeting application. When a receptionist answers a call, the VRS can play a preamble message such as, "Welcome to ABC Company. How can I help you?" When the caller replies, the receptionist answers, "One moment please," and quickly extends the call to the desired party. This ensures that all incoming calls are answered quickly, courteously and consistently.

Time, Date and Station Number Check

If the system has a DSP daughter board installed for VRS, any multiline terminal user can find out the time, date or the extension number while their telephone is idle (on-hook). The time and date check saves the user time since they do not have to look for a clock or calendar. Hearing the extension number conveniently identifies non-display multiline terminals. To find out their extension number, the user presses 6 (for Number). To listen to the time and date, the user presses 8 (for Time/Date).

Conditions

- VRS record time is fixed at two minutes and cannot be changed.
- The Automated Attendant (VRS) can answer up to 16 calls (Needs License and MEMDB) simultaneously.
- The maximum number of VRS ports is 16 when the MEMDB is installed on the CPU. If the MEMDB is not installed, the maximum number of VRS ports is four.

Default Settings

Disabled

V

System Availability

Terminals

Not applicable

Required Component(s)

PZ-VM21

IP4WW-CFVRS-C1

Related Features

Transfer

Guide to Feature Programming

Program Number	Program Name	Default
11-10-20	**Service Code Setup (for System Administrator) - VRS - Record/Erase Message**	716
11-10-21	**Service Code Setup (for System Administrator) - VRS - General Message Playback**	711
11-10-22	**Service Code Setup (for System Administrator) - VRS - Record or Erase General Message**	712
11-12-54	**Service Code Setup (for Service Access) - VRS Routing for ANI/DNIS**	882
15-07-01	**Programmable Function Keys**	Refer to Programming Manual.
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-07-13	**Class of Service Options (Administrator Level) - VRS Record (VRS Msg Operation)**	COS 01~15 = 1
20-07-14	**Class of Service Options (Administrator Level) - VRS General Message Play**	COS 01~15 = 1
20-07-15	**Class of Service Options (Administrator Level) - VRS General Message Record/Delete**	COS 01~15 = 1
20-11-15	**Class of Service Options (Hold/Transfer Service) - VRS Personal Greeting (Message Greeting)**	COS 01~15 = 1
20-13-23	**Class of Service Options (Supplementary Service) - Display the Reason for Transfer**	COS 01~15 = 0
20-15-11	**Ring Cycle Setup - VRS Waiting Message Incoming Call**	6
21-01-02	**System Options for Outgoing Calls - Intercom Interdigit Time**	10 (seconds)
22-01-10	**System Options for Incoming Calls - VRS Waiting Message Operation**	0
22-01-11	**System Options for Incoming Calls - VRS Waiting Message Interval Time**	20 (seconds)
22-02-01	**Incoming Call Trunk Setup**	0
22-04-01	**Incoming Extension Ring Group Assignment**	Extension 200 (first port)
22-14-01	**VRS Delayed Message for IRG - 1st Waiting Message Start Time**	0 (seconds)
22-14-02	**VRS Delayed Message for IRG - 1st Waiting Message Number**	0

Program Number	Program Name	Default
22-14-03	VRS Delayed Message for IRG - 1st Waiting Message Sending Count	0
22-14-04	VRS Delayed Message for IRG - 2nd Delayed Message Number	0
22-14-05	VRS Delayed Message for IRG - 2nd Delayed Message Sending Count	0
22-14-06	VRS Delayed Message for IRG - Tone Kind at Message Interval	0
22-14-07	VRS Delayed Message for IRG - Disconnect Time After the end of VRS Waiting Message	60 (seconds)
22-15-01	VRS Delayed Message for Department Group - 1st Delayed Message Start Time	0 (seconds)
22-15-02	VRS Delayed Message for Department Group - 1st Delayed Message Number	101
22-15-03	VRS Delayed Message for Department Group - 1st Delayed Message Sending Count	0
22-15-04	VRS Delayed Message for Department Group - 2nd Delayed Message Number	101
22-15-05	VRS Delayed Message for Department Group - 2nd Delayed Message Sending Count	0
22-15-06	VRS Delayed Message for Department Group - Tone Kind at Message Interval	0
22-15-07	VRS Delayed Message for Department Group - Disconnect Time After the End of VRS Waiting Message	60 (seconds)
24-02-03	System Options for Transfer - Delayed Call Forwarding Time	10 (seconds)
25-01-02	VRS/DISA Line Basic Data Setup - DISA User ID	1
25-02-01	DID/DISA VRS Message	Talkie Type = 1 Additional Data = 1
25-03-01	VRS/DISA Transfer Ring Group With Incorrect Dialing	0
25-04-01	VRS/DISA Transfer Ring Group With No Answer/Busy	0
25-05-01	VRS/DISA Error Message Assignment	0
25-06-01	VRS/DISA One-Digit Code Attendant Setup - Next Attendant Message Number	0
25-06-02	VRS/DISA One-Digit Code Attendant Setup - Destination Number	not assigned
25-07-02	System Timers for VRS/DISA - VRS/DISA No Answer Time	10 (seconds)
25-07-03	System Timers for VRS/DISA - Disconnect after VRS/DISA retransfer to IRG	60 seconds
25-08-01	DISA User ID Setup - Password	No setting
25-13-01	System Option for DISA - VRS Message Access Password	000000
25-15-01	DISA Transfer Target Setup -DISA Transfer Target Area at Wrong Dial	999
25-15-02	DISA Transfer Target Setup -DISA Transfer Target Area at NoAnswer or Busy	Default = 999
31-02-01	Internal Paging Group Assignment - Internal Paging Group Number	All stations = 0
31-02-02	Internal Paging Group Assignment - Internal All Call Paging Receiving	All stations = 0

Program Number	Program Name	Default
31-04-01	**External Paging Zone Group - Paging Group Number**	Speaker 1 (Basic) = 1 (Group 1) Speaker 2 (Expansion 1) = 2 (Group 2) Speaker 3 (Expansion 2) = 3 (Group 3)
31-07-01	**Combined Paging Assignments**	1
40-07-01	**Voice Prompt Language Assignment for VRS**	2
40-10-01	**Voice Announcement Service Option - VRS Fixed Message**	1
40-10-02	**Voice Announcement Service Option - General Message Number**	0
40-10-03	**Voice Announcement Service Option - VRS No Answer Destination**	0 (No setting)
40-10-04	**Voice Announcement Service Option - VRS No Answer Time**	0
40-10-05	**Voice Announcement Service Option - Park and Page Repeat Timer (VRS Msg Resend)**	0
40-10-06	**Voice Announcement Service Option - Set VRS Message for Private Call Refuse (VRS Msg Private Call)**	0
40-10-07	**Voice Announcement Service Option - Set VRS Message for Caller ID Refuse (VRS Msg CID)**	0
40-11-01	**Preamble Message Assignment**	0
47-03-02	**InMail Group Mailbox Options - Master Mailbox Number**	not assigned

Operation

VRS Messages

To record a VRS message:

1. Press **Speaker** or lift the handset.
   - OR -
   At a single line telephone, lift the handset.
2. Dial **716** .
3. Dial **7** (**R**ecord).
4. Dial the VRS message number you want to record (001~100).
5. When you hear, “Please start recording” followed by a beep, record your message.
6. Press **#** to end recording
   - OR -
   Hang up to save the message.

To listen to a previously recorded VRS message:

1. Press **Speaker** or lift the handset.
   - OR -
   At a single line telephone, lift the handset.
2. Dial **716** .
3. Dial **5** (**L**isten).
4. Dial the VRS message number to which you want to listen (01~100).

You hear the previously recorded message. If you hear a beep instead, no previous message is recorded.

5. Press **#** to hear the message again.
   - OR -
   To hear another message, dial **5** and then enter the message number (01~100). **- OR -**
   Hang up.

To erase a previously recorded VRS message:

1. Press **Speaker** or lift the handset.
   - OR -
   At a single line telephone, lift the handset.
2. Dial **716** .
3. Dial **3** (**E**rase).
4. Dial the number of the VRS message you want to erase (001~100).
5. Press **Hold** (multiline terminal only) to cancel the procedure without erasing (and return to step 3).
   - OR -
   Hang up to erase the message.

To record, listen to or erase a VRS message if you call in using DISA:

1. Place call to the system.

   You hear dial tone.

2. After the system answers, dial the DISA password (normally 000000).

   You hear dial tone.

3. Dial **716** and the VRS password.
4. Dial the function you want.
   7 = **R**ecord
   5 = **L**isten
   3 = **E**rase
5. Dial the message number (001~100), record the message and press # to end recording.

   *If you dialed **7** to record, you can dial # to listen to the message you just recorded.*

   *If you dialed **5** to listen, you can dial **5** and the message number to hear it again or if you want to Record, listen to or erase another message, go back to step 4.*

General Message

To listen to the General Message:

Multiline Terminal Only

Your Message Waiting LED flashes when there is a new General Message. A voice message periodically reminds you.

1. Do not lift the handset or press **Speaker**.
2. Dial **711** .

   You hear the General Message.

   Normally, your MW LED goes out. If it continues to flash, you have unanswered Message Waiting requests or new messages in your Voice Mail mailbox.

To record, listen to or erase the General Message:

1. Press **Speaker** or lift the handset.
   - OR -
   At single line telephone, lift the handset.

2. Dial **712** .
3. Dial the function you want.
   7 = **R**ecord
   5 = **L**isten
   3 = **E**rase

   If you dialed 7 to record, press # to end the recording.

   If you dialed 5 to listen, you can dial 5 to listen to the message again.

   To Record the General Message again, go back to step 1.

   If you dialed 3 to erase the General Message, you must go to step 4 (hang up). To cancel without erasing on a multiline terminal, press HOLD instead and go back to step 1.
4. Hang up when you are done.

Time, Date and Station Number Check

To check the extension number of any multiline terminal:

1. Do not lift the handset or press **Speaker**.
2. Dial **6** for extension number.

To check the system time and date from any multiline terminal extension:

1. Do not lift the handset or press **Speaker**.
2. Dial **8** for time and date.

Preamble

To answer a Preamble call:

1. Answer the ringing call.

   The line key turns solid red as the system plays the preamble to the caller.
2. When you hear two beeps and the line key turns green, converse with the caller.

Voice Response System (VRS) Upload Download Audio

Description

The Voice Response System (VRS) Upload Download Audio feature allows the upload of VRS greetings up to 1MB in size, recorded on a PC or professionally, to any valid VRS message in the system. It also allows users to listen to and delete VRS messages from callers. Access to the InMail/VRS compact flash drive is via the HTML User Pro (Web Pro).

The User Admin (UA Mode) can change Routing Mailbox greetings for the following Routing mailbox types: Instruction (Call Routing), Announcement and Group.

Audio Prompt Format

In order for uploaded greetings to properly play on the CFVM[ ] CompactFlash they must be in the proper format. Audio files not recorded in the proper format may not playback on the VRS/CFVM[ ] CompactFlash. The proper format is:

Bit Rate	**64kbps**
Sampling Size	8 bits
Channel	1 (Mono)
Sampling Rate	8 KHz
Audio Format	CCiTT A-law/μ-law

User Pro Access

There are two different User Pro logins available to make changes to audio files on the InMail/VRS CF, but only one allows changes to be made to VRS messages. To login, open an Internet browser and enter the IP of the SL1000 LAN port in the address line. At default, the IP address is 192.168.0.10.

User Admin Mode (UA Mode): This mode allows the user admin to access any telephone and mailbox in the system. This mode must be used to change VRS and Routing Mailbax greetings. At default, the login ID is USER1 and the password is 1111.

The following details the page layout diagram of the two different User Pro login IDs:

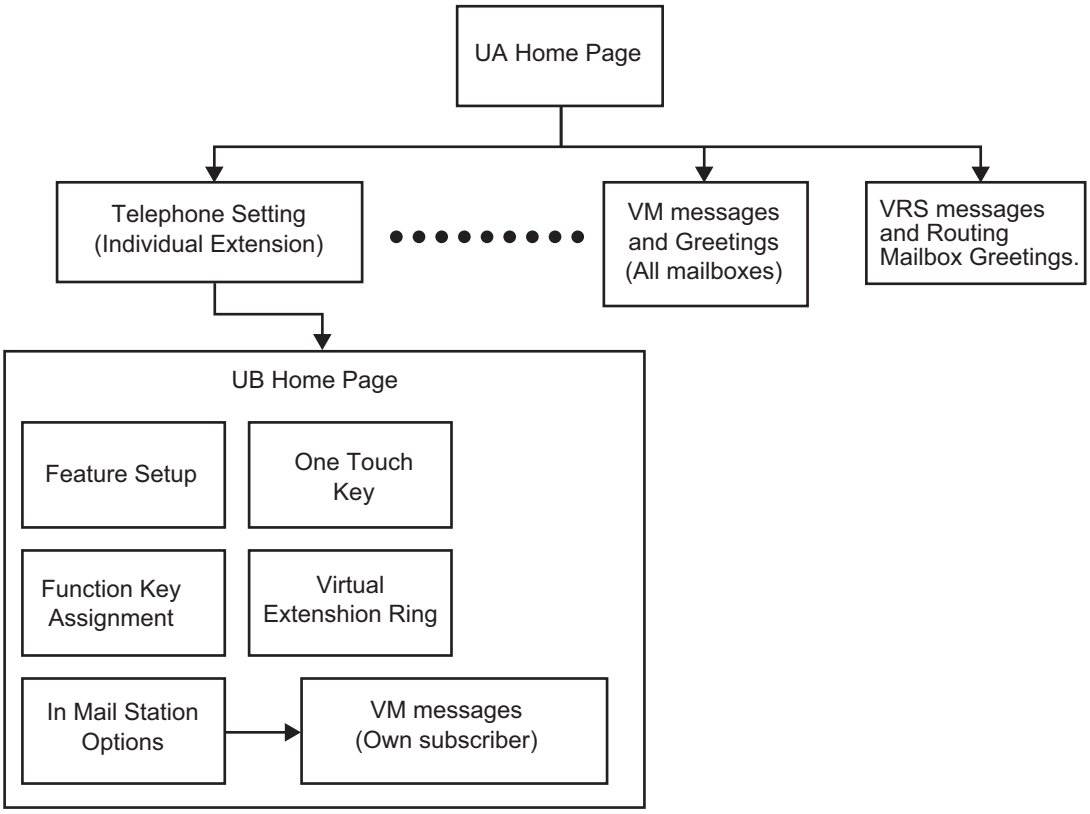

Figure 1-39 VRS User Pro Login Diagram

Message Name Format

Downloaded messages are automatically assigned a name by the SL1000 . This name includes the mailbox number the message was left in, type of message, the message number and the date and time to the second the message was left. The table below shows how to interpret the message name to determine this information.

Table 1-42 Default Incoming Ringing Tone

File Name Format	BTNNN_YYYYMMDD_HHMMSS.wav (maximum 32 characters)
B	Mailbox number (maximum eight digits) or VRS for the VRS message
T	Message Type + : Greeting or VRS message - : Recorded message
NNN	Message number (three digits)
YYYY	Year
MM	Month (1~12)
DD	Date (1~31)
HH	Hour (00~23)
MM	Minute (00~59)
SS	Second (00~59)

Conditions

- Uploading audio files to any type of Call Routing box and Group mailboxes are not supported. Auto attendant and group mailbox greetings cannot be uploaded or deleted in the End User WebPro interface.
- Uploading audio files to any type of Call Routing box and Group mailboxes is supported. Auto atten-

dant and group mailbox greetings can be uploaded or deleted using End User WebPro interface with the UA login.

- Uploading audio files to any type of Call Routing box and Group mailboxes are not supported. This means auto attendant and group mailbox greetings cannot be uploaded or deleted in the User Pro interface.
- VRS and InMail messages are recorded in an ADPCM format which may not be easily opened on the support PC.
- It is not possible to upload/download/delete multiple files simultaneously.
- The mailbox will be inaccessible from the telephone under these conditions:
  - Mailbox XXX will not be accessible when opening the telephone setup screen of extension XXX by UA mode in User Pro.
  - Mailbox XXX will not be accessible when selecting the extension XXX on the file upload/download screen of UA mode User Pro.
  - Mailbox XXX will be inaccessible when logging in the UB mode User Pro for extension XXX.
- While uploading an audio file via User Pro the greeting is not accessible by telephone.
- When downloading/deleting an audio file via User Pro, the file is not accessible by another User Pro session or from the telephone.
- This feature is only supported using a LAN connection.
- When uploading an audio file the extension will be checked whether it is WAV or not. However, the format of the uploaded file will not be checked. If the uploaded file is not in the proper format it may not playback properly.
- When a mailbox has a new message and the message is deleted using the User Pro interface, the MWI of the mailbox will NOT be cancelled.
- The largest allowed upload file size is approximately 1MB. Files larger than this cannot be uploaded.
- There is no size limitation when downloading audio files.
- User Pro does not check the uploaded file for correct naming format (i.e., BTNNN_YYYYMMDD_HHMMSS.wav). The file name will be automatically changed when the file is written in the CF.
- The actual file name of the messages is not displayed in User Pro. The message number, modified date and file size are displayed instead. If there is no message file, “-” will be displayed and the download/delete icon will not be displayed.
- The User Pro message page does not refresh automatically, to see new messages the page must be refreshed. For instance, if a new message is received via regular operation on the system while a user is viewing the upload/download screen, the new message is not shown until the page is re-loaded by clicking the  icon.
- At default, Microsoft Windows will automatically open and play the downloaded WAV. To make **Open** or **Save** selectable, the following settings are required:
  - Windows XP

    1. Select **Control Panel** then **Folder Options**.
    2. Click on the **Files** tab.
    3. Select the **WAV** extension from the list, then click **Advanced**.
    4. Check **Confirm to open the file after download**, then click **OK**.
    5. Close the folder option by clicking **OK** again.

Windows Vista: It is not possible to change the save to folder option. The downloaded file is automatically opened for playback.

Default Settings

None

System Availability

Terminals

All Terminals

Required Component(s)

PZ-VM21

IP4WW-CFVRS-C1

Related Features

Voice Response System (VRS)

V

Guide to Feature Programming

Program Number	Program Name	Default
90-02-01	**Programming Password Setup - User Name**	Refer to Programming Manual.
90-02-02	**Programming Password Setup - Password**	Refer to Programming Manual.
90-02-03	**Programming Password Setup - User Level**	Refer to Programming Manual.

Troubleshooting

The table below shows possible Error messages and Causes:

Table 1-43 Error Messages and Causes

Error Message	Cause
VMDB is not attached	The PZ-VM21 is not attached.
Mailbox XXX does not exist. (XXX = mailbox number)	The mailbox does not exist
The mailbox is being used by another session	When the mailbox is being used by another session, either PC or telephone.
There is no available space in the CF.	When there is no available space in the CF.
The file is being used by another session. Please try again later.	When the file to be downloaded is being used by another session, either PC or telephone.
The selected file has already been deleted.	When the file selected for download has already been deleted.
The file is being used by another session. Please try again later.	When the file selected for deletion is being used by another session.
The selected file has already been deleted.	When the file selected for deletion has already been deleted.
Cannot upload the file since the original file is being used by another session. Please try again later.	When the file to be replaced is being used when trying to upload the replacement.

Operation

Changing VRS Messages using User Admin Mode (UA)

Audio files up to 1MB may be uploaded to the SL1000 for VRS messages. All 100 VRS messages can be uploaded or deleted. The messages can be used on all VRS features: General Message, Automated Attendant greetings and the 900 Preamble.

In order for uploaded messages to play they must be in the proper format. Audio files not recorded in the proper format may not playback. The proper format is:

Bit Rate	64kbps

Sampling Size	8 bits
Channel	1 (Mono)
Sampling Rate	8 KHz
Audio Format	CCiTT A-law/µ-law

1. To login, open an Internet browser and enter the IP of the SL1000 LAN port in the address line. At default, the IP address is 192.168.0.10.
2. At the login screen enter username = USER1 and password = 1111.
3. You will then see the main menu, click on the VRS Audio Up/Download icon.
4. There can be up to 100 VRS messages and you may need to scroll through several pages or jump to get to the desired message number.

   The message numbers correspond to the same message number when accessed via the telephone. Message 1 is 001, message 2 is 002 and message 3 is 003, etc.
5. To delete a message, click on the red X to the right of the appropriate message.
6. To Upload a message:
   - Under Message No, enter the message number to be replaced.
   - Browse to find the location where the greeting file is stored.
   - Click on the upload icon to the right of the selected file name.
   - Depending on file size and LAN speed, it may take a minute to upload the greeting.
   - The uploaded message will appear in the assigned location.

Voice Response System (VRS) - Call Forwarding - Park and Page

Description

When an extension user is away from their phone, VRS Park and Page can let them know when they have a call waiting to be answered. The Personal Greeting and Park & Page options can have up to 200 messages total (note that the Park & Page feature uses two messages). To enable VRS Park and Page, the user records a Personal Greeting along with an additional Paging announcement. VRS Park and Page then answers an incoming call and plays the Personal Greeting to the caller. The caller then listens to Music on Hold (if available) while the system broadcasts the prerecorded Paging announcement. When the extension user hears the Page, they can go to any telephone and use Directed Call Pickup to intercept the call.

For example, John Smith could record a Personal Greeting that says:

“Hello, this is John Smith. I am away from my phone right now but please hold on while I am automatically paged.”

The prerecorded Paging announcement could say:

“John Smith, you have a call waiting on your line.”

The incoming caller hears the first message and listens to Music on Hold while the system broadcasts the second message. John Smith could then walk to any phone and pick up his call. If John doesn’t pick up the call, the Page periodically repeats.

VRS Park and Page follows the rules for Personal Greeting for All Calls, immediately rerouted. This means that Park and Page activates for ringing Intercom calls, DID calls and DISA calls. It also activates for calls transferred from the Automated Attendant. Additionally, calls from the Automated Attendant follow Automatic Overflow routing if not picked up. VRS Park and Page activates for transferred outside calls but does not play the Personal Greeting to the caller. If a call comes in when the specified Page zone is busy, the system broadcasts the announcement when the zone becomes free.

Conditions

- Park and Page announcements only repeat once.
- Voice Announcement (VAU) recording time is fixed at two minutes and cannot be changed.
- While Park and Page is enabled, only one DID call at a time can be processed. Subsequent calls hear a busy tone.
- This feature is not supported for CO transferred calls.

Default Setting

- Park and Page is available at default for internal paging access code **801** , zone 1.
- User access code of **795** . See feature Operation. Set Program 40-10-01 for VRS guidance message.

System Availability

Terminals

None

Required Component(s)

IP4WW-CFVRS-C1, PZ-VM21

Related Features

Analog Communication Interface (ACI)

Music on Hold

Guide to Feature Programming

Program Number	Program Name	Default
11-11-58	**Service Code Setup (for Setup/Entry Operation) - Call Forward with Personal Greeting**	795
11-12-19	**Service Code Setup (for Service Access) - Internal Group Paging**	801
11-12-20	**Service Code Setup (for Service Access) - External Paging**	803
11-12-24	**Service Code Setup (for Service Access) - Combined Paging**	*1
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
31-02-01	**Internal Paging Group Assignment - Internal Paging Group Number**	All stations = 0
31-03-01	**Internal Paging Group Settings - Internal Paging Group Name**	Up to 12 Characters 01 = Group 1 02 = Group 2 : 32 = Group 32
31-04-01	**External Paging Zone Group - Paging Group Number**	Speaker 1 (Basic) = 1 (Group 1) Speaker 2 (Expansion 1) = 2 (Group 2) Speaker 3 (Expansion 2) = 3 (Group 3)
31-06-01	**External Speaker Control - Broadcast Splash Tone Before Paging (Paging Start Tone)**	2
31-06-02	**External Speaker Control - Broadcast Splash Tone After Paging (Paging End Time)**	2
40-10-01	**Voice Announcement Service Option - VRS Fixed Message**	1
40-10-05	**Voice Announcement Service Option - Park and Page Repeat Timer (VRS Msg Resend)**	0 (seconds)

Operation

To have the system page you when you have a call:

1. Press **Speaker** (or lift the handset at the single line telephone) and dial **795** .
2. When you hear, “Start recording at the tone and press the **HASH** key when you are done.” record you Personal Greeting.

If you already have Park and Page or Personal Greeting set up, you can dial: ***3*** *to erase (the optionally* ***HOLD*** *to cancel the erase)*
5 *to listen (then* ***#*** *again to listen again)*
7 *to re-record*

3. Dial **#7**.
4. When you hear, “Start recording at the tone and press the **HASH** key when you are done” record your page and dial **#** when the announcement is complete.

   A paging chime overrides the first four seconds of an announcement. Allow a delay in announcement recording for chime time.

5. Dial the Page Zone that should broadcast your announcement.
   For example, for Internal Zone 1 dial **801** + 01, or for Combined Paging Zone, 1 dial ***1 + 1.
6. Dial the Park and Page type:
   2 = All Calls
   3 = Outside Calls Only
7. Press **Speaker** to hang up (or go on-hook at the single line telephone).

To pick up your Park and Page:

1. Press **Speaker** (or lift the handset at the single line telephone).
2. Dial ** + your extension number.

To cancel your Park and Page:

1. Press **Speaker** (or lift the handset at the single line telephone).
2. Dial **795** + 3.
3. Press **Speaker** to hang up (or go on-hook at the single line telephone).

Volume Controls

Description

Each multiline terminal user can control the volume of incoming ringing, splash tone, Paging, Background Music, Handsfree and your handset. Multiline terminals consolidate all adjustments into the

volume buttons. Pressing the VOLUME ▲ or VOLUME ▼ adjusts the volume level for whichever feature is active (outside call, ICM, ICM ringing, paging, etc.). Pressing these keys when the telephone is idle adjusts the contrast level of the telephone display. The users should set the volumes for their most comfortable levels.

Conditions

- When the telephone is IDLE contrast can not be changed when BGM is enable or when Navigation Mode (15-02-60) is enable.
- When Navigation is enabled Contrast can be changed by using a Navigation mode.
- Multiline terminal users can further increase station ring volume by pressing the Speaker key and dialing Code 829 .
- Headset volume, off-hook ringing volume, station ringing volume, and Speaker volume adjustments are determined by Program 15-02-27.
- The LCD of the SL1000 terminals provide a volume bar indication while adjusting the following volumes or controls:
  - Speaker Volume
  - Handset/Headset Volume
  - Background Music (BGM) Volume
  - Ring Volume/Off-Hook Ring Volume
  - LCD Contrast

Default Settings

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Off-Hook Signaling

Guide to Feature Programming

Program Number	Program Name	Default
15-02-27	Multiline Telephone Basic Data Setup - Handset Volume	1

Operation

To adjust the volume of incoming ringing and splash tone:

1. If the telephone is idle, press **Speaker** and dial **829** . If the telephone is ringing, skip to Step 2.
2. Press VOLUME ▲ or VOLUME ▼.

To adjust the volume of ringing incoming Paging announcements, Handsfree, the handset or Background Music:

1. Press VOLUME ▲ or VOLUME ▼.

The feature must be active to change the volume. Pressing the volume keys when the telephone is idle adjusts the display contrast.

Warning Tone for Long Conversation

Description

The system can broadcast warning tones to a trunk caller, warning the caller that he has been on the call too long. If he chooses, the caller can disregard the tones and continue talking. The outside caller does not hear the warning tones. Warning tones do not occur for Intercom calls and most incoming trunk calls. DISA trunks can also have warning tones. Warning tones are not available to analog single line telephone (SLT) users.

There are two types of warning tones: Alarm Tone 1 and Alarm Tone 2. Alarm Tone 1 is the first set of tones that occur after the user initially places a trunk call. Alarm Tone 2 broadcasts periodically after Alarm Tone 1 as a continued reminder. Each alarm tone consists of three short beeps.

If programmed, DISA calls are disconnected unless the continue code is entered by the user. With the Long Conversation Cutoff feature, incoming or outgoing central office calls can also be disconnected.

Warning Tone for DISA Callers

For DISA callers, with this feature enabled, the warning tone timer begins when an incoming DISA call places an outgoing call and either the inter-digit timer expires or the outgoing call is answered.

If an outside call is transferred to forwarded off-premise using an outside trunk, the warning tone timer begins immediately. This occurs only if either trunk involved in the call is programmed for this feature (Program 14-01-17). When transferring a trunk call off-premise, Program 14-01-13 must be enabled (set to 1).

Conditions

- Warning Tone for Long Conversation does not occur for incoming trunk calls.
- Warning Tone for Long Conversation occurs for all outgoing trunk calls, regardless of how they are placed or other outgoing restrictions.
- Warning Tone for Long Conversation can be enabled for DISA calls.
- Warning Tone for Long Conversation does not occur for Intercom calls.
- Warning Tone for Long Conversation can be used with the Long Conversation Cutoff feature for outgoing calls.
- Warning Tone is presented on a single line telephone in the ear piece.

Default Settings

Disabled

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Direct Inward System Access (DISA)

Intercom

Long Conversation Cutoff

Single Line Telephones

Code Restriction/Toll Restriction

W

Guide to Feature Programming

Program Number	Program Name	Default
14-01-17	**Basic Trunk Data Setup - Trunk to Trunk Warning Tone for Long Conversation Alarm**	0
14-01-25	**Basic Trunk Data Setup - Continued/Discontinued Trunk-to-Trunk Conversation**	0
20-06-01	**Class of Service for Extensions**	All extension port = Class 1
20-13-01	**Class of Service Options (Supplementary Service) - Long Conversation Alarm**	COS 01~15 = 1
20-21-01	**System Options for Long Conversation - Long Conversation Alarm 1**	170 (seconds)
20-21-02	**System Options for Long Conversation - Long Conversation Alarm 2**	180 (seconds)
20-28-01	**Trunk to Trunk Conversation - Conversation Continue Code**	not assigned
20-28-02	**Trunk to Trunk Conversation - Conversation Disconnect Code**	not assigned
20-28-03	**Trunk to Trunk Conversation - Conversation Continue Time**	0 (second)
21-01-01	**System Options for Outgoing Calls - Seizure Trunk Line Mode**	0
21-01-03	**System Options for Outgoing Calls - Trunk Interdigit Time (External)**	10 (seconds)
25-07-07	**System Timers for VRS/DISA - Long Conversation Warning Tone Time**	30 (seconds)
25-07-08	**System Timers for VRS/DISA - Long Conversation Disconnect Time**	15 (seconds)

Operation

Warning Tone for Long Conversation is automatic if programmed.

Warning Tone for Long Conversation for DISA Callers:

1. A DISA caller dials into the system and places a call.
2. Once the Warning Tone is heard, **To continue the call** the DISA caller presses the programmed Continue Code.
   - OR -
   To disconnect the call, the DISA caller presses the programmed Disconnect Code.

Codes Tables

Section 1 ABOUT THIS CHAPTER

The charts in this chapter provide a list of the Service Codes, Function Key Codes, and System Number Plan/Capacities. The service codes and function codes are listed by number and by feature in separate charts for ease of use.

Section 2 SIMPLIFYING MULTILINE TERMINAL OPERATIONS WITH ONE-TOUCH KEY OPERATION

A multiline terminal user can access many features through Service Codes (e.g., Service Code **#9** to access a specific trunk). To streamline the operation of their telephone, a multiline terminal user can store these codes under One-Touch Keys. This provides one-button operation for almost any feature. To find out more, turn to the One-Touch Calling feature.

When reading an instruction using programmable keys, you will see a notation similar to (**PRG 15-07 or SC 8nn**). This means that the key requires function code nnn, and you can program this code through Program 15-07 or by dialing Service Code **851** or **852** . Refer to the Programmable Function Keys feature for more information.

Section 3 USING HANDSFREE

The manual assumes each extension has Automatic Handsfree. This lets a user just press a line key or Speaker Key to answer or place a call. For extensions without Automatic Handsfree, the user must:

- Lift the handset or press **Speaker** for intercom dial tone.
- Lift the handset or press **Speaker**, then press a line key for trunk dial tone.

Post Dialing Service Codes

Table 2-1 Post Dialing Service Codes - Single Digit Post Dialing Codes

Code	For this feature. . .	When you are. . .	Note
1	Handsfree Answerback / Forced intercom Ringing	Changing the signaling mode of your outgoing Intercom call	
4	Department Step Calling	Cycling to the next member of a Department Calling Group	
3	Not used		
Set by PRG11-16-02	Barge-In	Barge into another station's active call	
5	Voice Mail	Leaving a message in a co-worker's mailbox after calling their busy or unanswered extension	

Code	For this feature. . .	When you are. . .	Note
0	Message Waiting	Leaving a Message Waiting at a co-worker's busy or unanswered extension	
#	Call Waiting / Camp-On / Callback / Trunk Queuing	Call Waiting / Camp-On / Callback / Trunk Queuing	
*	Off-Hook Signaling	Sending off-hook signal tones to a busy extension	

Service Codes by Number

Table 2-2 Service Codes by Number

Dial this Service Code. . .[1]	When you . . .	For this feature. . .	Also see Function Key. . .	Note
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle Speaker first).				
* + Enter Account Code + *	Enter an Account Code.	Account Codes	-	
**	Pick up a call ringing or waiting at another extension.	Directed Call Pickup Voice Response System (VRS)	-	
*#	Pick up a call ringing an extension in your pickup group (except Ring Group calls).	Group Call Pickup	24	
*0	Answer a Message Waiting request.	Message Waiting	38	
833	Set the Automatic Transfer for each trunk line.	Transfer	-	
834	Cancel the Automatic Transfer for each trunk line.	Transfer	-	
835	Set the Destination for Automatic Trunk Transfer.	Transfer	-	
*1 + Paging Group Number	Make a Combined Page.	Paging	-	
+ 0	Cancel Call Forwarding.	Call Forwarding	-	
724 (After + 001~126 + busy)	Disconnect a call in progress on a trunk.	Forced Trunk Disconnect	-	
*6 + Orbit (01~64)	Pick up a call parked in a system Park orbit (01~64).	Park	*04 + orbit	
*8	Call your mailbox.	Voice Mail	-	
#* #*	Enter system programming mode.	System Programming Password Protection	-	
Hookflash + ## + Enter Account Code + Hookflash	Enter an Account Code at a single line telephone.	Account Codes	-	
#0	Use Universal Answer Code to pick up a call ringing over the paging system.	Central Office Calls, Answering	-	
Hookflash + 826 + extension + hookflash twice	Activate Conference from a Single Line Telephone.	Conference	-	
#2 + bin	Dial a Common Speed Dialing number.	Speed Dialing	27	
#3	Flash a trunk from an single line telephone.	Flash	-	

Dial this Service Code. . .[1]	When you . . .	For this feature. . .	Also see Function Key. . .	Note
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle Speaker first).				
#4 + bin	Dial a group Speed Dialing number.	Speed Dialing	28	
#5	Use Last Number Redial.	Last Number Redial	-	
#6 + orbit (01~64)	Park a call in a system Park orbit (1~8, 01~32 or 01~64).	Park	*04 + orbit (1~64)	
#8	Set up an UnsupervisedConference.	Tandem Trunking (Unsupervised Conference)	-	
#9 + 001~126	Place a call over a specific trunk.	Central Office Calls, Placing	*01 + trunk (001~126)	
0 (Off-Hook)	Leave a Message Waiting at a co-worker's busy or unanswered extension.	Message Waiting	35	
1 (Off-Hook)	Change the signaling mode of your outgoing Intercom call.	Handsfree Answerback/Forced Intercom Ringing	-	
4 (On-Hook)	Listen to the General Message.	Voice Response System (VRS)	-	
6 (On-Hook)	Check an extension number.	Voice Response System (VRS)	-	
8 (On-Hook)	Listen for the time.	Voice Response System (VRS)	-	
9	Place a call using ARS or Trunk Group Routing.	Automatic RouteSelectionTrunk Group Routing	*02	
700 + code + 0	Use Dial Block.	Toll Restriction, Dial Block	-	
701 + code + 0	Aa a supervisor use Dial Block.	Toll Restriction, Dial Block	-	
702 + Group number (01~32)	Set Automatic Transfer Setup for each extension group.	Transfer	-	
703 + Group number (01~32)	Cancel Automatic Transfer Setup.	Transfer	-	
704 + Group number (01~32) + mode + extension	Set the destination for Automatic Transfer Setup for each extension group.	Transfer	-	
705 + Group number (01~32)	Set Delayed Transfer for each extension group.	Transfer	-	
706 + Group number (01~32)	Cancel Delayed Transfer.	Transfer	-	
707 + Group number (01~32)	Set up DND for each extension group.	Transfer	-	
708 + Group number (01~32)	Cancel DND for each extension group.	Transfer	-	
711	Use a SLT to listen the General Message.	Voice Response System (VRS)	-	
712 + 3 to erase, 5 to listen or 7 to record	Record, listen to or erase the General Message.	Voice Response System (VRS)	-	
716 + 3 to erase, 5 to listen or 7 to record	Record, listen to or erase a VRS Message.	Voice Response System (VRS)	-	
718	Use Night Mode Switch for other group.	Night Answer		
*9	Use Common Cancel Service Code.	TBD	-	
721	Print the SMDR Extension Accumulated printout.	Station Message Detail Recording (SMDR)	-	

Dial this Service Code. . .[1]	When you . . .	For this feature. . .	Also see Function Key. . .	Note
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle Speaker first).				
722	Print the SMDR Group Accumulated printout.	Station Message Detail Recording (SMDR)	-	
723	Print the SMDR Account Code Accumulated printout.	Station Message Detail Recording (SMDR)	-	
882	Transfer a call to the VRS This can also be used for routing ANI/DNIS to the VRS.	Transfer	-	
727	Enable DND at a room telephone.	Hotel/Motel (Do Not Disturb)	-	
728	Cancel DND at a room telephone.	Hotel/Motel (Do Not Disturb)	-	
729	Enable DND for another room telephone.	Hotel/Motel (Do Not Disturb)	-	
730	Cancel DND at another room telephone.	Hotel/Motel (Wake Up Call)	-	
731	Set up a Wake Up call for your own room telephone.	Hotel/Motel (Wake Up Call)	-	
732	Cancel a Wake Up Call for your room telephone.	Hotel/Motel (Wake Up Call)	-	
733	Set a Wake Up Call for another guest room telephone.	Hotel/Motel (Wake Up Call)	-	
734	Cancel a Wake Up Call for another guest room telephone.	Hotel/Motel (Wake Up Call)	-	
735	Enable Room to Room Call Restriction for a guest room telephone.	Hotel/Motel (Room to Room Call Restriction)	-	
736	Disable Room to Room Call Restriction for a guest room telephone.	Hotel/Motel (Room to Room Call Restriction)	-	
737	Change a room telephone Toll Restriction (When Checked In) level.	Hotel/Motel (Toll Restriction When Checked In)	-	
738	Set a room as checked in.	Hotel/Motel (Room Status)	-	
739	Set a room as checked out.	Hotel/Motel (Room Status)	-	
740	Change room status for own extension	Hotel/Motel (Room Status)	-	
741	Set a room status from another telephone.	Hotel/Motel (Room Status)	-	
742	Request a Room Status Printout.	Hotel/Motel (Room Status Printouts)	-	
745 + trunk # + 1 (block) 745 + trunk # + 0 (enable)	Block/busy out outbound usage on a trunk with Trunk Port Disable.	Central Office Calls, Placing	-	
750 + 0 (install) or 1 (remove)	Log in (0) or log out (1) for your Department Calling Group.	Department Calling	-	
754	Enable Conversation Record at a SLT.	Voice Mail	-	
763 + 6-digit code + line + telephone number	Override Toll Restriction.	Toll Restriction	-	

Dial this Service Code. . .[1]	When you . . .	For this feature. . .	Also see Function Key. . .	Note
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle Speaker first).				
772 + Line number (001~126)	Answer a call on a specific trunk.	Central Office Calls, Answering Hold	-	
770	Monitor a room telephone.	Hotel/Motel (Room Monitor)	-	
777	Change the COS of another extension. Must be allowed in Program 20-13-28.	Class of Service	-	
778 + 0~9	Change the language of a display telephone.	Alphanumeric Display / Maintenance	-	
779 + 1 (set) or 0 (cancel)	Change the ability for a second call with DID/DISA/DIL.	Central Office Calls, Answering	-	
889	Transfer a Wireless DECT (SIP) call when out of range.	Wireless DECT (SIP)	-	
800 + extension # + enter name + Hold	Program extension names.	Name Storing	55	
801 + zone (1~9 or 01~32) 801 + zone (0 or 00)	Make an Internal Zone Page. Make an All Call Internal Page.	Paging, Internal	21 + zone 22	
802 + Door Box (1~6)	Place a call to a Door Box.	Door Box	-	
803 + zone (1~3) 803 + zone (0)	Make an External Zone page. Make an External All Call page.	External Paging	19 + zone 20	
804 + trunk group (1~25)	Place an outside call over a trunk group.	Central Office Calls, Placing	*02 + group	
807	Override Do Not Disturb or Call Forwarding.	Call Forwarding Do Not Disturb	37	
808	Step through a Department Group.	Department Step Calling	36	
809	Send a Call Waiting tone to a busy extension.	Call Waiting	33	
810	Break into another extension call.	Barge-In	-	
811 + 1 (ICM) or 2 (TRK) + tone (1~8)	Listen to the incoming ring choices.	Selectable Ring Tones	-	
812	Change the signal type for calling an extension.	Intercom	-	
815	Save a number (from SLT) or dial a saved number	Save Number Dialed	30	
818 + 1 818 + 2 818 + 3 818 + 4 818 + 5 818 + 6 818 + 7 818 + 8	Activate Day 1 Mode. Activate Night 1 Mode. Activate Midnight 1 Mode. Activate Rest 1 Mode. Activate Day 2 Mode. Activate Night 2 Mode. Activate Midnight 2 Mode. Activate Rest 2 Mode.	Night Service	09 + 1 09 + 2 09 + 3 09 + 4 09 + 5 09 + 6 09 + 7 09 + 8	
820 + 1 (ICM) or 2 (TRK) + tone (1~8)	Change your extension incoming ring tones.	Selectable Ring Tones	-	
821	Enable Handsfree Answerback for incoming Intercom calls.	Handsfree Answerback/Forced Intercom Ringing	-	
822	Call off-premise with a Door Box.	Call Forwarding, Off-Premise Door Box	54	
823	Enable Forced Ringing for incoming Intercom calls.	Handsfree Answerback/Forced Intercom ringing	-	

Dial this Service Code. . .[1]	When you . . .	For this feature. . .	Also see Function Key. . .	Note
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle Speaker first).				
824	Enable/disable Dial Pad Confirmation Tone.	Dialing Pad Confirmation tone	-	
825	Turn Background Music on and off.	Background Music	04	
827 + 1 or 2 + time, or 827 + 1 or 2 + 9999 to cancel	Check, set or cancel an alarm.	Alarm	-	
828 + hour + minutes	Set the system Time.	Time and Date Clock/Calendar Display	-	
829	Check or change ring volume.	Volume Control	-	
830	Use Remote maintenance.	-	-	
832	Place a call on Group Hold.	Hold	-	
847 + 0 (Cancel) 1 (Trk calls) 2 (Paging, ICM, Call Forward and transfers) 3 (All calls) 4 (Call Forwards)	Activate Do Not Disturb.	Do Not Disturb	-	
849	Place a call on Exclusive Hold at a SLT.	Hold	-	
850	Camp On to an extension when calling into the system through the VRS.	Voice Response System (VRS)	35	
851 + key + code	Change the function of a programmable key using 851 service code.	Programmable Function Keys	-	
852 + key + code	Change the function of a programmable key using 852 service code.	One-TouchSerial Operation	-	
853 + bin + number + Hold + Name + Hold to store	Store Common Abbreviated Dialing numbers.	Abbreviated Dialing	-	
854 + bin + number + Hold + Name + Hold to store	Store Group Abbreviated Dialing numbers.	Abbreviated Dialing	-	
856	Answer a call ringing a telephone in your pickup group (except Ring Group calls).	Group Call Pickup	-	
773	Park a call or pick up a parked call at an extension.	Park	-	
859	Retrieve a call from Exclusive Hold at a SLT.	Hold	-	
862	Pick up a call from Group Hold.	Hold	-	
863	Join a Meet Me Conference or Meet Me Page on an Internal Paging Zone (if your extension is in the group called).	Meet Me Conference Meet Me Paging	23 or 32	
864 + zone paged (0~32)	Join a Meet Me Conference or Meet Me Page if your extension is not in the group paged.	Meet Me Paging	23 or 32	
865 + zone (0~3)	Join a Meet Me Conference or Meet Me Page on an External Paging Zone.	Meet Me Conference Meet Me Paging	23 or 32	

Dial this Service Code. . .[1]	When you . . .	For this feature. . .	Also see Function Key. . .	Note
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle Speaker first).				
868 + pickup group (1~8 or 1~9 or 01~64)	Answer a call ringing a telephone in another pickup group (except Ring Group calls).	Group Call Pickup	26 + group	
869	Answer a call ringing a telephone in another pickup group if you do not know the group number (except Ring Group Calls).	Group Call Pickup	25	
870	Cancel a Callback request.	Callback	-	
871 + ext	Cancel Messages Waiting you left at a specific extension.	Message Waiting	-	
873	Cancel all Messages Waiting you have left at other extensions.	Message Waiting	-	
875 + pswd (0000) + place outside call	Temporarily override anextension Toll Restriction.	Toll Restriction Override	-	
876	Clear number saved by Last Number Redial.	Last Number Redial	-	
881 + 00 (no tone), 01(general) or 02 (holiday)	Change the Music on Hold Tone.	Music on Hold	-	
882	Route ANI/DNIS to the VRS. It can also be used to transfer to VRS.	Transfer Voice Response Service (VRS)	-	
883	Enable the data communication auto-answer mode.	Data Communications	-	
885	Clear the number saved by Save Number Redial.	Save Number Redial	-	
894	Split between two calls on a SLT.	Call Waiting	-	
899	Test Callback operation for a SLT.	Callback	-	

Service Codes by Feature

Table 2-3 Service Codes by Feature

For this feature...	Dial this Service Code...[1]	When you ...	Also see Function Key...	Note
[1] Except where indicated, dial Service Code from intercom dial tone (e.g., press idle Speaker first).				
Speed Dialing	853 + bin + number + Hold + Name + Hold to store	Store System Speed Dialing numbers.	-	
	854 + bin + number + Hold + Name + Hold to store	Store Group Speed Dialingnumbers.	-	
	#2 + bin	Dial a System Speed Dialing number.	27	
	#4 + bin	Dial a Group Speed Dialing number.	28	
Account Codes	* + Enter Account code + *	Enter an Account Code.	-	
	Hookflash + ## + Enter account code + Hookflash	Enter an Account Code at an SLT.	-	

For this feature...	Dial this Service Code...[1]	When you ...	Also see Function Key...	Note
[1] Except where indicated, dial Service Code from intercom dial tone (e.g., press idle Speaker first).				
Alarm	827 + 1 or 2 + time, or 827 + 1 or 2 + 9999 to cancel	Check, set or cancel an alarm.	-	
Alphanumeric Display	778 + 0~16778 + 0~14	Select the language used on display multiline terminals.	-	
Wireless DECT (SIP)	889	Transfer a Wireless DECT (SIP) call when out of range.	-	
Automatic Route Selection or Trunk Group Routing-Group Routing	9	Place a call using Trunk Grou-p.Route an Automatic Route Selection.	*02	
Background Music	825	Turn Background Music on or off.	04	
Call Forwarding	842	Set/Cancel Call Forwarding(Both Ringing).	-	
	#1	Set/Cancel Call Forwarding when Busy.	-	
	844	Set/Cancel Call Forwarding when Busy/No Answer.	-	
	845	Set/Cancel Call Forwarding No Answer.	-	
	846	Set/Cancel Call Forwarding Follow Me.	-	
	848	Set/Cancel Call Forwarding Imme-diate.	-	
Call Forwarding, Off-PremiseDoor Box	822	Call off-premise with a Door Box.	54	
Call Forwarding/Do Not Disturb Override	807	Override an extension Call Forward or DND setting.	37	
Call Waiting / Camp-On	894	Split (switch) between calls on an SLT.	-	
	870	Cancel a Callback request.	-	
	899	Test Callback operation for an SLT.	-	
Callback / Camp-On / Trunk Queuing	#	Camp On or leave a Callback for a busy extension or trunk.	35	
	870	Cancel a Callback request.	-	
	899	Test Callback operation for an SLT.	-	
Central Office Calls, Answering / Hold	#0	Use Universal Answer to pick up a call ringing over the paging system.	-	
	772 + Line number (001~126)	Answer a call on a specific trunk.	-	
	779 + 1 (set) or 0 (cancel)	Change the ability for a second call with DID/DISA/DIL.	-	
Central Office Calls, Placing	#9 + 001~126	Place a call over a specific trunk.	*01 + trunk (001~126)	
	745 + trunk # + 1 (block) 745 + trunk # + 0 (enable)	Block/busy out outbound usage on a trunk with Trunk Port Disable.	-	
	804 + trunk group (1~25)	Place an outside call over a trunk group.	*02 + group	
Class of Service	777	Change the COS of another exten-sion. Must be allowed in Program 20-13-28.	-	

For this feature...	Dial this Service Code...[1]	When you ...	Also see Function Key...	Note
[1] Except where indicated, dial Service Code from intercom dial tone (e.g., press idle Speaker first).				
Conference	Hookflash + 826 + extension + hook-flash twice	Activate Conference from a Single Line Telephone.	1016	
Data Communica-tions	883	Enable the data connection auto-answer mode.	-	
	784	Disconnect an active data call.	-	
Department Calling	750 + 0 (install) or 1 (remove)	Log in (0) or log out (1) for your Department Calling Group.	46	
Department Step Calling	#	Step Call through a Department Group.	36	
Dial Pad Confirma-tion Tone	824	Enable/disable Dial PadConfirma-tion Tone.	-	
Directed Call Pickup	** + ext.	Pick up a call ringing or waiting at an extension.	-	
Do Not Disturb	847 + 0 (Cancel) 1 (Trk calls) 2 (Paging, ICM, Call Forwards, and Transfers) 3 (All calls) 4 (Call Forwards)	Activate Do Not Disturb.	-	
Door Box	802 + Door Box (1~8)	Place a call to a door Box.	-	
	822	Forward a Door Box off-premise.	-	
E911	886	Turn off the E911 alarm.	-	
Flash	#3	Flash a trunk from an SLT.	-	
Forced Trunk Disconnect	724 (after #9 + 001~126 + busy)	Disconnect a call in progress on a trunk.	-	
Group Call Pickup	*#	Pick up a call ringing an extension in your own pickup group (except Ring Group calls).	24	
	868 + pickup group (1~8 or 1~9 or 01~64)	Answer a call ringing a telephone in another pickup group.	26 + group	
	869	Answer a call ringing a telephone in another pickup group if you do not know the group number (except Ring Group calls).	25	
Handsfree Answerback/Forced Intercom Ringing	1 (Off-Hook)	Change the signaling mode of youroutgoing Intercom call.	-	
	821	Enable Handsfree Answerback for incoming Intercom calls.	-	
	823	Enable Forced Ringing for incoming Intercom calls.	-	
Hold	832	Placing a call on Group Hold.	-	
	849	Place a call on Exclusive Hold at an SLT.	-	
	859	Retrieve a call from Exclusive Hold at a Single Line Telephone.	-	
	862	Pick up a call from Group Hold.	-	
Hotel/Motel (Do Not Disturb)	727	Enable DND at a room telephone.	-	
Hotel/Motel (Do Not Disturb)	728	Cancel DND at a room telephone.	-	

For this feature...	Dial this Service Code...[1]	When you ...	Also see Function Key...	Note
[1] Except where indicated, dial Service Code from intercom dial tone (e.g., press idle Speaker first).				
Hotel/Motel (Do Not Disturb)	729	Enable DND for another roomtelephone.	-	
Hotel/Motel (Do Not disturb)	730	Cancel DND at another roomtelephone.	-	
Hotel/Motel	770	Monitor a room telephone.	-	
Hotel/Motel (Wake Up Call)	731	Set a Wake Up Call for your room telephone.	-	
Hotel/Motel (Wake Up Call)	732	Cancel a Wake Up Call for your room telephone.	-	
Hotel/Motel (Wake Up Call)	733	Set a Wake Up Call for another guest room telephone.	-	
Hotel/Motel (Wake Up Call)	734	Cancel a wake Up Call for another guest room telephone.	-	
Hotel/Motel (Room to Room Call Restriction)	735	Enable Room to Room Call Restriction for a guest room telephone.	-	
Hotel/Motel (Room to Room Call Restriction)	736	Disable Room to Room Call Restriction for a guest room	-	
Hotel/Motel (Toll restriction [When Checked In])	737	Change a room telephone TollRestriction (When Checked In) level.	-	
Hotel/Motel (Room Status)	738	Set a room as checked in.	-	
Hotel/Motel (Room Status)	739	Set room as checked out.	-	
Hotel/Motel (Room Status)	741	Set a room as available (clean) from another telephone.	-	
Hotel/Motel (Room Status Printouts)	742	Request a Room Status Printout.	-	
Last Number Redial	#5	Use Last Number Redial.	-	
	876	Clear number saved by Last Number Redial.	-	
Maintenance	No setting	Back up system data.	-	
	778 + 01~16	Display the language the telephone is using.	-	
Meet Me Conference Meet Me Paging	863	Join a Meet Me Conference or Meet Me Page on an Internal Paging Zone (if your extension is in the group called).	23 (Meet Me Paging) or 32 (Meet Me Conference)	
	864 + zone paged (0~9 or 00~32)	Join a Meet Me Conference or Meet Me Page if your extension is not in the group paged.	-	
	865 + zone (1~3)	Join a Meet Me conference or Meet Me Page on an External Paging Zone.	-	

For this feature...	Dial this Service Code...[1]	When you ...	Also see Function Key...	Note
[1] Except where indicated, dial Service Code from intercom dial tone (e.g., press idle Speaker first).				
Message Waiting	0 (Off-Hook)	Leave a Message Waiting at a co-worker's busy or unanswered extension.	38	
	*#	Answer a Message Waiting request.	38	
	871 + ext	Cancel Messages Waiting you have left at a specific extension.	-	
	873	Cancel all Messages Waiting you have left at other extensions.	-	
Music on Hold	881 + 00 (no tone), 01 (general) or 02 (holiday)	Change the Music on Hold Tone.	-	
Name Storing	800 + enter name + Hold	Program extension names.	55	
Night Service	718	Use Night Mode Switching for other group.	-	
	818 + 1 818 + 2 818 + 3 818 + 4 818 + 5 818 + 6 818 + 7 818 + 8	Activate Day 1 Mode. Activate Night 1 Mode. Activate Midnight 1 Mode. Activate Rest 1 Mode. Activate Day 2 Mode. Activate Night 2 Mode. Activate Midnight 2 Mode. Activate Rest 2 Mode.	09 + 1 09 + 2 09 + 3 09 + 4 09 + 5 09 + 6 09 + 7 09 + 8	
Off-Hook Signaling	* (Off-Hook) or 809	Send off-hook signal tones to a busy extension.	33	
Paging, Combined	*1 + Zone (1~8) *1 + Zone (0)	Make a combined zone page. Make a combined All Call page.	19 + zone 20	
Paging, External	803 + zone (1 ~ 3) 803 + zone (0)	Make an external zone page. Make an external All Call page.	19 + zone 20	
Paging, Internal	801 + zone (1~8, 1~9 or 01~32) 801 + zone (0 or 00)	Make an Internal Zone Page. Make an internal All Call Page.	21 + zone or 22	
Park	#6 + orbit (01~64)	Park a call in a system Park orbit (01~64).	*04 + orbit	
	*6 + orbit (01~64)	Pick up a call parked in a system Park orbit (01~64).	*04 + orbit	
	773	Park a call or pick up a parked call at an extension.	-	
Programmable Function Keys	851 + key + code	Change the function of a programmable key using 851 service code.	-	
	852 + key + code	Change the function of a programmable key using 852 service codes.	-	
Save Number Dialed	815	Save a number (from SLT) or dial a saved number.	30	
	885	Clear the number saved by Save-Number Redial number.	-	
Selectable Ring Tones	811 + 1 (ICM) or 2 (Trk) + tone (1~8)	Listen to the incoming ring choices.	-	
	820 + 1 (ICM) + 2 (Trk) + tone (1~8)	Change your extension incoming ring tones.	-	
System Programming Password Protection	# * # *	Enter system programming mode.	-	

For this feature...	Dial this Service Code...[1]	When you ...	Also see Function Key...	Note
[1] Except where indicated, dial Service Code from intercom dial tone (e.g., press idle Speaker first).				
Station Message Detail Recording	721	Print the SMDR Extension Accumulated printout.	-	
	722	Print the SMDR Group Accumulated printout.	-	
	723	Print the SMDR Account Code Accumulated printout.	-	
Tandem Trunking (Unsupervised Conference)	#8	Set up an Unsupervised Conference.	-	
Time and Date Clock/ Calendar Display	828 + hour + minutes	Set the system Time.	-	
Toll Restriction, Dial Block	700 + code + 0	Use Dial Block.	-	
	701 + code + 0	As a supervisor use Dial Block.	-	
Toll Restriction Override	875 + pswd (0000) + place outside call	Temporarily override an extension Toll Restriction.	-	
	763 + digit code + line + telephone number	Override Toll Restriction.	-	
Transfer	833	Set the Automatic Transfer for each trunk line.	-	
	834	Cancel the Automatic Transfer for each trunk line.	-	
	835	Set the Destination for Automatic Trunk Transfer.	-	
	702 + Group number (1~8 or 01~32)	Set Automatic Transfer Setup for each extension group.	-	
	703 + Group number (1~8 or 01~32)	Cancel Automatic Transfer Setup	-	
	704 + Group number (1~8 or 01~32) + mode + extension	Set the destination for Automatic Transfer Setup for each extension group.	-	
	705 + Group number (1~8 or 01~32)	Set Delayed Transfer for each extension group.	-	
	706 + Group number (1~8 or 01~32)	Cancel Delayed Transfer.	-	
	707 + Group number (1~8 or 01~32)	Set up DND for each extension group.	-	
	708 + Group number (1~8 or 01~32)	Cancel DND for each extension group.	-	
	884 + Extension number	Transfer a call into an existing call.	-	
	882	Transfer a call to the VRS. This can be used also to route ANI/DNIS to the VRS.	-	
Trunk Group Routing or Automatic Route Selection	9	Place a call using Trunk Group Routing or Automatic Route Selection.	*02	
Trunk Queuing	*8	Call your mailbox.	-	
	754	Enable Conversation Record at an SLT.	-	
	# (Off-Hook)	Camp on to or leave a Callback at a busy trunk.	35	

For this feature...	Dial this Service Code...[1]	When you ...	Also see Function Key...	Note
[1] Except where indicated, dial Service Code from intercom dial tone (e.g., press idle Speaker first).				
Voice Mail	5 (Off-Hook)	Leave a message in a co-worker's mailbox after callback their busy or unanswered extension.	-	
	*8	Call your mailbox.	-	
	754	Enable Conversation Record at an SLT.	-	
Voice Response System (VRS)	** + ringing ext.	Pick up a call ringing another extension for Directed Call Pickup or VRS Park and Page.	-	
	716 + 7 + Record message + # + Condition (2, 4,6 or 7) + Destination + Type (2 or 3) or 716 + 7 + 3 to cancel	Record, listen to or erase a Personal Greeting or Park and Page.	-	
	4 (On-Hook)	Listen to the General Message.	-	
	6 (On-Hook)	Check an extension number.	-	
	8 (On-Hook)	Listen for the time.	-	
	711	Use SLT to listen to the General Message.	-	
	712 + 3 to erase, 5 to listen or 7 to record	Record, listen to or erase the General Message.	-	
	716 + 3 to erase, 5 to listen or 7 to record	Record, listen to or erase a VRS Message.	-	
	850	Camp On to an extension when calling into the system through the VRS.	-	
	882	Transfer a call to the VRS. This can be used also to route ANI/DNIS to the VRS.	-	
Volume Control	829	Check or change ring volume.	-	
Common Canceling Service Code	*9	Use Common Canceling Service Code.	-	

Function Key Codes by Feature

Table 2-4 Function Key Codes by Feature

To program a key, press Speaker, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).					
For this feature...	**Use this key...**	**When you ...**	**Key Lamp Status**	**Also See Srvc Code**	**Note**
Speed Dialing	**Code:** 27 **Operation:** Press key + bin + Line or Speaker key	Dial a stored System Speed Dialing number.	None	#2 + bin	
	Code: 28 **Operation:** Press key + bin + Line or Speaker key	Dial a stored Group Speed Dialing number.	None	#4 + bin	
Account Codes	**Code:** 50 **Operation:** Press key + Dial Account Code	Enter Account Codes.	None	* + Enter Account Code + *	
Background Music	**Code:** 04 **Operation:** Press key	Turn Background Music on or off.	None	825	

To program a key, press Speaker, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).					
For this feature...	**Use this key...**	**When you ...**	**Key Lamp Status**	**Also See Srvc Code**	**Note**
Barge-In	**Code:** 34 **Operation:** Call ext + Press key	Barge-In on a co-worker's conversation.	None	810	
Call Arrival (CAR) Key	**Code:** *03 + ext. **Operation:** Press key	Place or answer a call to your co-worker's extension.	Slow Flash red when ringing, On red when busy	-	
Call Forwarding, Both Ring	**Code:** 14 **Operation:** Press key + Dest. Extension	Call Forward Both Ring to extension.	Slowly flashes red	842	
Call Forwarding, Busy	**Code:** 11 **Operation:** Press key + Dest. Extension	Call Forward Busy to extension or Voice Mail.	Slowly flashes red	#1	
Call Forwarding, Busy/No Answer	**Code:** 13 **Operation:** Press key + Dest. Extension	Call Forward Busy/No Answer to extension or Voice Mail.	Slowly flashes red	844	
Call Forwarding, External by Door Box	**Code:** 54 **Operation:** Press key + Dest. Number	Externally Call Forward Door Box calls.	Slowly flashes red	822	
Call Forwarding, Follow Me	**Code:** 15 **Operation:** Press key + Dest. Extension	Call Forward Follow Me to extension or Voice Mail.	Slowly flashes red	846	
Call Forwarding, Immediate	**Code:** 10 **Operation:** Press key + Dest. Extension	Call Forward Immediate to extension or Voice Mail.	Slowly flashes red	848	
Call Forwarding, No Answer	**Code:** 12 **Operation:** Press key + Dest. Extension	Call Forward No Answer to extension or Voice Mail.	Slowly flashes red	845	
Call Forwarding / Do Not Disturb Override	**Code:** 37 **Operation:** Call extension + Press key	Override an extension Call Forwarding or Do Not Disturb.	None	-	
Callback / Camp-On/ Trunk Queuing	**Code:** 35 **Operation:** Call busy extension or access busy trunk + Press key	Leave a Call back request at a busy extension, Camp On to a busy extension, or Queue for a busy trunk.	On red when activated	#	
Call Redirect	**Code:** 49 + extension or voice mail **Operation:** Press key	Redirect a ringing call to the predefined destination.	On red when activated	-	
Central Office Calls	**Code:** *01 + Trunk number (001~126) **Operation:** Press key	Press a line key to place or answer a trunk call (where trunks are 001~126).	On green when seized, on red when in use (by other party), Slow Flash green when ringing, Hold flash when on Hold	#9	
Conference	**Code:** 07 **Operation:** Set up call + Press key + set up call to add + Press key twice	Set up a Conference or a Meet Me Conference.	On red during setup	826	
Department Calling	**Code:** 46 **Operation:** Press Key	Log in or log out of your Department Calling Group.	On when removed, Off when installed	750	
Department Step Calling	**Code:** 36 **Operation:** Dial busy ext + Press key	Step Call through a Department Group for an idle member.	None	4	

To program a key, press Speaker, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).					
For this feature...	**Use this key...**	**When you ...**	**Key Lamp Status**	**Also See Srvc Code**	**Note**
Direct Station Selection / One-Touch Calling	**Code:** 01 **Operation:** Press key + dest. ext. or outside tel. # + Hold	Call an extension or outside number using a DSS key.	Off = extension idle On = extension busy Flashing = DND	-	
Do Not Disturb	**Code:** 03 **Operation:** Press key + code (0~4)	Set your telephone in DND.	DND key on red	847	
Do Not Disturb/ Call Forward Override	**Code:** 37 **Operation:** Press key	Call an extension which is in DND or Call Forwarded.	None	-	
Group Call Pickup	**Code:** 24 **Operation:** Speaker key + Press key	Answer a call ringing another telephone in your Pickup Group.	None	*#	
	Code: 25 **Operation:** Speaker key +Press key	Answer a call ringing a telephone in another Pickup Group - if you do not know the group number.	None	869	
	Code: 26 + Pickup Group (1~8 or 1~9 or 01~64) **Operation:** Speaker key + Press key + Pickup Group	Answer a call ringing a telephone in a specific Pickup Group.	None	868	
Hotline	**Code:** 01 + dest. ext **Operation:** Press key	Place a call to your Hotline partner.	Full BLF (red) for covered ext.	-	
Headset Operation	**Code:** 05 **Operation:** Press key	Enable or disable Headset Operation.	On red when activated	788	
Hold	**Code:** 44 **Operation:** Place or answer call + Press key	Put a call on System Hold (if your telephone Hold key is reassigned).	None	-	
	Code: 45 **Operation:** Place or answer call + Press key	Put a call on Exclusive Hold.	None	-	
Meet Me Conference (Also seeConference)	**Code:** 32 **Operation:** Press key	Join a Meet Me Conference.	None	863 or 864	
Memo Dial	**Code:** 31 **Operation:** Store: While on call, press key + number to store Use: Press Key + Call or line Erase: Speaker key + Press key	Store, use or check a Memo dial number.	None	-	
Message Waiting	**Code:** 38 **Operation:** Leave message: Call ext + Press key OR Answer message: Press key	Answer/Leave a Message Waiting.	None	*0	
Microphone Cutoff	**Code:** 02 **Operation:** Set up call + Press key	Use Microphone Cutoff.	On red when activated	-	
Call Arrival (CAR) Keys	**Code:** *03 + ext. or dept group **Operation:** Press key	Place or answer a call to your virtual (phantom)extension.	Slow Flash red when ringing, On red when busy	-	

To program a key, press Speaker, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).					
For this feature...	**Use this key...**	**When you ...**	**Key Lamp Status**	**Also See Srvc Code**	**Note**
Name Storing	**Code:** 55 **Operation:** Press key + ext ## + name + Hold	Enter a name for the extension to be displayed on telephones.	None	800	
Night Service	**Code:** 09 + mode (1~4 or 1~8) **Operation:** Press key	Activate the Day/Night Mode.	On red when activated	818 + 0	
Off-Hook Signaling	**Code:** 33 **Operation:** Call ext. and receive busy + Press key	Signal a busy extension.	None	*	
Paging, External	**Code:** 19 + zone (1~3) **Operation:** Press Key	Make an external zone page.	On red when activated	803 + zone	
	Code: 20 **Operation:** Press key	Make an external All Call page.	On red when activated	803 + 0	
Paging, Internal	**Code:** 21 + zone(1~8, 1~9 or 01~32) **Operation:** Press key	Broadcast to an Internal Paging Zone.	On red when activated	801 + zone	
	Code: 22 **Operation:** Press key	Broadcast to all Internal Paging zones.	On red when activated	801 + 0 or 00	
Park	**Code:** *04 + orbit (1~9 or 01~64) **Operation:** Place or answer call + Press key	Place a call into or retrieve a call from a Park Orbit.	Fast flash when orbit is busy (green at originator, red at others)	<Park> #6 <Pickup> *6	
Repeat Redial	**Code:** 29 **Operation:** Place call and press key	Activate Repeat Redial while on a call.	Fast Flash while system waits to redial	-	
Room Monitor	**Code:** 39 **Operation:** Press key at destination & source + ext	Activate Room Monitor.	Dest. Fast Flash red, Source Hold Flash red	-	
Save Number Dialed	**Code:** 30 Operation: + pswd (0000) + place outside call Save: Place call + Press key Redial: Line or Speaker key + Press key	Save, redial or check saved number.	None	-	
Secretary Call (Buzzer)	**Code:** 41 + sec. ext **Operation:** Press key	Call your secretary (using the buzzer).	On red at source Fast Flash red at destination	-	
Secretary Call Pickup	**Code:** 42 + boss ext **Operation:** Press key	As a secretary pick up a call ringing your boss's extension.	On red when activated	-	
Selectable Display Messaging	**Code:** 18 **Operation:** Press key + additional data if needed	Set up Call Forwarding Off-Premise, Selectable Display Messaging, VRS Park and Page and VRS Personal Greeting.	Flashes red when activated	-	
Serial Call	**Code:** 43 **Operation:** Trk call + Hold + ext + Press key	Place a Serial Call to a co-worker.	None	-	
Step Call	**Code:** 36 **Operation:** Press key	Step through a department group.	None	4	
Transfer	**Code:** 06 **Operation:** Establish call + Hold + Ext + Press key	Transfer a call.	None	-	

To program a key, press Speaker, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).					
For this feature...	**Use this key...**	**When you ...**	**Key Lamp Status**	**Also See Srvc Code**	**Note**
Trunk Group Routing	**Code:** ✱05 **Operation:** Press key	Access a trunk using Trunk Group Routing.	On red when active	9	
Trunk Groups	**Code:** ✱02 + TRK group (1~9 or 001~126) **Operation:** Press key	Use a trunk group key to access a Trunk Group.	On red when active	804	
Trunk Queuing	**Code:** 35 **Operation:** Hear busy tone for Trk + Press key	Camp On or Queue for a trunk.	On red while camped on	-	
Voice Mail	**Code:** 83 + code (0~4) **Operation:** Press key	Use Voice Mail Service.	Flashes slowly when monitoring	-	
	Code: 77 + extension or Message Center number Operation: Press key + pswd (0000) + place outside call	Call Voice Mail or leave a message.	Flashes green on your key for your messages or flashes red for the Message Center	✱8 5	
	Code: 78 + 0 **Operation:** Set up call + Press key	Use Voice Mail Record.	Slow Flash red when active	-	

Function Key Codes by Number

Table 2-5 Function Key Codes by Number

To program a key, press Speaker, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).					
Use this key...	**For this feature...**	**When you ...**	**Key Lamp Status**	**Also see Srvc Code**	**Note**
Code: 01 + dest. ext. or outside tel # + Hold **Operation:** Press key	Direct Station Selection,Hotline, One-Touch Calling	Call an extension or outside number using a DSS key.	Off = extension idle On = extension busy Flashing = DND	847	
Code: 02 **Operation:** Set up call + Press key	Microphone Cutoff	Use Microphone Cutoff.	On red when activated	-	
Code: 03 **Operation:** Press key	Do Not Disturb	Activate DND.	On red when activated	-	
Code: 04 **Operation:** Press key	Background Music	Turn BGM on or off.	On red when activated	825	
Code: 05 **Operation:** Press key	Headset Operation	Enable or disable Headset Operation.	On red when activated	-	
Code: 06 **Operation:** Establish call + Hold + Ext + Press key	Transfer	Transfer a call.	None	-	
Code: 07 **Operation:** Set up call + Press key + set up call to add + Press key twice	Conference	Set up a conference or a Meet Me Conference.	On red during setup	826	
Code: 08 **Operation:** Press key	Incoming Caller ID List	List incoming caller ID to extension.	Flashing when new log created On in call log	-	

To program a key, press Speaker, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).					
Use this key...	**For this feature...**	**When you ...**	**Key Lamp Status**	**Also see Srvc Code**	**Note**
Code: 09 + mode (1~4 or 1~8) **Operation:** Press key	Night Service	Activate the Day/Night Mode.	On red when activated	818 + mode (1~4 or 1~8)	
Code: 10 **Operation:** Press key + Dest. Ext.	Call Forwarding, Immediate	Call Forward to extension or Voice Mail.	Slowly flashes red	848	
Code: 11 **Operation:** Press key + Dest. Ext.	Call Forwarding, Busy	Call Forward to extension or Voice Mail.	Slowly flashes red	#1	
Code: 12 **Operation:** Press key + Dest. Ext.	Call Forwarding, No Answer	Call Forward to extension or Voice Mail.	Slowly flashes red	845	
Code: 13 **Operation:** Press key + Dest. Ext.	Call Forwarding, Busy/No Answer	Call Forward to extension or Voice Mail.	Slowly flashes red	844	
Code: 14 **Operation:** Press key + Dest. Ext.	Call Forwarding, Both Ring	Call Forward to extension.	Slowly flashes red	842	
Code: 15 **Operation:** Press key + Dest. Ext.	Call Forwarding, Follow Me	Call Forward to extension or Voice Mail.	Slowly flashes red	846	
Code: 19 + zone (1~3) **Operation:** Press key	Paging, External	Broadcast to an External Paging Zone.	On red when activated	803 + zone	
Code: 20 **Operation:** Press key	Paging, External	Broadcast to all External Paging Zones.	On red when activated	803 + 0	
Code: 21 + zone (1~8, 1~9 or 01~32) **Operation:** Press Key	Paging, Internal	Broadcast to an Internal Paging Zone.	On red when activated	801 + zone	
Code: 22 **Operation:** Press key	Paging, Internal	Broadcast to all Internal Paging Zone.	On red when activated	801 + 0 or 00	
Code: 23 **Operation:** Press key	Meet Me Paging	Join a Meet Me Page.	None	863, 864, or 865	
Code: 24 **Operation:** Speaker key + Press Key	Group Call Pickup	Answer a call ringing another telephone in your Pickup Group.	None	*#	
Code: 25 **Operation:** Speaker key + Press key	Group Call Pickup	Answer a call ringing a telephone in another Pickup Group - if you do not know the group number.	None	869	
Code: 26 + Pickup Group (1~32) **Operation:** Speaker key + Press key + Pickup Group	Group Call Pickup	Answer a call ringing a telephone in a specific Pickup Group.	None	868	

To program a key, press Speaker, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).					
Use this key...	**For this feature...**	**When you ...**	**Key Lamp Status**	**Also see Srvc Code**	**Note**
Code: 27 **Operation:** Press key + bin + Line or Speaker key	Speed Dialing	Dial a stored System Speed Dialing number.	None	#2 + bin	
Code: 28 **Operation:** Press key + bin + Line or Speaker key		Dial a stored Group Speed Dialing number.	None	#4 + bin	
Code: 29 Operation:Place call + Press key	Repeat Redial	Activate repeat redial while on a call.	Fast Flash while system waits to redial	-	
Code: 30 **Operation:** Save: Place call + Press key Redial: Line or Speaker key + Press key	Save Number Dialed	Save, redial or check a saved number.	None	815	
Code: 31 **Operation:** Store: While on call, Press key + number to store Use: Press key + Speaker key or line Erase: Speaker key + Press key	Memo Dial	Store, use or check a Memo Dial number.	None	-	
Code: 33 **Operation:** Call ext. and receive busy + Press key	Off-Hook Signaling	Signal a busy extension.	None	809	
Code: 34 **Operation:** Call ext + Press key	Barge-In	Barge-In on a co-worker's conversation.	None	810	
Code: 35 **Operation:** Call busy extension or access busy trunk + Press key	Callback / Camp-On / Trunk Queuing	Leave a Callback request at a busy extension, Camping On to a busy extension, or Queue for a busy trunk.	On red when activated	850	
Code: 36 **Operation:** Dial busy ext + Press key + pswd (0000) + place outside call	Department Step Calling	Step Call through a Department Group for an idle member.	None	808	
Code: 37 **Operation:** Call extension + Press key	Call Forwarding / Do Not Disturb Override	Override an extension Call Forwarding or Do Not Disturb.	On red when activated	807	
Code: 38 **Operation:** Leave message: Call ext + Press key OR Answer message: Press key	Message Waiting	Answer/Leave a Message Waiting.	None	*0 or 0	
Code: 39 **Operation:** Press key at destination and source + ext	Room Monitor	Activate Room Monitor.	Fast Flash red at destination, Hold Flash red at source	-	

To program a key, press Speaker, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).					
Use this key...	**For this feature...**	**When you ...**	**Key Lamp Status**	**Also see Srvc Code**	**Note**
Code: 41 + sec. ext. **Operation:** Press key	Secretary Call	Call your secretary (using the buzzer).	On red at source Fast Flash red at destination	-	
Code: 42 + boss ext. **Operation:** Press key		As a secretary pick up a call ringing your boss's extension.	On red when activated	-	
Code: 43 **Operation:** TRK call + Hold + ext + Press key	Serial Call	Place a Serial Call to a co-worker.	None	-	
Code: 44 **Operation:** Place or answer call + Press key	Hold	Put a call on System Hold (if hold key is reassigned).	None	-	
Code: 45 **Operation:** Place or answer call + Press key		Put a call on Exclusive Hold.	None	-	
Code: 46 **Operation:** Press key	Department Calling	Log in or log out of your Department Calling Group.	On when removed, Off when installed	750	
Code: 49 + ext or voice mail number **Operation:** Press key	Call Redirect	Redirect an incoming call to an extension or voice mail.	On red when activated Flashes when in DND/Call Forward	-	
Code: 50 **Operation:** Press key	Account Codes	Enter Account Codes.	None	* or ##	
Code: 55 **Operation:** Do not Lift the handset + Press key + Enter extension number + Enter name + Press Hold	Name Storing	Change the name displayed on your display telephone.	None	800	
Code: 83 + 0~4 **Operation:** Press key	Voice Mail	Use Voice Mail Service.	Flashes slowly when monitoring	-	
Code: 77 + extension or Message Center number **Operation:** Press key		Call Voice Mail or leave a message.	Flashes green on your key for your messages or flashes red for the Message Center	*8 or 8	
Code: 78 + Conversation Record **Operation:** Press key		Use Conversation Record.	Flashes red when recording	-	
Code: 79 + ext or pilot number **Operation:** Press key	Voice Mail	Use Automated Attendant.	On when setup for All calls. Slow flash when setup for Busy/No answer calls.	-	
Code: 80 + ext number **Operation:** Press key	Tandem Ringing	Set up Tandem Ringing	On for Master Side. Slow flash for Slave Side.	744	

To program a key, press Speaker, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).					
Use this key...	**For this feature...**	**When you ...**	**Key Lamp Status**	**Also see Srvc Code**	**Note**
Code: 81 + trunk line 001 ~ 126 **Operation:** Press key	Automatic Transfer to Transfer	Set up Automatic Transfer to Transfer	Slow Flash when set.	733	
Code: 83 + Fuction code **Operation:** Press key	Voice Mail	Select Conversation Recording Function.	On when set.	-	
Code: 85 + Directory Dialing key **Operation:** Press key	Directory Dialing	Use Directory Dialing	On when set.	887	
Code: 86 + PrivateCall Refuse key **Operation:** Press key	Private Call Refuse	Use Private Call Refuse	Slow Flash when set.	746	
Code: 87 + Caller IDRefuse key **Operation:** Press key	Caller ID Refuse	Use Caller ID Refuse	Slow Flash when set.	748	
Code: 88 + table No. 1 ~ 100 at PRG22-17 **Operation:** Press key	Dial-In	Change Dial-In Mode	Off:pattern1, pattern5~8 On:pattern2 Slow flash:pattern3 Fast flash:pattern4	709	
Code: 94 + Call Attendant key **Operation:** Press key	Call Attendant	Use Call Attendant	Fast flash when setup for No answer calls. Twice blink when setup for Busy calls. On when setup for Busy/No answer calls.	Busy:796 No Answer:797	
Code: 97 + Doorphone 1 ~ 8 **Operation:** Press key	Doorphone	Use Doorphone access	On when Doorphone Busy. Fast flash when Doorphone Incoming.	802	
Code: #02 + package 1 ~ 16 to cut the telephone power. **Operation:** Press key	Ecology	Set telephone power cut.	On when set.	831	
Code: #03 + Remote Monitor Permit key **Operation:** Press key	Security	Set Remote Monitor.	Slow flash when set Remote Monitor	710	
Code: ✱01 + Trunknumber (001~126) **Operation:** Press key	Central Office Calls	Press a line key to place or answer a trunk call (where trunks are 001~126).	On green when seized, on red when in use (by other party), Slow Flash green when ringing, Hold flash when on Hold	#9	
Code: ✱02 + TRK group (1~9 or 001~126) **Operation:** Press key	Trunk Groups	Use a trunk group key to access a Trunk Group.	On red when active	804	

To program a key, press Speaker, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).					
Use this key...	**For this feature...**	**When you ...**	**Key Lamp Status**	**Also see Srvc Code**	**Note**
Code: *03 + ext. or department group **Operation:** Press key	Virtual Extension Keys	Virtual Extension Key: Place or answer a call from your virtual (phantom) extension or Virtual Extension Key: Place or answer a call to your co-worker's extension.	Slow Flash red when ringing, On red when busy	-	
Code: *04 + orbit (01~64) **Operation:** Place or answer call + Press key	Park	Place a call into or retrieve a call from a Park Orbit.	Fast Flash when orbit is busy (green at originator, red at others)	<Park> #6 <Pickup> *6	

Features Availability by Software Revision

3

Features Availability by Software Revision

SECTION 1 FEATURE AVAILABILITY CHART

This chapter provides an alphabetical listing of the features that are available with each software revision.

The following table provides a breakout of the availability of each feature by revision, refer to Table 3-1 Feature Availability by Software Revision on this page.

S = Supported Feature
N/A = Feature not supported for this software release
E = Supported and Enhanced

Table 3-1 Feature Availability by Software Revision

SL1000 Feature Name	Ver.1.0	Note
Abbreviated Dialing/Speed Dial	S	
Account Code - Forced/Verified/Unverified	S	
Account Code Entry	S	
Alarm	S	
Alarm Reports	S	
Alphanumeric Display	S	
Analog Communications Interface (ACI)	S	
Answer Hold/Automatic Hold	S	
Attendant Call Queuing	S	
Automatic Release	S	
Automatic Route Selection (ARS/F-Route)	S	
Background Music	S	
Barge-In	S	
Battery Backup - System Memory	S	
Battery Backup - System Power	S	
Built-in Auto-Answering	S	
Call Arrival (CAR) Keys	S	
Call Duration Timer	S	
Call Forwarding	S	
Call Forwarding with Follow Me	S	
Call Forwarding, Off-Premise	S	

SL1000 Feature Name	Ver.1.0	Note
Call Forwarding/Do Not Disturb Override	S	
Call Monitoring	S	
Call Redirect	S	
Call Waiting/Camp-On	S	
Callback	S	
Caller ID Call Return	S	
Caller ID	S	
Caller ID - Flexible Ringing	S	
Caller ID - Shared Logging	S	
Central Office Calls, Answering	S	
Central Office Calls, Placing	S	
Class of Service	S	
Clock/Calendar Display/Time and Date	S	
Code Restriction/Toll Restriction	S	
Code Restriction Override/Toll Restriction Override	S	
Code Restriction, Dial Block/Toll Restriction, Dial Block	S	
Conference	S	
Conference, Remote	S	
Conference, Voice Call/Privacy Release	S	
Continued Dialing	S	
Data Line Security	S	
Delayed Ringing	S	
Department Calling	S	
Department Step Calling	S	
Dial Pad Confirmation Tone	S	
Dial Tone Detection	S	
Dialing Number Preview	S	
Digital Trunk Clocking	S	
Direct Inward Dialing (DID)	S	
Direct Inward Line (DIL)	S	
Direct Inward System Access (DISA)	S	
Direct Station Selection (DSS) Console	S	
Directed Call Pickup	S	
Directory Dialing	S	
Distinctive Ringing, Tones and Flash Patterns	S	
Do Not Disturb (DND)	S	
Door Box	S	
Ecology	S	
Flash	S	
Flexible System Numbering	S	
Flexible Timeouts	S	

SL1000 Feature Name	Ver.1.0	Note
Forced Trunk Disconnect	S	
Group Call Pickup	S	
Group Listen	S	
Handset Mute/Handset Cutoff	S	
Handsfree and Monitor	S	
Handsfree Answerback/Forced Intercom Ringing	S	
Headset Operation	S	
Hold	S	
Hotel/Motel	S	
Hot Key-Pad	S	
Hotline	S	
Howler Tone Service	S	
InMail	S	
InMail-Cascade Message Notification	S	
InMail-Email Notification	S	
InMail-Find-Me Follow-Me	S	
InMail - Language Setting	S	
InMail Park and Page	S	
InMail Upload Download Audio	S	
Intercom	S	
ISDN Compatibility	S	
Last Number Redial	S	
LCR - Least Cost Routing	S	
Line Preference	S	
Long Conversation Cutoff	S	
Loop Keys	S	
Maintenance	S	
Meet Me Conference	S	
Meet Me Paging	S	
Meet Me Paging Transfer	S	
Memo Dial	S	
Message Waiting	S	
Microphone Cutoff	S	
Mobile Extension	S	
Mobile Extension - Callback to Mobile Phone	S	
Multiple Trunk Types	S	
Music on Hold	S	
Name Storing	S	
Navigation Key	S	
Night Service	S	
Off-Hook Signaling	S	

SL1000 Feature Name	Ver.1.0	Note
One-Touch Calling	S	
Operator	S	
Paging, External	S	
Paging, External (VRS)	S	
Paging, Internal	S	
Park	S	
PBX Compatibility/Behind PBX	S	
PC Programming	S	
Power Failure Transfer	S	
Prime Line Selection	S	
Private Line	S	
Programmable Function Keys	S	
Programming from a Multiline Terminal	S	
Pulse to Tone Conversion	S	
Redial Function	S	
Remote (System) Upgrade	S	
Repeat Redial	S	
Resident System Program	S	
Ring Groups	S	
Ringdown Extension (Hotline), Internal/External	S	
Room Monitor	S	
Save Number Dialed	S	
Secondary Incoming Extension	S	
Secretary Call (Buzzer)	S	
Secretary Call Pickup	S	
Security	S	
Selectable Display Messaging	S	
Selectable Ring Tones	S	
Serial Call	S	
Single Line Telephones	S	
Station Hunt	S	
Station Message Detail Recording	S	
Station Name Assignment - User Programmable	S	
Station Relocation	S	
Tandem Ringing	S	
Tandem Trunking (Unsupervised Conference)	S	
Tone Override	S	
Traffic Reports	S	
Transfer	S	
Trunk Group Routing	S	
Trunk Groups	S	

SL1000 Feature Name	Ver.1.0	Note
Trunk Queuing/Camp-On	S	
Uniform Call Distribution (UCD)	S	
User Programming Ability	S	
Virtual Extensions	S	
Voice Mail Integration (Analog)	S	
Voice Mail Message Indication on Line Keys	S	
Voice Response System (VRS)	S	
Voice Response System (VRS) Upload Download Audio	S	
Voice Response System (VRS) - Call Forwarding - Park and Page	S	
Volume Controls	S	
Warning Tone for Long Conversation	S	

Memo

Memo

SL1000

Features and Specifications Manual

NEC Corporation

ISSUE 1.0