

**NEC**



# Features and Specifications Manual

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# Disclaimer

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NEC shall not be liable for any direct, indirect, consequential or incidental damages about the use of this equipment, manual or any related materials.

The information in this technical manual is advisory in nature and is subject to change. NEC may make improvements and changes in the products described in this manual without notice.

Changes will be periodically made to the information in the new editions. Efforts have been made to ensure that the contents of this manual are correct. Should you find any error, NEC welcomes your comments to improve our communications. Please contact NEC on 1800 036 136.

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### SECTION 1 ELECTROMAGNETIC INTERFERENCE (EMI)

#### **WARNING**

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This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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### SECTION 2 INCIDENCE OF HARM

If the System is malfunctioning, it may also be causing harm to the telephone network. The Telephone system should be disconnected until the source of the problem can be determined and until repair has been made. If this is not done, the Network Provider may temporarily disconnect the service.

### SECTION 3 HEARING AID COMPATIBILITY

The NEC Multiline Terminals that are provided for this system are hearing aid compatible. The manufacturer of Single Line Telephones for use with the system must provide notice of hearing aid compatibility to comply with ACA Technical Standards.

### SECTION 4 SERVICE REQUIREMENTS

#### **WARNING**

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This equipment must only be installed and maintained by service personnel.

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In the event of equipment malfunction, all repairs must be performed by an authorised dealer of NEC Business Solutions Ltd or by NEC Business Solutions Ltd. It is the responsibility of users requiring service to report the need for service to one of NEC Business Solutions Ltd authorised agents or to NEC Business Solutions Ltd.

### SECTION 5 COMPLIANCE INFORMATION

This equipment has been tested to comply with all relevant ACA Technical Standards.

The Xen Topaz KSU must be permanently connected to protective earth, via the earth terminal inside the KSU.

## SECTION 6 CONNECTION REQUIREMENTS FOR EARTHING THE TOPAZ KSU

Because this Topaz KSU has been ACA approved as an Earthed-SELV Customer Switching System for connection to a telecommunications network, the KSU Earth terminal E (on the 308M System Mainboard) **MUST** be permanently connected to Earth by connecting a minimum of 2.5mm<sup>2</sup> green/yellow conductor cable.

This cable **MUST** be connected between a Multiple Earth Neutral (MEN) Bonding Bar at the nearest convenient mains Switch Board to the KSU. This cable must serve no other purpose than installing the KSU.

**CAUTION:** If this cable is not installed or requires disconnection, then the telecommunication network connection(s), namely CO and/or ISDN, must be disconnected first from the KSU.

Liability for this installation rests solely with the licensed installer/dealer. It is recommended that the installer provide their label and it is to be placed in the Main Switch Board, certifying that the installation complies with the safety earthing installation manual instructions for the Topaz KSU Section 3.1.

(**Technical References:** AS/NZS 60950:2000, ACIF S009:2001. See Protective Earthing Conductor requirements.)

## SECTION 7 VOICE ANNOUNCEMENT/MONITORING

### CAUTION

The use of monitoring, recording or listening devices to eavesdrop, monitor, retrieve or record telephone conversations or other sound activities, whether or not contemporaneous with its 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. *The telecommunications (Interception) Act 1979 (Cth)*, *The telecommunications Act 1997*, *The Privacy Act 1988* and State and Territory Listening Devices Legislation are all relevant. Some federal and state laws require some form of notification to all parties to the telephone conversation, such as using a beep tone or other notification methods, or require the consent of all parties to the telephone conversation, prior to monitoring or recording a telephone conversation. Some of these laws incorporate strict penalties. Section 6 of the Industry Guidelines recommend pre-recorded messages or verbal notification to alert callers that the calls may be monitored:

For example: “Your call may be listened to and recorded for quality and coaching purposes. Please tell the consultant if you don’t want this to happen.”

Section 6 of the Industry Guidelines also make recommendations in relation to notifications in writing.

## SECTION 8 MUSIC ON HOLD

### IMPORTANT NOTE

In accordance with Australian Copyright Law, a license may be required from The Australian Performing Right Association Limited (APRA), or other similar organisation, when radio or TV broadcasts are transmitted through the Music On Hold feature of this telecommunication system. NEC Business Solutions Ltd hereby disclaims any liability arising out of the failure to obtain such a license.

## SECTION 9 BATTERY DISPOSAL AND SAFETY

This system includes the batteries listed below. When disposing of these batteries, KSUs and/or cards, you must comply with applicable Federal and State regulations regarding proper disposal procedures.

### IMPORTANT SAFEGUARDS FOR BATTERY DISPOSAL

The incineration, landfilling or mixing of nickel-cadmium or sealed lead batteries with the municipal solid waste stream is PROHIBITED BY LAW in most areas. Contact your local solid waste management officials for other information regarding the environmentally sound collection, recycling and disposal of the battery.

Nickel-Cadmium or sealed lead batteries must be returned to a Federal or State approved nickel-cadmium or sealed lead battery recycler. This may be where the batteries were originally sold or a local seller of automotive batteries. Contact your local waste management officials for other information regarding the environmentally sound collection, recycling and disposal of the battery contained in this product.

Table 1-1

Unit Name	Type of Battery	Quantity
IP2AT-924M KSU	Lithium	1
DX2E-32i/NXE Battery Box	Lead Acid (User supplied)	2/4

### CAUTION

Danger of explosion if batteries are incorrectly installed. Replace only with the same or equivalent type of battery as indicated throughout this manual.

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### SECTION 1 FEATURES

#### Before Reading This Section

This section provides detailed information on the system's features. If you don't know what the various features are, review the Table of Contents for this section and the manual's Index. After reviewing, turn back to this section for the specifics.

#### Using This Section

The features in this section are in alphabetical order, like a dictionary. This section subdivides each feature definition into headings as follows:

The **Compatibility Chart** at the top of each feature shows you if the feature is available for each system and what system software is required.

**Description** tells what the feature is and describes its benefits. Along with the Description are the Conditions and Default Setting. Conditions provides the feature's operational limits (if any). Default Setting outlines how the feature works with the default programming. When initially installed, the system uses the default setting. For specific default settings on each program, refer to the chart at the end of this book.

**Programming** explains the system programming that lets you customize the feature. Some features require programming; other's don't. If you decide to customize a feature, use Section 2 to enter the change into the system.

**Related Features** presents the feature interaction.

**Operation** consists of instructions on how to use each feature.

#### Read These Notes

##### Simplifying System Phone Operation with One-Touch Keys

A system phone user can access many features through Service Codes (e.g., Service Code 841 answers a Message Waiting indication from a co-worker). To streamline the operation of their phone, a system phone 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 (PGM 15-07 or SC nnn). This means that the key requires function code nnn, and you can program this code through Program 15-07 or by dialling 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 CALL key to answer or place a call. For extensions without Automatic Handsfree, the user must:

- ① Lift the handset or press SPK for Intercom dial tone
- ① Lift the handset or press SPK, then press a line key for trunk dial tone

### SECTION 1 CHARTS AND ILLUSTRATIONS

**Table 3-1 Post Dialling Service Codes**

<b>Dial This...</b>	<b>For this feature...</b>	<b>When you are...</b>
1	Handsfree Answerback / Forced intercom Ringing	Changing the signalling mode of your outgoing Intercom call
2	Step Call	Calling a busy station
*	Intercom Off-Hook Signalling	Calling a busy station
0	Camp On/Callback	Calling a busy station

**Table 2: Service Codes by Number**

Dial this Service Code... <sup>1</sup>	When you are...	For this feature...	Also see Function Key...
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
* + Enter Account Code + *	Entering an Account Code	Account Codes	-
715 + Extension No.	Picking up a call ringing or waiting at another extension	Directed Call Pickup Voice Response System (VRS)	-
867	Picking up a call ringing an extension in your own pickup group (including Ring Group calls)	Group Call Pickup	24
841	Answer a Message Waiting Indication	Message Waiting	38
833	Setting the Automatic Transfer for each trunk line	Transfer	-
834	Cancelling the Automatic Transfer for each trunk line	Transfer	-
835	Setting the Destination for Automatic Trunk Transfer	Transfer	-
751	Making a Combined Page	Paging	-
888 + 0	Cancelling Call Forwarding	Call Forwarding	16
888 + 1 + Type (2-4)	Activating Personal Answering Machine Emulation	Voice Mail (Personal Answering Machine Emulation)	16
888 + 2 + Destination + Type (2-4)	Activating Call Forwarding when Busy/Not Answered	Call Forwarding	16
888 + 3 + Destination + Type (2-4)	Activating Call Forward Follow Me at the destination extension	Call Forwarding with Follow Me	16
888 + 4 + Destination + Type (2-4)	Activating Call Forwarding Immediate	Call Forwarding	16
888 + 6 + Destination + Type (2-4)	Activating Call Forwarding when Unanswered (delayed)	Call Forwarding	16
888 + 7 + Destination + Type (2-4)	Activating Call Forwarding (Both Ringing)	Call Forwarding	16
724 (After #9 805 + 01-51 + busy)	Disconnecting a call in progress on a trunk	Forced Trunk Disconnect	-
713 + 3 + Message (01-20), or *4 713 + 3 + Hang up to cancel	Activating and cancelling Selectable Display Messaging	Selectable Display Messaging	17
713 + 6 + Trunk access code + Outside number, or 713 + 6 + Hold + Hang up to cancel	Forwarding your calls to an off-premise telephone number	Call Forwarding Off-Premise	17

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**Table 2: Service Codes by Number**

<b>Dial this Service Code...<sup>1</sup></b>	<b>When you are...</b>	<b>For this feature...</b>	<b>Also see Function Key...</b>
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
713 + 7 + Record message + # + Condition (2, 4, 6 or 7) + Destination + Type (2 or 3) or *4 713 + 7 + 3 to cancel	Recording, listening to or erasing a Personal Greeting or Park and Page	Voice Response System (VRS) (Personal Greeting)	17
861 + Orbit (01-64)	Picking up a call parked in a system Park orbit (01-64)	Park	*04 + orbit
894	Splitting (switching) between calls on an SLT	Call Waiting / Camp On	-
884	Calling your mailbox	Voice Mail Integration	67
6321	Entering the system programming mode	System Programming Password Protection	-
6322	Backing up system data	Maintenance	-
Hookflash + ## 891 + Enter Account Code + Hookflash	Entering an Account Code at an SLT	Account Codes	-
872	Using Universal Answer Code to pick up a call ringing over the paging system	Central Office Calls, Answering	-
Hookflash + #1 826 + extension + hookflash twice	Activating Conference from a Single Line set	Conference	-
* + bin	Dialling a Common Personal Abbreviated Dialling number	Abbreviated Dialling	27
806	Flashing a trunk from an SLT	Flash	-
814 + bin	Dialling a group Abbreviated Dialling number	Abbreviated Dialling	28
#	Using Last Number Redial	Last Number Redial	-
831 + orbit (01-64)	Parking a call in a system Park orbit (1-8, 01-32 or 01-64)	Park	*04 + orbit (1-64)
753	Setting up an Unsupervised Conference	Tandem Trunking (Unsupervised Conference)	-
805 + 01 -51	Placing a call over a specific trunk	Central Office Calls, Placing	*01 + trunk (001-51)
1 (Off-hook)	Changing the signalling mode of your outgoing Intercom call	Handsfree Answerback/Forced Intercom Ringing	-
4 (On-hook)	Listening to the General Message	Voice Response System (VRS)	-
6 (On-hook)	Checking an extension's number	Voice Response System (VRS)	-
8 (On-hook)	Listening for the time	Voice Response System (VRS)	-

**Table 2: Service Codes by Number**

Dial this Service Code... <sup>1</sup>	When you are...	For this feature...	Also see Function Key...
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
0	Placing a call using ARS or Trunk Group Routing	Automatic Route Selection Trunk Group Routing	*02
700 + code + 0	Using Dial Block	Toll Restriction, Dial Block	-
701 + code + 0	A supervisor using Dial Block	Toll Restriction, Dial Block	-
702 + Group number (01-32)	Setting Automatic Transfer Setup for each extension group	Transfer	-
703 + Group number (01-32)	Cancelling Automatic Transfer Setup	Transfer	-
704 + Group number (01-32) + mode + extension	Setting the destination for Automatic Transfer Setup for each extension group	Transfer	-
705 + Group number (01-32)	Setting Delayed Transfer for each extension group (on no answer)	Transfer	-
706 + Group number (01-32)	Cancelling Delayed Transfer	Transfer	-
707 + Group number (01-32)	Setting up DND for each extension group	Transfer	-
708 + Group number (01-32)	Cancelling DND for each extension group	Transfer	-
711	SLT Listening to the General Message	Voice Response System (VRS)	-
712 + 3 to erase, 5 to listen or 7 to record	Recording, listening to or erasing the General Message	Voice Response System (VRS)	-
716 + 3 to erase, 5 to listen or 7 to record	Recording, listening to or erasing a VRS Message	Voice Response System (VRS)	-
718	Night Mode Switching for other group	Night Answer	-
720	Common Cancelling Service Code		
721	Print the SMDR Extension Accumulated printout	Station Message Detail Recording (SMDR)	-
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)	-
726	Leaving a message at an extension, without first calling that extension	Message Waiting	-

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**Table 2: Service Codes by Number**

<b>Dial this Service Code...<sup>1</sup></b>	<b>When you are...</b>	<b>For this feature...</b>	<b>Also see Function Key...</b>
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
745 + Trunk No. (01~51)	Trunk Port Disable (1) Disable (0) Enable		-
750 + 0 (install) or 1 (remove)	Logging in (0) or logging out (1) for your Department Calling Group	Department Calling	-
754	Enabling Conversation Record at an SLT set	Voice Mail	-
763 + 6-digit code + line + phone number	Overriding Toll Restriction	Toll Restriction	-
777	Changing the COS of another extension. Must be allowed in Program 20-13-28.	Class of Service	-
778	Displaying the language of the system.	Maintenance	-
725	Live MonitoringVoice Mail	Voice Mail	-
771	Charge Cost Display by the supervisor.	Station Message Detail Recording	-
774	Entry Credit for Toll Restriction	Toll Restriction	-
780	Change to Station Group All Ring	Ring Groups	-
800 + extension # + enter name + HOLD	Programming extension names	Name Storing	55
801 + zone (1-9 or 01-32) 801 + zone (0 or 00)	Making an Internal Zone Page Making an All Call Internal Page	Paging, Internal	21 + zone 22
802 + Doorphone (1-6)	Placing a call to a Doorphone	Doorphone	-
803 + zone (1-6) 803 + zone (0)	Making an External Zone page	Making an External Zone page Making an External All Call page	19 + zone 20
804 + trunk group (1-9 or 01-51)	Placing an outside call over a trunk group	Central Office Calls, Placing	*02 + group
807	Overriding Do Not Disturb or Call Forwarding	Call Forwarding Do Not Disturb	37
808	Stepping through a Department Group	Department Step Calling	36
809	Sending a Call Waiting indication to a busy extension	Call Waiting	33

**Table 2: Service Codes by Number**

Dial this Service Code... <sup>1</sup>	When you are...	For this feature...	Also see Function Key...
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
810	Breaking into another extension's call	Barge In	-
812	Changing the signal type for calling an extension	Intercom	-
815	Saving a number (from SLT) or dialling a saved number	Save Number Dialed	30
818 + 1 818 + 2 818 + 3 818 + 4 818 + 5 818 + 6 818 + 7 818 + 8	Activating Day 1 Mode Activating Night 1 Mode Activating Midnight 1 Mode Activating Rest 1 Mode Activating Day 2 Mode Activating Night 2 Mode Activating Midnight 2 Mode Activating Rest 2 Mode	Night Service	09+0 (Toggle Day 1/ Night1) 09 + 1 09 + 2 09 + 3 09 + 4 09 + 5 09 + 6 09 + 7 09 + 8
821	Enabling Handsfree Answerback for incoming Intercom calls	Handsfree Answerback/Forced Intercom Ringing	-
822	Calling off-premise with a Doorphone	Call Forwarding, Off-Premise Doorphone	54
823	Enabling Forced Ringing for incoming Intercom calls	Handsfree Answerback/ Forced Intercom ringing	-
824	Enabling/disabling Dial Pad Confirmation Tone	Dialling Pad Confirmation tone	-
825	Turning Background Music on and off	Background Music	04
827 + 1 or 2 + time, or 827 + 1 or 2 + 9999 to cancel	Checking, setting or cancelling an alarm	Alarm	-
828 + hour + minutes	Setting the system Time	Time and Date	-
829	Checking or changing ring volume	Volume Control	-
830	Remote maintenance	-	-
832	Placing a call on Group Hold	Hold	-
836	Text Message Setting	Select Display Messaging	-

**Table 2: Service Codes by Number**

<b>Dial this Service Code...<sup>1</sup></b>	<b>When you are...</b>	<b>For this feature...</b>	<b>Also see Function Key...</b>
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
840	System alarm message delete	-	-
842	Setting Call Forward (Both Ring)	Call Forwarding	14
843	Setting Call Forward (Busy)	Call Forwarding	11
844	Setting Call Forward (Busy/ No Answer)	Call Forwarding	13
845	Setting Call Forward (No Answer)	Call Forwarding	12
846	Setting Call Forward (Follow Me)	Call Forwarding	15
848	Setting Call Forward (Immediate)	Call Forwarding	10
847 + 0 (Cancel) 1 (Trunk calls) 2 (Paging, ICM, Call Forward and transfers) 3 (All calls) 4 (Call Forwards)	Activating Do Not Disturb	Do Not Disturb	-
849	Placing a call on Exclusive Hold at a SLT set.	Hold	-
850	Camping On to an extension when calling into the system through the VRS	Voice Response System (VRS)	35
851 + key + code	Changing the function of a programmable key using 851 service codes	Programmable Function Keys	-
852 + key + code	Changing the function of a programmable key using 852 service codes	One-Touch Serial Operation	-
853 + bin + number + HOLD + Name + HOLD to store	Storing Common Abbreviated Dialling numbers	Abbreviated Dialling	-
854 + bin + number + HOLD + Name + HOLD to store	Storing Group Abbreviated Dialling numbers	Abbreviated Dialling	-
855 + One Touch key + code	Programming a One-Touch Key or Personal Speed Dial	One-Touch Dialling	-
856	Answering a call ringing a phone in your pickup group (except Ring Group calls)	Group Call Pickup	-

**Table 2: Service Codes by Number**

Dial this Service Code... <sup>1</sup>	When you are...	For this feature...	Also see Function Key...
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
773	Parking a call or picking up a parked call at an extension	Park	-
859	Retrieving a call from Exclusive Hold at a DSL/SLT set.	Hold	-
862	Picking up a call from Group Hold	Hold	-
863	Joining 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 (0-9 or 00-32)	Joining a Meet Me Conference or Meet Me Page if your extension is not in the group paged	Meet Me Paging	23 or 32
866	Using trunk access via Networking	Networking	-
868 + pickup group (1-9 or 01-32)	Answering a call ringing a phone in another pickup group (except Ring Group calls)	Group Call Pickup	26 + group
869	Answering a call ringing a phone in another pickup group if you don't know the group's number (except Ring Group Calls)	Group Call Pickup	25
870	Cancelling a Callback request	Callback	-
871 + ext	Cancelling Messages Waiting you have left at a specific extension	Message Waiting	-
873	Cancelling all Messages Waiting you have left at other extensions	Message Waiting	-
875 + pswd (0000) + place outside call	Temporarily overriding an extension's Toll Restriction	Toll Restriction Override	-
876	Clearing number saved by Last Number Redial	Last Number Redial	-
881 + 00 (no tone), 01 (general) or 02 (holiday)	Changing the Music on Hold Tone	Music on Hold	-
882	Routing ANI/DNIS to the VRS. It can also be used when transferring to VRS.	Transfer Voice Response Service (VRS)	-

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**Table 2: Service Codes by Number**

<b>Dial this Service Code...<sup>1</sup></b>	<b>When you are...</b>	<b>For this feature...</b>	<b>Also see Function Key...</b>
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
883	Enabling the data communication auto-answer mode	Data Communications	-
884	Accessing the VRS	Voice Response Service (VRS)	-
885	Clearing the number saved by Save Number Redial	Save Number Redial	-
894	Splitting between two calls on an SLT	Call Waiting	-
899	Testing Callback operation for SLT	Callback	-

**Table 3: Service Codes by Feature**

For this feature... <sup>1</sup>	Dial this Service Code... <sup>1</sup>	When you are...	Also see Function Key...
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
Abbreviated Dialling	853 + bin + number + HOLD + Name + HOLD to store	Storing Common/ Personal Abbreviated Dialling numbers	-
	854 + bin + number + HOLD + Name + HOLD to store	Storing Group Abbreviated Dialling	-
	* + bin	Dialling a Common/ Personal Abbreviated Dialling number	27
	814 + bin	Dialling a Group Abbreviated Dialling number	28
Account Codes	* + Enter Account code + *	Entering an Account Code	-
	Hookflash + 891 + Enter account code + Hookflash	Entering an Account Code at an SLT	-
Alarm	827 + 1 or 2 + time, or 827 + 1 or 2 + 9999 to cancel	Checking, setting or cancelling an alarm	-
Automatic Route Selection or Trunk Group Routing	0	Placing a call using Trunk Group	*02
Background Music	825	Turning Background Music on and off	04
Call Forwarding	888 + 0	Cancelling Call Forwarding	16
	842 + 1 + Destination	Activating Call Forwarding (Both Ringing)	14
	843 + 1 + Destination	Activating Call Forwarding when Busy	11
	844 + 1 + Destination	Activating Call Forwarding when Busy/ Not Answered	13
	845 + 1 + Destination	Activating Call Forwarding when Unanswered (delayed)	12
	846 + 1 + Destination	Activating Call Forwarding Follow Me	15
	848 + 1 + Destination	Activating Call Forwarding Immediate	10

**Table 3: Service Codes by Feature**

<b>For this feature...<sup>1</sup></b>	<b>Dial this Service Code...<sup>1</sup></b>	<b>When you are...</b>	<b>Also see Function Key...</b>
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
Call Forwarding Off-Premise	713 + 6 + Trunk access code + Outside number, or 713 + 6 + Hold + Hang up to cancel	Forwarding your calls to an off-premise telephone number	17
Call Forwarding, Off- Premise Doorphone	822	Calling off-premise with a Doorphone	54
Call Forwarding/Do Not Disturb Override	807	Overriding an extension's Call Forward or DND setting.	37
Call Forwarding with Follow Me	888 + 3 + Destination + Type (2-4)	Activating Call Forward Follow Me at the destination extension	16
Call Waiting / Camp On	894	Splitting (switching) between calls on an SLT	-
Callback / Camp On / Trunk Queuing	0	Camping On or leaving a Callback for a busy extension or trunk	35
	870	Cancelling a Callback request	-
	899	Testing Callback operation for SLT	-
Central Office Calls, Answering / Hold	872	Using Universal Answer to pick up a call ringing over the paging system	-
	772 + Line number (01-51)	Answering a call on a specific trunk	-
	799 + 1 (set) or 0 (cancel)	Changing the ability for a second call with DID/ DISA/DIL	-
Central Office Calls, Placing	805 + 01-51	Placing a call over a specific trunk	*01 + trunk (01-51)
	804 + trunk group (1-9 or 01- 51)	Placing an outside call over a trunk group	*02 + group
Class of Service	777	Changing the COS of another extension. Must be allowed in Program 20-13-28.	-
Conference	Hookflash + 826 + extension + hookflash twice	Activating Conference from a Single Line set	1016

**Table 3: Service Codes by Feature**

<b>For this feature...<sup>1</sup></b>	<b>Dial this Service Code...<sup>1</sup></b>	<b>When you are...</b>	<b>Also see Function Key...</b>
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
Department Calling	750 + 0 (install) or 1 (remove)	Logging in (0) or logging out (1) for your Department Calling Group	46
Department Step Calling	#	Step Calling through a Department Group	36
Dial Pad Confirmation Tone	824	Enabling/disabling Dial Pad Confirmation Tone	-
Directed Call Pickup	815 + ext.	Picking up a call ringing or waiting at an extension	-
Do Not Disturb	847 + 0 (Cancel) 1 (Trunk calls) 2 (Paging, ICM, Call Forwards, and Transfers) 3 (All calls) 4 (Call Forwards)	Activating Do Not Disturb	-
Doorphone	802 + Doorphone (1-6)	Placing a call to a Doorphone	-
Flash	806	Flashing a trunk from an SLT	-
Forced Trunk Disconnect	724 (after 805 + 01-51 + busy)	Disconnecting a call in progress on a trunk	-
Group Call Pickup	867	Picking up a call ringing an extension in your own pickup group (except Ring Group calls)	24
	868 + pickup group (1-9 or 01-32)	Answering a call ringing a phone in another pickup group	26 + group
	869	Answering a call ringing a phone in another pickup group if you don't know the group's number (except Ring Group calls)	25

Table 3: Service Codes by Feature

For this feature... <sup>1</sup>	Dial this Service Code... <sup>1</sup>	When you are...	Also see Function Key...
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
Handsfree Answerback/Forced Intercom Ringing	1 (Off-hook)	Changing the signalling mode of your outgoing Intercom call	-
	821	Enabling Handsfree Answerback for incoming Intercom calls	-
	823	Enabling Forced Ringing for incoming Intercom calls	-
Hold	832	Placing a call on Group Hold	-
	849	Placing a call on Exclusive Hold at a SLT set	-
	859	Retrieving a call from Exclusive Hold at a DSL	-
	862	Picking up a call from Group Hold	-
Message Waiting	726	Leaving a message at an extension, without first calling that extension	-
Last Number Redial	#	Using Last Number Redial	-
	876	Clearing number saved by Last Number Redial	-
Maintenance	6322	Backing up system data	-
Meet Me Conference Meet Me Paging	863	Joining 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	Joining a Meet Me Conference or Meet Me Page if your extension is not in the group paged	-
	865 + zone (0-8)	Joining a Meet Me conference or Meet Me Page on an External Paging Zone.	-

**Table 3: Service Codes by Feature**

For this feature... <sup>1</sup>	Dial this Service Code... <sup>1</sup>	When you are...	Also see Function Key...
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
Message Waiting	0 (Off-hook)	Leaving a Message Waiting at a co-worker's busy or unanswered extension	38
	841	Answering a Message Waiting request	38
	871 + ext	Cancelling Messages Waiting you have left at a specific extension	-
	873	Cancelling all Messages Waiting you have left at other extensions	-
Music on Hold	881 + 00 (no tone), 01 (general) or 02 (holiday)	Changing the Music on Hold Tone	-
Name Storing	800 + enter name + HOLD	Programming extension names	55
Night Service	718	Night Mode Switching for other group	
	818 + 0	Activating Day 1 Mode	09 + 0
	818 + 1	Activating Night 1 Mode	09 + 1
	818 + 2	Activating Midnight 1 Mode	09 + 2
	818 + 3	Activating Rest 1 Mode	09 + 3
	818 + 4	Activating Day 2 Mode	09 + 4
	818 + 5	Activating Night 2 Mode	09 + 5
	818 + 6	Activating Midnight 2 Mode	09 + 6
Off Hook Signalling	809	Sending off-hook signal tones to a busy extension	33
		Programming a One- Touch Key or Personal Speed Dial	-
Paging, Combined	751 + Zone (1-6) 751 + Zone (0)	Making a combined zone page.	19 + zone
		Making a combined All Call page.	20

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Table 3: Service Codes by Feature

For this feature... <sup>1</sup>	Dial this Service Code... <sup>1</sup>	When you are...	Also see Function Key...
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
Paging, External	803 + zone (1-6) 803 + zone (0)	Making an external zone page Making an external All Call page	19 + zone 20
Paging, Internal	801 + zone (1-9 or 01-32) 801 + zone (0 or 00)	Making an Internal Zone Page Making an internal All Call Page	21 + zone or 22
Park	831 + orbit (01-64)	Parking a call in a system Park orbit (01-64)	*04 + orbit
	861 + orbit (01-64)	Picking up a call parked in a system Park orbit (01-64)	*04 + orbit
	773	Parking a call or picking up a parked call at an extension	-
Programmable Function Keys	851 + key + code	Changing the function of a programmable key using 851 service codes	-
	852 + key + code	Changing the function of a programmable key using 852 service codes	-
Ring Groups	780	Change to STG All Ring	-
Save Number Dialed	815	Saving a number (from Station Group) or dialling a saved number	30
	885	Clearing the number saved by Save Number Redial number	-
Selectable Display Messaging	713 + 3 + message (01-20), or 713 + 3 + Hang up to cancel	Activating and Cancelling Selectable Display Messaging	17
	836	Text Message Setting	-
System Programming Password Protection	6321	Entering the system programming mode	-

**Table 3: Service Codes by Feature**

For this feature... <sup>1</sup>	Dial this Service Code... <sup>1</sup>	When you are...	Also see Function Key...
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
Station Message Detail Recording	121 721	Print the SMDR Extension Accumulated printout	-
	122 722	Print the SMDR Group Accumulated printout	-
	123 723	Print the SMDR Account Code Accumulated printout	-
Tandem Trunking (Unsupervised Conference)	#8	Setting up an Unsupervised Conference	-
Time and Date	828 + hour + minutes	Setting the system Time	-
Toll Restriction, Dial Block	700 + code + 0	Using Dial Block	-
	701 + code + 0	A supervisor using Dial Block	-
	774	Entry Credit	-
Toll Restriction Override	875 + pswd (0000) + place outside call	Temporarily overriding an extension's Toll Restriction	-
	763 + digit digit code + line + telephone number	Overriding Toll Restriction	-

**Table 3: Service Codes by Feature**

For this feature... <sup>1</sup>	Dial this Service Code... <sup>1</sup>	When you are...	Also see Function Key...
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
Transfer	833	Setting the Automatic Transfer for each trunk line	
	834	Cancelling the Automatic Transfer for each trunk line	
	835	Setting the Destination for Automatic Trunk Transfer	
	702 + Group number (01-32)	Setting Automatic Transfer Setup for each extension group	-
	703 + Group number (01-32)	Cancelling Automatic Transfer Setup	-
	704 + Group number (01-32) + mode + extension	Setting the destination for Automatic Transfer Setup for each extension group	-
	705 + Group number (01-32)	Setting Delayed Transfer for each extension group	-
	706 + Group number (01-32)	Cancelling Delayed Transfer	-
	707 + Group number (01-32)	Setting up DND for each extension group	-
	708 + Group number (01-32)	Cancelling DND for each extension group	-
Trunk Group Routing or Automatic Route Selection	0	Placing a call using Trunk Group Routing or Automatic Route Selection	*02
Trunk Queuing	2 (Off-hook)	Camping on to or leaving a Callback at a busy trunk	35
Voice Mail	8 (Off-hook)	Leaving a message in a co-worker's mailbox after callback their busy or unanswered extension	-
Voice Mail	888 + 1 + Type (2-4)	Activating Personal Answering Machine Emulation	-
	884	Calling your mailbox	67

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**Table 3: Service Codes by Feature**

For this feature... <sup>1</sup>	Dial this Service Code... <sup>1</sup>	When you are...	Also see Function Key...
<sup>1</sup> Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
Voice Response System (VRS)	815 + ringing ext.	Picking up a call ringing another extension for Directed Call Pickup or VRS Park and Page.	-
	713 + 7 + Record message + # + Condition (2, 4,6 or 7) + Destination+ Type (2 or 3). or *4 713 + 7 + 3 to cancel	Recording, listening to or erasing a Personal Greeting or Park and Page	17
	4 (On-hook)	Listening to the General Message	-
	6 (On-hook)	Checking an extension's number	-
	8 (On-hook)	Listening for the time	-
	711	SLT listening to the General Message	-
	712 + 3 to erase, 5 to listen or 7 to record	Recording, listening to or erasing the General Message	-
	716 + 3 to erase, 5 to listen or 7 to record	Recording, listening to or erasing a VRS Message	-
Volume Control	829	Checking or changing ring volume	-
Common Cancel code	120 720	Common Cancelling Service Code	-
Trunk Port Disable	145 745	Trunk Port Disable	-

**Table 4: Function Key Codes by Features**

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.

For this feature...	Use this key...	When your are...	Key Lamp Status
Abbreviated Dialling	<b>Code:</b> 27 <b>Operation:</b> Press key + bin + Line or CALL	Dialling a stored Common Abbreviated Dialling number	None
	<b>Code:</b> 28 <b>Operation:</b> Press key + bin + Line or CALL key	Dialling a stored Group Abbreviated Dialling number	None
Account Codes	<b>Code:</b> 50 <b>Operation:</b> Press key + Dial Account Code	Entering Account Codes	None
Background Music	<b>Code:</b> 04 <b>Operation:</b> Press key	Turning Background Music on or off	None
Barge In	<b>Code:</b> 34 <b>Operation:</b> Call ext + Press key	Barging In on a co-worker's conversation	None
Call Coverage	<b>Code:</b> *03 + ext. <b>Operation:</b> Press key	Placing or answering a call to your co-worker's extension	Slow Flash red when ringing, On red when busy
Call Forwarding, Dual Ring	<b>Code:</b> 14 <b>Operation:</b> Press key + 1/0 + Dest. Extension	Call Forwarding Dual Ring to extension	Slowly flashes red
Call Forwarding, Busy	<b>Code:</b> 11 <b>Operation:</b> Press key + 1/0 + Dest. Extension	Call Forwarding Busy to extension or Voice Mail	Slowly flashes red
Call Forwarding, Busy/No Answer	<b>Code:</b> 13 <b>Operation:</b> Press key + Dest. Extension	Call Forwarding Busy/No Answer to extension or Voice Mail	Slowly flashes red
Call Forwarding, Device	<b>Code:</b> 17 <b>Operation:</b> Press key + type	Call Forwarding Device to a device or Voice Mail	Slowly flashes red
Call Forwarding, External by Doorphone	<b>Code:</b> 54 <b>Operation:</b> Press key + Dest. Number	Externally Call Forwarding Doorphone calls	Slowly flashes red
Call Forwarding, Follow Me	<b>Code:</b> 15 <b>Operation:</b> Press key + 3/0 + Dest. Extension + Type	Call Forwarding Follow Me to extension or Voice Mail	Slowly flashes red
Call Forwarding, Immediate	<b>Code:</b> 10 <b>Operation:</b> Press key + 1/0 + Dest. Extension	Call Forwarding Immediate to extension or Voice Mail	Slowly flashes red

**Table 4: Function Key Codes by Features**

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.

For this feature...	Use this key...	When your are...	Key Lamp Status
Call Forwarding, No Answer	<b>Code:</b> 12 <b>Operation:</b> Press key + 1/0 + Dest. Extension	Call Forwarding No Answer to extension or Voice Mail	Slowly flashes red
Call Forwarding, Off-Premise	<b>Code:</b> 17 <b>Operation:</b> Press key + device type code + requested data (depends on device selected).	Setting up Call Forwarding Off-Premise, Selectable Display Messaging, VRS Park and Page and VRS Personal Greeting	Slowly flashes red
Call Forwarding, Station	<b>Code:</b> 16 <b>Operation:</b> Press key + Condition + Dest. Extension + Type	Call Forwarding Station to extension or Voice Mail	Slowly flashes red
Call Forwarding / Do Not Disturb Override	<b>Code:</b> 37 <b>Operation:</b> Call extension + Press key	Overriding an extension's Call Forwarding or Do Not Disturb	None
Callback / Camp On/ Trunk Queuing	<b>Code:</b> 35 <b>Operation:</b> Call busy extension or access busy trunk + Press key	Leaving a Call back request at a busy extension, Camping On to a busy extension, or Queuing for a busy trunk	On red when activated
Call Redirect	<b>Code:</b> 49 + extension or voice mail <b>Operation:</b> Press key	Redirect a ringing call to the predefined destination	On red when activated
Central Office Calls	<b>Code:</b> *01 + Trunk number (01-51) <b>Operation:</b> Press key	Pressing a line key to place or answer a trunk call (where trunks are 01-51)	On green when seized, on red when in use (by other party), Slow Flash green when ringing, Hold flash when on Hold
Conference	<b>Code:</b> 07 <b>Operation:</b> Set up call + Press key + set up call to add + Press key twice	Setting up a Conference or a Meet Me Conference	On red during setup
Conference, Voice Call	<b>Code:</b> 32 <b>Operation:</b> Set up trunk call + Press key	Setting up a Voice Call Conference	None
Data Communications	<b>Code:</b> 66 <b>Operation:</b> Press key + ext or outside number	Placing a data call	On red when call set up

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**Table 4: Function Key Codes by Features**

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.

For this feature...	Use this key...	When your are...	Key Lamp Status
Department Calling	<b>Code:</b> 46 <b>Operation:</b> Press Key	Logging in or logging out of your Department Calling Group	On when removed, Off when installed
Department Step Calling	<b>Code:</b> 36 <b>Operation:</b> Dial busy ext + Press key	Stepping through a Department Group for an idle member	None
Direct Station Selection	<b>Code:</b> 01 <b>Operation:</b> Press key	Calling an extension using a DSS key	Off = extension idle On = extension busy Flashing = DND
Do Not Disturb	<b>Code:</b> 03 <b>Operation:</b> Press key + code (0-4)	Setting your phone in DND	DND key on red
Do Not Disturb/Call Forward Override	<b>Code:</b> 37 <b>Operation:</b> Press key	Calling an extension which is in DND or Call Forwarded	None
Group Call Pickup	<b>Code:</b> 24 <b>Operation:</b> CALL + Press key	Answering a call ringing another phone in your Pickup Group	None
	<b>Code:</b> 25 <b>Operation:</b> CALL + Press key	Answering a call ringing a phone in another Pickup Group - if you don't know the group number	None
	<b>Code:</b> 26 + Pickup Group (1-9 or 01-32) <b>Operation:</b> CALL + Press key + Pkup Group	Answering a call ringing a phone in a specific Pickup Group	None
Handset Mute	<b>Code:</b> 40 <b>Operation:</b> Press key	Muting the handset transmission while on a call	On when feature active (no transmission on handset)
Hotline	<b>Code:</b> 01 + dest. ext <b>Operation:</b> Press key	Placing a call to your Hotline partner	Full BLF (red) for covered ext.
Headset Operation	<b>Code:</b> 05 <b>Operation:</b> Press key	Enabling or disabling Headset Operation	On red when activated
Hold	<b>Code:</b> 44 <b>Operation:</b> Place or answer call + Press key	Putting a call on System Hold (if your phone's Hold key is reassigned)	None
	<b>Code:</b> 45 <b>Operation:</b> Place or answer call + Press key	Putting a call on Exclusive Hold	None

**Table 4: Function Key Codes by Features**

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.			
For this feature...	Use this key...	When your are...	Key Lamp Status
Incoming Caller ID List (Answered and Missed calls)	<b>Code:</b> 08 <b>Operation:</b> Press key	Viewing answered and missed trunk calls	Flashing when missed call stored
Loop Keys	<b>Code:</b> *05 + 0 (Incoming), 1 (Outgoing) or 2 (Both Ways) + 00 (All trunk groups incoming or ARS outgoing) or Trunk group (01-25). <b>Operation:</b> Press Key	Placing or answering a trunk call	Flashing red when ringing On green when in use Flashing green when on hold
Meet Me Conference (Also see Conference)	<b>Code:</b> 32 <b>Operation:</b> Press key	Joining a Meet Me Conference	None
Meet Me Paging	<b>Code:</b> 23 <b>Operation:</b> Press key	Joining a Meet Me Page	None
Memo Dial	<b>Code:</b> 31 <b>Operation:</b> <u>Store:</u> While on call, press key + number to store <u>Use:</u> Press Key + Call or line <u>Erase:</u> CALL + Press key	Storing, using or checking a Memo dial number	None
Message Waiting	<b>Code:</b> 38 <b>Operation:</b> Leave message: Call ext + Press key OR Answer message: Press key	Answering/Leaving a Message Waiting	None
Microphone Mute	<b>Code:</b> 40 <b>Operation:</b> Set up call + Press key	Using Microphone Mute	On red when activated
Multiple Directory Numbers	<b>Code:</b> *03 + ext. or dept group <b>Operation:</b> Press key	Placing or answering a call to your virtual (phantom) extension	Slow Flash red when ringing, On red when busy
Name Storing	<b>Code:</b> 55 <b>Operation:</b> Press key + ext # + name + HOLD	Entering a name for the extension to be displayed on telephones	None
Night Service	<b>Code:</b> 09 + mode (1-8) <b>Operation:</b> Press key	Activating the Day/ Night Mode	On red when activated
Off Hook Signalling	<b>Code:</b> 33 <b>Operation:</b> Call ext. and receive busy + Press key	Signalling a busy extension	None
Paging, External	<b>Code:</b> 19 + zone (1-6) <b>Operation:</b> Press Key	Making an external zone page	On red when activated

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**Table 4: Function Key Codes by Features**

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.			
For this feature...	Use this key...	When your are...	Key Lamp Status
	<b>Code:</b> 20 <b>Operation:</b> Press key	Making an external All Call page	On red when activated
Paging, Internal	<b>Code:</b> 21 + zone (1-9 or 01-32) <b>Operation:</b> Press key	Broadcasting to an Internal Paging Zone	On red when activated
	<b>Code:</b> 2 <b>Operation:</b> Press key	Broadcasting to all Internal Paging zones	On red when activated
Park	<b>Code:</b> *04 + orbit (1-9 or 01-64) <b>Operation:</b> Place or answer call + Press key	Placing a call into or retrieving a call from a Park Orbit	Fast flash when orbit is busy (green at originator, red at others)
Repeat Redial	<b>Code:</b> 29 <b>Operation:</b> Place call and press key	Activating Repeat Redial while on a call	Fast Flash while system waits to redial
Room Monitor	<b>Code:</b> 39 <b>Operation:</b> Press key at destination & source + ext	Activating Room Monitor	Dest. Fast Flash red, Source Hold Flash red
Save Number Dialed	<b>Code:</b> 30 <b>Operation:</b> <u>Save:</u> Place call + Press key <u>Redial:</u> Line or CALL + Press key	Saving, redialling or checking a saved number	None
Secretary Call (Buzzer)	<b>Code:</b> 41 + sec. ext <b>Operation:</b> Press key	Calling your secretary (using the buzzer)	On red at source Fast Flash red at destination
Secretary Call Pickup	<b>Code:</b> 42 + boss ext <b>Operation:</b> Press key	A secretary picking up a call ringing your boss's extension	On red when activated
Selectable Display Messaging	<b>Code:</b> 18 <b>Operation:</b> Press key + additional data if needed	Setting up Call Forwarding Off-Premise, Selectable Display Messaging, VRS Park and Page and VRS Personal Greeting	Flashes red when activated
Serial Call	<b>Code:</b> 43 <b>Operation:</b> Trk call + Hold + ext + Press key	Placing a Serial Call to a co-worker	None
Step Call	<b>Code:</b> 36 <b>Operation:</b> Press key	Stepping through a department group	None

**Table 4: Function Key Codes by Features**

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.

For this feature...	Use this key...	When your are...	Key Lamp Status
Transfer	<b>Code:</b> 06 <b>Operation:</b> Establish call + Hold + Ext + Press key	Transferring a call	None
Trunk Group Routing	<b>Code:</b> *05 <b>Operation:</b> Press key	Accessing a trunk using Trunk Group Routing	On red when active
Trunk Groups	<b>Code:</b> *02 + Trunk group (1-9 or 01-51) <b>Operation:</b> Press key	Using a trunk group key to access a Trunk Group	On red when active
Trunk Queuing	<b>Code:</b> 35 <b>Operation:</b> Hear busy tone for Trk + Press key	Camping On or Queuing for a trunk	On red while camped on
Voice Response System (VRS) (Park and Page) (Personal Greeting)	<b>Code:</b> 17 <b>Operation:</b> Press key + device type code + requested data (depends on device selected).	Setting up Call Forwarding Off-Premise, Selectable Display Messaging, VRS Park and Page and VRS Personal Greeting	Flashes red
Voice Mail	<b>Code:</b> 67 + extension or Department Group number <b>Operation:</b> Press key	Calling Voice Mail or leaving a message	Flashes red on your key for your messages or flashes red for the Department Group
	<b>Code:</b> 68 + code (0-2) <b>Operation:</b> Press key	Using Voice Mail Service	Flashes slowly when monitoring

Table 3-2: Function Key Codes by Number

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.			
Use this key...	For this feature...	When you are...	Key Lamp Status
<b>Code:</b> 01 + any digits + HOLD <b>Operation:</b> Press key	Direct Station Selection, Hotline, Outside calls, Service Codes	Calling an extension using a DSS key	DSS only Off = extension idle On = extension busy Flashing = DND
	<p>The DSS Function key will allow the entry of up to 24 digits, these can be any digits e.g extension numbers, Service Codes or outside numbers.</p> <p>If the digits entered match an extension number then the function key will be a DSS key for the extension and show busy lamp information.</p> <p>If the digits entered match a Service Code the function key will access the feature.</p> <p>If the digits entered begin with a trunk access code the Topaz will seize a trunk and dial the remaining digits to line. For trunk calls the digits can contain the special functions: Flash, Pause and Wait for Answer.</p>		
<b>Code:</b> 40 <b>Operation:</b> Set up call + Press key	Microphone Mute	Using Microphone Mute	On red when activated
<b>Code:</b> 03 <b>Operation:</b> Press key	Do Not Disturb	Activating DND	On red when activated
<b>Code:</b> 04 <b>Operation:</b> Press key	Background Music	Turning BGM on or off	On red when activated
<b>Code:</b> 05 <b>Operation:</b> Press key	Headset Operation	Enabling or disabling Headset Operation	On red when activated
<b>Code:</b> 06 <b>Operation:</b> Establish call + Hold + Ext + Press key	Transfer	Transferring a call	None
<b>Code:</b> 07 <b>Operation:</b> Set up call + Press key + set up call to add + Press key twice	Conference	Setting up a conference or a Meet Me Conference	On red during setup
<b>Code:</b> 08 <b>Operation:</b> Press key	Missed Calls	Viewing answered/missed trunk calls	Flashing when missed call stored
<b>Code:</b> 09 + mode (1-8) <b>Operation:</b> Press key	Night Service	Activating the Day/Night Mode	On red when activated
<b>Code:</b> 10 <b>Operation:</b> Press key 1/0 + Dest. Ext.	Call Forwarding, Immediate	Call Forwarding to extension or Voice Mail	Slowly flashes red
<b>Code:</b> 11 <b>Operation:</b> Press key 1/0 + Dest. Ext.	Call Forwarding, Busy	Call Forwarding to extension or Voice Mail	Slowly flashes red

**Table 3-2: Function Key Codes by Number**

<b>To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.</b>			
<b>Use this key...</b>	<b>For this feature...</b>	<b>When you are...</b>	<b>Key Lamp Status</b>
<b>Code: 12</b> <b>Operation:</b> Press key 1/0 + Dest. Ext.	Call Forwarding, No Answer	Call Forwarding to extension or Voice Mail	Slowly flashes red
<b>Code: 13</b> <b>Operation:</b> Press key 1/0 + Dest. Ext.	Call Forwarding, Busy/No Answer	Call Forwarding to extension or Voice Mail	Slowly flashes red
<b>Code: 14</b> <b>Operation:</b> Press key 1/0 + Dest. Ext.	Call Forwarding, Dual Ring	Call Forwarding to extension with both phones ringing	Slowly flashes red
<b>Code: 15</b> <b>Operation:</b> Press key 1/0 + Dest. Ext. + Type	Call Forwarding, Follow Me	Call Forwarding to extension or Voice Mail	Slowly flashes red
<b>Code: 16</b> <b>Operation:</b> Press key Condition + Dest. Ext. + Type	Call Forwarding, to Station	Call Forwarding to extension or Voice Mail	Slowly flashes red
<b>Code: 17</b> <b>Operation:</b> Press key + device type code + requested data (depends on device selected).	Call Forwarding, to Device Off-Premise Selectable Display Messaging Voice Response System (VRS) (Park and Page) Voice Response System (VRS) (Personal Greeting)	Setting up Call Forwarding Off-Premise, Selectable Display Messaging, VRS Park and Page and VRS Personal Greeting	Flashes red
<b>Code: 19 + zone (1- 6)</b> <b>Operation:</b> Press key	Paging, External	Broadcasting to an External Paging Zone	On red when activated
<b>Code: 20</b> <b>Operation:</b> Press key	Paging, External	Broadcasting to all External Paging Zones	On red when activated
<b>Code: 21 + zone (1- 9 or 01-32)</b> <b>Operation:</b> Press Key	Paging, Internal	Broadcasting to an Internal Paging Zone	On red when activated
<b>Code: 22</b> <b>Operation:</b> Press key	Paging, Internal	Broadcasting to all Internal Paging Zone	On red when activated
<b>Code: 23</b> <b>Operation:</b> Press key	Meet Me Paging	Joining a Meet Me Page	None
<b>Code: 24</b> <b>Operation:</b> CALL + Press Key	Group Call Pickup	Answering a call ringing another phone in your Pickup Group	None

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Table 3-2: Function Key Codes by Number

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.			
Use this key...	For this feature...	When you are...	Key Lamp Status
<b>Code:</b> 25 <b>Operation:</b> CALL + Press key	Group Call Pickup	Answering a call ringing a phone in another Pickup Group - if you don't know the group number	None
<b>Code:</b> 26 + Pickup Group (1-9 or 01- 32) <b>Operation:</b> CALL + Press key + Pickup Group	Group Call Pickup	Answering a call ringing a phone in a specific Pickup Group	None
<b>Code:</b> 27 <b>Operation:</b> Press key + bin + Line or CALL key	Abbreviated Dialling	Dialling a stored Common/Personal Abbreviated Dialling number	None
<b>Code:</b> 28 <b>Operation:</b> Press key + bin + Line or CALL key		Dialling a stored Group Abbreviated Dialling number	None
<b>Code:</b> 29 <b>Operation:</b> Place call + Press key	Repeat Redial	Activating repeat redial while on a call	Fast Flash while system waits to redial
<b>Code:</b> 30 <b>Operation:</b> <u>Save:</u> Place call + Press key <u>Redial:</u> Line or CALL + Press key	Save Number Dialed	Saving, redialling or checking a saved number	None
<b>Code:</b> 31 <b>Operation:</b> <u>Store:</u> While on call, Press key + number to store <u>Use:</u> Press key + CALL or line <u>Erase:</u> CALL + Press key	Memo Dial	Storing, using or checking a Memo Dial number	None
<b>Code:</b> 32 <b>Operation:</b> Set up trunk call + Press key OR Press key	Conference, Voice Call OR Meet Me Conference (Also see Conference)	Setting up a Voice Call Conference OR Joining a Meet Me Conference	None
<b>Code:</b> 33 <b>Operation:</b> Call ext. and receive busy + Press key	Off Hook Signalling	Signalling a busy extension	None
<b>Code:</b> 34 <b>Operation:</b> Call ext + Press key	Barge In	Barging In on a co-worker's conversation	None

**Table 3-2: Function Key Codes by Number**

<b>To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.</b>			
<b>Use this key...</b>	<b>For this feature...</b>	<b>When you are...</b>	<b>Key Lamp Status</b>
<b>Code: 35</b> <b>Operation:</b> Call busy extension or access busy trunk + Press key	Callback / Camp On / Trunk Queuing	Leaving a Callback request at a busy extension, Camping On to a busy extension, Queuing for a busy trunk	On red when activated
<b>Code: 36</b> <b>Operation:</b> Dial busy ext + Press key	Department Step Calling	Stepping through a Department Group for an idle member	None
<b>Code: 37</b> <b>Operation:</b> Call extension + Press key	Call Forwarding / Do Not Disturb Override	Overriding an extension's Call Forwarding or Do Not Disturb	On red when activated
<b>Code: 38</b> <b>Operation:</b> Leave message: Call ext + Press key OR Answer message: Press key	Message Waiting	Answering/Leaving a Message Waiting	None
<b>Code: 39</b> <b>Operation:</b> Press key at destination and source + ext	Room Monitor	Activating Room Monitor	Fast Flash red at destination, Hold Flash red at source
<b>Code: 40</b> <b>Operation:</b> Press key	Handset Mute	Muting the handset transmission while on a call	On when feature active (no transmission on handset)
<b>Code: 41 + sec. ext.</b> <b>Operation:</b> Press key	Secretary Call	Calling your secretary (using the buzzer)	On red at source Fast Flash red at destination
<b>Code: 42 + boss ext.</b> <b>Operation:</b> Press key		A secretary picking up a call ringing your boss's extension.	On red when activated
<b>Code: 43</b> <b>Operation:</b> TRK call + Hold + ext + Press key	Serial Call	Placing a Serial Call to a co-worker	None
<b>Code: 44</b> <b>Operation:</b> Place or answer call + Press key	Hold	Putting a call on System Hold (if hold key is reassigned)	None
<b>Code:45</b> <b>Operation:</b> Place or answer call + Press key		Putting a call on Exclusive Hold	None
<b>Code: 46</b> <b>Operation:</b> Press key	Department Calling	Logging in or logging out of your Department Calling Group	On when removed, Off when installed

Table 3-2: Function Key Codes by Number

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.			
Use this key...	For this feature...	When you are...	Key Lamp Status
<b>Code:</b> 49 + ext or voice mail number <b>Operation:</b> Press key	Call Redirect	Redirecting an incoming call to an extension or voice mail	On red when activated Flashes when in DND/Call Forward
<b>Code:</b> 50 <b>Operation:</b> Press key	Account Codes	Entering Account Codes	None
<b>Code:</b> 52 + Incoming Ring Group Number (1~8)	Incoming Call Queuing Setup	Busy on a call and wish to play a delay message to new callers to that ring group	On red when active
<b>Code:</b> 53	Queuing Message Starting		On red when active
<b>Code:</b> 54 <b>Operation:</b> Press key	Call Forward, Off- Premise	Forwarding a Doorphone call to an external phone number	On red when activated
<b>Code:</b> 55 <b>Operation:</b> Do not lift handset + Press key + Enter extension number + Enter name + Press HOLD	Name Storing	Changing the name displayed on your display phone	None
<b>Code:</b> 56	Automatic Transfer		On red when active
<b>Code:</b> 57	Department Incoming Call - Delayed		
<b>Code:</b> 58 + Dept. Group (1-32)	Department Incoming Call - Immediate		
<b>Code:</b> 59 + Dept. Group (1-32)	Department Incoming Call - Delay		
<b>Code:</b> 60 + Dept. Group (1-64)	Department Incoming Call - DND		
<b>Code:</b> 63	Outgoing Call Without Caller ID (ISDN)		On red when active
<b>Code:</b> 67 + Ext or Department Group number <b>Operation:</b> Press key	Voice Mail	Calling Voice Mail or leaving a message	Flashes red on your key for your messages or red for the Department Group
<b>Code:</b> 68 + 0-2 <b>Operation:</b> Press key		Using Voice Mail Service	Flashes slowly when monitoring
<b>Code:</b> 69 + 0 <b>Operation:</b> Set up call + Press key		Using Voice Mail Record	Slow Flash red when active
<b>Code:</b> 70 + Ext. # or Dept. Group (1-32)		Automated Attendant for Extension	None

**Table 3-2: Function Key Codes by Number**

<b>To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code.</b>			
<b>Use this key...</b>	<b>For this feature...</b>	<b>When you are...</b>	<b>Key Lamp Status</b>
<b>Code:</b> 71 + Ext. # or Dept. Group (1-32)		Message Change for Voice Attendant	Off=Message 1 On=Message 2 Flash Red = Message 3
<b>Code:</b> 76	Toll Restriction in Credit		
<b>Code:</b> *01 + Trunk number (01-51) <b>Operation:</b> Press key	Central Office Calls	Pressing a line key to place or answer a trunk call (where trunks are 01-51)	On green when seized, on red when in use (by other party), Slow Flash green when ringing, Hold flash when on Hold
<b>Code:</b> *02 + Trk group (1-9 or 01-51) <b>Operation:</b> Press key	Trunk Groups	Using a trunk group key to access a Trunk Group	On red when active
<b>Code:</b> *03 + ext. or department group <b>Operation:</b> Press key	Multiple Directory Numbers/Call Coverage	<b>Multiple Directory Number:</b> Placing or answering a call from your virtual (phantom) extension or <b>Call Coverage:</b> Placing or answering a call to your co-worker's extension	Slow Flash red when ringing, On red when busy
<b>Code:</b> *04 + orbit (01-64) <b>Operation:</b> Place or answer call + Press key	Park	Placing a call into or retrieving a call from a Park Orbit	Fast Flash when orbit is busy (green at originator, red at others)
<b>Code:</b> *05 + 0 (Incoming), 1 (Outgoing) or 2 (Both ways) + 00 (All trunk groups incoming or ARS outgoing) or Trunk group (01-25) <b>Operation:</b> Press key	Loop Keys, Trunk Group Routing	Placing or answering a trunk call	Flash red when ringing, On green when in use, Flash green when on hold

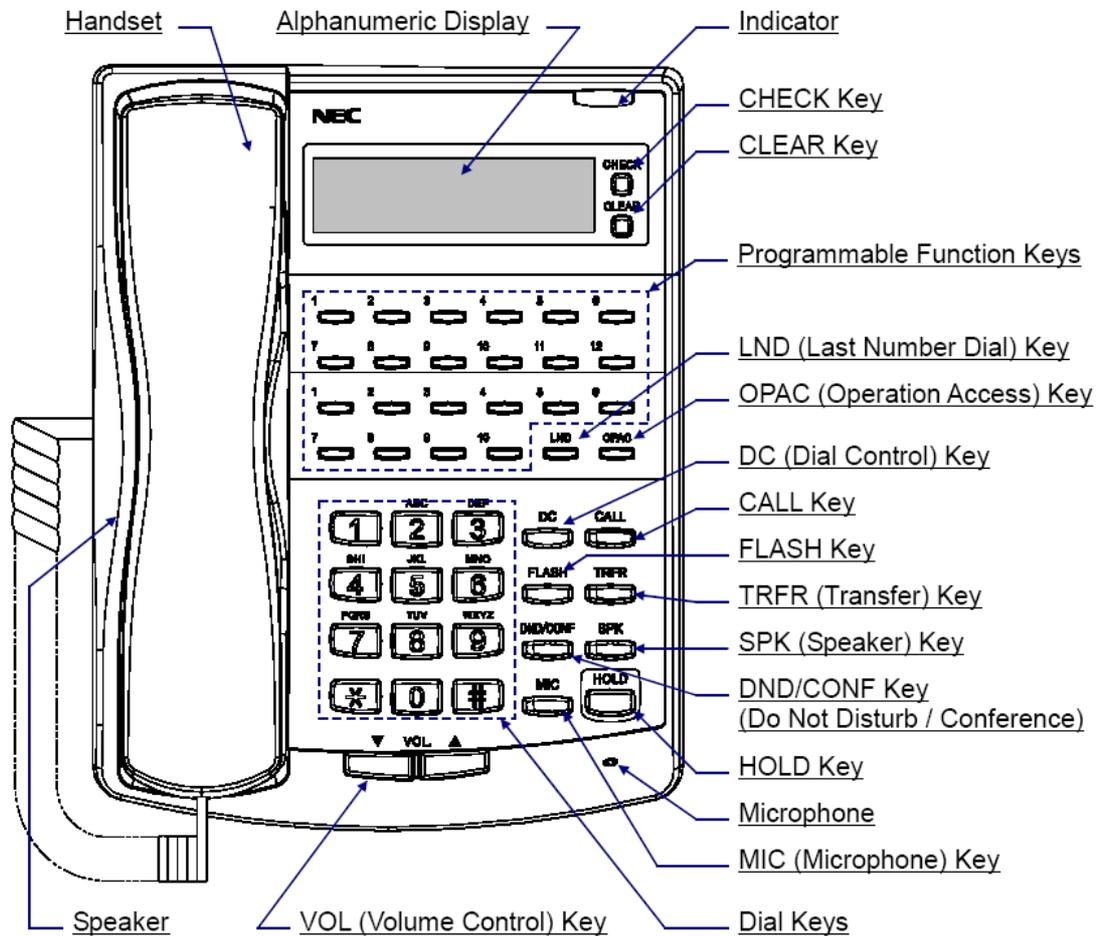
Maximum System Capacities	
Items	Topaz
<b>System</b>	
Class of Service	15
Toll Restriction Classes	15
Verifiable Account Code Table	2000
Day/Night Mode Numbers	8
Day/Night Service Patterns	10
Analogue Caller ID Detector Busy Tone Detector DTMF Receiver	924M : 16 924M with DSPDBU: 32
<b>Trunk</b>	
Trunk Port Number	1-51
Trunk Ports(Total) Analogue Trunks BRI Trunk Ports	9+16=25 9 8(16B)
924M(308M+308E+308E) Analogue Trunk Ports :	1-9
4BRIU Physical Port Number (T-point) : Logical Port Number (T-point) :	1-4 1-8
Trunk Group Numbers	1-25
Trunk Access Maps	1-51
Trunk Routes	1-25
Ring Groups	1-8
DID Translation Tables	1-20
DID Translation Tables Entries	2000
DISA Classes of Service Users	15 1-15
<b>Extension</b>	
924M(308M+308E+308E) Extension Ports	1-24
Telephone Extension Number Range	200-225 (default)
Virtual Extension Ports	50
Virtual Extension Port Numbers	01-50
Virtual Extension Port Number Range	Undefined
Class of Service	15

<b>Maximum System Capacities</b>	
<b>Items</b>	<b>Topaz</b>
Operator Access Number	0 or 9
Operator Extension	1-8
DSS Console Number	1-3
DSS Console Maximum Installed	3
DLS Console Maximum Installed	24
Doorphone Numbers	1-2
Ringdown Assignment	122
<b>Abbreviated Dialling</b>	
Abbreviated Dialling Groups	1-32
Abbreviated Dial Bins	0-1999
<b>Automated Attendant</b>	
VRS Message Numbers	1-48
<b>Conference</b>	
Conference Circuits	32ch (8ch x 4)
<b>Department and Pickup Groups</b>	
Department (Extension) Group Numbers	1-32
Department (Extension) Group Number Range	1-4 digits
Call Pickup Group Numbers	1-8
<b>Hotline</b>	
Internal Hotline	24
External Hotline	9
<b>Paging and Park</b>	
Internal Page Group Numbers	32
External Page Group Numbers	6
External Speakers	6
Park Group Numbers	1-64
Park Orbits	1-64
<b>SMDR</b>	
SMDR Ports	1(COM)
<b>VRS</b>	
VRS(on DSPDB Daughter Board)	1
<b>Voice Mail(DSPDBU)</b>	
Voice Mail(DSPDB) Mailboxes	300

<b>Maximum System Capacities</b>	
<b>Items</b>	<b>Topaz</b>
Voice Mail Channels	8
<b><i>Passwords</i></b>	
User Password for setting Toll restriction Override and Changing Class of Service using a Service Code	No Setting_@
<b><i>Programming Passwords</i></b>	
Level 2 (IN)	12345678
Level 3 (SA)	0000
Level 4 (SB)	9999
Programming Password Users	1-8
Telephone Extension Port Number(Total) Key Telephones Single Line Telephones	1-24

**SECTION 2 LOCATION OF CONTROLS**

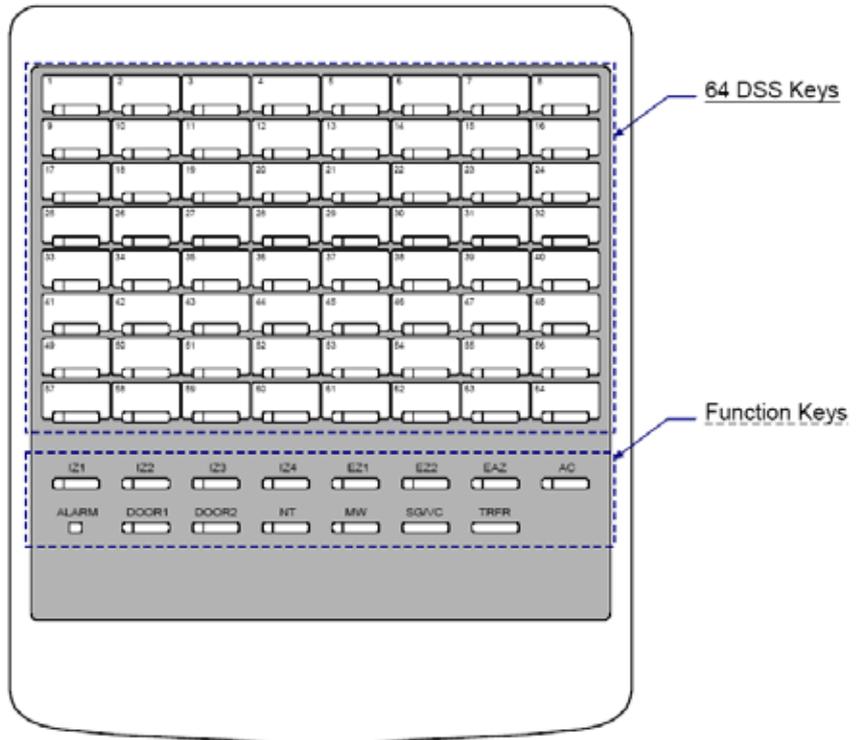
**1. Key Telephone**



Functions	12TXD	12TD	6TXD	6TD
Programmable Line Keys	12	12	6	6
Programmable Function Keys	10	10 (NO BLF)	10	10 (NO BLF)
Display	Yes	No	Yes	No
CHECK/CLEAR Keys	Yes	No	Yes	No
Handsfree	Yes	No (Talkback)	Yes	No (Talkback)
Accept DLS Console	Yes	No	Yes	No
Wall Mount Kit	Yes (Built-in)	Yes (Built-in)	Yes (Built-in)	Yes (Built-in)

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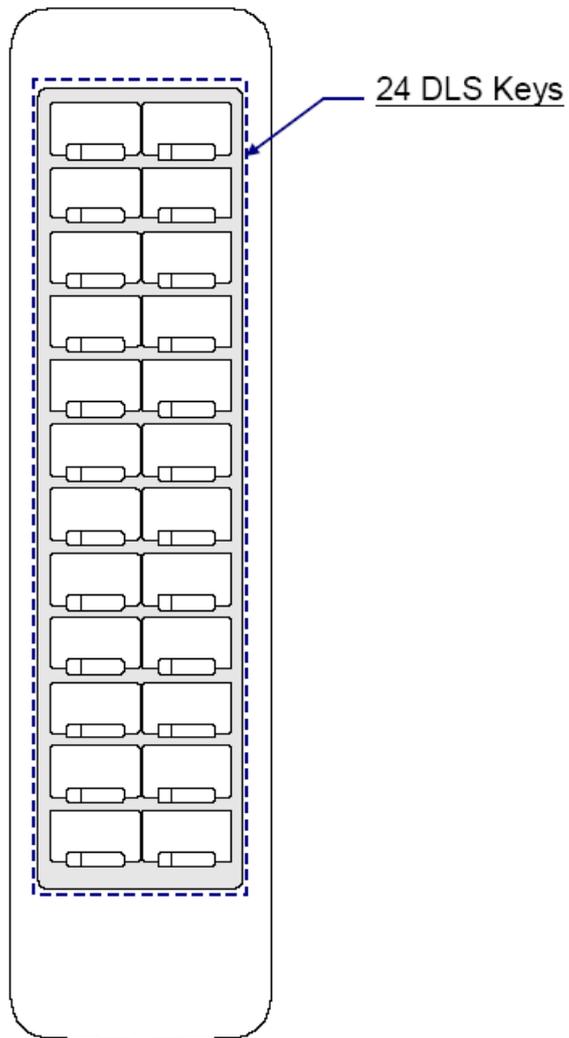
2. DSS (Direct Station Selection) Console



Function Keys

Indication	Function Name
IZ1 ~ IZ4	Internal Paging (Zone 1 ~ 4)
EZ1 ~ EZ2	External Paging (Zone 1 and 2)
EAZ	External All Paging
AC	External / Internal All Call
DOOR1 ~ DOOR2	Doorphone Call (Doorphone 1 and 2)
NT	Night Mode Switching
M/W	Message Waiting
SG/VC	Intercom Call Mode Switching (Signal / Voice)
TRFR	Transfer

3. DLS (Direct Line Selection) Console



### Abbreviated Dialling

#### • Description

Abbreviated Dialling 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 dialling a long telephone number, the extension user just dials the Abbreviated Dialling code.

There are three types of Abbreviated Dialling: Common, Group and Personal. All co-workers can share the Common Abbreviated Dialling numbers. All co-worker's in the same Abbreviated Dialling Group can share the Group Abbreviated Dialling numbers. Personal Abbreviated Dialling numbers are available only at a user's own extension. The system has 2000 Abbreviated Dialling bins that you can allocate between Common and Group Abbreviated Dialling. In addition, each user has 20 personal Abbreviated Dialling bins.

Each Abbreviated Dialling bin can store a number up to 36 digits long.

When placing an Abbreviated Dialling call, the system normally routes the call through Trunk Group Routing or ARS (whichever is enabled). Or, the user can pre-select a specific trunk for the call. In addition, the system can optionally force Common Abbreviated Dialling numbers to route over a specific Trunk Group. User pre-selection always overrides the system routing.

#### **Common Abbreviated Dialling**

At default the system has 900 Common Abbreviated Dials set by Program 13-01-03. Although there are 2000 abbreviated dialling bins available we do not recommend that you increase the quantity of Common Abbreviated Dial bins (since the Personal Abbreviated bins are also accessed with bin numbers 900-919 by the user).

The entries of the Common Abbreviated bins can be set either with Program 13-04-01 or with Service Code 853. They can be dialled by pressing the DC key or Service Code \* followed by the bin number.

#### **Group Abbreviated Dialling**

At default there are no groups assigned in Program 13-02-01. There are up to 32 groups available. You can set the quantity of bins available for each group; the quantity must be in multiples of 10. The bins used for each group cannot overlap any other group or the Common Abbreviated bins.

The entries of the Group Abbreviated bins can be set either with Program 13-04-01 or with Service Code 854. They can be dialled by Service Code 814 followed by the bin number.

When using Service Codes 854 and 814 the bin number starts at 000 for each group regardless of the actual start bin number defined in Program 13-02-01.

### **Personal Abbreviated Dialling**

There are 20 Personal bins available for each extension.

The entries of the Personal Abbreviated bins can be set with Service Code 853 at each telephone. They can be dialled by Service Code \* followed by the bin number 900-919.

### **DSS Console Chaining**

DSS Console chaining allows an extension user with a DSS Console to chain to an Abbreviated Dialling number stored under a DSS Console key. The stored number dials out (chains) to the initial call. This can, for example, simplify Dialling when calling a company with an Automated Attendant. You can program the bin for the company number under one DSS Console key and the client's extension number under the other DSS Console key. 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. See Programming below for additional details.

The DSS Console user can also chain to an Abbreviated Dialling number Dialed manually, from a Programmable Function Key or a One-Touch Key.

### **Storing a Flash**

To enhance compatibility with connected PBX lines, an Abbreviated Dialling bin can have a stored Flash command. For example, storing 0 Flash 926 5400 will cause the system to dial 0, 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, an Abbreviated Dialling Programmable Function Key can also store an Abbreviated Dialling bin number. When the extension user presses the key, the phone automatically dials out the stored number. This provides true one-touch calling via a phone's function keys.

### **Conditions**

None

### **Default Setting**

900 Common Abbreviated Dialling Bins (000~899)

20 Personal Abbreviated Dialling Bins (900~919)

There are no Group Abbreviated Dialling bins assigned.

### **• Programming**

#### **13-01-01 :Abbreviated Dialling Function Setup - Abbreviated Dialling Auto Outgoing Call mode**

Assign as Trunk Outgoing Mode when all Abbreviated Dialling bins contain external numbers only. The trunk access code (default=0) is automatically prefixed to each number when dialled. Assign as Extension Outgoing Mode to allow Abbreviated Dialling bins to contain both external and internal numbers. In this case, external numbers must include the trunk access code (default=0) when the number is stored.

#### **13-01-02 :Abbreviated Dialling Function Setup - Personal Abbreviated Dial**

Enable to allow access to Personal Abbreviated Dialling bins or disable to provide Common Abbreviated Dialling bins only. When Personal Abbreviated Dialling is enabled, these 20 bin numbers cannot be used for Common Abbreviated Dialling, even though the numbering ranges may overlap.

### **13-01-03 :Abbreviated Dialling Function Setup - Common Abbreviated Dialling Bins**

Designate the bins the system will use for Common Abbreviated Dialling.

Depending on the number of bins assigned in Program 13-01-03, the number of digits used for Abbreviated Dialling will be different:

13-01-03 = 0-100,                      Abbreviated Dialling is 2 digit.

13-01-03 = 200-1000,                Abbreviated Dialling is 3 digit.

13-01-03 = 1100-2000,              Abbreviated Dialling is 4 digit.

13-01-03	13-01-02	Common ABB Bins	Personal ABB Bins
100	1	00-79	80-99
100	0	00-99	None
200-900	1	000-899	900-919
200-900	0	000-899	None
1100-2000	1	0000-1999	0900-0919
1100-2000	0	0000-1999	None

### **13-02-01: Group Abbreviated Dialling Bins**

Designate the bins the system will use for Group Abbreviated Dialling.

### **13-03-01: Abbreviated Dialling Groups Assignment for Extensions**

For Group Abbreviated Dialling, assign extensions to Abbreviated Dialling groups (1-32).

### **13-04-01: Abbreviated Dialling Number and Name**

Enter the Common and Group Abbreviated Dialling numbers and names.

### **13-05-01: Abbreviated Dialling Trunk Group**

For each Common Abbreviated Dialling number, enter the routing option. To use ARS or Trunk Group Routing, enter 0. To use a specific Trunk Group, enter the group number (1-25).

### **14-02-06: Analogue Trunk Data Setup - Pause Time**

Enable/disable the systems ability to pause after dialling the first digit.

### **15-07-01: Programming Function Keys**

Assign a function key for Common/Personal Abbreviated Dialling (code 27) or Group Abbreviated Dialling (code 28). You can program the key as either a general Abbreviated Dialling key or you can choose to store a bin number with the function key. This key would then always dial the

associated bin number. If storing a bin number along with the code, do not store 0, 00 or 000. To bypass entering a bin number, press HOLD (HOLD is also required if programming the function key using the service code 851).

**20-06-01: Class of Service for Extensions**

Assign a Class of Service (1-15) to an extension.

**20-07-04: COS Options - Storing Abbreviated Dialling Entries**

In an extension's COS, allow (1) or prevent (0) the storing of Abbreviated Dialling entries (codes 853 and 854). Preventing this option will also prevent the user's display from showing the telephone number. This can be used when you want to prevent account codes from being displayed.

**20-08-03: COS Options (Outgoing Call Service) - Common Abbreviated Dialling**

In an extension's COS, enable (1) or disable (0) Common Abbreviated Dialling.

**20-08-04: COS Options (Outgoing Call Service) - Group Abbreviated Dialling**

In an extension's Class of Service, enable (1) or disable (0) Group Abbreviated Dialling.

**30-03-01: DSS Console Key Assignment**

For DSS Console Chaining, assign an Abbreviated Dialling Service Code (813 or 814) plus a two-digit bin number to a DSS Console key.

• **Related Features**

• **Account Codes**

Abbreviated Dialling bins can contain stored Account Codes. Prevent them from being displayed using 20-07-04.

• **Automatic Route Selection**

For systems with Automatic Route Selection, ARS selects the trunk for the call unless the user preselects.

• **Central Office Calls, Placing**

A user can implement Abbreviated Dialling only if their extension has outgoing access to trunks.

• **PBX Compatibility**

If you enter a PBX trunk access code in an Abbreviated Dialling bin, the system automatically inserts a pause after the bin.

• **Programmable Function Keys**

Function keys simplify Abbreviated dialling operation.

• **Single Line Telephones**

Single line telephones can only dial Common, Personal and Group Abbreviated dialling numbers.

• **Toll Restriction**

Toll Restriction may prevent a user from using a stored Abbreviated dialling number.

• **Trunk Group Routing**

Unless a user preselects a trunk, Trunk Group Routing selects the trunk Abbreviated dialling uses for trunk calls.

## • Operation

### Store Abbreviated Dialling number (display system phones only):

1. Press **SPK** key.
2. Dial **853** (for common/personal) or **854** (for group).
3. Dial the Abbreviated Dialling bin number,  
*Common = 000-899,*  
*Personal = 900-919,*  
*Group = 000-1999 (not set in default).*
4. Dial telephone number you want to store (up to 36 digits).  
*Valid entries are 0-9, # and \*. To enter a pause, press MIC. To store a Flash, press FLASH.*
5. Press **HOLD**.
6. Enter the associated name (up to 12 digits).  
*Use the keypad digits as shown in the character table below.*
7. Press **HOLD**.
8. Press **SPK** to hang up.

Use this keypad digit ...	When you want to ...
1	Enter characters: 1 @ [ ¥ ] ^ _ ' {   } ← →
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 ! " # \$ % & ' ( )
*	Enter characters: * + , - . / : ; < = > ?
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: STA).
DND/CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

**To dial a Common/Personal Abbreviated Dialling number:**

1. Press **SPK** key (or lift handset).
2. Dial **\***.  
-OR-  
Press **DC** key.  
-OR-  
Press Common/Personal Abbreviated Dialling key (PGM 15-07 or SC 851: 27).  
*To preselect, press a line key in step 1 (instead of CALL) before pressing the DC or Abbreviated Dialling key).*
3. Dial Abbreviated Dialling bin number.  
*Common=000-899,*  
*Personal=900-919.*

*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 Group Abbreviated Dialling Number:**

1. Press **SPK** key (or lift handset).
2. Dial **814**.  
-OR-  
Press **DC** key.  
-OR-  
Press Group Abbreviated Dialling key (PGM 15-07 or SC 851: 28).  
*To preselect, press a line key in step 1 (instead of CALL) before pressing the DC or Abbreviated Dialling key).*
3. Dial Abbreviated Dialling bin number.  
*Group=000-1999 (not set in default).*

*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 Check an Abbreviated Dialling number (display system phone only):**

1. Press **CHECK**.
2. Press **DC**.
3. Dial the Abbreviated Dialling bin number.  
*If the entire stored number is too long for your phone's display, press \* to see the rest of it.*
4. Press **CLEAR**.  
  
-OR-
  1. Press **CHECK**.
  2. Press the Common/Personal/Group Abbreviated Dialling key.  
*If the entire stored number is too long for your phone's display, press \* to see the rest of it*
  3. Press **CLEAR**.

## Account Codes

### • Description

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

#### **Optional Account Codes**

Optional Account Codes allow a user to enter an Account Code while placing a trunk call or anytime while on a call. This type of Account Code is optional; the system does not require the user to enter it.

#### **Forced Account Codes**

Forced Account Codes require an extension user to enter an Account Code every time they place a trunk call. If the user doesn't enter the code, the system prevents the call. As with Optional 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 1000 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 be from 3-16 digits long using the characters 0-9 and #. During programming, you can use "wild cards" to streamline entering codes into system memory. For example, the entry 123W 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. 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's display. (If the attendant fails to enter a valid Account Code, the system drops the call.)

#### **Account Codes for Incoming Calls**

The system can control the ability of 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's 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 the character "\*" on the telephone's display.

### Account Code Capacity

Account Codes print along with the other call data on the SMDR record after the call completes. Account Codes can be 1-16 digits in length using 0-9 and #. Verified Account Codes can be from 3-16 digits long.

### Redialled Numbers Do Not Contain Account Codes

When using the Last Number Redial, Save or Repeat Dial features, the system will not retain Account Code information. Any number redialled with these features, the user will need to re-enter an Account Code.

**Note:** 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.

### Access to Emergency Numbers

When Forced or Verified Account Codes are enabled, the emergency number 000 may be blocked. To allow access to the emergency number, as required by law, assign 000 to an Abbreviated Dialling bin (e.g. 000=\*1\*000) and then program this to a Programmable Feature key (e.g. SC851 : 01:\*000). This key must be labelled as Emergency.

### Conditions

- A. Account Codes are user-Dialled codes that help the system administrator categorize and/or restrict trunk calls. The system has three types of Account Codes, optional, forced and verified.
- B. 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.
- C. Do not use an asterisk within a PBX access code when using Account Codes. Otherwise, after the \*, the trunk will stop sending digits to the central office.

### Default Setting

Account Codes are disabled.

### • Programming

#### 14-01-11: Basic Trunk Data Setup - Account Code

Enable (1) or disable (0) Forced Account Codes for each trunk.

#### 15-07-01: Programming Function Keys

Assign a function key as an Account Code key (code 50). Use this key instead of the dial pad to enter the \* before and after the Account Code.

#### 20-06-01: Class of Service for Extensions

Assign a Class of Service (1-15) to an extension.

#### 20-13-20: Class of Service Options (Supplementary Service) - Account Code/ Toll Restriction Operator Alert

When enabled, the operator is alerted when an extension improperly enters an Account Code or violates Toll Restriction.

#### 21-01-14: Forced Account Code Inter-digit Timer

The system waits this amount of time for a user to dial Forced Account Code digits (0-64800 sec.).

#### 21-04-01: Toll Restriction Class for Extensions

Use this option to assign a Toll Restriction Class (1-15) to an extension.

### **35-05-01: Account Code Setup - Account Code Mode**

For each Class of Service (1-15) use this option to select the Account Code Mode. The options are:

- 0 Account Codes disabled. (Any codes you enter dial out as part of your initial call.)
- 1 Account Codes optional (not required).
- 2 Account Codes required (forced) but not verifiable.
- 3 Account Codes required (forced) and verifiable.

### **35-05-03: Account Code Setup - Account Codes for Incoming Calls**

For each Class of Service (1-15), enter 1 in this option to enable Account Codes for incoming calls. Enter 0 to disable Account Codes for incoming calls. If disabled, any codes you enter dial out on the connected trunk.

### **35-05-04: Account Code Setup - Hiding Account Codes**

For each Class of Service (1-15), enter 1 to have the system hide Account Codes on an extension's display as they are entered. Enter 0 to have the Account Codes displayed.

### **35-06-01: Verified Account Code Table**

Use this option to enter data into the Verified Account Code Table. You can enter up to 2000 codes from 3-16 digits in length. For a wild card, press the FLASH key.

## • Related Features

- **Abbreviated Dialling**

Abbreviated dialling bins can contain stored Account Codes. Prevent them from being displayed using 20-07-04.

- **Automatic Route Selection**

ARS can force a user to enter an Authorization Code prior to using a certain route. The system verifies the ARS Authorization Code dialled against the ARS Authorization Code list (Program 44-03).

- **Programmable Function Keys**

To simplify Account Code entry, store the Account Code (e.g., \*1234\*) in a One-Touch Key. Just press the key instead of dialling the codes.

- **PBX Compatibility**

When using Account Codes, do not use an asterisk within a PBX access code. Otherwise, after the \*, the trunk would stop sending digits to the central office.

- **Station Message Detail Recording**

Account Codes appear on the SMDR report (even if they are hidden on the phone's display).

## • Operation

### **To enter an Account Code any time 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 at SLTs.*

1. Dial \*.  
OR  
Press your Account Code key (PGM 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 will show an “ \* “ character on the telephone’s display.*

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

#### **To enter an Account Code before dialling the outside number:**

*If your system has Forced Account Codes, you must use this procedure. If it has Verified Account Codes, you can 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 Dialling a code (except 0). Refer to Central Office Calls, Placing for more information.*

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

3. 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 will show an “ \* “ character on the telephone’s display.*

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

5. Dial the number you want to call.

*If you hear “stutter dial tone after Dialling the number, ARS is requesting that you enter an ARS Authorization Code. Refer to Automatic Route Selection for more information.*

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

1. Access a trunk and dial the number you want to call.

*If you hear “stutter dial tone after Dialling the number, ARS is requesting that you enter an ARS Authorization Code. Refer to Automatic Route Selection for more information.*

2. Wait for your call to go through.

OR

If you hear “Please enter an Account Code,” and your display shows ENTER ACCOUNT:

Dial \*.

OR

Press your Account Code key (PGM 15-07 or SC 851: code 50)

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

If Account Codes are hidden, each digit you dial will show an “ \* “ character on the telephone’s display.

Dial \*.

OR

Press your Account Code key (PGM 15-07 or SC 851: code 50)

#### **To enter an Account Code for an incoming call:**

*This procedure is not available at SLTs.*

1. Answer incoming call.

*If Account Codes for Incoming Calls is disabled, the following steps will dial digits out onto 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 while placing a trunk call:**

*If your system has Forced Account Codes, you must follow this procedure.*

1. 1. Access trunk for outside call.

*You can access a trunk by pressing a line key or Dialling a code. Refer to Central Office Calls, Placing for more information.*

*With Forced Account Codes, you hear, "Please enter an Account Code." Your display shows: ENTER ACCOUNT.*

2. Dial \*.

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

4. Dial \*.

*If the system has Forced Account Codes and you don't enter a code, your call cannot go through. You can, however, dial \*\* to bypass Forced Account Code entry.*

5. Dial number you want to call.

*If you hear "stutter" dial tone after Dialling the number, ARS is requesting you to enter an ARS Authorization Code. Refer to the Automatic Route Selection feature for more information on ARS Authorization Codes.*

**To enter an Account Code at a single line set:**

1. 1. Access trunk for outside call.

*You can access a trunk by Dialling a code. Refer to Central Office Calls, Placing for more information. With Forced Account Codes, you hear, "Please enter an Account Code." Your display shows: ENTER ACCOUNT.*

2. 2. Dial \*.

3. 3. Enter Account Code (1-16 digits).

4. 4. Dial \*.

5. 5. Dial number you want to call.

*If you hear "stutter" dial tone after Dialling the number, ARS is requesting you to enter an ARS Authorization Code. Refer to the Automatic Route Selection feature for more information on ARS Authorization Codes.*

## Alarm

### • Description

Alarm lets a system phone 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 sets will ring and Music on Hold will be heard when the alarm sounds.

### Default Setting

Alarm is enabled.

### • Programming

#### 20-01-06: System Options - Alarm Duration

Set the duration of the Alarm signal (0-64800 seconds).

### • Related Features

None

### • Operation

#### To set the alarm:

1. At system phone, press a SPK key.

OR

At single line set, lift 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 will be heard if the alarm has been set. If the alarm was not set, an error tone will be heard instead.*

5. At system phone, press SPK to hang up.

OR

At single line set, hang up.

**Note:** When Alarm 1 is set, the telephone display will show "Alarm 1" until the alarm has sounded (Alarm 1 sounds once only at the assigned time).

**Note:** When Alarm 2 is set, no indication is given on the telephone display until the alarm sounds (Alarm 2 sounds daily at the assigned time).

#### To silence an alarm:

1. At system phone, press CLEAR.

OR

At single line set, lift handset.

*The single line set user will hear Music on Hold when the handset is lifted.*

**To check the programmed alarm time:**

1. Press CHECK.
2. Dial 827.
3. Dial alarm type (1 or 2).  
*The programmed time displays.*
4. Press CLEAR.

**To cancel an alarm:**

1. At system phone, press a SPK key.  
OR  
At single line set, lift handset.
2. Dial 827.
3. Dial alarm type (1 or 2).
4. Dial 9999.
5. At system phone, press SPK to hang up.  
OR  
At single line set, hang up.

## Alphanumeric Display

### • Description

System 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 Customise features.

### Conditions

The contrast is not adjustable when the telephone has background music enabled.

### Default Setting

Enabled for all display telephones.

### • Programming

#### **20-06-01: Class of Service for Extensions**

Assign a Class of Service (1-15) to an extension.

#### **20-11-08: Class of Service Options (Hold/Transfer Service) - Transfer Information Display**

In an extension's Class of Service, enable (1) or disable (0) an extension's incoming Transfer pre-answer display.

### • Related Features

None

### • Operation

Operation is automatic if enabled in programming.

## Attendant Call Queuing

### • 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/DDI, DIL and transferred calls. If the attendant doesn't have an appearance for the queued call, it waits in line on the CALL key. 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, for each telephone assigned in Program 20-17-01. It is automatic for incoming exchange line calls to a Ring Group (Program 22-04-01 to place phones into Ring Groups).

### Conditions

None

### Default Setting

Enabled.

### • Programming

#### **20-17-01: Operator's Extension Number**

Assign the operator (attendant's) extension.

#### **24-02-01: System Options for Transfer - Busy Transfer**

Prevent (0) or allow (1) extensions to Transfer calls to an attendant that has more than 32 calls in queue.

### • Related Features

- **Call Forwarding / Personal Greeting**

Forwarding when unanswered or busy can only occur at the attendant if there are more than 32 calls in queue.

### • Operation

None

## Automatic Route Selection (F-Route)

### • Description

Automatic Route Selection (ARS) provides call routing and digit translation based on the digits a user dials. ARS consists of look up tables that compare the dialled digits and decide which translation table should be used. The decision can optionally be dependant on time and day of the week. The translation table will then delete and/or add digits select the trunk group and seize the outgoing trunk.

### ARS Feature Summary

- **Basic ARS Operation**

When a user places an outside call, ARS analyses the digits dialled and assigns one of 64 Selection Numbers to the call. The Selection Number chosen depends on which digits the user dialled. ARS then checks the time of the day, the day of the week and the extension's 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).

- **Call Routing**

ARS can apply up to 24-digit analysis to every number dialled. For programming, ARS provides separate 8-digit and 24 digit tables. Each table can have up to 250 numbers.

- **Dialling Translation (Special Dialling Instructions)**

ARS can automatically execute stored dialling instructions (called Dial Treatments) when it chooses a route for a call. The system allows up to 15 Dial Treatments. The Dial Treatments can:

- Automatically insert or delete a leading 1
- Insert or delete and area code (NPA)
- Add digits (such as a dial-OCC number), pauses and waits to the dialling sequence
- Require the user to enter an authorisation code when placing a call (see Forced Authorisation Code below)

- **Time of Day Selection**

For routing purposes, ARS provides ten different day selections (called Time Schedule Patterns). Each Time Schedule Pattern can provide up to 20 time intervals which are 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's ARS<sup>1</sup> 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.

<sup>1</sup> Use Program 26-04-01 to assign an extension's ARS Class of Service. An extension's Class of Service (set in Programs 20-xx has not effect on ARS routing choices.

**Conditions**

- A. Line keys, outgoing loop keys, outgoing trunk group keys, Dialling 804+trunk group, Dialling 805+trunk number, and abbreviated dial numbers assigned to a certain trunk group can all be used to by-pass ARS.
- B. Do not use Dial Analysis Table 1 when configuring the system for Australian numbering plan.

**Default Setting**

ARS is not programmed.

**• Programming****11-01-01 : Tab System Numbering**

Set up a Service Code for ARS/F-Route Access (normally 0).

**11-09-01: Trunk Access Code**

Specify the single digit code used to access ARS (normally 0).

**14-05-01: Trunk Groups**

Program trunks of the same carrier type into the same trunk group.

**14-07-01: Trunk Access Map Setup**

Set up the Trunk Access Maps (1-51). This sets the access options for trunks.

**15-06-01: Trunk Access Map for Extensions**

Assign Trunk Access Maps (1-51) to extensions.

**26-01-01: Automatic Route Selection Service – ARS Service**

Enable (1) or disable (0) ARS.

**26-01-02: Automatic Route Selection Service - Network Outgoing Inter-Digit ARS Timer**

With Networking, this timer (0-64800 x 100msec.) replaces 20-03-04 when determining if all network protocol digits have been received. If ARS is enabled at Site B, this timer can be programmed for 5 (500 msec) at Site A. If ARS is disabled and Site B is using F-Route for out-bound dialling, this timer should be programmed for 30 (3 seconds) at Site A.

**26-01-03: Automatic Route Selection Service - ARS Misdialled Number Handling**

If a user dials a number not programmed in ARS, this option determines if the system should route over trunk group 1 (0) or play error tone (1).

**26-02-01: Dial Analysis Table for ARS – Dial**

Enter the digits (16 digits maximum: 1-9, 0 \* #, @; 200 separate entries) for the Dial Analysis Table which will be analysed by ARS/LCR. This table will be checked after any programmed F-Route operations have completed. The system will then refer to Program 26-02-02 and 26-02-03 to determine the routing for the call. To enter a wild card/don't care digit, press Line Key 1 to enter an @ symbol. ***It is important to remember that the system checks the table numbers in numerical order.*** This means that entries for specific numbers should be entered first (such as your local area codes), then enter the items containing wild

card digits. If the system sees an entry of "2@@", then any table entries which follow will be ignored. For example, if 268, 269, and 270 are local exchanges, these would be the first three table entries which would route according to the settings made in Program 26-02-02 and 26-02-03 for each of the table entries. If the next entry is "2@@", then the system checks no further in this program and routes all other "2xx" numbers according to the entries made in Program 26-02-02 and 26-02-03 for this table entry.

**26-02-02: Dial Analysis Table for ARS - Service Type**

For each Dial Analysis Table (1-200), select '0' for no ARS, '1' for *Service Type 1 - Route to Trunk Group Number* to have the number route to a trunk group [Refer to Program 26-02-03] or '2' for *Service Type 2 - F-Route Selected* to have the dialled number controlled by the F-Route table. If Service Type 2 is selected and F-Route operation is on, the F-Route table used is determined by Program 44-04. If F-Route operation is off, the routing is determined by Program 44-05.

**26-02-03: Dial Analysis Table for ARS - Service Number**

For each Dial Analysis Table (1-200), if Service Type 1 was selected in Program 26-02-02, enter the trunk group number (0-25, 0=no route).

**26-02-04: Dial Analysis Table for ARS - ARS Class of Service**

For each Dial Analysis Table (1-200), set the Automatic Route Selection (ARS) Class of Service (0-16).

**26-02-05: Dial Analysis Table for ARS - Dial Treatment**

For each Dial Analysis Table (1-200), set the Automatic Route Selection (ARS) Dial Treatment (0-15) to be used.

**26-03-01: ARS Dial Treatment**

Assign the 15 Dial Treatments for automatic ARS Dialling translation. The ARS Dial Treatment options are:

- **3** - Delete the NPA if dialled as part of the initial call.
- **2** - Delete the leading digit if dialled as part of the initial call.
- **1** - Add a leading 1 if not dialled as part of the initial call.
- **INPA** - Insert the NPA specified by NPA.
- **DNN** - Outdial the NN number of digits or execute the code that follows. For example, D041234 out-dials 1234. Valid entries are 0-9, #, \*, Wnn (wait nn seconds) and P (pause). Each digit's code counts as a digit. So for example, if a P was added for a pause, the entry would look like: D05P1234. This Dial Treatment can only be added from telephone programming.
- **Wnn** - Wait nn seconds.
- **P** - Pause in analogue trunk.
- **R** - Redial the initially dialled number, including any modifications
- **E** - End of Dial Treatment. All Dial Treatments must end with the E code.

**26-04-01: ARS Class of Service**

Set an extension's ARS Class of Service (0-16). Automatic Route Selection uses ARS Class of Service when determining how to route an extension's calls.

**44-01-01: System Options for ARS**

Select whether the ARS feature should use the time schedule (0=not used, 1=used).

**44-02-01: Dial Analysis Table for ARS Access – Dial**

Set the Dial digits for the Pre-Transaction Table for selecting ARS(8 digits).

**44-02-02: Dial Analysis Table for ARS Access - Service Type**

Set the Service Type (0-3) for the Pre-Transaction Table for selecting ARS .

**44-02-03: Dial Analysis Table for ARS Access - Additional Data**

If a Service Type is selected in Program 44-02-02, set the additional data, if required, for the Pre-Transaction Table for selecting ARS

**44-02-04: Dial Analysis Table for ARS Access - Dial Tone Simulation**

Determine if the Dial Tone Simulation is on (1) or off (0) for the Pre-Transaction Table for selecting ARS .

**44-03-01: Dial Analysis Extension Table – Dial**

Set the Dial digits to be used for the Dial Extension Analyze Table.

**44-03-02: Dial Analysis Extension Table - Table Number**

Select the ARS/R-Route table number (0-500) to be used for the Dial Extension Analyze Table.

**44-03-03: Dial Analysis Extension Table - Table Number (251)**

Select the ARS/R-Route table number (0-500) to be used for the Dial Extension Analyze Table 251.

**44-03-04: Dial Analysis Extension Table - Next Table Number**

Select the Next Table Area Number (0-4) to be used for the Dial Extension Analyze Table 252.

**44-04-01: ARS Selection for Time Schedule**

Assign each ARS Selection number (1-500) to an ARS table number for each ARS time mode. There are 8 time modes for ARS Access.

**44-05-02: ARS Table - Delete Digits**

For each ARS table (1-500) assign a priority number (1-4). Enter the number of digits to be deleted (0-255).

**44-05-03: ARS Table - Additional Dial Number**

For each ARS table (1-500) assign a priority number (1-4). Enter the number of additional digits to be Dialed (0-1000).

**44-05-04: ARS Table - Beep Tone**

For each ARS table (1-500) assign a priority number (1-4). Select whether or not a beep is heard if a lower priority trunk group is used (0=no beep, 1=beep).

**44-05-05: ARS Table - Gain Table Number for Internal Call**

For each ARS table (1-500) assign a priority number (1-4). Select the gain table number to be used for internal calls (0-500).

**44-05-06: ARS Table - Gain Table Number for Tandem Connections**

For each ARS table (1-500) assign a priority number (1-4). Select the gain table number to be used for tandem connection (0-500).

**44-05-07: ARS Table - ARS Class of Service**

For each ARS table (1-500) assign a priority number (1-4). Select the Class of Service to be used for ARS (0-16).

**44-05-08: ARS Table - Dial Treatment**

For each ARS table (1-500) assign a priority number (1-4). Select the Dial Treatment to be used (0-15).

**44-06-01: Additional Dial Table**

Set the additional dial table (1-1000) to add prior to the Dialed ARS number.

**44-07-01: Gain Table for ARS Access - Incoming Transmit****44-07-02: Gain Table for ARS F-Route Access - Incoming Receive****44-07-03: Gain Table for ARS Access - Outgoing Transmit****44-07-04: Gain Table for ARS Access - Outgoing Receive**

Set the gain table to be used (1-500). If an extension dials ARS number;

- The Extension Dial Gain Table is activated, which is assigned in Program 44-05.

- The Extension Dial Gain Table follows “Outgoing transmit” and “Outgoing receive” settings.

If the incoming call is transferred to another line using ARS ;

- The Tandem Gain Table is activated, which is assigned in Program 44-05.

- The Tandem Gain Table follows the “Incoming transmit” and “Incoming receive” settings for incoming line, and “Outgoing transmit” and “Outgoing receive” settings for the outgoing line.

For the ARS call (in the above case), CODEC gain in Program 14-01-02 and 14-01-03 are not activated.

**44-08-01: Time Schedule for ARS**

Define the daily pattern of the ARS feature. ARS has 10 time patterns. These patterns are used in Program 44-09 and 44-10. The daily pattern consists of 20 time settings.

**44-09-01: Weekly Schedule for ARS**

Define a weekly schedule for using ARS (day numbers 1-7 (1=Sun, 7=Sat), pattern numbers 1-10).

**44-10-01: Holiday Schedule for ARS**

Define a yearly schedule for ARS. This schedule is used for setting special days such as national holidays (pattern numbers 1-10).

**• Related Features**

- **Abbreviated Dialling**  
Abbreviated dialling may bypass ARS routing.
- **Central Office Calls, Placing**

Set up other options for outgoing calls (e.g., unassign line keys, adjust gains, ARS access key, loop keys, etc.).

- **Least Cost Routing (LCR)**  
LCR is applied after trunk routing has been determined and is used to modify the dialled digits which will be sent to line.
- **Toll Restriction**  
Toll Restriction overrides ARS.
- **Trunk Group Routing**  
A system with Automatic Route Selection cannot also have Trunk Group Routing.
- **Trunk Queuing/Camp On**  
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.

## • Operation

### To place a call using ARS:

1. At keyset, press the SPK key.

- OR -

At single line set, lift handset.

*You will hear normal Intercom dial tone.*

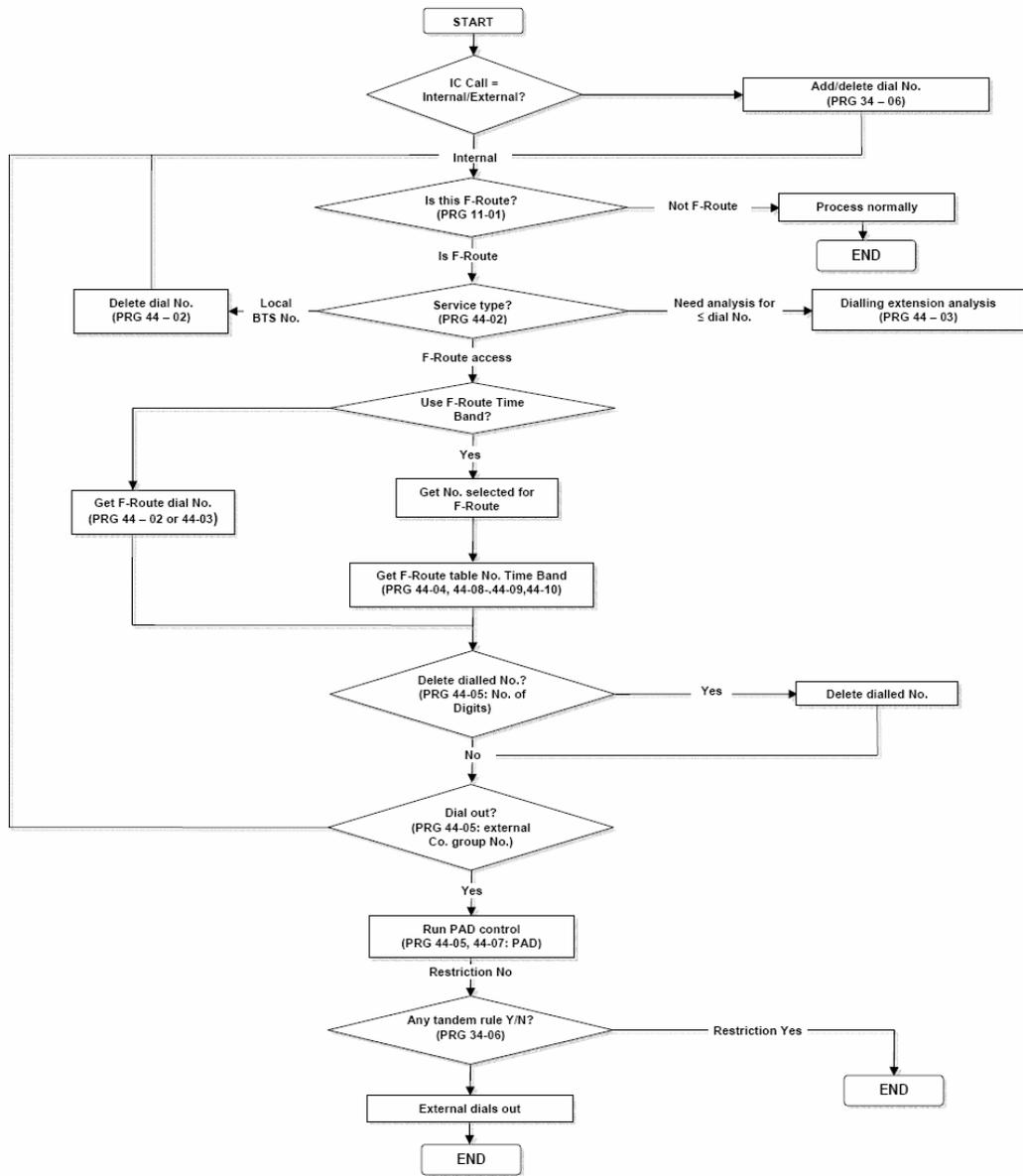
1. Dial 0

*You will hear a second "stutter" dial tone.*

*Dial outside number.*

*If you hear another "stutter" dial tone, you must enter your extension's ARS Authorisation Code.*

### F-Routing Dial Analysis



## Background Music

### • Description

Background Music (BGM) sends music from a customer-provided music source to speakers in system phones. If an extension user activates it, BGM plays whenever the user's extension is idle.

- A. Refer to the System Hardware Manual for installation instructions.
- B. The system supports one Background Music source input, via either the built-in music port or the 2PGDU card.
- C. If a 2PGDU card is installed and has BGM assigned to one of its ports (Program 10-03-01=9 and 33-01-01=3), the built-in music port is no longer used for BGM, i.e. the 2PGDU card takes priority.

### Default Setting

The built-in music port is assigned for Background Music.

### • Programming

#### 10-03-01 :PCB Setup – Terminal Type (2PGDU)

Set the terminal type to 9:External Music Source (MOH or BGM).

Assign port numbers in the following order to avoid duplication in Program 10-03-02:

Program 10-03-01 Port 3 = 9 (External Music Source), system assigns 10-03-02 = Port 1.

Program 10-03-01 Port 4 = 6 (External Speaker), system assigns 10-03-02 = Port 2.

#### 10-03-02 :PCB Setup – Logical Port Number (2PGDU)

Assign port numbers for the devices assigned in Program 10-03-01.

May be automatically assigned when Program 10-03-01 is set.

#### 20-06-01 :Class of Service for Extensions

Assign a Class of Service (1~15) to an extension.

#### 20-13-30 :Class of Service for Extensions

Class of Service Options (Supplementary Service)

- Background Music

In an extensions Class of Service, enable (1) or disable (0) the ability to activate Background Music.

#### 33-01-01 :Analogue Interface Port Type Setup

Set the Analogue Interface port (1-6) assigned as an External Music Source in Program 10-03-01 to 3 (BGM). Note that the 2PGDU card resides in Slot 4.

### • Related Features

- **Music on Hold**
- **Single Line Telephones**

- **Operation**

**To turn Background Music on or off:**

1. Press a SPK key.
2. Dial 825.
3. Press SPK to hang up.

## 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.

---

### CAUTION

The use of monitoring, recording or listening devices to eavesdrop, monitor, retrieve or record telephone conversations or other sounds activities, whether or not contemporaneous with its 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. *The Telecommunications (Interception) Act 1979 (Cth), The Telecommunications Act 1997, The Privacy Act 1988* and State and Territory Listening Devices Legislation are all relevant. Some federal and state laws require some form of notification to all parties or require the consent of all parties to the telephone conversation, prior to monitoring or recording a telephone conversation. Some of these laws incorporate strict penalties. Section 6 of the Industry Guidelines recommend pre-recorded messages or verbal notification to alert callers that the calls may be monitored:

e.g. *"your call may be listened to and recorded for quality and coaching purposes. Please tell the consultant if you don't want this to happen"*.

Section 6 of the Industry Guidelines also make recommendations in relation to notifications in writing.

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### Conditions

Each Barge In requires a conference circuit to be available. If all 32 conference circuits are in use, Barge In cannot be performed.

### Default Setting

Disabled

### • Programming

#### **11-12-08: Service Code Setup (for Service Access) - Barge In**

Determine what the service code should be for an internal party to use the Barge In feature (default=810).

#### **11-16-02: One-Digit Service Code Setup - Barge In**

Use this option to set up Item 02 for single digit Barge In. For example, you can assign Item 02 to use digit 5 for Barge In. This would allow you to program a function key with an extension number plus the Barge In code (i.e., 205 5). This allows one-touch access to the Barge In feature for extension 205. If you undefine a service code, be careful when you change this item that you don't inadvertently disable any essential Dialing function (such as Voice Mail or Message Waiting).

**15-07-01: Programming Function Keys**

Assign a function key for Barge In (code 34).

**20-06-01: Class of Service for Extensions**

Assign a Class of Service (1-15) to an extension.

**20-13-10: Class of Service Options (Supplementary Service) - Barge In Mode**

In an extension's Class of Service, enable the Barge In Speech Mode (0) or Monitor Mode (1) at the initiating extension (i.e., Barge In initiator).

**20-13-15: Class of Service Options (Supplementary Service) - Barge In, Initiate**

In an extension's Class of Service, enable (1) or disable (0) Barge In at the initiating extension (i.e., Barge In initiator).

**20-13-16: Class of Service Options (Supplementary Service) - Barge In, Receive**

In an extension's Class of Service, enable (1) or disable (0) Barge In at the receiving extension (i.e., Barge In receive).

**20-13-17: Class of Service Options (Supplementary Service) - Barge In Tone/Display**

Enable (1) or disable (0) the Barge In Tone. If disabled, this also turns off the Barge In display at the called extension.

**20-13-32: Class of Service Options (Supplementary Service) - Multiple Barge In**

Enable (1) or disable (0) the extension's ability to have multiple user's Barge In to their conversation.

**20-14-11: Class of Service Options for DISA - DISA Trunk Barge In**

Use this option to enabled (1) or disable (0) a DISA user from using the Barge In feature with the service code defined in Program 11-12-08.

**20-18-07: Service Tone Timer - Intrusion Tone Repeat Time**

After a user Barges In, the system repeats the Barge In tone after this interval. Normally, you should disable this timer by entering 0. (This timer also affect any other types of call interruption features, such as Voice Mail Conversation Recording.

**21-01-03: System Options for Outgoing Calls - Trunk Interdigit Time (External)**

Program how long an extension must wait before using the Barge In feature can be used on a call (this timer waits until this timer expires before putting a call in a talk state).

## • Related Features

### • Conference

An extension user cannot Barge In on a Conference.

### • Intercom

An extension user cannot Barge In on an Intercom call if one of the Intercom callers is using Handsfree Answerback. Both Intercom parties must have lifted the handset or pressed SPK.

### • Off Hook Signalling

An extension user cannot Barge In on an Intercom call if one of the Intercom callers is using Handsfree Answerback. Both Intercom parties must have lifted the handset or pressed SPK.

### • Programmable Function Keys

Function keys simplify Barge In operation.

## • Operation

### To Barge In after calling a busy extension:

*The call must be set up for about 10 seconds before you can Barge In.  
Listen for busy/ring or busy tone.*

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

### To Barge in without first calling the busy extension:

1. Press a SPK key.
2. Dial 810.  
OR  
Press Barge In key (PGM 15-07 or SC 851: 34).
3. Dial busy extension.

*To Barge In to a Conference call, dial the extension number of a user active on a Conference call. When a new call is added to the conference, an intrusion tone is heard by all parties, depending on system programming, and all display system phones show the joined party. If Barge In is not possible:*

- the extension user will hear a warning tone
- the DISA user will be rerouted to the defined ring group

OR

### **Not available for DISA trunks:**

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

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

## Call Forwarding

### • Description

Call Forwarding permits an extension user to redirect their calls to another extension. 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 Not Answered
- Call Forwarding Immediate
- Call Forwarding with Dual Ringing
- Call Forwarding when Unanswered
- Personal Answering Machine Emulation (Not available with the DSPDB Voice Mail).

Call Forwarding will reroute calls ringing an extension, including calls transferred from another extension. The extension user must enable Call Forwarding from their phone. To redirect calls while a user is at another phone, use "Call Forwarding with Follow Me". A periodic VRS announcement may remind users that their calls are forwarded.

### Conditions

- A. Normally, the system does not allow the chaining of Call Forwards. For example, extension 216 forwards to 218, and 218 in turn forwards to 220. Calls to 216 route to 218. Calls to 218 route to 220. The system does allow a single chain, however, if the second extension in the chain is forwarded off-premise (\*46 + trunk access code + destination telephone number).
- B. Periodic reminder message requires a DSP daughter board for Voice Response System (VRS).
- C. Call Forwarding an extension in a Department Group will prevent that extension from receiving Department Pilot Calls.
- D. 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.
- E. Ring Groups do not follow Call Forward to voice mail.
- F. Multiple Directory and Call Coverage Key calls do not follow Call Forwarding.

### Default Setting

Enabled.

### • Programming

#### 11-01-01: System Numbering

Setup a Service Code for Call Forward function (default: 8xx)

#### 11-11-xx: Service Code Setup (for Setup/Entry Operation)

Assign individual Service Codes for each of the Call Forward functions (it is recommended that these remain at the default settings).

- |                                      |                |
|--------------------------------------|----------------|
| 01 : Call Forward – Immediate        | (default: 848) |
| 02 : Call Forward – Busy             | (default: 843) |
| 03 : Call Forward – No Answer        | (default: 845) |
| 04 : Call Forward – Busy/No Answer   | (default: 844) |
| 05 : Call Forward – Dual Ring        | (default: 842) |
| 06 : Call Forwarding – Select Option | (default: 888) |
| 07 : Call Forwarding – Follow Me     | (default: 846) |

**15-07-xx: Programming Function Keys**

Assign Programmable Function Keys for the required Call Forward functions. Alternatively, the user may program these keys using Service Code 851 + Call forward code (below).

10 : Call Forward – Immediate

11 : Call Forward – Busy

12 : Call Forward – No Answer

13 : Call Forward – Busy/No Answer

14 : Call Forward – Both Ring

15 : Call Forward – Follow Me

16 : Call Forward – Select

17 : Call Forward – Device

**14-02-08: Analogue Trunk Data Setup – Answering Condition.**

All Analogue trunks involved in a Call Forward Off Premise must be assigned with Polarity Reversal.

**20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

**20-11-02: Class of Service Options - Call Forwarding (When Busy)**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to set Call Forwarding when Busy.

**20-11-03: Class of Service Options - Call Forwarding (When Unanswered)**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to set Call Forwarding when Unanswered.

**20-11-04: Class of Service Options - Call Forwarding (Dual Ringing)**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to set Call Forwarding with Both Ringing.

**24-02-03: System Options for Transfer - Delayed Call Forwarding Time**

Set the Delayed Call Forwarding interval. For an unanswered call, Call Forwarding when Unanswered occurs after this interval.

**• Related Features**

- **Call Forwarding, Fixed**

Fixed Call Forwarding is a permanent type of forwarding that automatically reroutes calls under certain condition - without any user action. User entered Call Forwarding overrides Fixed Call Forwarding.

- **Call Forwarding, Off-Premise**

An extension user can forward their calls to an off-premise location.

- **Call Forwarding with Follow Me**

While away from their desk, a user can redirect their calls to a co-worker's extension.

- **Call Forwarding/Do Not Disturb Override**

Override Call Forwarding or DND at another extension.

- **Central Office Calls, Answering**

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 why the call is ringing to their phone.

- **Department Calling**  
An extension user can forward their calls to a Department number.
- **Do Not Disturb**  
If an extension user activates DND option 4, the system prevents other extensions from forwarding calls to them. If an extension already receiving forwarded calls activates DND option 4, callers to the forwarded extension hear DND tone.
- **Programmable Function Keys**  
Function keys simplify Call Forwarding operation.
- **Voice Response System (VRS)**  
The periodic reminder message requires a Voice Response System (VRS).

## • Operation

### To Activate or Cancel Call Forward:

1. Press a programmed Call Forward key (PGM 15-07 or SC 851:10, 11, 12, 13, 14,15).
2. To Enable: Dial **1** + Extension Number;  
To Disable: Dial **0**.
3. Press SPK to hang up.

-OR-

4. Press SPK key (or lift handset)
5. Dial Call Forward service code:  
**842** = Call Forward Dual Ring  
**843** = Call Forward Busy  
**844** = Call Forward Busy/No Answer  
**845** = Call Forward No Answer
6. **846** = Call Forward Follow Me  
**848** = Call Forward Immediate
7. To Enable: Dial **1** + Extension Number;  
To Disable: Dial **0**.
8. Press SPK to hang up.

-OR-

9. Press a programmed Call Forward - Select key (PGM 15-07 or SC 851:16).  
-OR-  
Press SPK key (or lift handset) and dial **888**.
10. Dial Call Forwarding condition:  
**1** = Personal Answering Machine Emulation (then skip to step 5).  
**2** = Busy or No Answer  
**3** = Follow Me  
**4** = Immediate All Calls  
**6** = No Answer  
**7** = Immediate with Dual Ringing  
**0** = Cancel
11. Dial destination extension.

12. Dial Call Forwarding type:

2 = All calls

3 = Outside calls only

4 = Intercom calls only

13. Press SPK to hang up (hang up at SLT).

**Note:** When using a Call Forward – Select key (PGM 15-07 or SC851 : 16), the last call forward setting made with this key (i.e., call forward type and destination) can be repeated by pressing this key and waiting for 5 seconds. A confirmation tone will be heard once the call forward is set. To cancel the call forward setting, press this key and again wait for 5 seconds.

## Call Forwarding, Fixed

### • Description

Fixed Call Forwarding is a type of forwarding that is permanently in force at an extension. Calls to an extension with Fixed Call Forwarding enabled automatically reroute - without any user action. Unlike normal Call Forwarding (which is turned on and off by extension users), Fixed Call Forwarding is set by the administrator in system programming. Fixed Call Forwarding complements Voice Mail, for example. The administrator can program Fixed Call Forwarding to send a user's unanswered calls to their Voice Mail mailbox. Each individual user no longer has to manually set this operation.

In system programming, the administrator can set the Fixed Call Forwarding destination and type for each extension and virtual extension. The forwarding destination can be an on- or off-premise extension or Voice Mail. The Fixed Call Forwarding types are:

- Fixed Call Forwarding with Dual Ringing (Program 24-06 Option 1)
- Fixed Call Forwarding when Unanswered (Program 24-06 Option 2)
- Fixed Call Forwarding Immediate (Program 24-06 Option 3)
- Fixed Call Forwarding when Busy or Unanswered (Program 24-06 Option 4)
- Fixed Call Forwarding Off-Premise (Program 24-07)

Fixed 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
- Direct Inward Lines
- DISA and DID line calls to the forwarded extension
- Transferred calls

### Fixed Call Forwarding Chaining

Fixed Call Forward Chaining allows Fixed Call Forwards to loop from one extension to the next. For example, you could have the chain 201 + 202 + 203 + 204 set up for Fixed Call Forwarding when Busy. If extension 201 is busy, calls to 201 route to 202. If 202 is also busy, the calls route to 203 and so on. Chaining allows you to set up very basic hunting between co-workers.

Keep the following in mind when setting up Fixed Call Forwarding Chaining:

- If Fixed Call Forwarding Chaining forms a complete Call Forwarding loop (i.e., 201 + 202 + 203 + 201), the system rings the last extension in the chain (203). It does not complete the loop.
- If Fixed Call Forwarding Chaining finds an extension with user-implemented Call Forwarding in the middle of a chain, it rings that extension. It does not continue routing to the other extensions in the chain.
- If one of the extensions in a Fixed Call Forwarding chain has its fixed option set for Both Ringing (1), the system rings that extension. It does not continue routing to the other extensions in the chain.
- The receiving extension's display shows:

EXT AAA	AAA is the extension that initially placed the call.
TRANS << EXT BBB	BBB is the first extension in the Fixed Call Forwarding chain.

#### Conditions

- A. Call Forwarding an extension in a Department Group will prevent that extension from receiving Department Pilot Calls.
- B. Multiple Directory and Call Coverage Key calls follow Call Forwarding.
- C. Ring Group calls do not follow Call Forward to voice mail.

#### Default Setting

Disabled.

#### • Programming

##### **14-02-08: Analogue Trunk Data Setup – Answering Condition**

All analogue trunks involved in a Call Forward Off Premise must be assigned with Polarity Reversal on Answer.

##### **24-02-03: System Options for Transfer - Delayed Call Forwarding Time**

Set the Delayed Call Forwarding interval. For an unanswered call, Fixed Call Forwarding When Unanswered occurs after this interval.

##### **24-06-01: Fixed Call Forwarding**

For an extension port, assign the Fixed Call Forwarding Type (0-4) and the destination extension port. Available types are: 0 = Fixed Call Forwarding off 1 = Fixed Call Forwarding with Dual Ringing (do not use for Voice Mail ports) 2 = Fixed Call Forwarding when Unanswered 3 = Fixed Call Forwarding Immediate 4 = Fixed Call Forwarding when Busy or Not Answered

##### **24-07-01: Fixed Call Forwarding Off-Premise**

For each extension, assign the Fixed Call Forwarding Off-Premise telephone number (up to 24 digits). Be sure to include the trunk access code.

#### • Related Features

- **Alphanumeric Display**

When a call is Fixed Call Forwarded, the display at the destination shows from which extension the call was routed.

- **Call Forwarding**

User entered Call Forwarding overrides Fixed Call Forwarding.

- **Call Forwarding, Off-Premise**

An extension user can forward their calls to an outside telephone number.

- **Multiple Directory Numbers**

Calls to virtual extension numbers follow the Fixed Call Forwarding assignment of their virtual port.

#### • Operation

None

## Call Forwarding, Off-Premise

### • Description

Off-Premise Call Forwarding allows an extension user to forward their calls to an off site location. By enabling Off-Premise Call Forwarding, 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 phone number the user enters, such as a car phone, home office, hotel or meeting room. Off-Premise Call Forwarding can route the off-site phone 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 \*
- Direct Inward Lines \*
- DISA, DID and DDI calls to the forwarded extension \*
- Transferred calls \*

Off-Premise Call Forwarding does not reroute Call Coverage keys, Multiple Directory Number keys, or Ring Group calls (i.e., trunk ringing according to Ring Group assignments made in Programs 22-04 and 22-05).

*\* Off-Premise Call Forwarding can reroute an incoming trunk call only if the outgoing trunk selected has answer/disconnect supervision enabled (see Programming above).*

### Off-Premise Call Forward for Doorphones

Off-Premise Call Forwarding allows Doorphone callers to be transferred automatically to the pre-programmed external party. The destination telephone number is stored in the Common Abbreviated Dial area. This feature may be used in case a co-worker is out of the office. All incoming calls for their extension will be automatically transferred to their external number (example: cell phone). Off-Premise Call Forward for Doorphones can be transferred to the external party through **ISDN lines only**.

### Conditions

- A. Call Forwarding Off-Premise requires ISDN, or loop start trunks with disconnect supervision.
- B. The trunk access code and the outside telephone number combined cannot exceed 4 digits.
- C. Normally, the system does not allow the chaining of Call Forwards. For example, extension 216 forwards to 218, and 218 in turn forwards to 220. Calls to 216 route to 218. Calls to 218 route to 220. The system does allow a single chain, however, if the second extension in the chain is forwarded off-premise (\*46 + trunk access code + destination telephone number).
- D. Call Forwarding an extension in a Department Group will prevent that extension from receiving Department Pilot Calls.
- E. 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.
- F. A Forced/Verified Account Code (when enabled) must be entered before the Call Forward destination number.

### Default Setting

Disabled.

- **Related Features**

- **Call Forwarding, Fixed**

Fixed Call Forwarding can automatically forward an extensions calls to an outside number.

- **Call Forward to Abbreviated Dial**

Call forward codes can be used to forward to abbreviated dial that will route off premise.

- **Doorphone**

Doorphones must be programmed in order for the calls to be transferred off-premise.

- **Toll Restriction**

The outside number OPX Call Forwarding dials can only be a number normally allowed by the forwarded extension's Toll Restriction.

- **Voice Response System (VRS)**

In systems with a DSP daughter board for VRS, callers to an extension forwarded off-premise hear, *"Please hold on, your call is being rerouted."*

- **Programming**

- 11-10-04: **Service Code Setup (for System Administrator) - Storing Common Abbreviated Dialling Numbers.**

Assign the service code to be used for Common Abbreviated Dialling (853 by default).

- 11-10-18: **Service Code Setup (for System Administrator) - Off-Premise Call Forward by Doorphone**

Assign the service code to be used for Off-Premise Calling Forwarding by a Doorphone (822 by default).

- 14-01-13: **Basic Trunk Data Setup - Loop Supervision**

Enable (1) loop supervision for each trunk that should be able to use Call Forwarding Off-Premise.

- 14-02-08: **Analogue Trunk Data Setup – Answering Condition**

All analogue trunks involved in Call Forward Off Premise must be assigned with Polarity Reversal (Line Reversal on Answer).

- 14-02-12: **Detect Network Disconnect Signal**

Enable the network disconnect signal detection for proper release of analogue trunks.

- 14-02-13: **Trunk to Trunk Limitation**

When 14-02-12=1 (enabled) and 14-02-13=0 (disabled), Trunk to Trunk Transfer/Call Forward Off-Premise uses the following disconnect timers:

25-07-07 (DISA Conversation Warning Tone Time)  
25-07-08 (DISA Long Conversation Disconnect)

When 14-02-12=1 (enabled) and 14-02-13=1(enabled), Trunk to Trunk Transfer/Call Forward Off-Premise uses the following disconnect timer:

24-02-07 (Forced Release Timer for Trunk to Trunk Transfer)

**15-07-01: Programmable Function Keys**

For one-touch access to the Call Forwarding Device setup code (713), assign a function key (17) for Call Forwarding (Device).

For Off-Premise Call Forwarding by a Doorphone, assign a function key (54) if required.

**20-06-01: Class of Service for Extensions**

Assign Class of Service (1-15) to an extension.

**20-11-12: Class of Service Options (Hold/Transfer Service) - Call Forwarding Off- Premise**

In an extensions Class of Service, enable (1) or disable (0) setting up Call Forwarding Off-Premise at the extension.

**21-03-01: Trunk Group Routing for Trunks**

Assigns the routes set in Program 14-06 for use with automatic external call forward.

For each mode, assign the trunks used for call forward off-premise to Route Table Number 1.

**24-02-07: Forced Release Timer for Trunk to Trunk Transfer**

All trunk to trunk transferred calls will be disconnected after this timer has expired (default=30 minutes). Set this timer to 0 to prevent call cut off. This applies to a manual trunk to trunk transfer call.

**25-07-07: DISA Conversion Warning Tone Time**

Determine the length of time a DISA/T2T/CFOP caller can talk before the Long Conversation tone is heard (0-64800 seconds).

**25-07-08: DISA Long Conversation Disconnect**

This timer determines how long the system will wait before disconnecting a call after the Long Conversation tone from Program 25-07-07 is heard (0-64800 seconds)

**32-01-03: Doorphone Timers - Off-Premise Call Forward by Doorphone Disconnect Timer**

Define the conversation period for an Off-Premise Call Forward by Doorphone call. When this timer expires, the caller will hear busy tone for 3 seconds (fixed timer) and the call will then be disconnected (0-64800).

**• Operation****To activate Call Forwarding Off-Premise**

1. Press **SPK** key (or lift handset) and dial **713**.  
-OR-  
Press Call Forward (Device) key (PGM 15-07 or SC 851: 17).
2. Dial **6** + trunk access code:  
**0**(ARS/Trunk Group Routing),  
**804** + Line Group (01- 25),  
**805** + Line number (e.g., 05 for line 5).
3. Dial the outside number to which your calls should be forwarded.
4. For System Phone only, press **HOLD**.
5. Press **SPK** (or hang up at SLT) to hang up.

*Your DND or Call Forwarding (Device) Programmable Function Key flashes*

**To cancel Call Forward Off-Premise:**

1. Press **SPK** key (or lift handset) and dial **713**.  
-OR-  
Press Call Forward (Device) key (PGM 15-07 or SC 851: 17).
2. Dial **6 + HOLD**.
3. Press **SPK** (or hang up at SLT) to hang up.

*Your DND or Call Forwarding (Device) Programmable Function Key stops flashing.*

**Off-Premise Call Forwarding for Door Phones**

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

**To activate Call Forward Off-Premise for Door Phone:**

1. Press **SPK** key (or lift handset) and dial **822**.  
-OR-  
Press Call Forward (Device) key (PGM 15-07 or SC 851: 54).
2. Dial the door phone number (1-6).
3. Dial the Abbreviated Dialling number to which the calls should be forwarded.
4. Press **SPK** (or hang up at SLT) to hang up.

*Your DND or Off-Premise Call Forwarding Programmable Function Key flashes.*

**To cancel Call Forward Off-Premise for Door Phone:**

1. Press **SPK** key (or lift handset) and dial **822**.  
-OR-  
Press Call Forward (Device) key (PGM 15-07 or SC 851: 54).
2. Dial **0**.
3. Press **SPK** (or hang up at SLT) to hang up.

*Your DND or Off-Premise Call Forwarding Programmable Function Key stops flashing.*

## Call Forwarding to Abbreviated Dial

### • Description

Call Forwarding to Abbreviated Dial allows an extension user to forward their calls to an off-site location. By enabling Call Forwarding to abbreviated dial, 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 phone number the user enters, such as a car phone, home office, hotel or meeting room. Off-Premise Call Forwarding will route the off-site phone number over the trunk route set for the abbreviated dial bin.

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 \*
- Direct Inward Lines \*
- DISA, DID and DDI calls to the forwarded extension \*
- Transferred calls \*

Call Forwarding does not reroute Call Coverage keys, Multiple Directory Number keys, or Ring Group calls (i.e., trunk ringing according to Ring Group assignments made in Programs 22-04 and 22-05).

\* Off-Premise Call Forwarding can reroute an incoming trunk call only if the outgoing trunk selected has disconnect supervision enabled (see Programming above).

### Off-Premise Call Forward for Doorphones

Off-Premise Call Forwarding allows Doorphone callers to be transferred automatically to the pre-programmed external party. The destination telephone number is stored in the Common Abbreviated Dial area. This feature may be used in case a co-worker is out of the office. All incoming calls for their extension will be automatically transferred to their external number (example: cell phone). Off-Premise Call Forward for Doorphones can be transferred to the external party through **ISDN lines only**.

### Conditions

- A. Call Forwarding Off-Premise requires ISDN, loop start trunks with disconnect supervision.
- B. The system does not allow the chaining of Call Forwards. For example, extension 216 forwards to 218, and 218 in turn forwards to 220. Calls to 216 route to 218. Calls to 218 route to 220. The system does allow a single chain, if the second extension in the chain is forwarded off-premise (848 + 1 + 813 + bin).
- C. Call Forwarding an extension in a Department Group will prevent that extension from receiving Department Pilot Calls.
- D. 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.

### Default Setting

Disabled.

### • Related Features

- **Call Forwarding, Fixed**  
Fixed Call Forwarding can automatically forward an extensions calls to an outside number.

- **Call Forward, Off Premise**  
Call forward codes can be used to forward to a specific outside number.
- **Doorphone**  
Doorphones must be programmed in order for the calls to be transferred off-premise.
- **Toll Restriction**  
The outside number Call Forwarding dials can only be a number normally allowed by the forwarded extension's Toll Restriction.
- **Voice Response System (VRS)**  
In systems with a DSP daughter board for VRS, callers to an extension forwarded off-premise hear, *"Please hold on, your call is being rerouted."*

- **Programming**

- **11-10-04: Service Code Setup - Storing Common Abbreviated Dialling Numbers**

- Assign the service code to be used for Common Abbreviated Dialling (853 by default).

- **11-10-18: Service Code Setup - Off-Premise Call Forward by Doorphone**

- Assign the service code to be used for Off-Premise Calling Forwarding by a Doorphone (822 by default).

- **14-01-13: Basic Trunk Data Setup - Loop Supervision**

- Enable (1) loop supervision for each trunk that should be able to use Call Forwarding Off-Premise.

- **15-07-01: Programmable Function Keys**

- For one-touch access to the Call Forwarding setup codes (843, 844, 845, 848), assign a function key (10, 11, 12, 13) for Call Forwarding. For Off-Premise Call Forwarding by a Doorphone, assign a function key (54) if required.

- **20-06-01: Class of Service for Extensions**

- Assign Class of Service (1-15) to an extension.

- **20-11-12: Class of Service Options (Hold/Transfer Service) - Call Forwarding Off- Premise**

- In an extensions Class of Service, enable (1) or disable (0) setting up Call Forwarding Off-Premise at the extension.

- **32-01-03: Doorphone Timers - Off-Premise Call Forward by Doorphone Disconnect Timer**

- Define the conversation period for an Off-Premise Call Forward by Doorphone call. When this timer expires, the caller will hear busy tone for 3 seconds (fixed timer) and the call will then be disconnected (0-64800).

- **Operation**

- **To activate Call Forwarding Off-Premise**

- 1. At system phone, press a SPK key + Dial 848.
    - OR
    - Press Call Forward key (PGM 15-07 or SC 851: 10)
    - OR
    - At SLT, lift handset Dial 848.

2. Dial 1 + 813 +1.

*813 is the Abbreviated dial access code, can be replaced with the Group Abbreviated dial access code 814.*

3. Dial the bin number to which your calls should be forwarded.
4. Press SPK (or hang up at SLT) to hang up if you Dialed 848 in step 1.

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

#### **To cancel Call Forwarding Off-Premise**

1. At system phone, press a SPK key + Dial 848.  
OR  
Press Call Forward (Device) key (PGM 15-07 or SC 851: 10)  
OR  
At SLT, lift handset and dial 848.

2. Dial 0.

3. Press SPK (or hang up at SLT) to hang up if you Dialed 848 in step 1.

*Your DND or Call Forwarding (Device) Programmable Function Key stops flashing.*

#### **Off-Premise Call Forwarding for Doorphones:**

*These operations are performed at the Doorphone Ringing Extension only.*

#### **To activate Call Forwarding Off-Premise by Doorphone**

1. At system phone, press a SPK key + Dial 822.  
OR  
Press Call Forward (Device) key (PGM 15-07 or SC 851: 54)  
OR  
At SLT, lift handset Dial 822.
2. 2. Dial the Doorphone number (1-8).
3. 3. Dial the Abbreviated Dialling number to which the calls should be forwarded.
4. 4. Press SPK (or hang up at SLT) to hang up.

*Your DND or Off-Premise Call Forwarding Programmable Function Key flashes.*

#### **To cancel Call Forwarding Off-Premise by Doorphone**

1. At system phone, press a SPK key + Dial 822.  
OR  
Press Call Forward (Device) key (PGM 15-07 or SC 851: 54)  
OR  
At SLT, lift handset and dial 822.

2. Dial 0.

3. Press SPK (or hang up at SLT) to hang up.

*Your DND or Off-Premise Call Forwarding Programmable Function Key stops flashing.*

## 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 phone.

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

### Conditions

- A. Call Forwarding an extension in a Department Group will prevent that extension from receiving Department Pilot Calls.
- B. 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.

### Default Setting

Enabled.

### • Programming

#### 11-01-01: System Numbering

Setup a Service Code for Call Forward functions (default: 8xx).

#### 11-11-07: Service Code Setup (for Setup/Entry Operation)

Assign individual Service Code for Call Forward Follow Me function (it is recommended that this remains at the default setting).

#### 15-07-01: Programming Function Keys

Assign a function key for one-touch access to the Call Forward Follow Me (code 15)

#### 20-06-01: Class of Service for Extensions

Assign a Class of Service (1-15) to an extension.

#### 20-11-05: Class of Service Options (Hold/Transfer Service) - Call Forwarding with Follow Me

In an extension's Class of Service, allow (1) or prevent (0) the setting of Call Forwarding with Follow Me.

### • Related Features

#### • Programmable Function Keys

Function keys simplify Call Forwarding with Follow Me operation.

### • Operation

#### To Activate or Cancel Call Forward Follow Me:

1. Press a programmed Call Forward key (PGM 15-07 or SC 851:15).
2. To Enable : Dial **1** + your extension number,  
To Disable : Dial **0**
3. Press SPK or hang up.  
-OR-

4. Press SPK key (or lift handset).
5. Dial **846**.
6. To Enable : Dial **1** + your extension number,  
To Disable : Dial **0**
7. Press SPK or hang up.  
-OR-
8. Press SPK key (or lift handset).
9. Dial **888**.
10. To Enable : Dial **3** + your extension number,  
To Disable : Dial **0** (Skip to step 6).
11. Dial your extension number.
12. Dial Call Forward type:
  - 0** = Cancel
  - 2** = All Calls
  - 3** = Outside calls only
  - 4** = Intercom calls only
13. Press SPK to hang up (hang up at SLT)  
*When set, your DND or Call Forwarding (Device) Programmable Function Key flashes red.*

## 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 Setting

Disabled.

### • Programming

#### **15-07-01: Programming Function Keys**

Assign a function key for Call Forwarding/Do Not Disturb Override (code 37).

#### **20-06-01: Class of Service for Extensions**

Assign a Class of Service (1-15) to an extension.

#### **20-13-04: Class of Service Options (Supplementary Service) - Call Forwarding/DND Override**

In an extension's Class of Service, enable (1) or disable (0) the ability to initiate Call Forwarding/DND Override.

### • Related Features

- **Programmable Function Keys**

Function keys simplify Call Forwarding/DND Override operation.

### • Operation

#### **To override an extension's Call Forwarding or Do Not Disturb:**

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

## Call Redirect

### • Description

Call Redirect allows a system phone 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 types of calls:

- Normal trunk call
- DID
- DISA
- DIL
- ICM

The following types of calls cannot be redirected with the feature:

- Transferred
- Department Group (all ring mode)
- Doorphone
- Virtual Extension

### Conditions

- C. After pressing the Call Redirect key, the call will not recall the extension.
- D. The pre-defined destination has to be an extension number or voice mail pilot number.

### Default Setting

Disabled.

### • Programming

#### **15-07-01: Programmable Function Keys**

Assign a function key for Call Redirect (code 49 + destination extension number).

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-11-16: Class of Service Options (Hold/Transfer Service) - Call Redirect**

Enable (1) or disable (0) a system phone user's ability to transfer a call to a pre-defined destination (such as an operator, voice mail, or another extension) without answering the call

### • Related Features

None

- **Operation**

**To redirect a ringing call:**

1. 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 or pressing the CALL keys.

*A confirmation tone is heard over the telephone's speaker.*

## Call Timer

### • Description

Call Timer lets a system phone user time their trunk calls on the telephone display. This helps users that must keep track of their time on the phone. For incoming trunk calls, the Call Timer begins as soon as the user answers the call. For outgoing trunk calls, the Call Timer starts about 10 seconds after the user dials the last digit.

### Conditions

None

### Default Setting

Enabled.

### • Programming

#### **14-02-08: Analogue Trunk Data Setup – Answering Condition**

#### **20-13-36: Class of Service Options (Supplementary Service - Caller Timer**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use the Call Timer.

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **21-01-03: System Options for Outgoing Calls - Trunk Interdigit Time (External)**

The system waits for this timer to expire before starting the Call Timer.

### • Related Features

- **Alphanumeric Display**

Disabling the trunk name seize display (Program 20-09-04=0) also disables the Call Timer.

### • Operation

#### **To time your trunk calls:**

1. Place trunk call.

*The timer starts automatically.*

## 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 line for a busy extension without being forgotten.

### Conditions

None

### Default Setting

Enabled.

### • Programming

#### **11-12-47: Service Code Setup (for Service Access) - Call Waiting Answer / Split Answer for SLT**

If required, use this program to change the code users dial to Split while on a call. This code is normally 894.

#### **15-07-01: Programming Function Keys**

Assign a function key for Camp-On (code 35). This key is also the Call-back key.

#### **20-18-06: Service Tone Timer - Call Waiting Tone Timer**

Use this option to set the interval between Call Waiting tones. This timer also sets the interval between Off Hook Signalling alerts.

### • Related Features

#### • **Callback**

If an extension user Camps-On and then hangs up, the system converts the Camp On to a Callback.

#### • **Off Hook Signalling**

The Off Hook Signalling Enhancements give an extension the ability to block a caller from dialling 804 to Camp On and/or DID callers from automatically camping on.

#### • **Programmable Function Keys**

Function keys simplify Call Waiting/Camp On operation.

#### • **Transfer**

An extension user may be able to Transfer a call to a busy extension.

#### • **Trunk Queuing/Camp-On**

Trunk Queuing lets an extension user Camp-On to a trunk.

### • Operation

#### **To Camp-On to a busy extension:**

1. Call busy extension.
2. Dial 850 or Press Camp-On key (PGM 15-07 or SC 851: 35).

3. Do not hang up.

*To Camp-On to a trunk, see Trunk Queuing.*

**To cancel a Camp-On request:**

1. Hang up.
2. At system phone, press a SPK key and Dial 870.  
OR  
At system phone, press Camp-On key (PGM 15-07 or SC 851: 35).  
OR  
At single line set, lift handset and dial 870.

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

*Listen for Camp On beep.*

1. **Single Line Telephone:**

Hookflash and dial 894

*To repeatedly split between the two calls.*

## Callback

### • Description

When an extension user calls a co-worker that doesn't answer, 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 mean time.*
2. 2. When extension B becomes idle, the system rings extension A. This is the Callback ring.
3. 3. Once caller A answers the Callback ring, the system rings (formerly busy) extension B.  
*If caller A doesn't answer the Callback ring, the system cancels the Callback.*
4. 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.

### Default Setting

Enabled.

### • Programming

#### **15-02-11: Multi-Line Telephone Basic Data Setup - Callback Automatic Answer**

Enable (1) or disable (0) Callback Automatic Answer.

#### **15-07-01: Programming Function Keys**

Assign a function key for Callback (code 35). This key is also the Camp-On key.

#### **20-01-07: System Options - Callback Ring Duration Time**

Set the duration of the Callback ring (0-64800 seconds).

#### **20-01-09: System Options - Callback/Trunk Queuing Cancel Time**

The system cancels Callback and Trunk Queuing requests after this interval (0-64800 seconds).

### • Related Features

- **Call Waiting (Camp-On)**  
If an extension user initiates a Callback but does not hang up, their extension Camps-On to the busy extension.
- **Programmable Function Keys**  
Function Keys simplify Callback operation.

**• Operation****To place a Callback:**

1. Call unavailable (busy or unanswered) extension.
2. Dial 850 or Press Callback key (PGM 15-07 or SC 851: 35).
3. Hang up.
4. Lift 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 phone 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 don't have Callback Automatic Answer, you must press the ringing line appearance to place the call.*

**To cancel a Callback:**

1. At system phone, press a SPK key and Dial 870.  
OR  
At system phone, press Camp-On key (PGM 15-07 or SC 851: 35).  
OR  
At single line set, lift handset and dial 870.

**To test Callback at your single line phone:**

1. Lift the handset.
2. Dial 899.
3. Hang up.
4. When the phone rings, lift the handset.  
*You hear synthesized Music on Hold.*
5. Hang up.

## Caller ID

### • Description

Caller ID allows a display system phone to show an incoming caller's telephone number (called the Directory Number or DN) and optional name. The Caller ID information is available as a post-answer or pre-answer display. Normally, the system provides the Caller ID pre-answer display.

With the post-answer display, the user sees the incoming caller's number/name after they answer the call. With the pre-answer display, the user previews the caller's number before picking up the ringing line. The pre-answer display is only available if the system has Automatic Handsfree for incoming line/loop keys disabled. Refer to the table on the following for the available Caller ID displays.

### 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 will show the Caller ID or the trunk's name if Caller ID is not enabled. For incoming Intercom calls, the display will show the calling extension's name. You can set up the system to present the second call data automatically or allow the user to select the operation of second calls (with service code 779).

Caller ID supports the telco's Called Number Identification (CNI) and Called Number Delivery (CND) service, when available. These services provide the Caller ID information (i.e., messages) between the first and second ring burst of an incoming call. There are two types of Caller ID message formats currently available: Single Message Format and Multiple Message Format. With Single Message Format, the telco sends only the caller's phone number (DN). The DN is either 7 or 10 digits long. In Multiple Message Format, the telco sends the DN and the caller's name. The DN for this format is also 7 or 10 digits long, and the name provided consists of up to 15 ASCII characters.

Telephone's display can show up to 12 Caller ID digits.

Once installed and programmed, Caller ID is enabled for all types of trunk calls, including:

- Ring Group calls
- Calls transferred from another extension
- Calls transferred from the VRS
- Direct Inward Lines (DILs)

Caller ID temporarily stores 16 calls (total of abandoned and unanswered). New calls replace old calls when the buffer fills.

### Outputting Caller ID Data

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

**Caller ID Type (FSK/DTMF)**

The type of Caller ID received can be set for each analogue trunk with Program 14-02-16.

The type of Caller ID sent to each SLT telephone can be set with Program 15-03-11.

**ISDN Calls Display Reason for No Caller ID Information**

With Caller ID enabled, the system will provide information for ISDN calls that do not contain the Caller ID information. If the Caller ID information is restricted, the telephone display will show "PRIVATE". If the system is not able to provide Caller ID information because telco information is not available, then the display will show "No Caller Info".

**Temporary Memory**

An unanswered call will the Call History key (PGM 15-07 or SC 851: 08) to flash, indicating a new call has been placed in the temporary memory. If enabled in programming, the telephone's display will show "CHECK LIST".

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

**Caller ID to Abbreviated Dial Name Tagging**

If the received Caller ID number matches a number in the Abbreviated Dial bin the name assigned to the Abbreviated Dial bin will be displayed.

Note that if the received Caller ID includes the callers name then the Abbreviated Dial Name Tagging will not occur; the callers name will be displayed.

**Caller ID to Single Line Telephones**

The XN120 can send the caller ID to an analogue single line telephone (SLT) connected to one of the ST telephone ports. The system will also send the calling party number and name for internal calls to the SLT.

**Note:** When caller ID is enabled the ringing pattern is fixed at 2 Sec ON/4 Sec OFF for internal and external calls.

**Conditions**

To have pre-answer Caller ID from the voice mail, the call must be an unscreened transfer.

**Default Setting**

Receiving callers name and number is disabled for analogue trunks (to enable: set Program 14-02-10 for each trunk).

Sending caller ID (name and number) is disabled for SLT telephones (to enable: set Program 15-03-09 for each SLT telephone).

Sending callers name is enabled for SLT telephones (to disable: set Program 15-03-10 for each SLT telephone).

Receiving callers name and number is enabled for ISDN trunks, it cannot be disabled.

Caller ID Display				
Abbreviation		Description		
Uses PRG 20-20-01/02/03 for reference to Absence code		Absence Reason Code P displays as PRIVATE Absence Reason Code O displays as OUT OF AREA		
CID-num CID-name Trunk name		Caller ID number (Provided by telco) Caller ID name (provided by telco) Trunk name provided by phone system (Program 14-01-01)		
NN:NN:NN HH:MM:SS MM:DD XXX YY * ^		System's Caller Timer display System Time System Date Trunk Number Caller ID order number when reviewing (ISDN only). Call History view will show a * for unanswered call and blank for answered calls Caller ID Number may be replaced by a matching Abbreviated Dialling Bin name.		
Conditions	Row	Pre-Answer Display	Post-Answer Display <i>(Refer to Note 1)</i>	Display When Reviewing via Call History key (SC 851:08)
With Caller ID name and number	1	XXX: MM-DD HH:MM	Trunk name NN:NN:NN	* MM-DD HH:MM
	2	CID-num^	CID-num^	YY: CID-num^
With Caller ID number Without Caller ID name With name absence code	1	XXX: MM-DD HH:MM	Trunk name NN:NN:NN	* MM HH:MM
	2	CID-num^	CID-num^	YY: CID-num^
Without Caller ID number With Caller ID name With number absence code	1	XXX: MM-DD HH:MM	Trunk name NN:NN:NN	* MM HH:MM
	2	CID-name	CID-name	CID-name
Without Caller ID number Without Caller ID name With number & name absence codes	1	XXX: MM-DD HH:MM	Trunk name NN:NN:NN	* MM HH:MM
	2	Name Absence Code	Name Absence Code	Name Absence Code
Without Caller ID number Without Caller ID name With number absence code	1	XXX: MM-DD HH:MM	Trunk name NN:NN:NN	* MM HH:MM
	2	Name Absence Code	Name Absence Code	Name Absence Code
Without Caller ID number Without Caller ID name With name absence code	1	XXX: MM-DD HH:MM	Trunk name NN:NN:NN	* MM-DD HH:MM
	2	Name Absence Code	Name Absence Code	Name Absence Code
Without Caller ID number Without Caller ID name Without any absence code	1	Trunk name	Trunk name NN:NN:NN	No caller id info stored
	2	Ringing		

Without time and date With absence reason	1	Trunk name		Trunk name
	2	Name Absence Code		Absence code
Without time and date With absence reason	1			Trunk name
	2			NO CALLER INFO

• **Programming**

**10-02-03: Location Setup – Other Area Access Code**

Enter the Other Area Access Code digits(default: 0) required to place an outgoing call (8 digits maximum: 0-9, \*, #). This is the code which will be added to the Caller ID information for incoming trunk calls to allow the call to dial out if allowed in 20-19-03.

**14-01-19: Privacy Mode Toggle Option**

When enabled, post answer CCI display will not show CLI Number or Name on the second row of the LCD. If the Line Key is pressed while the line is set to private mode, CLI will then be displayed.

**14-01-20: Basic Trunk Data Setup - Block Outgoing Caller ID**

Allow (1) or prevent (0) the system from automatically blocking outgoing Caller ID information when a user places a call. If allowed (i.e., block enabled), the system automatically inserts the Caller ID block code (defined in Program 14-01-21) before the user Dialed digits (this requires Program 14-02-10 to be enabled). If prevented (i.e., block disabled), the system out-dials the call just as it was Dialed by the user.

**14-01-21: Caller ID Block Code**

Enter the code, up to 8 digits, that should be used as the Caller ID Block Code. This code is automatically inserted before Dialed digits if Program 14-01-20 is set to '1'.

**14-02-06: Receiving Type FSK / DTMF**

**14-02-10: Analogue Trunk Data Setup - Caller ID**

Enable (1) or disable (0) a trunk's ability to receive Caller ID name/number information. If this option is set to '1', the system will suppress ringing and lamping for trunk calls for the first ring in order to receive the Caller ID information.

**14-02-16: Caller-ID Type for Analogue Trunk**

Set the type of Caller ID received on each analogue trunk, FSK (0) or DTMF (1) (default = FSK).

**15-03-11: Caller-ID Type for External Module**

Set the type of Caller ID sent to each analogue telephone, FSK (0) or DTMF (1) (default = FSK).

**20-06-01: Class of Service for Extensions**

Assign Class of Service (1-15) to extensions.

**20-08-15: Class of Service (Outgoing Call Service) - Block Outgoing Caller ID**

Allow (1) or prevent (0) a user's Class of Service from automatically blocking outgoing Caller ID information when a call is placed. If allowed (i.e., block enabled), the system automatically inserts the Caller ID block code (defined in Program 14-01-21) before the user Dialed digits (this requires Program 14-02-10 to be enabled). If prevented (i.e., block disabled), the system outdials the call just as it was Dialed by the user.

**20-09-01: Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/ DIL**

In an extension's Class of Service, enable (1) or disable (0) forced second call. When enabled the user can not turn off second call indication by Service Code 779+0. When disabled the user can choose to receive/not receive second calls with Service Code 779+1.

**20-09-02: Class of Service Options (Incoming Call Service) - Caller ID Display**

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to display incoming Caller ID name/number information.

**20-09-04: Class of Service (Incoming Call Service) – Notification for Incoming Call List Existence**

When enabled, "Check List" appears on a System Phone's LCD for any new call received with Caller ID. This indicates that there is new Caller ID information to view in the Caller ID list. When disabled, this LCD indication is not provided, although the new Caller ID information can still be viewed in the Caller ID list.

**20-13-06: Class of Service Options (Supplementary Service) Automatic Off-Hook Signal**

In order for a display phone to show Caller ID information for a second incoming call, must be enabled (1).

**20-19-01: System Options for Caller ID - Caller ID Display Formatting**

Determine whether the first 10 digits (0) or last 10 digits (1) should be displayed when Caller ID exceeds 12 digits.

**20-19-02: System Options for Caller ID - Caller ID Wait Timer**

Determine how long an incoming CO call should wait for Caller ID information from telco before the system connects the call.

**20-19-03: System Options for Caller ID - Edit Caller ID**

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to edit the stored Caller ID information. For ISDN incoming calls, the digits assigned in Program 10-02-03 are prefixed to the Caller ID number (default = 0) when Program 20-19-03 is enabled.

**80-02-01: DTMF Tone Setup – Duration**

**80-02-02: DTMF Tone Setup – Pause**

With Program 14-01-20 set to 1 and Program 14-02-10 set to 1, if the Caller ID block code is being sent too quickly for the telco to recognize, lengthen the pause and duration time for the DTMFs.

• **Related Features**

- **Automatic Route Selection**

ARS can block outgoing Caller ID information on a call-by-call basis. To do this, insert the Caller ID block code (e.g., \*67) in the ARS Dial Treatments.

- **Station Message Detail Recording**  
Caller ID information outputs on the SMDR report.

## Caller ID Sending

### • Description

Caller ID sending allows the XN120 to send the calling party's telephone number (CGPN) for outgoing ISDN calls.

The CGPN is passed on by the Network provider to the called party.

Note - You may need to request this service with the ISDN Network provider.

The CGPN number can be set for each trunk and/or each extension, when both are set the extension will take priority over the trunk CGPN.

### Conditions

This service may be restricted by the Network provider.

### Default Setting

CLIP sending is enabled.

There are no entries for trunk or extension CLIP.

### • Programming

**10-03-05: CLIP Information Sending - enable/disable for each ISDN BRI circuit**

**15-01-04 : CLIP Information Sending - enable/disable for each extension**

**20-08-13 : CLIP Information Sending - enable/disable per COS**

**22-12-01 : ISDN Trunk CLIP - enter the CGPN to be sent for each ISDN trunk**

**20-13-01 : Extension CLIP- enter the CGPN to be sent for each extension**

## 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. For additional information on making trunk ring, refer to the Ring Group feature.

### 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 doesn't answer the call, it rings the secretary's phone after a programmable interval.

### Universal Answer

Universal Answer allows an employee to answer a call by going to any system phone and Dialling a unique Universal Answer code. The employee doesn't have to know the trunk number or dial any other codes to pick up the ringing trunk. You'll normally set up Universal Answer along with Universal Night Answer (see "Night Service". When a Universal Night Answer call rings the External Paging, an employee can answer the call from the first available phone. 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 phone. See "Night Service" for more on Universal Night Answer.

The Automatic Answer of Universal Answer Calls option (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; they no longer need to dial the service code.

### Display Reason for Transfer

When incoming DID, DDI, DISA, DIL or ISDN calls are transferred to another extension or ring group due to a Call Forward or DND setting, the reason for the transfer can be displayed on the phone receiving the transferred call. The extension user can then recognize why they are receiving the call. This feature requires a display telephone in order to view the message.

### Conditions

None

### Default Setting

Enabled.

### • Programming

#### 10-03-03: PCB Setup - Transmit CODEC Gain Type

#### 10-03-04: PCB Setup - Receive CODEC Gain Type

Customise the transmit and receive levels of the CODEC Gain Types for single line telephones.

#### 10-08-01: Pre-Ringing Setup

Enable (1) or disable (0) pre-ringing for outside calls.

**14-01-02: Basic Trunk Data Setup - Transmit CODEC Gain Type**

**14-01-03: Basic Trunk Data Setup - Receive CODEC Gain Type**

Customise the transmit and receive levels of the CODEC Gain Types for each trunk.

**14-02-02: Analogue Trunk Data Setup - Ring Detect Type**

For each trunk, enable delayed ringing (0) or immediate ringing (1).

**14-05-01: Trunk Groups**

For Universal Answer, assign trunks to trunk groups (1-25) then go to Program 14-06 below to set up Trunk Group Routing.

**14-06-01: Trunk Group Routing**

For Universal Answer, set up trunk routes (1-25) and then go to Program 23-03 below to assign the trunk routes to extensions. An extension user can use Universal Answer to answer a call if the ringing trunk is in its assigned route.

**14-07-01: Trunk Access Map Setup**

Set up the Trunk Access Maps (1-51). This sets the access options for trunks. Ring Group programming overrides Access Map programming.

**15-06-01: Trunk Access Map for Extensions**

Assign Trunk Access Maps (1-51) to extensions.

**15-07-01: Programming Function Keys**

To have outside calls ring specific keys, assign trunks to line keys (codes 1-51). You can also program function keys as trunk group or loop keys (\*02 or \*05). For additional loop key data, in Program 15-13 enter 0 (incoming only), 1 (outgoing only) or 2 (both ways).

**20-02-09: System Options for Multi-Line Telephones - Disconnect Supervision**

Enable (1) disconnect supervision for the system.

**20-06-01: Class of Service for Extensions**

For Universal Answer, assign a Class of Service (1-15) that enables Program to an extension.

**20-10-07: Class of Service Options (Answer Service) - Automatic Answer of Universal Calls**

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to use Auto-Answer to pick up Universal Answer calls. This allows a user to simply pick up the handset instead of Dialling a service code.

**20-13-23: Class of Service Options (Supplementary Service) - Display the Reason for Transfer**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to display the Reason for Transfer message.

**22-01-02: System Options for Incoming Calls - Incoming Call Ring No Answer Alarm**

Enable (1) or disable (0) the Incoming Call RNA Alarm. If enabled, the ring cadence will change for a call that rings longer than the interval set in 22-01-03.

**22-01-03: System Options for Incoming Calls - Ring No Answer Alarm Time**

Set the Ring No Answer Alarm interval (0-64800 seconds). If a trunk rings a system phone-system phone longer than this interval, the system changes the ring cadence.

**22-01-04: System Options for Incoming Calls - DIL No Answer Time**

If an incoming trunk call rings longer than this interval, it reroutes to the Ring Group set in Program 22-08.

**22-03-01: Trunk Ring Tone Range**

Assign Ring Tone Ranges to trunks. Trunks ring extensions according to the Ring Tone Range selected in 22-03-01.

**22-04-01: Incoming Extension Ring Group Assignment**

To have trunks ring extensions, assign extensions to ring groups (1-25). For each extension in the Ring Group, indicate in Program 22-06 if trunks should ring (1) or not ring (0).

**22-05-01: Incoming Trunk Ring Group Assignment**

To have the trunks ring extensions, assign trunks to a Ring Group.

**22-06-01: Normal Incoming Ring Mode**

Indicate whether the trunks in the Ring Group assigned in 22-04 should ring (1) or not ring (0).

**22-08-01: DIL/IRG No Answer Destination**

If an incoming trunk call rings longer than the DIL No Answer Time (Program 22-01-04), it routes to the destination you specify in this option. Determine if the destination should be a Ring Group (1-25) or DSPDB Voice Mail (101)

**23-03-01: Universal Answer/Auto Answer**

For Universal Answer, assign trunk routes (1-25) set in Program 14-06 to extensions. An extension user can use Universal Answer to answer a call if the ringing trunk is in its assigned route.

• **Related Features**

- **Central Office Calls, Answering Call Forward/DID/DIL/DISA/Do Not Disturb/ISDN**

The Reason for Transfer option should be set for each type of trunk which will use the Reason for Transfer message.

- **Directed Call Pickup/Group Call Pickup**

Using these features, ringing calls can be picked up regardless of access map programming.

- **Direct Inward Line**

Direct Inward Lines ring an extension directly, without Ring Group or Access Map programming.

- **Line Preference**

An extension user can answer an outside call just by lifting the handset.

- **Long Conversation Cutoff/Warning Tone for Long Conversation**

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.

- **Microphone Mute**  
In order to mute the handset transmitter, set up a Microphone Mute Programmable Function Key.
- **Night Service**  
Use Universal Answer to pick up Universal Night Answer calls.
- **Programmable Function Keys**  
Line keys and loop keys simplify answering outside calls.
- **Selectable Text Messaging**  
If the Absent text message has been set by the originating extension, the destination extension will display the assigned text message instead of the Reason for Transfer message.

### • Operation

#### To answer an incoming trunk call:

1. Lift handset.
2. At system phone, press flashing line key.

*If you don't have a line or loop key for a trunk call ringing your phone, it rings an a CALL key. If you have Ringing Line Preference, lifting the handset answers the call. You can dial after answering the call. This allows you, for example, to respond to computer-generated incoming calls.*

OR

1. If you know the specific line number, dial 772 + Line number (01-51).

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

1. At system phone, press a SPK key.  
OR  
At single line set, lift handset.

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

2. Dial 872.

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

## Central Office Calls, Placing

### • Description

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

A user can place a call by:

- Pressing Line Keys or "Loop Keys"
- Pressing a Trunk Group (i.e., loop) key
- Pressing a Trunk Group Routing (dial 0) key
- Dialling a code for a specific trunk (805 + the trunk number)
- Dialling a code for a Trunk Group (804 + group number)
- Dialling a code for Trunk Group Routing or ARS (0)
- Dialling an Alternate Trunk Route Access Code (which you must define)

### Conditions

None

### Default Setting

Enabled.

### • Programming

#### **10-03-03: PCB Setup - Transmit CODEC Gain Type**

Customise the transmit and receive levels of the CODEC Gain Types for single line telephones.

#### **10-03-04: PCB Setup - Receive CODEC Gain Type**

Customise the transmit and receive levels of the CODEC Gain Types for single line telephones.

#### **11-01-01: System Numbering**

Set up a Service Code for Alternate Trunk Route Access.

#### **11-09-01: Trunk Access Code**

If required, change the single-digit Trunk Access Code (normally 0). If you change this code, you must also review the settings in 11-01 for the new code selected.

#### **11-09-02: Trunk Access Code - Alternate Trunk Route Access Code**

Assign the Service Code set up in 11-01 for Alternate Trunk Route Access.

#### **11-12-01: Service Code Setup (for Service Access)**

To simplify placing calls, assign function keys for placing trunk calls: Trunk Group Routing/dial 0 keys (code 804).

#### **14-01-01: Basic Trunk Data Setup - Trunk Name**

To make identifying calls easier, assign a name to each trunk.

#### **14-01-02: Basic Trunk Data Setup - Transmit CODEC Gain Type**

#### **14-01-03: Basic Trunk Data Setup - Receive CODEC Gain Type**

Assign a CODEC Gain Type to each trunk. This sets the amount of gain (amplification) for the selected trunk.

**14-01-07: Basic Trunk Data Setup - Outgoing Calls**

For each trunk, allow (1) or prevent (0) outgoing calls.

**14-01-10: Basic Trunk Data Setup - DTMF Tones for Outgoing Calls**

For each trunk, enable (1) or disable (0) DTMF tones for outgoing trunk calls.

**14-07-01: Trunk Access Map Setup**

Set up the Trunk Access Maps (1-51). This sets the access options for trunks.

**15-06-01: Trunk Access Map for Extensions**

Assign Trunk Access Maps (1-51) to extensions.

**15-07-01: Programming Function Keys**

To simplify placing calls, assign function keys for placing trunk calls: Line keys (1-51) and Trunk Group/loop keys (code \*02 + group).

**20-02-06: System Options for Multi-Line Telephones – Pre-selection Time**

Set the preselection interval (0-64800 seconds). When a system phone user preselects a line key, the system remembers the preselection for this interval.

**20-02-09: System Options for Multi-Line Telephones - Disconnect Supervision**

Enable (1) disconnect supervision for the system.

**20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to extensions.

**20-08-02: Class of Service Options (Outgoing Call Service) - Trunk Calls**

In an extension's Class of Service, enable (1) or disable (0) trunk calling.

**21-15-01: Alternate Trunk Route for Extensions**

Designate the trunk route accessed when a user dials the Alternate Trunk Route Access Code. Refer to "Trunk Group Routing" to set up out-bound routing.

**81-01-01: Analogue Trunk Data Setup**

Review the Analogue Trunk Timers for compatibility with the connected telco.

• **Related Features**

• **Alphanumeric Display/Call Timer**

If the trunk name seize display is enabled in programming (Program 20-09-04=1), Call Timer starts automatically after the user places a trunk call. Disabling the trunk name seize display (Program 20-09-04=0) also disables the Call Timer.

• **Automatic Route Selection**

The system can automatically select the correct type of line to use based on the number dialled and the time.

• **Handsfree**

With Automatic Handsfree, an extension user can press a line key to place a trunk call without first lifting the handset or pressing SPK. Users without Automatic Handsfree can preselect a line key before lifting the handset or pressing SPK.

- **Long Conversation Cutoff/Warning Tone for Long Conversation**  
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.
- **Loop Keys**  
Loop keys simplify placing Central Office Calls.
- **Microphone Mute**  
In order to mute the handset transmitter, set up a Microphone Mute Programmable Function Key. The MIC key will only mute the Handsfree microphone.
- **Programmable Function Keys**  
Line keys and loop keys simplify placing outside calls.
- **Trunk Group Routing**  
Trunk Group Routing sets outbound call routing options for users that dial the Trunk Group Routing code (0) for trunk calls.
- **Trunk Groups**  
Use trunk group programming to set the order in which users access trunks within a specific trunk group.

## • Operation

### To place a call over a trunk group:

1. At system phone, press a SPK key.  
OR  
At single line set, lift handset.

2. Dial 804.

3. Dial line group number (01-25).

4. Dial number.  
OR

1. At system phone, press trunk group key (PGM 15-07 or SC 851: \*02 + group).

*Also see the "Loop Keys" feature.*

2. Dial number.

### To place a call using Trunk Group Routing:

1. At system phone, press a SPK key.  
OR  
At single line set, lift handset.

2. Dial 0.

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

3. Dial number.  
OR

1. At system phone, press Trunk Group Routing key (PGM 15-07 or SC 852: \*05).

*Also see the "Loop Keys" feature.*

2. Dial number.

**To place a call over a specific trunk:**

1. At system phone, press a SPK key.  
OR  
At single line set, lift handset.
2. Dial 805.
3. Dial line number (e.g., 05 for line 5).
4. Dial number.  
OR
1. At system phone, press line key (PGM 15-07 or SC 852: 01 to 51).  
*Also see the "Loop Keys" feature.*
2. Dial number.

## Class of Service

### • Description

Class of Service (COS) sets various features and Dialling 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 Dialling options for daytime operation, night time operation and even during lunch breaks. An extension's Class of Service can be changed in system programming or via a Service Code (normally 777).

### Conditions

None

### Default Setting

- The attendant (port 01/extension 200 and port 02/extension 201) have Class of Service 1 in all Night Service modes. All other extensions have Class of Service 2 in all Night Service modes.
- See the Charts for the default settings of the individual options.

### If changing Class of Service via Service Code:

- The password required to change Class of Service via Service Code 777 is 0000 (Program 90-02-02 = 0000).
- An extension can use Service Code 777 to change another extension's Class of Service (Program 20-13-28 = 1).
- An extension automatically blocks another extension's 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).

### • Programming

#### **11-11-24: Service Code Setup (for Setup/Entry Operation) - Change Extension Class of Service**

If required, use this option to change the Service Code a user dials to change an extension's Class of Service.

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service to extensions (1-15). Any Class of Service assignments you change using Service Code 777 (see below) automatically update this program.

#### **20-07 through 20-14 : Class of Service Options**

Set the options in a Class of Service.

**If changing Class of Service via Service Code:****20-13-28: Class of Service Options (Supplementary Service) - Allow Station COS to be Changed**

Use this option to permit (1) or block (0) another extension from changing this extension's Class of Service via Service Code 777.

Class of Service Options (Administrator Level), Program 20-07				
Item No.	Item	Input Data	Default	Related Program
			<b>COS 1 - 15</b>	
01	Manual Night Service Enabled Enabled/disabled an extension's ability to use manual Night Service Switching	0- Off 1- On	0	11-10-01
02	Changing the Music on Hold Tone Enable/disable an extension's ability to change the Music on Hold tone	0- Off 1- On	0	11-10-02
03	Time Setting Enable/disable an extension's ability to set the Time via Service Code 828.	0- Off 1- On	1	11-10-03
04	Storing Abbreviated Dialling Entries Enables/disables an extension's ability to store Abbreviated Dialling numbers. With this disabled, an extension will display only the name assigned to the Abbreviated Dialling number - the telephone number will not be displayed. This could be used if you wish to prevent Account Codes from being displayed.	0- Off 1- On	1	11-10-04
05	Set/Cancel Automatic Transfer to Transfer	0- Off 1- On	1	11-10-06
06	- Not Used -			
07	- Not Used -			
08	- Not Used -			
09	- Not Used -			
10	Programmable Function Key Programming (Appearance Level) Enables/disables an extension's ability to program their Appearance function keys using Service Code 852 (by default).	0- Off 1- On	1	20-13-18
11	Forced Trunk Disconnect (analogue trunk only) Enables/disables an extension's ability to use Forced Trunk Disconnect	0- Off 1- On	0	
12	Trunk port disable	0- Off 1- On	0	11-10-27
13	VRS Record Enables/disable extension's ability to record, erase and listen to VRS messages	0- Off 1- On	1	

14	VRS General Message Listen Enables/disable extension's ability to dial 4 or Service Code 711 and listen to the General Message	0- Off 1- On	1	11-10-21
15	VRS General Message Record Enables/disables extension's ability to dial Service Code 712 And record, listen to or erase the General Message	0- Off 1- On	1	11-10-22
16	- Not Used -			
17	- Not Used -			
18	SMDR printout accumulated extension data	0- Off 1- On	0	11-10-23
19	SMDR printout accumulated STG data	0- Off 1- On	0	11-10-24
20	SMDR printout accumulated account code data	0- Off 1- On	0	11-10-25

Class of Service Options (Outgoing Call Service), Program 20-08				
Item No.	Item	Input Data	Default	Related Program
			COS1 - 15	
01	Intercom Calls Enable/disable Intercom calling for the extension.	0- Off 1- On	1	
02	Trunk Calls Enable/disable outgoing trunk calling for the extension.	0- Off 1- On	1	
03	Common Abbreviated Dialling	0- Off 1- On	1	
04	Group Abbreviated Dialling	0- Off 1- On	1	
05	Dial Number Preview Enable/disable an extension's ability to use Dial Number Pre-view	0- Off 1- On	1	
06	Toll Restriction Override Enables/disables Toll Restriction Override (Service Code 875).	0- Off 1- On	1	21-01-07 21-07
07	Repeat Redial Enables/disables an extension's ability to use Repeat Redial.	0- Off 1- On	1	
08	Toll Restriction Dial Block Enable (1) or disable (0) an extension's ability to use Dial Block.	0- Off 1- On	0	
09	Hotline/Extension Ringdown Enables/disables Ringdown Extension for extensions with this COS.	0- Off 1- On	0	
10	Switching from Handsfree Answerback to Forced Intercom Ringing Enables/disables an extension's ability to force Handsfree Answerback or Forced Intercom Ringing for outgoing Intercom calls.	0- Off 1- On	1	
11	Protect for the call mode switching from caller (Internal Call)	0- Off 1- On	0	
12	Department Group Step Calling Enables/disables an extension's ability to use Department Group Step Calling	0- Off 1- On	1	
13	CLIP	0- Off 1- On	1	
14	Call Address Information	0- Off 1- On	0	

15	Block Outgoing Caller ID Enable (1) or disable (0) the system's ability to automatically block outgoing Caller ID information when a user places a call. If this option is on, the system automatically inserts the Caller ID block code (defined in 14-01-21) before the user's Dialed digits.	0- Off 1- On	0	14-01-20 14-01-21
17	ARS Override Access Map		0	

Class of Service Options (Outgoing Call Service), Program 20-09				
Item No.	Item	Input Data	Default	Related Program
			<b>COS1 - 15</b>	
01	Second Call for DID / DISA / DIL	0- Off 1- On	0	
02	<b>Caller ID Display</b> Enables / disables the Caller ID display at an extension.	0- Off 1- On	1	
03	Sub Address Identification	0- Off 1- On	0	
04	Notification for Incoming Call List existence	0- Off 1- On	1	
05	<b>Setting Handsfree Answerback and Forced Intercom Ringing</b> Allow/prevents an extension from enabling Handsfree Answerback or Forced Intercom Ringing for their incoming Intercom calls	0- Off 1- On	1	11-11-15 11-11-16

Class of Service Options (Answer Service), Program 20-10				
Item No.	Item	Input Data	Default	
			<b>COS1 - 15</b>	
01	<b>Group Call Pickup (Within Group)</b> Enables/disables Group Call Pickup for calls ringing an extension's own Pickup Group (Service Code 867)	0- Off 1- On	1	
02	<b>Call Pickup (Another Group)</b> Group Call Pickup (Another Group) Enables/disables Group Call Pickup for calls ringing outside a group (Service Code 869)	0- Off 1- On	1	
03	<b>Group Call Pickup for Specific Group</b> Enables/disables an extension's ability to use Unscreened Transfer	0- Off 1- On	1	

04	<b>Group Call Pickup</b> Enable/disable an extension's ability to pick up a call ringing into a Pickup Group (Service Codes 867 and 868)	0- Off 1- On	1
05	Directed Call Pickup for Own Group	0- Off 1- On	1
06	<b>Meet Me Conference and Paging</b> Enables/disables an extension's ability to use Meet Me Conference and Paging	0- Off 1- On	1
07	<b>Automatic Answer of Universal Calls</b> Enables/disables an extension's ability to use Universal Auto Answer (no service code required)	0- Off 1- On	1
08	<b>Auto Off-Hook Answer for Call Coverage Keys</b> Enables (1) or disables (0) an extension's ability to answer an incoming call on a Call Coverage Key simply by lifting the handset.	0- Off 1- On	0

Class of Service Options (Answer Service), Program 20-11			
Item No.	Item	Input Data	Default
			<b>COS1 - 15</b>
01	<b>Call Forward Immediately</b> Enables/disables an extension's ability to use Immediate Call Forward	0- Off 1- On	1
02	<b>Call Forward When Busy</b> Enables/disables an extension's ability to use Call Forward When Busy.	0- Off 1- On	1
03	<b>Call Forwarding When Unanswered</b> Enables/disables an extension's ability to use Call Forward When Unanswered.	0- Off 1- On	1
04	<b>Call Forwarding (Both Ringing)</b> Enables/Disables an extension's ability to activate Call Forwarding with Both Ringing.	0- Off 1- On	1
05	<b>Call Forwarding with Follow Me</b> Enables/disables an extension's ability to initiate Call Forwarding with Follow Me.	0- Off 1- On	1
06	<b>Unscreened Transfer</b> Enables/disables an extension's ability to use Unscreened Transfer.	0- Off 1- On	1
07	<b>Transfer Without Holding</b> Enables/disables an extension's ability to use Transfer Without Holding.	0- Off 1- On	0
08	<b>Transfer Information Display</b> Enables/disables an extension's incoming Transfer pre-answer display.	0- Off 1- On	1
09	<b>Group Hold Initiate</b> Enables/disables an extension's ability to initiate a Group Hold.	0- Off 1- On	1
10	<b>Group Hold Answer</b> Enables/disables an extension's ability to pick up a call on Group Hold	0- Off 1- On	1
11	<b>Automatic On Hook Transfer</b> Enables/disables an extension's ability to use Automatic On Hook Transfer.	0- Off 1- On	1
12	<b>Call Forwarding Off-Premise</b> Enables/disables an extension's ability to set up Call Forwarding Off-Premise for their phone.	0- Off 1- On	0
13	<b>Operator Transfer After Hold Callback</b> Enables/disables an extension's ability to have a call which recalls from hold transfer to the operator.	0- Off 1- On	0
14	<b>Trunk to Trunk Transfer Restriction</b>	0- Off 1- On	0
15	<b>VRS Personal Greeting</b> Enables/disables extension's ability to dial Service Code *47 to record, listen to or erase the General Message.	0- Off 1- On	1

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16	<b>Call Redirect</b> Enable or disable a system phone user's ability to transfer a call to a pre-defined destination (such as an operator, voice mail, or another extension) without answering the call.	0- Off 1- On	0
17	Call transfer setup for each telephone group	0- Off 1- On	1
18	<b>No Recall</b> Allow (0) or prevent (1) answered Transferred calls from recalling the originating extension.	0- Off 1- On	0
19	<b>Normal/Extended Park</b> Determine if an extension's Class of Service should allow either a normal or extended Park.	0-Normal 1- Extende	0
20	<b>Ring Inward recall disable</b>		0
21	<b>On-Hook Trunk to Trunk Transfer Restriction</b>		0

Class of Service Options (Supplementary Service), Program 20-13			
Item No.	Item	Input Data	Default
			<b>COS1 - 15</b>
01	<b>Long Conversation Alarm</b> Enables/disables the Warning Tone for Long Conversation (not for SLTs)	0- Off 1- On	1
02	<b>Long Conversation Cutoff (Incoming)</b> Enables/disables an extension's ability to use Long Conversation Cut-off for incoming calls.	0- Off 1- On	0
03	<b>Long Conversation Cutoff (Outgoing)</b> Enables/disables an extension's ability to use Long Conversation Cut-off for outgoing calls.	0- Off 1- On	0
04	<b>Call Forwarding/DND Override</b> Enables/disables an extension's ability to use Call Forwarding/DND Override.	0- Off 1- On	1
05	<b>Automatic Off Hook Signalling (for KST)/Call Waiting (for SLT)</b> Allows a busy extension to manually (0) or automatically (1) receive off hook signals.	0- Off 1- On	1
06	<b>Automatic Off Hook Signalling</b> Allows a busy extension to manually (0) or automatically (1) receive off hook signals.	0- Off 1- On	0
07	<b>Message Waiting</b> Enables/disables an extension's ability to leave Message Waiting.	0- Off 1- On	1
08	<b>Conference</b> Enables/disables an extension's ability to initiate a conference or Meet Me Conference.	0- Off 1- On	1
09	<b>Privacy Release</b> Enables/disables an extension's ability to initiate a Voice Call Conference.	0- Off 1- On	1

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10	<b>Barge In Mode</b> Enables the extension's Barge In to be speech mode (0) or Monitor mode (1).	0- Off 1- On	0
11	<b>Room Monitor, Initiating Extension</b> Enable/disable an extension's ability to initiate Room Monitor.	0- Off 1- On	0
12	<b>Room Monitor, Extension Being Monitored</b> Enable/disable an extension's ability to be monitored.	0- Off 1- On	0
13	<b>Continued Dialling</b> Enable/disable an extension's ability to use Continued Dialling which allows DTMF signal sending while talking on extension.	0- Off 1- On	1
14	<b>Department Calling</b> Enable/disable an extension's ability to call a Department Group.	0- Off 1- On	1
15	<b>Barge In, Initiate</b> Enables/disables Barge In at initiating extension.	0- Off 1- On	1
16	<b>Barge In, Receive</b> Blocks/allows Barge In at the receiving extension.	0- Off 1- On	1
17	<b>Barge In Tone/Display</b> Use this option to enable/disable the Barge In tone. If enabled, callers hear an alert tone and their display indicates the Barge In when another extension barges into their conversation. If disabled, there is no alert tone or display indication.	0- Off 1- On	1
18	<b>Programmable Function Key Programming (General Level)</b> Enables/disables an extension's ability to program their General function keys using Service Code 851 (by default). (Refer to Program 20-07-10 for Service Code 852.)	0- Off 1- On	1
19	<b>Selectable Display Messaging</b> Enables/disables an extension's ability to use Selectable Display Messaging.	0- Off 1- On	1

<b>Class of Service Options (Supplementary Service), Program 20-13</b>			
<b>Item No.</b>	<b>Item</b>	<b>Input Data</b>	<b>Default</b>
			<b>COS1 - 15</b>
20	<b>Account Code/Toll Restriction Operator Alert</b> Enables/disables operator alert when an extension improperly enters an Account Code or violates Toll Restriction.	0- Off 1- On	1
21	<b>Extension Name</b> Enables/disables an extension's ability to program its name	0- Off 1- On	1
22	<b>Called Party Status</b> Display the detail state of called party	0- Off 1- On	0
23	<b>Display the Reason for Transfer</b> Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, DND).	0- Off 1- On	0

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24	<b>Privacy Release by Pressing Line Key</b> Enable (1) or disable (0) a user's ability to press a line key to barge into an outside call. The Barge In feature must be enabled if this option is to be used.	0- Off 1- On	0
27	<b>Busy on seizing virtual extension</b>	0- Off 1- On	1
28	<b>Allow COS to be Changed</b> Enable (1) or disable (0) the ability of an extension's COS to be Changed via Service Code 777.	0- Off 1- On	0
29	<b>Paging Display</b> Enables (1) or disables (0) an extension's ability to display paging information.	0- Off 1- On	1
30	<b>Background Music</b> In an extension's Class of Service, allow (1) or prevent (0) an extension from turning Background Music on and off.	0- Off 1- On	1
31	Connected Line identification (COLP)	0- Off 1- On	0
32	<b>Deny Multiple Barge Ins</b> Enable (1) or disable (0) the extension's ability to have multiple user's Barge In to their conversation.	0- Off 1- On	0
34	<b>Block Manual Off-Hook Signalling</b> Enable (1) or disable (0) an extension's ability to block off-hook signals manually sent from a co-worker.	0- Off 1- On	0
35	<b>Block Camp-On</b> Enable (1) or disable (0) an extension's ability to block callers from Dialling the service code (assigned in 11-16-05) to Camp On.	0- Off 1- On	0
36	<b>Call Timer</b> In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use the Call Timer.	0- Off 1- On	1
38	<b>Headset Ear Piece Ringing</b>		0

Class of Service Options (DISA Service), Program 20-14			
Item No.	Item	Input Data	Default
			<b>COS1 - 15</b>
01			
02	<b>Trunk Group Routing/ARS Access</b> This option enables or disables a DISA caller's ability to dial 0 for Trunk Group Routing or Automatic Route Selection (ARS).	0- Off 1- On	0
03	<b>Trunk Group Access</b> This option enables or disables a DISA or caller's ability to access trunk groups for outside calls (Service Code 814).	0- Off 1- On	0
04	<b>Common Abbreviated Dialling</b> This option enables or disables a DISA or caller's ability to use the system's Common Abbreviated Dialling.	0- Off 1- On	0

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05	<b>Operator Calling</b> This option enables or disables a DISA caller's ability to dial 0 for the telephone system operator.	0- Off 1- On	0
06	<b>Internal Paging</b> This option enables or disables a DISA caller's ability to use the telephone system's Internal Paging.	0- Off 1- On	0
07	<b>External Paging</b> This option enables or disables a DISA caller's ability to use the telephone system's External Paging.	0- Off 1- On	0
08	<b>Direct Trunk Access</b> This option enables or disables a DISA caller's ability to use Direct Trunk Access (Service Code 815).	0- Off 1- On	0
09	<b>Forced Trunk Disconnect &lt;Not for ISDN T-point&gt;</b> This option enables or disables a caller's ability to use Forced Trunk Disconnect (Service Code *26). This option is not available to DISA callers.	0- Off 1- On	0
10	Call Forward Setting by Remote Via DISA	0- Off 1- On	0
11	<b>DISA Barge In</b> This option enables or disables a DISA caller's ability to use the Barge In feature.	0- Off 1- On	0

## • Related Features

### •Night Service

An extension can have a different Class of Service for each Night Service mode: Day 1, Night 1, Midnight 1, Rest 1, Day 2, Night 2, Midnight 2, or Rest 2.

## • Operation

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

1. Press a SPK key.
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 Sta#-*
12. Go to step 3 and enter another extension number.  
OR  
Press SPK to hang up.

## Conference

### • Description

The conference feature lets an extension user add additional inside and outside callers to their conversation. With Conference, a user may set up a multiple-party telephone meeting without leaving the office. The system provides 32 Conference circuits, and allows up to 8 internal or external parties to be conferenced. This means that one extension can Conference up to 7 internal and/or external parties together (the originator would be the 8<sup>th</sup> party).

### **Split (From Conference)**

Split allows a user to alternate (i.e., switch) between their callers in Conference. This will allow 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 202 followed by extension 203, Split will cycle from the trunk, to 202 and finally to 203. The Split cycle then repeats.

### **Barge Into Conference**

If a user's extension has Barge In capability 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.

### **Transfer Call Into Conference**

An extension with Barge In capability can Transfer a call into an existing Conference. This would allow, 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.

### **Conditions**

- A. Up to four eight-party conferences may be established simultaneously.
- B. Conference circuits may be used by other facilities, such as barge in, conversation recording and tandem trunking.

### **Default Setting**

Enabled.

### • Programming

#### **11-12-08: Service Code Setup (for Service Access) - Barge In**

If required, use this program to change the code users dial to Barge In to a Conference call. This code is normally 810.

#### **11-12-47: Service Code Setup (for Service Access) - Call Waiting Answer / Split Answer for SLT**

If required, use this program to change the code users dial to Split while on a Conference call. This code is normally 894.

#### **11-16-02: Program 11-16 : One-Digit Service Code Setup - Barge In**

If required, use this program to define the single digit service code users dial to Barge In to a Conference call.

**14-01-04: Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls**

CODEC gain set at 0 dB (14-01-04 = 32 [CODEC Gain Type 2] ) can be used to set the CODEC gain type for multi-line Conference calls.

**15-07-01: Programming Function Keys**

Assign a function key for Conference (code 07).

**20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

**20-13-08: Class of Service Options (Supplementary Service) – Conference**

In an extension's COS, enable (1) or disable (0) the extension's ability to initiate a Conference.

**20-13-15: Class of Service Options (Supplementary Service) - Barge In Initiate**

In an extension's COS, enable (1) or disable (0) the extension's ability to Barge In to a call.

**20-13-16: Class of Service Options (Supplementary Service) - Barge In Receive**

In an extension's COS, enable (1) or disable (0) the extension's ability to receive a Barge In on a call.

**20-14-11: Class of Service Options For DISA - DISA Trunk Barge In**

Determine if DISA users should have the ability to dial a service code to Barge In to a Conference call (0=disabled, 1=enabled).

• **Related Features**

- **Central Office Calls, Placing**  
Define the outgoing call options for each trunk and user.
- **Conference, Voice Call**  
Set up a Conference with a co-worker in your immediate work area.
- **Direct Inward System Access (DISA)**  
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**  
Meet Me Conference lets an extension user set up a Conference via Paging.
- **Meet Me Paging**  
Meet Me Paging lets an extension user set up a two-party meeting via Paging.
- **Programmable Function Keys**  
In order for system phone to have Conference, it must have a Conference function key.
- **Tandem Trunking**  
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.

## • Operation

### To establish a Conference:

#### System Phone

1. Establish Intercom or trunk call.
2. Press CONF or Conference key (PGM 15-07 or SC 851: 07).
3. Dial 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 dial a trunk/trunk group code. You can optionally go back to step 2 to add more parties to your Conference.*

4. When called party answers, press CONF or Conference key twice.  
*If you cannot add additional parties to your Conference, you have exceeded the system's Conference limit.*
5. Repeat steps 2-4 to add more parties.

#### Single Line Set

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.  
Hookflash and repeat step 3 to add more parties.  
OR  
Hookflash twice to set up the Conference.

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

### To exit a Conference without affecting the other parties:

#### System Phone

1. Hang up.  
*If you press Hold while on a call with two outside callers, the outside callers hear Music on Hold.*

#### Single Line Set

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 SPK and dial the service code (810=default).  
*If the telephone doesn't have the proper COS, a warning tone is sent. After the user hangs up, the system will automatically place 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 system phones show the joined party. If a Conference is not possible:*
  - the extension user will hear a warning tone
  - the DISA user will be rerouted to the defined ring group

#### Not available for DISA trunks:

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

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

**To join a Conference Call via Privacy Release:**

- A. When invited to join Conference call, press the indicated Line Key.

## Conference, Voice Call/Privacy Release

### • Description

Voice Call Conference lets extension user's in the same work area join in a trunk Conference. To initiate a Voice Call Conference, an extension user just presses the Voice Call 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's line key to join the 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 "through the air."

### 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. This would help a workgroup supervisor, for example, that needed to quickly monitor any group member's call. If the supervisor wanted to make a "secure" call, however, they could quickly switch the line's mode and be assured that their call would not be monitored. If the outside call is on a line key, the user just presses the line key to switch modes. If the call is on a loop key, the user presses their Privacy Release function key instead.

For systems using the Privacy Mode Toggle option, trunks initially have the privacy released. If privacy is desired for a trunk, use the toggle option or press the Privacy Release function key to switch modes.

### Conditions

none

### Default Setting

Disabled.

### • Programming

#### 14-01-19: Basic Trunk Data Setup - Privacy Mode Toggle Option

Determine if a trunk should be able to be toggled to a private/non-private line (0=disabled, 1=enabled).

#### 15-07-01: Programming Function Keys

Assign a function key for Voice Call Conference (code 32).

#### 20-06-01: Class of Service for Extensions

Assign a Class Of Service (1-15) to an extension.

#### 20-13-09: Class of Service Options (Supplementary Service), Privacy Release

In an extension's COS, enable (1) or disable (0) an extension's ability to use Privacy Release allowing for a Voice Call Conference. The trunk must be programmed to allow this feature in Program 14-01-19.

#### 31-01-04: System Options for Internal/External Paging - Privacy Release Time

Set the interval users have to join a Voice Call Conference after it is announced. (Note that this interval is also used for Meet Me Conference.)

- **Related Features**

- **Conference**  
Set up a multiple-party telephone meeting without leaving the office.
- **Programmable Function Keys**  
Voice Call Conference requires a Voice Call Conference function key and line keys.
- **Single Line Telephones**  
This feature is not available at single line telephones.

- **Operation**

**To join a Voice Call Conference (if invited):**

1. After Conference request, press indicated line key.

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

1. Press SPK to hang up.

**To make your trunk call Private (Privacy Mode Toggle Option Enabled):**

2. Press the Line Key.  
– OR –  
Press the Privacy Release key (PGM 15-07 or SC851 : 32) if call is on a loop key.

## Continued Dialling

### • Description

Continued Dialling 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 Dialling:

- **Continued Dialling for Intercom Calls**  
Depending on an extension's Class of Service, a system phone user may be able to dial additional digits after their Intercom call connects. In systems with Voice Mail, for example, Continued Dialling lets extension users dial the different options after the Voice Mail answers. Without Continued Dialling, extension users cannot access these Voice Mail options.
- **Continued Dialling for Trunk Calls**  
Continued Dialling 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 Dialling, the system's Toll Restriction will cut off the call after a specific number of Dialed digits. See Programming below for additional information.

<b>NOTICE</b>
Continued Dialling may make the system more susceptible to toll fraud.

### Conditions

None

### Default Setting

Enabled.

### • Programming

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-13-13: Class of Service Options (Supplementary Service) - Continued Dialling**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Continued Dialling for Intercom calls to 2500 type devices.

#### **21-04-01: Toll Restriction Class**

Assign a Toll Restriction Class (1-15) to an extension.

#### **21-05-04: Toll Restriction Class - Maximum Number of Digits Table Assignment**

Assign Program 21-06-03 entries to each Toll Restriction class.

- **Related Features**

- **Toll Restriction**

- The ability to use Continued dialling on trunk calls is set by Toll Restriction programming.

- **Operation**

- To use Continued Dialling:**

1. Place Intercom or trunk call.
2. Continue Dialling after call connects.

*Toll Restriction and Class of Service programming may limit Continued Dialling.*

## Cost Centre Codes

### •Description

Certain Network providers can accept a Cost Centre Code (CCC) that will be used to provide an itemised bill from their Network provider.

The CCC is inserted automatically by the XN120 before the dialled digits and is stripped off by the Network provider.

There are two methods that the XN120 can send CCC to the Network:

Send the CCC to the direct carrier.

OR

Send the CCC within the Least Cost Routing (LCR) access codes. You can then get extension billing from the indirect carrier.

### Conditions

You must confirm the quantity of CCC digits required by the Network provider otherwise calls will not route correctly.

Confirm with the Network provider that Cost Centre Codes are supported if you also have Carrier Pre-Select (CPS) operation.

### Default Setting

Disabled.

### • Programming

**14-01-23 : LCR Mode - Select type 2: LCR ON(Cost Centre Code only).**

**26-07-01 : Cost Centre Codes - Set the CCC for each extension.**

### • Related Features

#### •LCR - Least Cost Routing

Cost Centre Codes can be combined with the LCR operation.

### • Operation

The operation is automatic and cannot be bypassed.

## Department Calling

### • Description

With Department Calling, an extension user can call an idle extension within a pre-programmed Department Group by dialling the group's pilot number. The call would ring the first available extension in the group. For example, this would let a caller dial the Sales department just by knowing the Sales department's pilot number. The caller would not have to know any of the Sales department's extension numbers. The system allows up to 32 Department Calling Groups.

### Department Group Name

When an internal extension is queued at a busy department group the name will be displayed at the system phone's display. The user will see: WAITING (group name). The group name is set by Program 16-01-01.

### Department Group Routing

There are two types of routing 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. Priority routing is selected by Program 16-01-02.

With Circular Routing, each call rings a new extension, providing an easy type of Uniform Call Distribution (UCD).

For example, in a Department Group set for circular routing with extensions 210 (Priority 1), 211 (Priority 2) and 212 (Priority 3).

- The first call rings 210.
- The second call rings 211.
- The third call rings 212.
- The fourth call rings 210 and the cycle repeats.

**Note:** When programming, the high priority extensions have low priority numbers. For example, priority 1 has a higher priority than priority 10.

### 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. Overflow routing is set by Program 16-01-03.

### Hunting Mode

Ringling calls can step around members of the group once only and stop at the last member or repeatedly search for a free member. Hunting mode is set by Program 16-01-04.

### Simultaneous Ringing

All idle members of the department group can ring simultaneously for internal and outside calls to the pilot number. Calls do not cycle between group members. Simultaneous ringing can be automatic (all members ring when the call is placed to the pilot number) or manual ( the call to the pilot number will step around each member of

the group until the caller selects simultaneous ring mode). The automatic/manual option is selected by Program 16-01-05. To select manual mode the user must either dial the service code 780 (set by Program 11-12-09) or the single digit service code set by Program 11-16-10.

Note, when automatic is selected the operation of Program 16-01-10 is effected. Calls to the pilot number will not receive ringback tone if all members are busy, they will receive busy tone and will not wait for a member to become free.

### **Recall Restriction**

Calls transferred to the pilot number that do not get answered will recall at the extension that transferred the call. The transfer recall can be restricted (turned off) by Program 16-01-07. When the transfer recall is restricted the transferred call will ring the group until it is answered or the caller clears down.

### **Maximum Queuing Limit**

The quantity of ISDN DDI trunk calls queuing at a busy Department Group can be limited when all members of the group are busy. When the queue limit is reached further calls will receive busy indication. The number of calls in the queue can be set by Program 16-01-08.

If the queue limit is set to 0 then no ISDN DDI calls will be queued.

Note that the queue limit will be ignored if enhanced hunting is set in Program 16-01-10 or you have enabled Busy step on for the DDI in Program 22-11-04.

### **No Answer Step On Time**

An un-answered call ringing at a member of a department group will step on to the next available member after a preset time, set by Program 16-01-09. If the timer is set to 0 the step on will be disabled.

### **Enhanced Hunting**

Department Calling is enhanced with expanded hunting capabilities. 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:

- Normal Hunting (Program 16-01-10 = 0)

A call to the pilot number will hunt past a busy group member to the first available extension. The call will continue to ring the extension until it is answered or the calling party hangs up, it will also step on to the next available member after the No Answer Step On Time, timer 16-01-09. Calls to the group when all members are busy will receive busy tone.

- Busy (Program 16-01-10 = 1)

A call to the pilot number will ring the first idle member of a Department group, following the priority or circular routing. The call will continue to ring the extension until it is answered or the calling party hangs up, it will not step on to the next available member. If the Department Group has Priority Routing enabled, and the highest priority member is busy, the call will step on to the next available member. Calls to the group when all members are busy will receive ring back tone and wait for a member to become free.

- No Answer (Program 16-01-10 = 2)

A call to the pilot number will ring the first idle member of a Department group, following the priority or circular routing. The call will continue to ring the extension until it is answered or the calling party hangs up, it will also

step on to the next available member after the No Answer Step On Time, timer 16-01-09. If the Department Group has Priority Routing enabled, and the highest priority member is busy, the call will wait for the extension to become free and will not step on to the next available member. Calls to the group when all members are busy will receive ring back tone and wait for a member to become free.

- Busy & No Answer (Program 16-01-10 = 3)

A call to the pilot number will ring the first idle member of a Department group, following the priority or circular routing. The call will continue to ring the extension until it is answered or the calling party hangs up, it will also step on to the next available member after the No Answer Step On Time, timer 16-01-09. If the Department Group has Priority Routing enabled, and the highest priority member is busy, the call will step on to the next available member and continue to step on after the No Answer Step On Time. Calls to the group when all members are busy will receive ring back tone and wait for a member to become free.

Note that enhanced hunting will effect the operation of simultaneous ringing and maximum queue limit.

### **Queue Announcements**

If a call in queue is an outside call, and the system has DSPDB daughter board installed for VRS, the queued caller can hear a customer recorded announcement.

Up to two different announcements can be given to the queued caller.

There is also a pre-recorded announcement, "Please hold on. All lines are busy. Your call will be answered when a line becomes free."

The queue announcements are assigned by Program 22-15 for each group.

Note, DDI calls will not receive the queue announcement if the queue limit is set to 0 in Program 16-01-08, enhanced hunting is set to normal hunting in Program 16-01-10 and the DDI has no transfer set in Program 22-11-05 as calls will not queue at the busy group. You must set either a queue limit greater than 0 or set enhanced hunting to allow calls to queue at a busy group or set a transfer option in 22-11-05.

### **User Log In/Log Out**

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 system phone can optionally have a function key programmed for one-button log in and log out operation.

### **Secondary Group Allocation**

An extension can be a member of one Department Group by allocation in Program 16-02-01. An extension can also be a secondary member of other Department Groups by allocation in Program 16-03-01. Each Department Group can have up to 16 secondary members.

When a Department Group contains a secondary member allocated in Program 16-03-01 then the simultaneous ring option (automatic and manual) is not available.

**Conditions**

When a DIL rings to a Department Group, the DIL will not follow overflow programming (Programs 22-01-04 and 22-08).

If an extension sets call forward it will be removed from any department groups.

Department group calls cannot follow the call forward.

If an extension sets DND External it will not receive any outside calls to the department group.

If an extension sets DND Internal it will not receive any internal calls to the department group.

If an extension sets DND All it will not receive any outside or internal calls to the department group.

**Default Setting**

Disabled.

**• Programming****11-07-01: Department Group Pilot Numbers**

Assign pilot numbers to the Extension (Department) Groups you set up in Program 16-02.

**15-07-01: Programming Function Keys**

Assign a Department Calling key so extension users can install or remove themselves from the Department Calling Group.

**16-01-01: Department Group Basic Data Setup - Department Name**

Assign a name to the Extension (Department) Groups you set up in Program 16-02.

**16-01-02: Department Group Basic Data Setup - Department Calling Cycle**

Set the routing cycle for calls into a department (i.e., when a user dials the department pilot number). The system can ring the highest priority extension available (Priority Routing, 0) or cycle in circular order through the group (Circular Routing, 1).

**16-01-03: Department Group Basic Data Setup - Department Routing When Busy**

Set how the system routes an Intercom call to a busy Department Group member. The caller can hear busy tone (0) or overflow to the first available Department Group member (1). This option is for Intercom calls to an extension, not a pilot number.

**16-01-09: Department Group Basic Data Setup - Department Hunting No Answer Time**

Set the duration a Department Group call will ring at an extension before it steps on to the next available member.

**16-01-10: Department Group Basic Data Setup - Hunt Type**

Set the operation of department group calls.

- 1 No Hunting: Calls step around the group. Calls to a busy group receive busy tone.
- 2 Busy Hunting: Calls do not step around the group. Calls will step to the next member if the priority extension is busy. Calls to a busy group receive ring back tone.

- 3 No Answer Hunting: Calls step around the group. Calls will not step on if the priority extension is busy. Calls to a busy group receive ring back tone.
- 4 Busy/No Answer Hunting: Calls step around the group. Calls will step on if the priority extension is busy. Calls to a busy group receive ring back tone.

#### **16-02-01: Department Group Assignment for Extensions**

Assign extensions to Department Groups (1-32) and set the priority assignment.

#### **16-03-01: Secondary Department Group**

You may assign extensions to a second Department Group.

#### **20-06-01: Class of Service for Extensions**

Assign extension to more than one department group. Each group can have up to 16 secondary members. Adding a secondary member will disable simultaneous ring mode for the group.

#### **20-13-14: Class of Service Options (Supplementary Service) - Department Calling**

In an extension's Class of Service, allow (1) or prevent (0) Department Calling.

#### **22-02-01: Incoming Call Trunk Setup**

If you want a trunk to be a DIL to a Department Group, assign Service Type 4 for each Night Service Mode. Also see 22-07 below.

#### **22-07-01: DIL Assignment**

For each trunk assigned Service Type 4 in 22-02 above, assign the DIL destination as the Department Group pilot number ( 385-416 for Department Groups 1-32).

### **• Related Features**

- **Department Step Calling**

Easily step call to an idle Department Group member if the member called is busy.

- **Multiple Directory Numbers / Call Coverage**

A virtual extension can be programmed allowing a Call Coverage key to receive multiple calls which can camp on to the extension - no analogue port is required.

- **Transfer**

An extension user can Transfer a call to a Department Group master number. If unanswered, the call will recall the transferring extension after the Transfer Recall Time (Program 24-02-04).

- **Voice Mail Integration**

Voice Mail Integration uses one Department Group for voice mail.

### **• Operation**

#### **To call a department:**

1. At system phone, press a SPK key.  
OR  
At single line set, lift handset.
2. Dial department's extension number.

*The system routes the call to the first free phone in the department.*

**To log out of your Department Calling Group:**

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

1. Press a SPK key.

2. Dial 750 + 1.  
OR

1. Press Department Calling Log In key (PGM 15-07 or SC 851: 46).

*The key lights while you are logged out.*

**To log back in to your Department Calling Group:**

While you log back in, Department Calling will route calls to your extension.

1. Press a SPK key.

2. Dial 750 + 0.  
OR

1. Press Department Calling Log In key (PGM 15-07 or SC 851: 46).

*The key goes out when you log back in.*

## Department Group - Call Forward

### •Description

Department Group Call Forward allows a user to set call forward for calls routed to a department group.

The forward can be set for each department group and each department group can have its own destination number that the calls are forwarded to. The destination can be either an internal extension/ pilot number or an off premise number.

The feature will operate for calls via ISDN trunk ports that are set as DDI (Type 3 in Program 22-02-01) and internal calls to the pilot number.

The call forward is controlled by service codes and function keys. The destination can also be changed by the user for each night mode (1-8).

When call forward is set all incoming calls to the department group will be forwarded immediately or after a delay. Call forward after a delay can only be set via function key 59 and will only operate for incoming DDI calls to the department group. The delay time is set by Program 24-02-08.

The destination of the call forward is saved in an Abbreviated Dial bin, the bin is defined by Program 24-05-01. If a different call forward destination is required for each night mode then a different Abbreviated Dial bin must be defined for each night mode. To route the call off premise you must enter a trunk access digit (e.g. 9) before the destination number. If there is no trunk access digit the call will route internally. The internal number can be an extension or another department group pilot number.

It is also possible to chain the call forwards, for example if department group 01 is forwarded to department group 02 and group 02 is also forwarded extension 250 then calls to department group 01 will ring at extension 250.

A call that is forwarded off premise will be disconnected after timers 25-07-07 & 08.

The outgoing trunk route is defined by Program 21-03-01. A free trunk within this route will be used when a call is forwarded off premise.

### Conditions

Analogue trunks must have disconnect clear enabled when call forward off premise is set, this is to ensure the lines are cleared when a call is disconnected.

The call forward destination cannot be set from an analogue SLT via Service Code 704.

### Default Setting

The service code to enable department group forwarding is 702.

The service code to disable department group forwarding is 703.

The service code to set/change the destination number is 704.

Abbreviated Dial bin 1999 is used as the call forward destination for all night modes.

The disconnect timers are set to give a warning tone after 30 seconds and then disconnect after another 15 seconds.

The outgoing trunk route is not defined.

Disconnect clear is not set.

Trunk to trunk call forward setting is enabled in Class of Service.

#### • Programming

**11-11-25 : Service Code - 702**

**11-11-26 : Service Code - 703**

**11-10-08 : Service Code - 704**

**13-04-01 : Abbreviated Dial Name and Number**

**14-01-13 : Trunk to Trunk Transfer**

**15-07-01 : Programming Function Keys (Codes 58 and 59)**

**20-11-07 : Class of Service**

**21-03-01 : Trunk Route for Automatic Trunk to Trunk Routing**

**24-04-01 : Destination Abbreviated Dial Bin Number (bin 1999 is used at default)**

**25-07-07 & 08 : DISA Conversation Timers**

#### • Related Features

- Department Calling
- Trunk to Trunk Transfer
- Call Forward Off Premise
- Call Forward to Abbreviated Dial Bin
- Programmable Function Keys

#### •Operation

To set the destination number for each department group.

(Cannot be set from an analogue SLT.)

1. Press SPK to go off hook.
2. Dial 704.
3. Dial the department group number (01 to 64).
4. Dial the night mode number (1 to 8).
5. Dial the off premise destination number (include any trunk access digits for off premise).
6. Press HOLD to set the destination for other night modes.
7. Press SPK to hang up.

Note that at step 5 the destination number will be saved to the Abbreviated Dial bin number specified by Program 24-05-01 for the chosen night mode.

If the same Abbreviated Dial bin is also used for other night modes then you do not need to set them separately. For example at default bin number 1999 is used for all night modes so when a night mode destination number is set for any night mode it will be used for all night modes.

**To set the call forward for incoming calls to a department group:**

1. Press SPK to go off hook.
2. Dial department group call forward service code - 702.
3. Dial the department group number (01 to 64).
4. Press SPK to hang up.
5. Repeat steps 1 to 4 for further department groups.

Or

6. Press the department group call forward function key (851+58+group number). The key will flash red when the call forward is set.

**To cancel the call forward for incoming calls to a department group:**

1. Press SPK to go off hook.
2. Dial department group call forward cancel service code - 703.
3. Dial the department number (01 to 64).
4. Press SPK to hang up.
5. Repeat steps 1 to 4 for further department groups.

Or

6. Press the department group call forward function key (851+58+group number). The key will go out when the call forward is cancelled.

**To set delayed call forward for incoming DDI Calls:**

1. Press the department group delayed call forward function key (851+59+group number). The key will flash red when the call forward is set.
2. Incoming DDI calls will ring at the department group until a timer expires (Program 24-02-08)
3. When the timer expires the call to the department group will forward to the destination number.

**To cancel delayed call forward for incoming DDI Calls:**

1. Press the flashing department group delayed call forward function key (851+59+group number). The key will go off when the call forward is cancelled.

## 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

None

### Default Setting

Enabled.

### • Programming

#### 11-16-01: Single Digit Service Code Setup

If required, use this option to change the Department Step Calling Single Digit Service Code.

#### 15-07-01: Programming Function Keys

Assign a function key Department Step Calling (code 36).

#### 20-06-01: Class of Service for Extensions

Assign a Class Of Service (1-15) to an extension.

#### 20-08-12: Class of Service Options (Outgoing Call Service) - Department Step Calling

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Department Step Calling.

### • Related Features

- **Department Calling**

An extension user can call an idle extension within a pre-programmed Department Group by dialling the group's pilot number. Department Calling also provides overflow routing for extensions within the group - which simulates Step Calling.

- **Programmable Function Keys**

Function keys simplify Department Step Calling operation.

### • Operation

#### To make a Step Call:

*You step through Extension Groups set in Program 16-02.*

1. Place call to busy Department Group member.  
OR  
Place call to Department Group pilot number.
2. Press Step Call key (PGM 15-07 or SC 851: 36).
3. Repeat step 2 to call other Department Group members.

## Dial Number Preview

### • Description

Dialling Number Preview lets a display system phone user dial and review a number before the system dials it out. Dialling Number Preview helps the user avoid Dialling errors.

### Conditions

An extension user cannot edit the displayed number.

### Default Setting

Enabled.

### • Programming

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-08-05: Class of Service Options (Outgoing Call Service) - Dial Number Preview**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Dial Number Preview.

### • Related Features

- **Central Office Calls, Placing**

In order to place an outgoing call, an extension user must have outgoing access to a line, loop or trunk group key.

### • Operation

#### **To use Dial Number Preview to place a call (system phone only):**

1. Do not lift the handset or press a SPK key.
2. **To preview any number**, press \*.  
**To preview an Abbreviated Dial number**, press DC.
3. Dial number you want to call.  
*The number displays.*
4. To dial out the displayed trunk number, press a line/loop/trunk group key.  
*If the previewed number as a trunk access code (e.g., 0), you can press CALL instead.*

OR

To dial out the displayed Intercom number, press a SPK key.

OR

To cancel the number without Dialling it out, press HOLD.

## 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

None

### Default Setting

Disabled

### • Programming

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-18-05: Service Tone Timer - System Phone Confirmation Tone**

If required, change the Dial Pad Confirmation Tone frequency and duration.

### • Related Features

- **Single Line Telephones**

Dial Pad Confirmation Tone does not apply to single line telephones.

### • Operation

#### **To enable Dial Pad Confirmation Tone:**

1. Press a SPK key
2. Dial 824

#### **To disable Dial Pad Confirmation Tone:**

1. Press a SPK key
2. Dial 824

## Direct Inward Dialling (DID)

### • Description

Direct Inward Dialling (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 number 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.

**Note:** Direct Inward Dialling requires DID service from the Network Provider.

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

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

### **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 can't buy the exact block of numbers you need (e.g., 301-556 200-499), use the translation tables to convert the digits received. For example, a translation table could convert digits 501-756 500-799 to extension numbers 301-556 200-499.

The Topaz system has 2000 DID Translation Table entries that you can allocate among the 20 DID Translation Tables. There is one translation made in each entry. For a simple installation, you can put all 2000 entries in the same table. For more flexibility, you can optionally distribute the 2000 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**

You can program the system to be compatible with up to 8 digit DID service. 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 the four digits.

For analogue DID, the system is compatible with Dial Pulse (DP) and DTMF DID signalling. DID trunks can be either wink start or immediate start.

### **DID Camp-On**

DID Camp-On sets what happens to DID calls to busy extensions when you have Busy Intercept disabled (22-11-04). With DID Camp-On enabled, a call to a busy extension camps-on. If Program 22-11-04 is set for No Answer step on, the call will step on after the DID Ring No Answer Time interval (22-01-06). It will step on to the programmed DID Intercept extension ring group or Voice Mail (22-11-05/06). Without DID Camp-On, the caller to the busy extension just hears 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 dialling options. If the caller misdials, they can 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 doesn't exist, they could hear, "The extension you dialled 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 dialled numbers. You could, for example, set up 926 5401 through 926 5449 to route to extensions 301- 349, and have 926 5450 route to the automated attendant.

### **SMDR Includes Dialed Number**

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

### **DID Intercept**

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

- **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 misdialling.
- **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 (see below).
- **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 interval. If Ring-No-Answer Intercept is disabled, the unanswered call rings the destination until the outside caller hangs up.

### **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 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.

This feature works for DID trunks with a trunk service type 1 in Program 22-02. Other types of trunks may use the DID table, but the new 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's routing. When the incoming call is forwarded to the first destination by a busy intercept, the Voice Mail protocol will be that it forwards busy calls. When the incoming call is routed to the first destination by a ring-no-answer intercept, the protocol will be that it forwards ring-no-answer. The Voice Mail will transfer the calls to the mailbox number defined in Program 22-11-02.

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

#### Conditions

- A. DID service must be purchased from you local telephone company
- B. DID Intercept for each DID number works for DID trunks with a trunk service type 1 in Program 22-02. Other types of trunks may use the DID table, the DID intercept feature is not supported
- C. BRI DID requires a BRI PCB and Option Box.

#### Default Setting

Disabled.

#### • Programming

##### **14-05-01 : Trunk Groups**

Put DID trunks in the same trunk group (other than group 1).

##### **15-07-01 : Programming Function Keys**

You can assign line keys for DID trunks (01-50). Without line keys, DID calls ring line appearance (CALL) keys.

##### **20-09-01 : Class of Service Options (Incoming Call Service) - Second Call for DID/ DISA/ DIL**

Enable (1) or disable (0) an extension's ability to receive a second call from a DID, DISA or DIL, caller.

##### **22-01-06 : System Options for Incoming Calls - DID Ring-No-Answer Time**

Set the DID Ring-No-Answer (RNA) Intercept interval (0-64800 seconds). In systems with RNA Intercept, the DID call rings the destination extension for this interval and then rings Intercept Ring Group. This also sets how long the system should let an unanswered DID ring before transferring the call to the DID Intercept's first destination.

**22-02-01 : Incoming Call Trunk Setup**

For each Night Service Mode, enter service type 3 when the trunk should be a DID trunk.

**22-04-01 : Incoming Extension Ring Group Assignment**

Assign extensions to Ring Groups. Calls ring the extensions according to programming in 22-06.

**22-09-01 : DID Basic Data Setup - Expected Number of Digits**

For each DID Translation Table (1-20), enter the number of digits the table expects to receive from the CO (8 maximum). For example, for a table used with 3-digit DID service, enter 3.

**22-09-02 : DID Basic Data Setup - Received Vacant Number Operation**

Selectively enable (1) or disable (0) Vacant Number Intercept based on each DID Translation Database (Program 22-11-01 and 22-11-02).

**22-10-01 : DID Translation Table Setup**

Assign the start and end range of DID Translation Table entries (1-2000) to each DID Translation Table (1-20).

**22-11-01 : DID Translation Table Number Conversion - Received Number**

For each DID Translation Table entry (1-2000), specify the digits received by the system (eight max.).

**22-11-02 : DID Translation Table Number Conversion - Target Number**

For each DID Translation Table entry (1-2000), specify the extension the system dials after translation (36 digits max.)

**22-11-03 : DID Translation Table Number Conversion - Dial-In Name**

For each DID Translation Table entry (1-2000), specify the name that should show on the dialled extension's display when it rings (twelve characters max.)

**22-11-04 : DID Translation Table Number Conversion - Transfer Operation Mode**

For each DID Translation Table entry (1-2000), specify the condition required to transfer to the call to the destination defined in 22-11-05 and 22-11-06.

**22-11-05 : DID Translation Table Number Conversion - Transfer Destination 1****22-11-06 : DID Translation Table Number Conversion - Transfer Destination 2**

For each DID Translation Table entry (1-2000), specify the first and second Transfer Destinations if the callers receives a busy or no answer (action defined in 22-11-04).

(Destination Options: 0 = No setting, 01-25 = Incoming Group, 101 = DSPDB Voice Mail, 201-232: Department Group, 400 = VRS/AA, 401 = DISA, 1000-1999 = Abbreviated Number (000-999))

If the Transfer Destinations are busy or receive no answer, those calls are transferred to the final transfer destination (Program 22-10).

**22-11-07 : DID Translation Table Number Conversion - Call Waiting (DDI Camp On)**

For each DID Translation Table entry (1-2000), specify whether Call Waiting should be allowed (0=disable, 1=enable).

**22-11-08 : DID Translation Table Number Conversion - Maximum Number of Calls**

For each DID Translation Table entry (1-2000), specify the maximum number of DID calls (00-51).

**22-11-09 : DID Translation Table Number Conversion - MOH Source**

For each DID Translation Table entry (1-2000), specify the source of music to be used for DID trunks (0=MOH port, 1=BGM port, 2=Music Source port).

**22-11-10 : DID Translation Table Number Conversion - Music Source Port Number**

For each DID Translation Table entry (1-2000), if item 2 is selected in 22-11-09, specify the port to be used for the source of music heard on DID trunks.

**22-12-01 : DID Intercept Ring Group**

For each DID Translation Table, program the DID Intercept destination. The destination can be a Ring Group (01-25), or DSPDB Voice Mail=101. This program is used when there is no destination programmed in Program 22-12-05. It is unrelated to Program 22-12-06.

**22-13-01 : DID Trunk Group to Translation Table Assignment**

Assign the DID trunk groups (01-25) to translation tables. If all the DID trunks use the same type of DID service, you may have only one DID trunk group and one DID Translation Table (with many entries).

**• Related Features****• Central Office Calls, Answering**

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 why the call is ringing to their phone.

**• Direct Inward Line (DIL)**

DILs also provide a way for outside callers to dial a system extension, virtual extension or Department Group directly.

**• Direct Inward System Access (DISA)**

DISA also allows outside callers to dial system extensions directly.

**• Off Hook Signalling**

The Off Hook Signalling provide DID calls with signalling options. Refer to this feature for the specifics.

**• Programmable Function Keys**

To simplify answering DID calls, assign function keys as line keys for the DID trunks.

**• Station Message Detail Recording**

SMDR can print trunk port names or received dialled number for ANI/DNIS or DID trunks. If enabled, DNIS digits can be printed on the SMDR reports instead of the trunk name.

- **Operation**

DID calls ring extensions like normal trunk calls.

## 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's phone number, the call rings the operator on the International Sales line key. The DIL does not ring other extensions.

### DIL Delayed Ringing

Extensions in a Ring Group can have delayed ringing for another extension's 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

- A. If unanswered, a DIL without delayed ringing rings an extension until the outside party hangs up.
- B. 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 22-08.
  - 2. If there is 22-08 assignment or PC Attendant, the call rings according to the Ring Group assignments in 22-04 and 22-05.
  - 3. If none of the destinations in steps 1-3 above are available, the call continues to ring until a destination becomes free.
- D. The DIL follows call forwarding programming, even to voice mail.

### Default Setting

Disabled.

### • Programming

#### 14-07-01: Trunk Access Map Setup

Set up the Trunk Access Maps. All extensions should have at least Hold access to the DIL (entry 3). Without Hold access, transferred DILs and DILs on hold can be answered only while they are ringing or recalling.

#### 15-06-01: Trunk Access Map for Extensions

Assign Trunk Access Maps to extensions (1-51).

#### 15-07-01: Programming Function Keys

To have the DIL ring a key, program a line key for the DIL trunk.

#### 20-09-01: Class of Service Options (Incoming Call Service) - Second Call for DID/ DISA/ DIL

Enable (1) or disable (0) an extension's ability to receive a second call from a DID, DISA or DIL, caller.

#### 22-01-04: System Options for Incoming Calls - DIL No Answer Time

Set the DIL No Answer Time (0-64800 seconds). If DIL Delayed Ringing is set in program 22-08, this option sets the DIL Delayed Ring interval.

#### 22-02-01: Incoming Call Trunk Setup

Assign each DIL Service Type 4. Make an entry for each Night Service mode.

**22-04-01: Incoming Extension Ring Group Assignment**

Assign the extensions that should receive the overflow to the ring group programmed in 2208. Set the ringing in Program 22-06 (0=trunks don't ring [just flash line keys], 1=trunks ring).

**22-07-01: DIL Assignment**

Set the destination extension port for each DIL - for each Night Service mode. The destination can be an extension port, virtual extension port, or Department Group.

**22-08-01: DIL/IRG No Answer Destination**

For each DIL with delayed ringing, enter the DIL No Answer Ring Group. An unanswered DIL rings this group after the DIL No Answer Time. Make an entry for each Night Service mode (Ring Group (1-25) or DSPDB Voice Mail=101).

**22-11-11 :DID Translation Number Conversion, Ring Group Transfer**

Enable (1) or disable (0) each conversation tables' ability to follow the Ring Group programming defined in Program 22-12-01 : DID Intercept Ring Group. If Program 22-11-05 : DID Translation Number Conversion, Transfer Destination Number 1 and Program 22-11-06 : DID Translation Number Conversion, Transfer Destination Number 2 are set, the priority of transferring will be in this order: Program 22-11-05 then Program 22-11-06 then if Program 22-11-11 is enabled, Program 22-12-01.

**25-01-01 :DID/DISA Line Basic Data Setup - DID/DISA Dial-In Mode**

Determine whether the system should use option 0 (Extension number/Service code specify) or option 1 (Use dial conversion table) for calls.

**25-01-03 :DID/DISA Line Basic Data Setup - DID/DISA Transfer Alarm**

Determine whether the system should use option 0 (Normal) or option 1 (Alarm) for calls.

**If VRS facility (DSPDB Unit) is available:**

**25-02-01 :DID/DISA VRS Message**

For each DID/DISA trunk port (1-51) and each night mode (1-8), select the message source (0=No Message, 1=VRS, 2=ACI, 3=SLT) and assign the VRS message number to be used as the Automated Attendant Message for each trunk which is assigned as a DID/DISA (Additional data required with VRS=01-48 [VRS message number], with ACI=1-4 [ACI group number], and with SLT=1-32 [Station group number]).

**25-03-01 :DID/DISA Transfer Ring Group With Incorrect Dialling**

For each trunk port (1-51), set what happens to a call when the DISA or Automated Attendant caller dials incorrectly or waits too long to dial. The call can either disconnect (0) or Transfer to an alternate destination (Ring Group=1-25 or DSPDB Voice Mail=101). When setting the DISA and DID Operating Mode, you make an entry for each Night Service mode (1-8).

**25-04-01 :DID/DISA Transfer Ring Group With No Answer/Busy**

For each trunk port (1-51), set the operating mode of each DISA trunk. This sets what happens to the call when the DISA or Automated Attendant caller calls a busy or unanswered extension. The call can either disconnect (0) or Transfer to an alternate destination (Ring Group=1-25 or DSPDB Voice Mail=101). When setting the DISA and DID Operating Mode, you make an entry for each Night Service mode (1-8).

#### **25-05-01 :DID/DISA Error Message Assignment**

For each trunk that will be answered by the VRS, enter the VRS message number (1-48) the outside caller hears if they dial incorrectly after answer. If you enter 0, the call reroutes according to Program 25-03 and Program 25-04. Make one entry for each Night Service mode.

#### **25-06-02 :DID/DISA One-Digit Code Attendant Setup**

Set up single digit dialling for Automated Attendant callers. For each VRS Message programmed to answer outside calls, specify:

- The digit the Automated Attendant caller dials (0-9, \*, #). (Keep in mind that if you assign destinations to digits used for extension numbers, outside callers will not be able to dial system extensions.)
- The destination reached (four digits maximum) when the caller dials the single digit code.

#### **25-07-01 :System Timers for DID/DISA - VRS Dial Tone Time**

After answering a DID/DISA trunk, the system waits this interval for the caller to dial the first digit of the DISA password. If the caller fails to dial within this interval, the system drops the call (0-64800).

#### **25-07-02 :System Timers for DID/DISA - DID/DISA No Answer Time**

A DID/DISA caller can ring an extension for this interval before the system sets the call as a Ring No Answer. After this interval expires, the call follows the programmed Ring No Answer routing (set in Program 25-03 and 25-04) (0-64800).

#### **25-07-04 :System Timers for DID/DISA - Calling Time to Automatic Answering Telephone Set**

Set the answering waiting time of the automatic answering extension when an incoming DID trunk call is received (0-64800).

#### **25-07-05 :System Timers for DID/DISA - Duration Time for Guidance Message by Automatic Answering Telephone Set**

Set the announcement time of the automatic answering extension after which in incoming DID trunk caller is disconnected (0-64800).

#### **25-07-06 :System Timers for DID/DISA - Duration Time for Guidance Message by ACI**

Set the announcement time by the ACI after which an incoming DID trunk caller is disconnected (0-64800).

#### **25-07-11 :System Timers for DID/DISA - DID/DISA Answer Delay Timer**

Set up the interval time the system will wait after receiving an incoming DID/DISA call until the system will automatically answer the call (0-64800).

#### **25-07-13 :System Timers for DID/DISA - DID/DISA Busy Tone Interval**

If a DISA or Automated Attendant caller dials a busy extension (and Program 25-04-01 = 0), the system plays busy tone for this interval before disconnecting (0-64800).

#### **25-07-14 :System Timers for DID/DISA - Delayed DID Answer Timer**

Assign the delay time from switching from a normal incoming status to DID mode. If this time is set to '0', the call will switch to DID mode immediately (0-64800).

#### **• Related Features**

- **Call Forwarding**  
Call Forwarding reroutes DILs.
- **Central Office Calls, Answering**  
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 why the call is ringing to their phone.
- **Central Office Calls, Placing**  
You can place DILs in trunk groups to make outgoing DIL calls easier.
- **Department Calling**  
A DIL can have an Extension (Department) Group as its destination.
- **Do Not Disturb**  
If a DILs destination extension is in DND, an incoming call rings according to Ring Group programming.
- **Group Call Pickup**  
A user can activate Group Call Pickup to intercept a DIL ringing another extension.
- **Name Storing**  
Program a name for a DIL. This makes it easier to identify the incoming call.
  
- **Private Line**  
To simulate Private Line operation, create a unique Access Map for the DIL that allows full access only for the destination. Give all other extensions only Hold access.
- **Off Hook Signalling**  
If a system phone's first channel is busy, a DIL always signals the idle second channel if available. If the second channel already has a call waiting, DIL waits in line for a channel to become free. The outside caller hears ringback tone while this occurs.
- **Programmable Function Keys**  
If an extension has a line key for a DIL, the call will ring the key. If not, the call rings an available line appearance. For other extensions, the DIL indicates as busy.
- **Ring Groups**  
A DIL will ring its assigned extension without Ring Group programming. A DIL only rings its assigned extension. It will not ring other extensions in a Ring Group.

**• Operation****To answer a call on your Direct Inward Line:**

1. Lift handset.

2. At system phone, press flashing line key for DIL.

*If you don't have a line key for the DIL, the DIL rings a CALL key.*

*If you have Ringing Line Preference, lifting the handset answers the call.*

*If you don't answer the call, it may ring other extensions (i.e., the DIL No Answer Ring Group).*

**To place a call on your Direct Inward Line:**

1. Lift handset.

2. At system phone, press line key for DIL

OR

Dial 805 and the DIL trunk number (e.g., 05).

OR

Dial 804 and the DIL trunk group number (e.g., 05).

OR

Dial 0 for Trunk Group Access

3. Dial 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's 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. If the extension does not have a line key, the call rings a CALL 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 Class of Service

DISA Class of Service provides features and Dialling restrictions for DISA callers. This allows you to control the capabilities of the DISA callers Dialling into your system. When a DISA caller first accesses the system, they must 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 doesn't 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 0 and place outside calls. Any toll charges are incurred by the system. The call follows the system's 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 (e.g., 01). This allows the DISA caller to place an outgoing call over the selected group. Trunk Group Access bypasses the system's Trunk Group Routing/ARS/Trunk Access Maps. As with dial 0 access, any toll charges are incurred by the system. Also see Direct Trunk Access below.
- **Common Abbreviated Dialling**  
The system's Common Abbreviated Dialling bins may be available to DISA callers. This could save the DISA caller time when Dialling.
- **Operator Calling**  
A DISA caller may be able to dial 9 for the system's 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 805 followed by the trunk's number (e.g., 01). This allows the DISA caller to place an outgoing call over the selected trunk. Direct Trunk Access bypasses the system's Trunk Group Routing/ARS/Trunk Access Maps. As with dial 0 access, any toll charges are incurred by the system. Also see Trunk Group Access above.
- **DISA Trunk Barge In**  
The DISA Trunk Barge In option allows a caller to break into another extension'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's Toll Restriction.

### **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 a 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 DISA Overflow Message 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.

### **DISA Dial in Mode**

You can select the method that the digits dialled by a DISA caller are routed by the system by Program 25-01-01.

You can select Intercom mode where the received digits are used to route the DISA caller or you can select Convert mode where the received digits are passed to the DDI Conversion table.

When you select the Convert mode the operation of the DISA call is the same as a DDI call, as follows:

The trunk port that the DISA call is received on will define the trunk group number (Program 14-05-01).

The trunk group number will define the DDI table area for each night mode (Program 22-13-01).

The DDI table area is defined by Program 22-10-01. You now have the DDI conversion table to be used as the convert table.

The quantity of digits that the DISA caller must dial is define by Program 22-09-01 (default is 4 digits).

The digits received are then compared to the receive dial entries of the DDI table (Program 22-11-01), if an exact match is found the call will be routed to the DDI target number (Program 22-11-02). If a match is not found the DISA call will be disconnected.

If the DDI target number is invalid the call will not use the DISA option for Wrong Dial (Program 25-03-01). If the DDI target is invalid the options for the DDI will be used (Program 22-11-06 & 06).

If the DDI target number is busy/no answer the call will not use the DISA option for Busy/RNA (Program 25-04-01). If the DDI target is busy/RNA the options for the DDI will be used (Program 22-11-04).

#### **DISA Password/User ID**

You can enable/disable the DISA password per trunk port by Program 25-01-02. When enabled all DISA callers must enter a valid 6-digit password before the call can proceed; the passwords are defined in Program 25-08-01. The DISA password is used to assign a DISA Class of Service.

If the DISA password is disabled the incoming caller does not need to enter any password to access all of the DISA options.

Care should be taken when the password is disabled as any DISA caller can access outgoing trunks and paging zones etc.

#### **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 Dialling a code to continue the conversation or disconnect.

#### **Conditions**

- A. The DISA caller must use a DTMF dial telephone. DISA is compatible with calling devices that meet the DTMF signalling requirements of EIA Specification RS-464. DISA trunks must be supervised loop start.
- B. When accessing Topaz from a remote location via a DISA trunk, a specific DISA tone will first be heard when the system answers (a fast alternating tone). After the correct password is entered to allow system access, the tone changes to a mono tone. It is at this time that allowable system features can be accessed, e.g., access code for internal paging. If the caller enters the wrong password (a warning tone will be heard), they can repeat the password entry up to 3 times before being disconnected.

#### **Default Setting**

Disabled.

- **Programming**

- **10-09-01: DTMF and Dial Tone Circuit Setup**

Reserve at least one circuit for DTMF reception (entry 0 or 2).

- Use the following as a guide when allocating DTMF receivers:

- In light traffic sites, allocate one DTMF receiver for every 10 devices that use them.

- In heavy traffic sites, allocate one DTMF receiver for every five devices that use them.

- **11-01-01: System Numbering**

Set up a Service Code for Alternate Trunk Route Access.

- **11-09-02: Trunk Access Code - Alternate Trunk Route Access Code**

Assign the Service Code set up in 11-01 for Alternate Trunk Route Access.

- **14-01-02: Basic Trunk Data Setup - Transmit CODEC Gain Type**

Customise the CODEC gains (transmit and receive levels 1-63) for DISA trunks.

- **14-01-13: Basic Trunk Setup - Loop Disconnect Supervision**

If DISA caller can place outgoing calls through the system (see Program 20-14), enable loop supervision (1) for the DISA trunk. If DISA caller cannot use the system's trunks for outgoing calls, enter 0 to disable loop supervision.

- **20-01-05: System Options - DTMF Receiver Active Time**

After answering the call, the system attaches a DTMF receiver to the DISA trunk for this interval (0- 64800 seconds).

- **20-09-01: Class of Service Options (Incoming Call Service) - Second Call for DID/DISA**

Enable (1) or disable (0) an extension's ability to receive a second call from a DID, DISA, or DIL caller.

- **20-14-01 - 20-14-11 : Class of Service Options for DISA**

Enable (1) or disable (0) the following options for each DISA Class of Service (1-15).

- First Digit Absorption (Item 1)
- Trunk Group Routing/ARS Access (Item 2)
- Trunk Group Access (Item 3)
- Common Abbreviated Dialling (Item 4)
- Operator Calling (Item 5)
- Internal Paging (Item 6)
- External Paging (Item 7)
- Direct Trunk Access (Item 8)
- Forced Trunk Disconnect (Item 9)
- Call Forward Setting by Remote Via DISA (Item 10)
- DISA Trunk Barge In (Item 11)

- **21-15-01: Alternate Trunk Route for Extensions**

Designate the trunk route accessed when a user dials the Alternate Trunk Route Access Code. Refer to "Trunk Group Routing" to set up out-bound routing.

**22-01-11: System Options for Incoming Calls -VRS Waiting Message Interval Time**

Setup the sending duration time of the Auto - Attendant & Queuing. The message is repeatedly sent out within the specified time (0-64800 seconds).

**22-02-01: Incoming Call Trunk Setup**

For DISA operation, set the trunk service type to 02. You can have a different service type for each Night Service mode.

**22-04-01: Incoming Extension Ring Group Assignment**

Assign the extensions that should receive the overflow. Set the ringing in Program 22-06 (0=trunks don't ring [just flash line keys], 1=trunks ring).

**25-03-01: DID/DISA Transfer Ring Group With Incorrect Dialling**

Assign the extensions that should receive the overflow. Set the ringing in Program 22-06 (0=trunks don't ring [just flash line keys], 1=trunks ring).

**25-04-01: DID/DISA Transfer Ring Group With No Answer/Busy**

Set the operating mode of each DISA trunk. This sets what happens to the call when the DISA caller calls a busy or unanswered extension. The call can either disconnect (0), transfer to an alternate ring group destination (1-25), or transfer to DSPDB Voice Mail (101).

**25-07-01: System Timers for DID/DISA - DISA Dial Tone Time**

After answering the DISA trunk, the system waits this interval (0-64800 seconds) for the caller to dial the first digit of the password. If the caller fails to dial within this interval, the system drops the call.

**25-07-02: System Timers for DID/DISA - DID/DISA No Answer Time**

A DISA caller can ring an extension for this interval (0-64800 seconds) before the system sets the call as a Ring No Answer. After this interval expires, the call follows the programmed Ring No Answer routing (see Program 25-04 below).

**25-07-07: System Timers for DID/DISA -DISA Conversation Warning Tone Time**

Determine the length of time a DISA caller can talk before the Long Conversation tone is heard (0-64800 seconds).

**25-07-08: System Timers for DID/DISA - DISA Long Conversation Disconnect**

This timer determines how long the system will wait before disconnecting a call after the Long Conversation tone is heard (0-64800 seconds).

**25-07-09: System Timers for DID/DISA - 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 interval (0-64800 seconds), the system terminates the DISA call.

**25-07-10: System Timers for DID/DISA - 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 interval (0-64800 seconds), the system terminates the DISA call.

**25-07-13: System Timers for DID/DISA - DID/DISA Busy Tone Interval**

If a DISA caller dials a busy extension (and Program 25-04 = 0), the system plays busy tone for this interval before disconnecting.

**25-08-01: DISA User ID Setup**

For each DISA user, set the 6-digit password.

**25-09-01: Class of Service for DISA Users**

Assign a DISA Class of Service for each user. **The DISA Class of Service cannot be 0.** You cannot use the 20-xx-xx and 42-xx-xx programs to assign Class of Service to DISA trunks (15 users, with one password and DISA Class of Service (1-15) for each user).

**25-10-01: Trunk Group Routing for DISA**

Use this program to assign the Trunk Group Route (1-25) chosen when a user places a DISA call into the system and dials 0. Set Trunk Group Routing in Program 14-06. If the system has ARS, Dialling 0 accesses ARS. The route chosen is based on the DISA Class of Service, which is determined by the password the caller dials.

**25-11-01: DISA Toll Restriction Class**

If the system uses Toll Restriction, enter a Toll Restriction Class (1-15) for each DISA user (1-15). The system uses the Toll Restriction Class you enter in Program 21-05. The Toll Restriction Class assigned to a DISA call is based on the DISA Class of Service, which is determined by the password the caller dials. You cannot use Program 21-04 to assign Toll Restriction to DISA trunk.

**25-12-01: Alternate Trunk Group Routing for DISA**

Assign the trunk route that DISA Caller's access if they dial the Alternate Trunk Route Access Code. Refer to "Central Office Calls, Placing" for more on setting up Alternate Trunk

• **Related Features**

• **Automatic Route Selection**

In a system with ARS enabled:

When a DISA caller dials 0 for an outside call (if allowed), the system routes the call via ARS.

In a system with ARS disabled:

When a DISA caller dials 0 for an outside call (if allowed), the system uses the routes programmed for Trunk Group Routing.

• **Central Office Calls, Answering**

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 why the call is ringing to their phone.

• **Direct Inward Dialling (DID) / Direct Inward Line (DIL) / Voice Response System (VRS)**

These features also allow outside callers to directly access system extensions.

• **Long Conversation Cutoff**

Long conversation cutoff is controlled separately for DISA.

- **Voice Response System (VRS)**

Department Calling with Overflow Message requires a DSP daughter board for VRS.

- **Operation**

**To place a DISA call into the system (from any DTMF dial telephone):**

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 (200-295).
  - OR
  - Dial 0 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 805 + a trunk number (1-51) for an outside call.
  - OR
  - Dial 813 + Common Abbreviated Dialling bin number.
  - OR
  - Dial 9 for the operator.
  - OR
  - Dial 801 + an Internal Paging Zone number (0, 1-6,00,01~32).
  - OR
  - Dial 803 + an External Paging Zone number (1-2 or 0 for All Call).
  - OR
  - Dial 810 + a busy extension number to barge in to a call.
  - OR
  - Dial 828 to set the time + two digits for two digits for hour (24 hour clock, 13=1:00 PM) + two digits for minutes.

## Direct Station Selection (DSS) Console

### • Description

The DSS Consoles (64-Button, 24-Button) gives a system phone 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., operators or dispatchers). The DSS Console simplifies:

- Calling extensions and Doorphones
- Placing, answering and transferring outside calls
- Making an External or Internal Page
- Switching the Night Service mode
- Activating DSS Console Alternate Answer

The 64 button DSS Console also provides DSS Console Alternate Answer. This lets a system phone user with a DSS Console quickly reroute their calls to a co-worker.

You can also program the DSS Console keys to store Function codes. This provides the DSS Console user with many of the features available on Programmable Feature Keys.

The maximum number of DSS Consoles allowed is 9. There is no limit on the number of 64-button DSS consoles per extension, but an extension can have only one 24-button DLS console. An extension can, however, have both a 24-button DSS and 64-button DLS console(s) installed.

### Installation of the Consoles

The 64-button console plugs into the eight port of the 308M/308E/008E unit and is assigned to a system phone in Program 30-02. The keys are set in Program 30-03, each key has a function number and optional additional data.

The 24-button console plugs into any display-type system phone via the socket in the base of the phone, it does not take a port on the system. The keys are set either via Program 15-07 or by service codes 851/852 from the system phone it is plugged into. Each key has a function number and optional additional data.

### Conditions

- A. Changing flash patterns for DSS Consoles will also change them for Hotline keys.
- B. When installing a DSS, the system must auto-detect the console in order for the LEDs to function correctly. When connecting the DSS to a extension previously defined with another circuit type, undefine the circuit type (enter 00 in Program 10-03 for the extension number), then connect the DSS Console.
- C. To program the keys on a 24-Button DLS in Program 15-07, use the extension number to which the DLS is installed and, regardless of the type of system phone connected, **start programming the DLS keys at key number 23.**

### Default Setting

- No 64-button DSS Consoles assigned (in Program 30-02).
- All 64-button DSS Console key ranges are DSS/One Touch for extension numbers 200-295.
- Once a 64-button DSS Console is enabled, the console's keys are DSS/One Touch keys (Program 30-03).
- Once a 24-button console is attached the keys are Not Defined (Program 15-07).

### • Programming

#### 10-03-01: Terminal Type

The system automatically assigns the terminal type (10) for the port which has a 64-button DSS console installed.

#### 10-03-09: PCB Setup

#### 15-07-01: Programming Function Keys

Assign function keys to the DSS consoles. When programming a 24-Button DSS key, use the extension number to which the DSS is installed and, regardless of the type of system phone connected, ***start programming the DSS keys at key number 25 (Key 25=DSS key 1)***.

#### 20-06-01: Class of Service for Extensions

Assign Class of Service (1-15) to extensions.

#### 30-02-01: DSS Console Extension Assignment

Designate the 64-button DSS Console installations (i.e., the extensions that have 64-button DSS Consoles assigned to them).

#### 30-03-01: DSS Console Key Assignment

Customise 64-button DSS Console keys to function as DSS keys and Function Code keys.

### • Related Features

- **Central Office Calls, Answering and Placing**  
A DSS Console can have line keys for placing and answering calls.
- **Doorphone**  
The 64-button DSS Console provides one-touch calling and a Busy Lamp Field for Doorphones. Refer to the Doorphone Feature when programming Doorphone.
- **Night Service**  
The 64-button DSS Console provides one-touch Night Service switching. Refer to the Night Service feature when programming Night Service options.
- **Paging, External and Internal**  
The 64-button DSS Console provides one-touch External and Internal Page zone access. Refer the External Paging and Internal Paging features when programming Paging.
- **Programmable Function Keys**  
You can program the DSS Console keys with function codes to provide the functions of many of the Programmable Function keys.

## • Operation

### Calling an extension from your DSS Console:

*Optional for 64-Button Consoles.*

1. Press DSS Console key.

*If the call voice-announces, you can make it ring by Dialling 1.*

*If you don't have Handsfree, you must lift handset to speak.*

### Placing a trunk call from your 24-Button DSS Console:

1. Press DSS Console key assigned to trunk.
2. Dial outside number.

*If you don't have Handsfree, you must lift the handset to speak.*

### Answering a trunk call from your DSS Console:

1. Press flashing DSS Console key assigned to trunk.

*If you don't have Handsfree, you must lift the handset to speak.*

### Calling a Doorphone from your 64-button DSS Console:

1. Press DOOR1 or DOOR2.
2. Press DSS Console key for Doorphone you want to call (1-6).

*If you don't have Handsfree, you must lift the handset to talk to the Doorphone.*

### Transferring a call using your DSS Console:

1. Place or answer call.

*If you are on an Intercom call, press HOLD before going to the next step.*

2. Press DSS key for extension that will receive transfer.

*You cannot Transfer to an extension that is busy or in Do Not Disturb.*

3. (Optional) Announce call.

*If called party doesn't want the call, press flashing line or CALL key to retrieve it.*

4. Press SPK to hang up.

### Making a External Page using your 64-button DSS Console:

1. Press DSS Console External Page zone key (EZ1, EZ2 or EAZ).

*If the zone you want is busy, try again later.*

*If you don't have Handsfree, lift the handset to make your announcement.*

### Making an Internal Page using your 64-button DSS Console:

1. Press DSS Console Internal Page zone key (IZ1 – IZ4).

*If the zone you want is busy, try again later.*

*If you don't have Handsfree, lift the handset to make your announcement.*

### Switching the Night Service mode from your 64-button DSS Console:

1. Press Night Service (NT) key.

**Using a DSS Console key as a Programmable Function Key:**

*You can store Function codes under DSS Console keys.*

1. Press 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 the Call Forward feature.*

## 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 co-worker's call 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

- A. Directed Call Pickup does not pick up calls recalling an extension (such as Hold and Transfer recalls) or calls on Hold.
- B. An extension can use Directed Call Pickup to intercept calls to which it is denied access in Programs 14-07 and 15-06.

### Default Setting

Enabled.

### • Programming

#### **20-10-05: Class of Service Options (Answer Service) - Directed Call Pickup for Own Group**

Enable (1) or disable (0) an extension's ability to use Directed Call Pickup for calls ringing their own group.

### • Related Features

For other features which let you cover a co-worker's calls, refer to:

- **Department Calling**
- **Group Call Pickup**
- **Hotline**
- **Multiple Directory Numbers**
- **Secretary Call Pickup**
- 

### Hold/Transfer

Calls which were on hold or transferred which recall the extension can be answered using Directed Call Pickup.

### Park

Personal Park also uses the Directed Call Pickup code.

### Voice Mail

Voice Mail Park and Page also uses the Directed Call Pickup code.

### • Operation

**To use Directed Call Pickup to intercept a call to a co-worker's extension:**

1. At system phone, press a SPK key.

OR

At single line set, lift handset.

2. Dial 715.

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 will answer first.*

## Do Not Disturb

### • Description

Do Not Disturb blocks incoming calls and Paging announcements. DND permits an extension user to work by the phone undisturbed by incoming calls and announcements. The user can activate DND while their phone is idle or while on a call. Once activated, incoming trunk calls still flash the line keys. The user may use the phone in the normal manner for placing and processing calls.

There are five Do Not Disturb options available at each extension:

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

0 = Do Not Disturbed cancelled

### Conditions

If there is no Call Forwarding key (Program 15-07: 10 - 17), the DND key will blink when the extension is forwarded.

### Default Settings

Enabled for all extensions.

### • Programming

#### **11-12-01: Service Code Setup (for Service Access) - Call Forwarding/DND Override**

In order to use the DND Override service code if voice mail is installed, the single digit service code (11-16-09) must be deleted or changed as it conflicts with the DND Override code.

#### **11-16-06: Single Digit Service Code Setup - DND/Call Forward Override**

If a single digit service code is to be used, assign an available code number.

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-13-04: Class of Service Options (Supplementary Service) - Call Forward/DND Override**

Determine whether or not an extension should be able to override DND (0=denied, 1=allowed).

### • Related Features

#### • Call Forwarding

If an extension user activates DND option 4, the system prevents other extensions from forwarding calls to them. If an extension already receiving forwarded calls activates DND option 4, callers to the forwarded extension hear DND tone.

- **Call Forwarding/Do Not Disturb Override**  
An extension user can override Call Forwarding or Do Not Disturb at another extension.
- **Central Office Calls, Answering**  
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 why the call is ringing to their phone.
- **Direct Inward Line (DIL)**  
DND modes 1-3 will cause calls to follow 22-08 programming even if the extension is forwarded.
  
- **Distinctive Ringing, Tones and Flash Patterns**  
Set up DND flash patterns for DSS and Hotline keys.

## • Operation

To activate or deactivate Do Not Disturb while your extension is idle:

### System Phone

1. Do not lift the handset.
2. Press DND key.  
OR  
Press a SPK key 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

### Single Line Telephone

1. Lift 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

## Doorphone

### • Description

The Doorphone is a self-contained Intercom unit typically used to monitor an entrance door. A visitor at the door can press the Doorphone call button (like a door bell). The Doorphone 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 Doorphone. The Doorphone is convenient to have at a delivery entrance, for example. It is not necessary to have company personnel monitor the delivery entrance; they just answer the Doorphone chimes instead. Any number of system extensions can receive Doorphone chime tones.

Each Doorphone 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 Doorphone chimes, a system phone user can press FLASH to activate the Doorphone contacts. This in turn releases the electric strike on the entrance door. The device connected to the Doorphone contacts cannot exceed the contact ratings shown in the table below:

Doorphone Relay Contact Specifications	
Contact Configuration	Normally Open
Maximum Load	500mA@24 VDC 250mA@120 VAC

The system can have up to two Doorphones.

### Conditions

Refer to the system hardware manual for additional details.

### Default Setting

Enabled

### • Programming

#### 10-03-01: PCB Setup - Channel 1 Terminal Type

Set the terminal type to "8" for Doorphone usage.

#### 32-01-01: Doorphone Timers - Doorphone Answer Time

Set the interval within which a user must answer the Doorphone chimes.

#### 32-01-02: Doorphone Timers - Door Lock Cancel Time

Set the length of time the Doorphone strike stays open when the single line user hook flashes or system phone user presses Flash.

#### 32-02-01: Doorphone Ring Assignments

Determine which Doorphones (1-6) should ring which extensions.

#### 32-03-01: Doorphone Basic Setup - Chime Pattern

Set the chime pattern (0-6) for each Doorphone.

#### 32-03-02: Doorphone Basic Setup - CODEC Transmit Gain Setup

Setup 32-03-03 : Doorphone Basic Setup - CODEC Receive Gain Setup  
Select the CODEC gain types (1-63) for each Doorphone (1-6).

- **Related Features**

- **Single Line Telephones, Analogue Single Line Sets**

- Doorphones can ring single line phones if allowed in programmed.

- **Operation**

**To call a Doorphone:**

**System Phone**

1. Press a SPK key.
2. Dial 802.
3. Dial Doorphone Number (1-6).

**Single Line Telephone**

1. Lift handset.
2. Dial 802.
3. Dial Doorphone Number (1-6).

**To activate the Doorphone strike:**

**System Phone**

1. While talking to the Doorphone, press the Flash key.

**Single Line Telephone**

1. While talking to the Doorphone, hookflash.

**To answer a Doorphone chime:**

1. Lift handset.

## Fax Machine Compatibility

### • Description

Fax Machine Compatibility lets you integrate a customer-provided fax machine into your telephone system. You have the following options:

- **Transfer to Fax**  
Transfer to Fax allows an extension user to Transfer their active voice call to a company fax machine. After the Transfer completes, the user's outside caller can start their fax machine and send the fax. This would benefit a salesperson on the road, for example. The salesperson could call their secretary and give a general report - and then fax detailed figures when the conversation is over.
- **Direct Inward calling to Fax**  
DIL/DID provide direct routing to fax machines installed as system extensions. Use a DIL/DID for a "fax only" line for unattended sending and receiving of faxes.

### Conditions

None

### Default Setting

Disabled.

### • Programming

Refer to **Central Office Calls, Answering** and **Central Office Calls, Placing** for trunk programming.

### • Related Features

- **Central Office Calls, Answering / Central Office Calls, Placing**  
The fax machine should be programmed with incoming and outgoing access options.
- **Direct Inward Line**  
Use DILs to route system trunks directly to fax machines installed as extensions.
- **Direct Inward Dialling**  
Use DID to route calls directly to fax machines installed as extensions.
- **Ring Groups**  
Ring Groups can also be used to direct calls to the fax machine.
- **Single Line Telephones - Analogue/Digital**  
Set up incoming and outgoing access for the fax telephone line.
- **Voice Response System (VRS)**  
When using a VRS, set up a single digit dialling code which can be used to transfer callers to the fax machine.
- **Voice Mail**  
When using voice mail, you can provide the digit to be dialled to transfer the call to the analogue port which is connected to the fax machine.

## • Operation

### To transfer a call to the fax machine:

#### **System Phone**

1. Press HOLD.

*You hear Transfer dial tone.*

2. Dial fax machine extension number.

*If you have Automatic On Hook Transfer and the extension you call is busy, pressing CALL returns you to the call.*

*If the called extension doesn't answer, you can dial another extension number or press CALL to return to the call.*

3. Hang up.

*If you don't have Automatic On Hook Transfer, you must press the TRF Key to Transfer the call.*

#### **Single Line Set**

1. Hookflash.

2. Dial fax machine extension number.

*If the called extension doesn't answer, you can dial another extension number or hookflash to return to the call.*

3. Hang up.

## Flash

### • Description

Flash allows an extension user to access certain CO and PBX features by interrupting 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

None.

#### Default Setting

Enabled.

### • Programming

#### 14-02-03: Analogue Trunk Data Setup – Flashing

Make sure this item is set for open loop Flash (0).

#### 14-02-04: Analogue Trunk Data Setup - Flash for Timed Flash or Disconnect

For each trunk, indicate if Flash is for Flash (0) or open loop disconnect (1).

#### 15-02-05: System Telephone Basic Data Setup - Transfer Key Operation Mode

If CONF (TRF) key should access Flash, enter 2. Otherwise, enter 0 or 1.

#### 15-03-04: Single Line Telephone Basic Data Setup – Flashing

In a single line telephone's Class of Service, enable (1) or disable (0) the ability to hookflash for system feature access.

#### 20-06-01: Class of Service for Extensions

Assign a Class Of Service (1-15) to an extension.

#### 81-01-14: Analogue Trunk Initial Data Setup - Hookflash 1

Set the Flash duration (16-4080mS) for analogue trunk circuits.

#### 81-01-15: Analogue Trunk Initial Data Setup - Hookflash 2

Set the open loop disconnect duration (16-4080mS) for analogue trunk circuits.

### • Related Features

- **PBX Compatibility**

If the system is behind a PBX, Flash normally gives the extension user access to many PBX features.

- **Toll Restriction**

The system applies Toll Restriction (if applicable) to the number a user dials after flashing a trunk.

- **Voice Mail Integration**

If Voice Mail Integration ports are to flash outside calls, change the Single Line Flash Service Code (11-12-42). Dialling “#” from voice mail ports lights the Message Waiting lamp.

- **Operation**

To flash the trunk you are on:

**System Phone and Digital Single Line**

1. Press FLASH.

**Single Line Set**

1. Hookflash.
2. Dial 806.

## Flexible System Numbering

### • Description

Flexible System Numbering lets you reassign the system's 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's number plan. You can have factory technicians:

- Set the number of digits in internal (Intercom) functions. For example, extension numbers can be up to four digits long.
- Change your system's 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's Trunk Group Routing code. Although the default code of 0 is suitable for most applications, you can alter the code if you have to.

The system provides a completely flexible system numbering plan. Refer to the chart below and the Programming section for more details.

Flexible System Numbering	
Program	Description
11-01 : System Numbering	Set the system's 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 0). This is the code users dial to access Automatic Route Selection or Trunk Group Routing.
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)	Customise the Service Codes.
11-16 : Single Digit Service Code Setup	Assign the Single Digit Service Codes. These are the post-Dialling codes a user can dial after placing an Intercom call to a co-worker.

### Conditions

- Programming follows a telephone's extension number, not the port number in most cases. If you relocate a phone, you may need to change additional programming.
- If the extension numbering plan is changed from '2xx' to '1xx', and you would like to consecutively press two DSS keys without toggling the hookswitch, Program 11-16-05 must be removed. If not, pressing the second DSS key will actually change voice/ringing call to the first extension.

- C. 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:

<b>11-01 Type 2 (Extension Number)</b> 11-02 11-04 11-06 11-07 11-08 15-01-01 15-07 15-12 15-14 21-11	<b>11-01 Type 1 (Service Codes)</b> 11-10 11-11 11-12 11-15 15-14 21-11 30-03
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- D. Any feature which requires Dialling a code or extension number can be affected.

**Default Setting**

Extensions are numbered consecutively (Program 11-02 and 11-04) from: 200 (port 01) to 223 (port 24)

**• Programming**

**11-01-01: System Numbering**

Customise the system's internal (Intercom) numbering plan.

**11-02-01: Extension Numbering**

Assign extension numbers to extension ports. The telephone's programming identity follows the port number - not the extension number.

**11-09-01: Trunk Access Code**

Assign the single-digit trunk access code (normally 0) for ARS/Trunk Group Routing.

**11-10-01: Service Code Setup (for System Administrator)**

**11-11-01: Service Code Setup (for Setup/Entry Operation)**

**11-12-01: Service Code Setup (for Service Access)**

Customise the Service Codes.

**11-16-01: Single Digit Service Code Setup**

Assign the Single Digit (post-dialling) Service Codes.

**• Related Features**

None

## Forced Trunk Disconnect

### • Description

Forced Trunk Disconnect allows an extension user to disconnect (release) another extension's 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.

#### CAUTION

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

None

### Default Setting

Disabled.

### • Programming

#### 20-06-01: Class of Service for Extensions

Assign a Class of Service (1-15) to an extension.

#### 20-07-11: Class of Service Options (Administrator Level) - Forced Trunk Disconnect

In an extension's Class of Service, enable (1) or disable (0) the ability to use Forced Trunk Disconnect.

### • Related Features

- **Central Office Calls, Placing**

A user can use Forced Trunk Disconnect only for trunks to which it would normally have access.

### • Operation

#### To disconnect a busy trunk:

##### System Phone

1. Press line key for trunk.

OR

Dial trunk access code (805 + trunk number).

*You hear busy tone. Trunk numbers are 01-51.*

2. Dial 724.

*You hear confirmation beeps as the system disconnects the trunk.*

*You can now place a call on the free trunk.*

3. Press line key for the trunk disconnected in Step 2.

OR

Dial the trunk access code (805 + trunk number) for the trunk disconnected in Step 2.

**Single Line Telephone**

1. Dial trunk access code (805 + trunk number).

*You hear busy tone. Trunk numbers are 01-51.*

2. Dial 724.

*You hear confirmation beeps as the system disconnects the line.*

3. Hookflash.

*You can now place a call on the free line.*

Dial the trunk access code (805 + 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 an extension in a Pickup Group. This permits co-workers in the same work area to easily answer each other's calls. The user can intercept the ringing call by dialling a code or pressing a programmed Group Call Pickup key. If several extensions within the group are ringing at the same time, Group Call Pickup intercepts the call based on the extension's priority within the Pickup Group.

With Group Call Pickup, a user can intercept the following types of calls:

- A call ringing another pickup group when the user knows the group number
- A call ringing another pickup group when the user doesn't know the group number
- A call ringing the user's own pickup group

### Conditions

A Call Pickup Group cannot have an associated name.

### Default Setting

Enabled.

### • Programming

#### **15-07-01: Programming Function Keys**

Assign Group Call Pickup keys: Code 24 for an extension's own Pickup Group and ring group calls (Service Code 867) Code 25 for a phone ringing in another Pickup Group (Service Code 869) - used when the caller doesn't know the group number Code 26 (+ group) for a phone ringing in another specific Pickup Group (Service Code 868)

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service to an extension (1-15).

#### **20-10-01: Class of Service Options (Answer Service) - Group Call Pickup Within Group**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to pick up calls ringing their pickup group (Service Code 867).

#### **20-10-02: Class of Service Options (Answer Service) - Group Call Pickup from Another Group**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to pick up calls ringing telephones that are not in their pickup group (Service Code 869)

#### **20-10-03: Class of Service Options (Answer Service) - Group Call Pickup for Specific Group**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to pick up calls ringing a specific group (Service Code 868).

#### **20-10-04: Class of Service Options (Answer Service) - Group Call Pickup**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Group Call Pickup.

**20-10-05: Class of Service Options (Answer Service) - Directed Call Pickup for Own Group**

Enable (1) or disable (0) an extension's ability to use Directed Call Pickup for calls ringing their own group.

**23-02-01: Call Pickup Groups**

Assign extensions to Pickup Groups. Also, use this option to assign an extension's priority within a Pickup Group (Call Pickup Groups 1-9 or 01-32, Priority Number 1-999).

• **Related Features**

- **Central Office Calls, Answering**  
Users can pickup of calls regardless of their access map programming.
- **Directed Call Pickup**  
Directed Call Pickup provides another way of answering a co-worker's call.
- **Hold / Park**  
Group Call Pickup can not be used to answer calls recalling from Hold or Park.
- **Multiple Directory Numbers / Call Coverage**  
Group Call Pickup keys can not be used to answer calls ringing Multiple Directory Number or Call Coverage keys.
- **Programmable Function Keys**  
Function keys simplify Group Call Pickup operation.

• **Operation**

**To answer a call ringing another phone in your Pickup Group:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. (System Phone only) Press Group Call Pickup key (PGM 15-07 or SC 851: 24).  
OR  
Dial 856 or 867.

*Service Code 867 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 phone in another Pickup Group when you don't know the group number:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. (System Phone only) Press Group Call Pickup key (PGM 15-07 or SC 851: 25).  
OR  
Dial 869.

**To answer a call ringing a phone in another Pickup Group when you know the group number:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. (System Phone only)  
Press Group Call Pickup key (PGM 15-07 or SC 851: 26 + group).  
OR  
Dial 868 and the group number (1-9 or 01-32).

## Handsfree and Monitor

### • Description

Handsfree allows a system phone user to process calls using the speaker and microphone in the telephone (instead of the handset). Handsfree is a convenience for workers who don't 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 phone.

The system provides three variations of Handsfree operation:

<b>Handsfree</b>	User can place and answer calls by pressing SPK instead of using the handset.
<b>Automatic Handsfree</b>	User can press a line or line appearance key without first lifting the handset or pressing SPK. An extension can have Automatic Handsfree for just outgoing calls or both outgoing calls and incoming line/loop key calls. Automatic Handsfree can also be used with the Call Coverage or Park features. Normally, extensions without speakerphones should have Automatic Handsfree for outgoing calls only.
<b>Monitor</b>	User can place a call without lifting the handset, but must lift the handset to speak.

### Conditions

- A. Keysets are half-duplex which may cause the speaker to turn off (clip) during conversations, giving preference to the outside party.
- B. Handsfree operation during outside trunk calls is only supported by display-type system phones/

### Default Setting

Enabled.

### • Programming

#### 20-06-01: Class of Service for Extensions

Assign Class of Service (1-15) to extensions.

### • Related Features

- **Central Office Calls, Answering / Central Office Calls, Placing**  
Extensions should be programmed for incoming and outgoing access, ringing, etc.
- **Handsfree Answerback**  
Answer Intercom calls without lifting the handset - just speak toward the phone.
- **Microphone Mute**  
For privacy, mute the phones microphone while on a call.
- **Single Line Telephones**  
Automatic Handsfree and Monitor are not available to single line telephones.
- **Prime Line Selection**  
Prime Line Selection affects how incoming and outgoing calls are handled and thus determines what happens when the user presses the SPK key.

**• Operation****To talk Handsfree:**

1. Press SPK, CALL key or line key.
2. Place call.
3. Speak toward phone when called party answers.

**To change a handset call into a Handsfree call:**

1. Press SPK.
2. Press SPK to hang up.

**To change a Handsfree call into a handset call:**

1. Lift handset.

## Handsfree Answerback/Forced Intercom Ringing

### • Description

Handsfree Answerback permits a system phone user to respond to a voice-announced Intercom call by speaking toward the phone, without lifting the handset. Like Handsfree, this is a convenience for workers who don't have a free hand to pick up the handset.

### Conditions

Handsfree Answerback is not available at an analogue single line telephone.

### Default Setting

Enabled.

### • Programming

#### **20-02-12: System Options for System Telephones - Forced Intercom Ringing**

Enable (1) or disable (0) Forced Intercom Ringing. If disabled (0), Intercom calls voice-announce.

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-08-10: Class of Service Options (Outgoing Call Service) - Switching from Handsfree**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to toggle between Handsfree Answerback and Forced Intercom Ringing for outgoing Intercom calls (dial 1 or Service Code 812).

#### **20-09-05: Class of Service Options (Incoming Call Service) Setting Handsfree answerback/Forced Intercom Ringing**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to set Handsfree Answerback (Service Code 821) and Forced Intercom Ringing (Service Code 823) for incoming Intercom calls.

### • Related Features

- **Handsfree and Monitor**

A system phone user can process calls using the speaker and microphone in the telephone (instead of the handset).

- **Microphone Mute**

With Microphone Mute enabled, Handsfree Answerback callers to an extension hear a single beep (instead of two).

- **Single Line Telephones**

Incoming Intercom calls always ring single line telephones.

### • Operation

#### **To enable Handsfree Answerback for your incoming Intercom calls:**

1. Press a SPK key.
2. Dial 821.
3. Press SPK to hang up.

*This disables Forced Intercom Ringing.*

**To enable Forced Intercom Ringing for your incoming Intercom calls:**

1. Press a SPK key.
2. Dial 823.
3. Press SPK 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 system phone user can utilize 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.

An extension in the headset mode has two options for when it appears busy to incoming callers.

The headset extension can be:

- Busy to incoming callers when only one extension appearance is busy (i.e., Off-Hook Signalling prevented)
- OR
- Busy to incoming callers only when both extension appearances are busy (i.e., Off Hook Signalling allowed)

### Conditions

- A. While in the headset mode, the Headset function key becomes a release (disconnect) key and no dial tone is heard from the speaker.
- B. While in the headset mode, the hook switch is not functional.
- C. Only compatible headsets should be used.
  - Plantronics S12 (Adapter and headset)
  - Plantronics M12E Vista Base with any H-series headsetTechnical note: the Topaz handset has a dynamic microphone (as opposed to an Electret type) ensure the headset you connect is compatible with this type of microphone.

### Default Setting

Disabled.

### • Programming

#### **11-11-43: Service Code Setup (for Setup/Entry Operation) – Headset Mode Switching**

Assign a service code for Headset Ringing Mode Switching (default: 788)

#### **15-07-01: Programming Function Keys**

Assign a function key for Headset operation (code 05).

#### **20-02-05: System Options for System Telephones - Headset Busy Mode**

Set the conditions under which a headset extension is busy to incoming callers:

The Headset extension is busy to incoming callers when **only one** extension appearance is busy (0).

OR

Headset extension is busy to incoming callers only when **both** extension appearances are busy (1).

#### **20-02-12: System Options for Multi-Line Telephones - Forced Intercom Ringing**

Determine whether intercom calls should ring or voice-announce extensions (0=voice, 1=ring).

**20-02-14: System Options Key Telephones**

Headset Ringing Cancel Timer 0-64800(sec.) 30

**20-03-06: System Options for Single Line Telephone – Headset Ringing Start Time (for SLT)**

Define the Headset ringing start time. After this timer expires from the time when a SLT is off hook, the system will set the SLT to headset ringing mode (Default: 5 seconds, Entries: 0-64800).

**21-13-38: Class of Service Options (Supplementary Service) – Headset Ringing**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use the Headset ringing (Default: 0 [disabled]).

**30-03-01: DSS Console Key Assignment**

When using a DSS Console, assign a function key for Headset operation (code 05).

• **Related Features**

• **Handsfree Answerback/Forced Intercom Ringing**

An extension with a headset can still receive voice-announced Intercom calls and respond Handsfree.

• **Programmable Function Keys**

A Headset Function key is required to answer or place a call in headset mode.

• **Single Line Telephones**

Single line telephones cannot use the Headset feature.

• **Operation**

**To enable the headset:**

1. Program a Headset key (PGM 15-07 or SC 851: 05).

*You hear a confirmation beep.*

**To use the headset:**

*The Headset key lights when you're on a call. To disconnect, press the Headset key again.*

*The headset only activates when the Headset key is pressed.*

**Answer a ringing call by pressing the Headset key.**

OR

**Press the Headset key and then a line key to make a trunk call.**

OR

**Press the Headset key to get Intercom dial tone.**

OR

**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 System Phones. Any system phone 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 System Phones that have a key for the trunk. Exclusive hold is important if a user doesn't 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 have been 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 will ring 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 will ring 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 SPK key before the call can be placed on hold.

### Default Setting

Enabled.

### • Programming

#### **14-01-16: Basic Trunk Data Setup - Forced Release of Held Call**

Enable (1) or disable (0) Forced Release of Held Call.

#### **14-07-01: Trunk Access Map Setup**

Set up the Trunk Access Maps (1-51). This sets the access options for trunks on Hold.

**15-02-06: System Telephone Basic Data Setup - Hold Key Operating Mode**

Set the function of the extension's HOLD key: System (0), Exclusive (1), or Park (2) Hold.

**15-02-07: System Telephone Basic Data Setup - Automatic Hold for CO Line**

Determine whether an extension will use Automatic Hold for CO calls (0) or if the call should disconnect (1).

**15-06-01: Trunk Access Map for Extensions**

Assign Trunk Access Maps (1-51) to extensions.

**15-07-01: Programming Function Keys**

Assign a function key for Exclusive Hold (code 45). If an extension has its fixed Hold key reassigned (in Program 15-02-06), assign a function key for System Hold (code 44).

**16-02-01: Department Group Assignment for Extensions**

Assign extensions to Department Groups (1-32).

**20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

**20-11-09: Class of Service Options (Hold/Transfer Service) - Group Hold Initiate**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to initiate Group Hold (Service Code 832).

**20-11-10: Class of Service Options (Hold/Transfer Service) - Group Hold Answer**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to pick up a call placed on Group Hold (Service Code 862).

**20-11-13: Class of Service Options (Hold/Transfer Service) - Hold Recall to Operator**

Enable (1) or disable (0) Hold Recall to Operator. If enabled, a call recalling an extension longer than the Hold/Exclusive Hold Recall Callback Time will recall the operator (normally 200). If disabled, the call will continually recall the extension that placed it on Hold.

**20-17-01: Operator's Extension**

Assign an operator's extension number if Hold Recall to Operator will be used.

**24-01-01: System Options for Hold - Hold Recall Time**

Set the Hold Recall Time (0-64800 seconds). A call on Hold recalls the extension that placed it on Hold after this interval.

**24-01-02: System Options for Hold - Hold Recall Callback Time**

Set the Hold Recall Callback Time (0-64800 seconds). A trunk recalling from Hold rings an extension for this interval.

**24-01-03: System Options for Hold - Exclusive Hold Recall Time**

Set the Exclusive Hold Recall Time (0-64800 seconds). A call on Exclusive Hold recalls the extension that placed it on Hold after this interval.

**24-01-04: System Options for Hold - Exclusive Hold Recall Callback Time**

Set the Hold Recall Time (0-64800 seconds). A trunk recalling from Hold rings an extension for this interval. If still unanswered, the call changes to System Hold.

**24-01-05: System Options for Hold - Forced Release of Held Calls Interval**

Set the Forced Release of Held Calls interval (0-64800 seconds). If enabled in Program 14-01-16, the system disconnects a call if on Hold longer than this interval.

**• Related Features**

- **Music on Hold**  
Callers on Hold hear Music on Hold, if programmed.
- **Programmable Function Keys**  
An extension can have function keys for System Hold and Exclusive Hold.
- **Single Line Telephones**  
Analogue single line telephones can only use Exclusive Hold and Group Hold. Digital single line phones can use System Hold as well.

**• Operation****System Hold****To place an outside call on System Hold (System Phone only):**

1. Press HOLD.  
*A line/loop/CALL key flashes slowly while on Hold; flashes fast when recalling.*  
OR
1. If you know the specific line number, dial 772 + Line number (01-51).

**To pick up an outside call on System Hold:**

- System Phone**
1. Press flashing line/loop/CALL key.  
OR
  1. If you know the specific line number, dial 772 + Line number (01-51).

**Exclusive Hold****To place an outside call on Exclusive Hold:**

- System Phone**
1. Press Exclusive Hold key (PGM 15-07 or SC 851: 45).  
*A line/loop/CALL key flashes slowly while on Hold, flashes fast when recalling.*

**To pick up an outside call on Exclusive Hold:**

- System Phone**
1. Press flashing line/loop/CALL key.

**Group Hold****To place a call on Hold so anyone in your extension group can pick it up:**

- System Phone**
1. Press HOLD.
  2. Dial 832.

3. Press SPK to hang up.

**Single Line Telephone**

1. Hookflash.
2. Dial 832.
3. Hang up.

**To pick up a call on Group Hold:**

**System Phone**

1. Press a SPK key.
2. Dial 862.

**Single Line Telephone**

1. Lift handset.
2. Dial 862.

**Intercom Hold**

**To place an Intercom call on Intercom Hold:**

1. Press HOLD.  
*The CONF/DND key flashes.*
2. Press SPK to hang up.

**To pick up an Intercom call on Intercom Hold:**

1. Press SPK.  
OR  
Press flashing CONF/DND key.

## Hotline

### • Description

Hotline gives a system phone 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.

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)

### Conditions

An extension user cannot use Hotline to pick up a call ringing their partner's extension.

### Default Setting

Disabled.

### • Programming

#### 15-07-01: Programming Function Keys

Assign a function key for Hotline (code 01 + partner's extension number).

#### 20-06-01: Class of Service for Extensions

Assign a Class of Service to an extension (1-15).

### • Related Features

- **Distinctive Ringing, Tones and Flash Patterns**  
Set up flash patterns for DSS and Hotline keys.
- **Do Not Disturb**  
Hotline does not override Do Not Disturb.
- **Handsfree Answerback/Forced Intercom Ringing**  
Hotline always follows the Handsfree Answerback/Forced Intercom Ringing mode set at the called extension. The Hotline caller can override the setting, if desired.
- **Hotline, External**  
External Hotline will automatically dial a telephone number or Common Abbreviated dialling number when the handset is lifted.
- **Off Hook Signalling**  
If the partner's extension is busy, Hotline does not automatically activate Off Hook Signalling.
- **Programmable Function Keys**  
A Hotline is a uniquely programmed function key.

**• Operation****To place a call to your Hotline partner:**

1. Press Hotline key (PGM 15-07 or SC 851: 01 + partner's extension number)

*You can optionally lift handset after this step for privacy.*

**To transfer your outside call to your Hotline partner:**

1. Press Hotline key.
2. Announce 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 phone.

OR

If your telephone rings, lift handset.

## Intercom

### • Description

Intercom gives extension users access to other extensions. This provides the system with complete internal calling capability.

### **Handsfree Answerback/Forced Intercom Ringing**

Handsfree Answerback permits an extension user to respond to a voice-announced Intercom call by speaking toward the phone, without lifting the handset. Like Handsfree, this is a convenience for workers who don't have a free hand to pick up the handset. Refer to Handsfree Answerback/Forced Intercom Ringing for more.

### **Conditions**

Preventing ICM calls does not affect Dialling other service codes, including Emergency calls.

### **Default Setting**

Enabled.

### • Programming

#### For Intercom . . .

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-08-01: Class of Service Options (Outgoing Call Service) - Intercom Calls**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to place Intercom calls.

#### **20-17-01: Operator's Extension**

Assign the operator's extension.

#### **20-18-01: Service Tone Timer - Extension Dial Tone Time**

Set the Extension Dial Tone Time (0-64800 seconds). After getting Intercom dial tone, a system phone user has this interval to dial the first digit of the Intercom call.

#### **21-01-02: System Options for Outgoing Calls - Intercom Interdigit Time**

Set the Intercom Interdigit Time (0-64800 seconds). When placing Intercom calls, users must dial each digit within this interval.

#### For Handsfree Answerback/Forced Intercom Ringing . . .

#### **20-02-12: System Options for System Telephones - Forced Intercom Ringing**

Enable (1) or disable (0) Forced Intercom Ringing. If disabled (0), Intercom calls voice-announce.

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-08-10: Class of Service Options (Outgoing Call Service) - Switching from Handsfree**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to toggle between Handsfree Answerback and Forced Intercom Ringing for outgoing Intercom calls (dial 1 or Service Code 812).

### **20-09-05: Class of Service Options (Incoming Call Service) - Setting Hands-free**

#### **Answerback/Forced Intercom Ringing**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to set Handsfree Answerback (Service Code 821) and Forced Intercom Ringing (Service Code 823) for incoming Intercom calls.

#### **• Related Features**

- **Handsfree Answerback/Forced Intercom Ringing**  
Intercom calls can ring or be voice-announced at the called extension.
- **Intercom Abandoned Call Display**  
Intercom Abandoned Call Display remembers the last five Intercom calls to an extension.
- **Line Preference**  
Ringing Line Preference can automatically answer ringing Intercom or trunk calls when the user lifts the handset.
- **Name Storing**  
An extension can have a name assigned that identifies the extension to callers.

#### **• Operation**

##### **To place an Intercom call:**

1. Press **SPK** key (or lift handset).
2. Dial extension number (or **9** for your operator).
3. Dial **1** to toggle between a Signalling (Ringing) Call and a Voice Call.

*If the extension you call is busy or doesn't answer, you can dial another extension number or dial **2** to step to the next extension without hanging up.*

##### **To answer an Intercom call:**

1. If you hear two beeps (Voice Call), speak toward phone handsfree.  
-OR-  
If your telephone rings (Signalling Call), lift handset or press **SPK**.

##### **To check your extension information:**

###### **System Phone**

1. Press **CHECK**.
2. Press **CALL**.  
*Your display shows your telephone's extension number, port number and Department Group.*
3. Press **CLEAR** to return the normal time/date display.

##### **To change how Intercom calls ring at your extension:**

1. Press the **CALL** key.
2. Dial **823** to have intercom calls ring at your extension (Signalling).

-OR-

3. Dial **821** to have intercom calls voice announce to your extension (Voice).

## ISDN Compatibility

### • Description

ISDN-BRI (Integrated Service Digital Network - Basic Rate Interface) is a telephone network service that provides two B-channels (2B+D) for voice call trunking. The B-channels are used to provide two CO/PBX type connections. Caller ID is 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.

### Basic Rate Interface (BRI)

Your system also provides compatibility with ISDN Basic Rate (BRI) services, including:

- Basic BRI Call Control (BCC) for 2 or 4 interfaces
- 2 x 64kbps Clear B-Channel and 16kbps D-Channel (2B+D)
- Point-to-Point BRI Terminal Connection (no daisy-chaining)
- Multipoint BRI Terminal Connection (daisy-chaining)
- S-Bus (allows BRI PCB's to be used as either a trunk or station interface)

BRI services require the installation of BRI Interface PCBs (2BRIU or 4BRIU). Each 2BRIU Interface PCB has two BRI circuits, while the 4BRIU Interface PCB has four BRI circuits. The BRI Interface PCBs install into the slots of the 2OPBOX unit.

### SMDR Includes Dialed Number

The SMDR report can optionally print the trunk's name (entered in system programming) or the number the incoming caller dialed (i.e., the ISDN DDI digits). This gives you the option of analysing the SMDR report based on the number your callers dial. When using the SMDR reports for ISDN, all incoming BRI calls will be displayed under the CLASS column as "IVIN".

### Display Shows Why Caller ID is Not Available

With Caller ID enabled, the system will provide information for ISDN calls that do not contain the Caller ID information. If the Caller ID information is restricted, the telephone display will show "PRIVATE". If the system is not able to provide Caller ID information because the telco information is not available, then the display will show "OUT OF AREA".

### Calling Party Number Notification

The system can provide calling party number notification for outgoing ISDN calls. When a call is made on an ISDN line by an extension, the system will send the identification for the extension placing the call, if it's 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 will be sent as it takes priority. When the option for calling party sub-address is on, the extension number will be sent as the sub-address information. Both the calling party number and calling party sub-address are sent in a SETUP message as the calling party information element and a calling party sub-address information element.

**Conditions**

- A. When Program 10-03-03 is changed between Point-Multipoint and Point-Point, the Topaz system must be reset (switch off then on again) before the service will operate.

**Default Setting**

Connection Type = Point-Multipoint.

**• Programming****10-03 : : System Configuration Setup – PCB Setup (BRIU)**

Setup the Basic Configuration data for the BRI ISDN card ,as follows:

10-03-01 : ISDN Line Mode (T-Point, S-Point, S-Point Leased Line).

10-03-02 : Logical Port Number.

10-03-03 : Connection Type (Point-Multipoint, Point-Point).

10-03-04 : Layer 3 Timer Type (1-5).

10-03-05 : CLIP Information Announcement (Disable, Enable).

Based on this setting, the system will include a “Presentation Allowed” (1) or “Presentation Restricted” (0) in the Setup message to allow or deny the Calling Party Number. Program 15-01-04 must also be set to a ‘1’ if this option is enabled.

10-03-06 : S-Point Connection Mode (Extended Passive Bus, Short Passive Bus).

10-03-07 : S-point DID digits (0-4).

10-03-08 : Dial Sending Mode (Enbloc sending, Overlap sending).

10-03-09 : Dial Information Element (Overlap Sending Mode) (Keypad Facility, Called Party Number).

If Overlap Sending is selected in Program 10-03-08, select either Keypad Facility (0) or Called Party Number (1) for the dial information element.

10-03-14 : S-Point Service Protocol (Keypad facility, Special Protocol for Topaz system).

**10-06 : System Configuration Setup – ISDN BRI Setup**

Specify the TEI selection and DID mode for DID callers when the BRI feature is used.

10-06-01 : TEI selection (Select by SPID number, Select by Channel ID Number).

10-06-02 : DID mode (Route by Called Party Number, Route by Redirecting Number).

10-06-03 : SPID1 (Up to 20 digits).

10-06-04 : SPID2 (Up to 20 digits).

**15-01-04 :Basic Extension Data Setup – Calling Party Number Notification (ISDN Caller ID)**

If both Program 15-01-04 and 10-03-05 are enabled (1), the system includes Caller ID in the Setup message as “Presentation Allowed”. If these options are disabled (0), it will be “Presentation Restricted”.

**15-07-01 :Programmable Function Keys**

Assign a Programmable Function Key for Caller ID Block for ISDN (Function Number 63), if required, to restrict the sending of Caller ID on outgoing calls.

**20-06-01 :Class of Service for Extensions**

Assign a Class of Service (1-15) to an extension.

**20-13-23 :Class of Service Options (Supplementary Service) - Display the Reason for Transfer**

Enable (1) or disable (0) an extension's ability to display the reason (Call Forward, Busy, No Answer or DND) a VRS, DID, DISA, or ISDN call is being transferred to their extension.

**20-08-13 :Class of Service Options (Outgoing Call Service) - ISDN CLIP**

Determine if the ISDN calling line identity presentation and screening indicators are to be allowed (0=disabled, 1=enabled).

**20-25 : System Option Setup – ISDN Options**

Define the ISDN system options for the BRI ISDN card ,as follows:

**20-25-01** : Send Release Message After Subscriber Hang Up

**20-25-02** : Progress Indicate Information element detect

**20-25-03** : Bearer Capability select from SLT Outgoing (3.1kHz Audio, Speech)

**20-25-04** : Send DT Until User Dials the First Digit (Overlap Sending Mode)

**20-25-05** : T305 Timer Start After Sending Disconnect Message

**20-25-06** : Call Proceeding Send Mode

**20-25-07** : Busy Tone Mode Set When Disconnect Message Received

**20-25-08** : Use of Low Layer Compatibility (LLC)

**20-25-09** : Use of High Layer Compatibility (HLC) Sending

**20-25-10** : S-Point Terminal Seizes Analogue Trunk

**20-25-11** : Automatic Changing System Clock When Date/Time Information Element Received

**20-25-12** : Forwarded Incoming Calls Return Connect Message when Outgoing Call Receives Alert Message

**20-25-13** : Use busy tone when trunk call receives Release Message

**21-08-04: Time for Send Busy Tone for ISDN Trunk**

Set the timer to send out Busy Tone on an ISDN line, when the called party is busy (0-64800sec).

**21-12 : Outgoing Call Setup – ISDN Calling Party Number Setup for Trunks**

Assign Calling Party Numbers for each trunk (maximum 16 digits per entry). When a call is made by an extension which does not have an Extension Calling Number assigned (Program 21-13), the system sends the calling number for the ISDN trunk defined in Program 21-12. **Note:** If the Calling Party Number is assigned in both Programs 21-12 and 21-13, the system sends the data in Program 21-13.

**21-13 : Outgoing Call Setup – ISDN Calling Party Number Setup for Extensions**

Assign each extension a Calling Party Number (maximum 16 digits per entry). The calling number is the subscriber number of the dial-in number. When a call is made by an extension which does not have an Extension Calling Number assigned (Program 21-12), the system sends the calling number for the ISDN trunk defined in Program 21-13. **Note:** If the Calling Party Number is assigned in both Programs 21-12 and 21-13, the system sends the data in Program 21-13.

#### **22-02-01: Incoming Call Trunk Setup**

Assign the incoming trunk type for each trunk. There is one item for each Night Service Mode.

#### **22-09 : Incoming Call Setup – DID Basic Data Setup**

For each trunk group, define the basic setting of Dial-In incoming calls for each trunk group.

**22-09-01 :** Expected Number of Digits from Telco (1-8)

**22-09-02 :** Received Vacant Number Operation (Disconnect, Transfer)

**22-09-03 :** Sub-addressing Mode (Extension Number specify, DID Conversion Table)

**22-09-04 :** DID Receiving Mode for ISDN (Enbloc Receiving, Overlap Receiving)

**22-09-05 :** Local Code Digits (0-15)

**22-09-06 :** Local Code (Max. 16 digits)

**22-09-07 :** Pilot Code (1 digit, 0-9)

**22-09-08 :** T302 Time-out Operation (Disconnect, Transfer)

#### **22-11-01: DID Translation Table Number Conversion**

Specify for each Translation Table entry (2000):

- 1 The digits received by the system (eight max.)
- 2 The extension the system dials after translation (24 digits max.)
- 3 The name that should show on the dialled extension's display when it rings (twelve characters max.)
- 4 The Transfer Target - 1 and 2. If the Transfer Targets are busy or receive no answer, those calls are transferred to the final transfer destination (Program 2-10).
- 5 Operation mode

#### **Assigning an ISDN Interface as an S-Bus Extension**

In the following example, BRI Interface 1 will be assigned as an S-Bus extension. Connected to this S-Bus port may be a video conference unit, G4 fax machine or other ISDN device. Switch and Jumper settings referred to are located on the 2/4BRIU card.

#### **Setup:**

1. Set switch SW102 = S.
2. Set switch SW100 = ON.
3. Set both jumpers of CN102 = ON.
4. Assign Program 10-03-01 for BRI Interface 1 = S-Point.
5. If the cable length to the S-Bus device is between 200m and 500m, set Program 10-03-06 = 0. Otherwise leave at default (1).

Program 10-03-06 = 0 (Extended Passive Bus) - assigned when the distance to the last device is up to 500m. Up to 3 devices may be connected up to 50m apart.

Program 10-03-06 = 1 (Short Passive Bus) - assigned when the distance to the last device is less than 200m. Up to 6 devices may be connected.

6. Program 10-03-07 can be used to add digits to the end of the extension number to increase the size of the initial number range. If Program 10-03-07 = 0, the initial number to the S-Bus ports are the logical port extension numbers, e.g. 208 and 209. If Program 10-03-07 = 1, the initial number to the S-Bus ports will be, for example, 208X and 209X.
7. Program 10-03-14 (Service Protocol for S-point) should be left at default (0 = Keypad facility).
8. Determine the type of outgoing trunk the S-Bus device will select when it goes off-hook and dials the trunk access code (e.g. 0).

ISDN Trunks Only: Program 20-25-20 = OFF

ISDN or PSTN Trunks: Program 20-25-20 = ON

9. Incoming calls to the S-Bus device can be assigned like any other extension, e.g. intercom calls, trunk calls, direct in-dial.

**Notes:**

- Line Key appearance for ISDN interfaces set as S-Point is disabled.
- The ISDN interface set as S-Point will be assigned the next available extension numbers, e.g. in a basic default system, the S-Bus extension numbers will be 208 & 209.
- When the S-Bus lines are selected internal dial tone is provided. At this point all internal topaz extension numbers can be dialled or a trunk access code.
- Note that the BRI interface must be assigned as point-to-multipoint (default setting) when multiple devices are connected (Program 10-03-03 = 0).

• **Related Features**

- **Caller ID**  
With Caller ID enabled, the system will provide information for ISDN calls that do not contain the Caller ID information. Outgoing calls on ISDN trunks can send extension based caller ID details with the call.
- **Call Forward Off-Premise**  
This feature requires ISDN trunks, or loop start trunks with disconnect supervision. Off-Premise Call Forward for Doorphones can be transferred to the external party through ISDN lines only.
- **Forced Trunk Disconnect**  
This feature only works on analogue trunk. ISDN trunks do not have the Forced Trunk Disconnect available.
- **Station Message Detail Recording**  
SMDR records for incoming calls on ISDN trunks are tagged with IVIN.
- **Tandem Trunking (Unsupervised Conference)**  
This feature requires ISDN trunks, or loop start trunks with disconnect supervision.
- **Toll Restriction Dial Block**

This feature is not available for ISDN BRI S-Bus extensions.

- **Transfer**

Transferred calls on DISA, DID, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer, or DND).

- **Operation**

Same as for analogue PSTN trunks.

## 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 Dialling 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 pre-select a specific trunk if desired.

### Redial List

The system allows display telephones to have a Redial List. Up to 10 Dialed numbers (both external and internal destinations) are automatically stored in the Redial List. The user can display and select one of the stored numbers and then redial it. If more than 10 destination numbers are Dialed, the oldest number is automatically erased to make room for the new number.

### Conditions

Redial List requires the use of a display telephone. Non-display and single line phones can not use this feature.

### Default Setting

Enabled.

### • Programming

#### **11-12-12: Service Code Setup (for Service Access) - Last Number Dial**

Assign a service code (816) to use Last Number Dial.

#### **11-12-17: Service Code Setup (for Service Access) - Clear Last Number Dialing Data**

Assign a service code (876) to clear the Last Number Dial.

#### **15-02-13: System Telephone Basic Data Setup - Redial List Mode**

Select the type of numbers that will be stored in the Redial List - Internal and External numbers (0) or External only (1).

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

### • Related Features

- **Automatic Route Selection**

When using Automatic Route Selection, ARS selects the trunk for the call unless the user preselects.

- **Repeat Redial**

The system can periodically redial an unanswered trunk call.

- **Save**

A user can save the number of an outgoing call to be accessed at a later time.

## • Operation

### To redial your last call:

1. Without lifting the handset, press LND.

*The last dialled number is displayed.*

2. To redial the last number, press #.

OR

Search for the desired number from the Redial List by pressing the LND or VOLUME 5 or VOLUME 6 keys.

3. Lift the handset or press SPK to place the call.

*The system automatically selects a trunk from the same group as your original call and dials the last number dialled.*

OR

1. At system phone, press idle line key (optional).

*The system automatically selects a trunk from the same group as your original call.*

2. Press LND.

OR

1. At system phone, press a CALL key.

OR

At single line telephone, lift handset.

2. Dial 816.

*The system automatically selects a trunk from the same group as your original call and dials the last number dialled.*

### To check the number saved for Last Number Redial:

1. Press LND.

*The stored number displays for six seconds. The stored number dials out if you:*

- Lift the handset,
- Press an idle line key,
- Press a CALL key, or
- Press SPK

2. Press HOLD.

### To erase the stored number:

1. At system phone, press a SPK key.

OR

At single line telephone, lift handset.

2. Dial 876.

## LCR – Least Cost Routing

### • Description

Least cost routing allows the Topaz system to automatically select the indirect carrier defined by routing tables within the system.

An indirect carrier is accessed via the PSTN lines connected to the Topaz (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 numbers 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 any 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 Topaz. Local calls can be routed via an indirect carrier if Cost Centre Codes are not required.

### Default Setting

Disabled.

### • Programming

Before Least Cost Routing can take place each trunk must be enabled by Program 14-01-23.

Calls made via a trunk that is disabled will route to the direct carrier only.

#### **14-01-23 : LCR Service**

Set this item to 1 to enable least cost routing.

The operation of dialled numbers beginning with a digit 1 can be changed by Program 26-01-04.

**26-01-04 : LCR Mode Option**

Set to UK operation - numbers beginning with digit 1 will use Program 26-08-01 for manual override operation.

Set to Not UK operation - numbers beginning with digit 1 will use Program 26-02-01 i.e. not use manual override operation. Use this setting for typical Australian applications.

Outgoing calls via an LCR enabled trunk will check each dialled digit against the entries of Program 26-02-01.

If the digits dialled do not match an entry the call will use the default carrier set by 26-05 Carrier table 1.

**26-02-01 : Digit analyse Table**

Enter the dialling code (normally just the STD code e.g. 01509), do not enter any trunk access digits (e.g. 901509).

There are 200 entries available, each entry can have up to 16 digits.

A wildcard can be entered. A wildcard means any dialled digit. Enter @ for a wildcard (press function key 01 during KeyTel Programming for a wildcard)

For each entry you must specify the carrier table to use by Program 26-02-06, the carrier table is 1-25 and is set by Program 26-05.

**26-02-06 : LCR Carrier Table**

Enter the carrier table to use.

*Note.*

*There are no settings required in Program 26-02-02, 26-02-03, 26-02-04, 26-02-05, 26-03 & 26-04. These are used by ARS operation. Therefore you must ensure that ARS is disabled in Program 26-01-01 otherwise Program 26-02-02, 26-02-03, 26-02-04, 26-02-05, 26-03 & 26-04 will be enabled.*

In the LCR carrier table you can specify:

**26-05-01 : Delete Digits**

Delete leading digits - This is used to delete an override code dialled by the user. Specify the quantity of leading digits to be deleted.

**26-05-02 : Access Code**

Access Code - The access code of the indirect carrier. This is specified by the indirect carrier.

The access code can be up to 16 digits in length, it is possible to enter Pause (P) and Change to DTMF (@). A pause is entered with function key 01 and change to DTMF with function key 02 during KeyTel programming. Refer to Change to DTMF Operation for further details.

**26-05-03 : Authorisation table number**

Authorisation code table - An optional PIN code. There are 10 entries available, they are specified in Program 26-06.

**26-05-04 : Cost Centre Code**

Cost Centre Code - An optional code to identify the extension making the call for billing. The cost centre code is specified for each extension by Program 26-07.

If an Authorisation Code is required it is selected from Program 26-06. The authorisation code is used to identify the customer for billing. You must confirm the authorisation code with the indirect carrier otherwise all calls via the indirect carrier will fail.

**26-06-01 : Authorisation Code Table**

There are 10 entries available each of up to 10 digits in length.

If a Cost Centre Code is required it is set by Program 26-07. The CCC is used to identify the user for billing. You must confirm the number of digits required by the indirect carrier.

**26-07-01 : Cost Centre Codes**

There is an entry for each extension installed on the Topaz system. Each entry can be up to 6 digits in length.

You must ensure that every extension has a valid cost centre code otherwise calls will fail from extensions that do not have a valid CCC.

If the customer wants an override code to bypass the LCR routing it is entered using Program 26-08. For UK operation the override code must begin with a digit 1, refer to Program 26-01-04 for LCR operation mode.

**26-08-01 : Manual Override Access Code Table**

There 10 entries each of up to 4 digits in length.

If you have entered any Manual Override codes in Program 26-08 you also have the option to prevent Emergency calls being made to an indirect carrier that cannot accept this type of call.

*This table is only required if you have entered an override code that will route to an indirect carrier that cannot accept Emergency calls.*

**26-09-01 : Manual Override Exemption Table**

There are 25 tables each of up to 4 digits in length. There are default entries of 000 for Australian operation.

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 Topaz 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 Topaz will stop dialling and wait for the CONNECT from the indirect carrier. The Topaz 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.

**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>

**14-01-23: LCR Service**

Set the LCR Mode per trunk (0 : LCR Off, 1 : LCR On, 2 : LCR On - Cost Centre Code only).

**26-01-04: Automatic Route Selection Service - LCR Mode**

Use this option to define the operation of dialled numbers beginning with digit 1.

UK Mode – LCR Manual Override Access Code Tables (Program 26-08-xx) are followed.

Not UK Mode – ARS Dial Analysis Tables (Program 26-02-xx) are followed.

**26-02-01: Dial Analysis Table for ARS – Dial**

Enter the digits (16 digits maximum: 1-9, 0 \* #, @; 200 separate entries) for the Dial Analysis Table which will be analysed by ARS/LCR. This table will be checked after any programmed F-Route operations have completed. The system will then refer to Program 26-02-02 and 26-02-03 to determine the routing for the call. To enter a wild card/don't care digit, press Line Key 1 to enter an @ symbol. ***It is important to remember that the system checks the table numbers in numerical order.***

This means that entries for specific numbers should be entered first (such as your local area codes), then enter the items containing wild card digits. If the system sees an entry of "2@@", then any table entries which follow will be ignored. For example, if 268, 269, and 270 are local exchanges, these would be the first three table entries which would route according to the settings made in Program 26-02-02 and 26-02-03 for each of the table entries. If the next entry is "2@@", then the system checks no further in this program and routes all other "2xx" numbers according to the entries made in Program 26-02-02 and 26-02-03 for this table entry.

**26-02-06: Dial Analysis Table for ARS - LCR Carrier Table**

For each Dial Analysis Table (1-200), set the LCR Carrier Table (0-25) to be used.

**26-05-01: LCR Carrier Table - Delete Digits**

26-05 defines the LCR Access Codes and routing options, including Authorization codes and Cost Centre Codes. Enter here the quantity of leading digits that need to be deleted.

**26-05-02: LCR Carrier Table - Access Code**

Enter the Access Code and Option to route to the Indirect Carrier.

**26-05-03: LCR Carrier Table - Authorization Code Table**

Enter the table number (0-10) that contains the correct Authorization code.

**26-05-04: LCR Carrier Table - Cost Centre Code**

Specify whether an optional cost centre code can be entered.

**26-06-01: LCR Authorization Code Table**

Define the optional Authorization code (or PIN code) required by the Indirect Carrier. The Authorization code is inserted if set in Program 26-05-03.

**26-07-01: LCR Cost Centre Code Table**

Define the optional cost centre code required by the Indirect Carrier. The cost centre code is set for each extension. The cost centre code is inserted if set in Program 26-05-04, or if "Cost Centre Code Only" is assigned in Program 14-01-23.

**26-08-01: LCR Manual Override Access Code - Manual Override Access Code**

This code is dialled by the user to bypass the automatic selection.

**26-08-02: LCR Manual Override Access Code - Carrier Table No.**

Specify the carrier table number (0-25) defined in 26-05.

**26-09-01: LCR Manual Override Exemption Table**

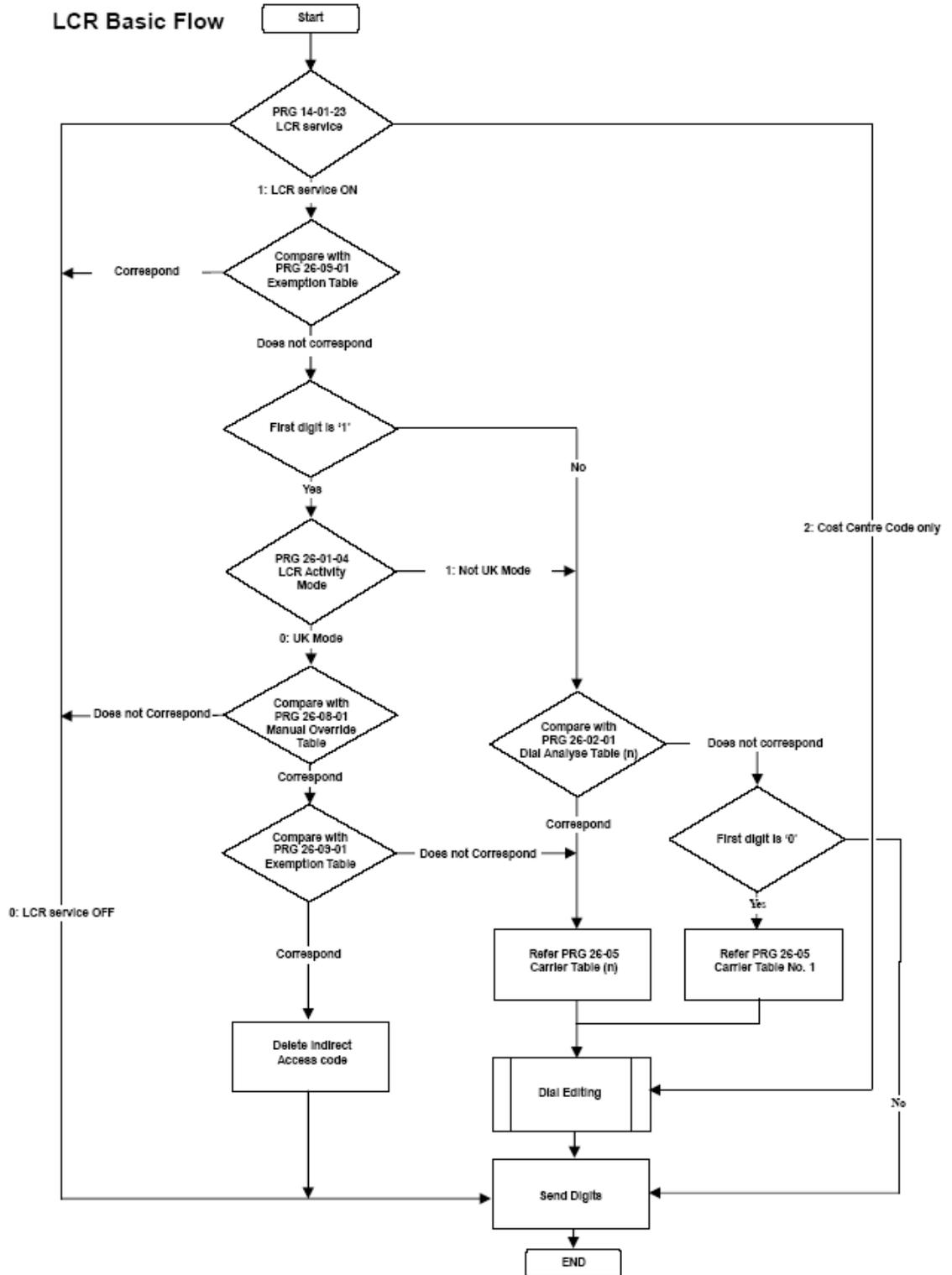
Define the numbers that must not be sent via an indirect carrier when the user dials a Manual Override Access Code. The exemptions are normally Emergency Services that may not be supported by the indirect carrier.

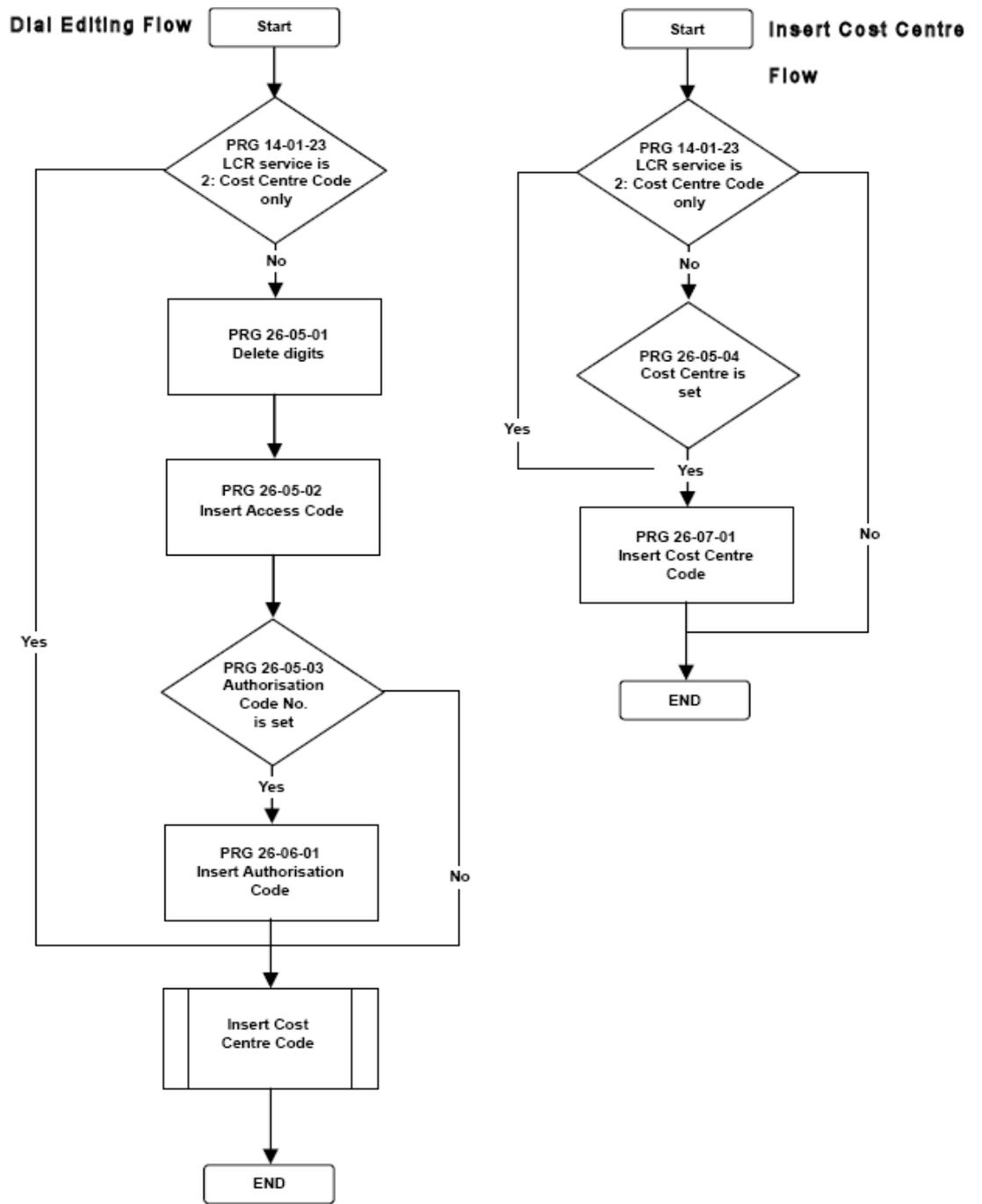
• **Related Features**

- **Cost Centre Codes**  
Send a cost center code for outgoing calls.
- **Automatic Route Selection (F-Route)**  
ARS and F-Route Determine the appropriate trunk routing based on the digits dialled.

• **Operation**

Feature is automatic once programmed





## Line Preference

### • Description

Line Preference determines how a system phone 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 system phone user answers calls. When a call rings the system phone, 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 system phone user places calls. If a system phone has Outgoing Intercom Line Preference, the user hears Intercom dial tone when they lift the handset. If a system phone 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 0”) 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 system phone extension has more than one call ringing its line keys, Ringing Line Preference answers the calls on a first-in first-answered basis.

#### Default Setting

Enabled.

### • Programming

#### 14-05-01: Trunk Groups

For Auto-Answer of Non-Ringing Lines, assign trunks to trunk groups. This is part of Trunk Group Routing programming.

#### 14-06-01: Trunk Group Routing

For Auto Answer of Non-Ringing Lines, program the Trunk Group Routing table. Auto Answer uses this table to determine the answer sequence for ringing calls.

#### 14-07-01: Trunk Access Map Setup

For Outgoing Line Preference and Auto-Answer of Non-Ringing Lines, set up the Trunk Access Maps (1-51).

**15-01-02: Basic Extension Data Setup - Outgoing Trunk Line Preference**

Enable (1) or disable (0) Outgoing Trunk Line Preference for extensions.

**15-02-09: System Telephone Basic Data Setup - Ringing Line Preference for Intercom Calls**

Enable Idle (0) or Ringing (1) Line Preference for Intercom calls. See the table below for interaction.

**15-02-10: System Telephone Basic Data Setup - Ringing Line Preference for Trunk Calls**

Enable Idle (0) or Ringing (1) Line Preference for trunk calls. See the table below for interaction.

**15-06-01: Trunk Access Map for Extensions**

For Outgoing Line Preference and Auto-Answer of Non-Ringing Lines, assign trunk Access Maps to extensions.

**20-10-07: Class of Service Options (Answer Service) - Automatic Answer of Universal Calls**

Enable (1) or disable (0) an extension's ability to use Universal Auto Answer for non-ringing lines.

**22-01-01: System Options for Incoming Calls - Incoming Call Priority**

Determine if ringing Intercom calls (0) or ringing trunk calls (1) should have answer priority. See the table below for interaction.

**22-04-01: Incoming Extension Ring Group Assignment**

Assign extensions to ring groups (1-25). Auto-Answer for Non-Ringing Lines only works for trunks that do not ring an extension.

**22-05-01: Incoming Trunk Ring Group Assignment**

Assign trunks to ring groups (1-25). Auto-Answer for Non-Ringing Lines only works for trunks that do not ring an extension.

**23-03-01: Universal Answer/Auto Answer**

For each extension, select the route that it will use for Auto-Answer for Non-Ringing Lines. The routes correspond to the Trunk Group Routing table set in Program 14-06.

• **Related Features**

- **Direct Inward Line**  
DILs do not affect Incoming Line Preference operation.
- **Ring Groups**  
Trunks ring extensions according to Ring Group programming.
- **Trunk Group Routing**  
If an extension gets trunk dial tone when the user lifts the handset, the system uses the "dial 0" routing to select the trunk.

• **Operation**

**To answer a ringing call if your phone has Ringing Line Preference:**

1. Refer to the chart on the previous page.

**To place a call if your phone has Outgoing Line Preference:**

1. Refer to the chart on the previous page.

## Long Conversation Cutoff

### • Description

For incoming and outgoing central office calls, each trunk can be programmed to disconnect after a defined length of time. The timer begins when the trunk is seized and disconnects the call after the timer 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. This tone is not available to analogue single line telephone users nor is it available for incoming calls.

### Conditions

None

### Default Setting

Disabled.

### • Programming

#### **14-01-14: Basic Trunk Data Setup - Long Conversation Cutoff**

Enable (1) or disable (0) a trunk's ability to disconnect incoming and outgoing central office calls automatically.

#### **14-01-15: Basic Trunk Data Setup - Long Conversation Alarm Before Cut Off**

Enable (1) or disable (0) the Long Conversation Alarm for each trunk.

#### **20-06-01: Class of Service for Extensions**

Assign a Class of Service (1-15) to extensions.

#### **20-13-02: Class of Service Options (Supplementary Service) - Long Conversation Cutoff Incoming**

Enable (1) or disable (0) an extension's class of service from using Long Conversation Cutoff for incoming calls.

#### **20-13-03: Class of Service Options (Supplementary Service) - Long Conversation Cutoff Outgoing**

Enable (1) or disable (0) an extension's class of service from using Long Conversation Cutoff for outgoing calls.

#### **20-21-03: System Options for Long Conversation - Long Conversation Cutoff Timer for incoming calls**

Enter the time the system will wait before disconnecting incoming trunks (0-64800 seconds).

#### **20-21-04: System Options for Long Conversation - Long Conversation Cutoff Timer for Outgoing Calls**

Enter the time the system will wait before disconnecting outgoing trunks (0-64800 seconds).

### • Related Features

- **Central Office Calls, Answering/Central Office Calls, Placing**  
Long Conversation Cutoff can disconnect incoming and outgoing CO calls after a set time period.

- **Direct Inward System Access (DISA)**  
Long conversation cutoff is controlled separately for DISA.
- **Warning Tone for Long Conversation**  
Using the Warning Tone for Long Conversation feature allows users on outgoing calls to hear a warning tone prior to the call disconnecting.

- **Operation**

Feature is automatic once programmed.

## Loop keys

### • Description

Loop keys are uniquely programmed function keys that simplify placing and answering trunk calls. Loop keys are used when the phone does not have a line key for the trunk. The loop key gives the user a key with lamp indication that makes holding/transferring of trunk calls easier. 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. Without a switched loop key, calls not appearing on a line key or fixed loop key will ring only the CALL 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 telephone display will show “WAITING - LOOP KEY” if the user presses a loop key when there are additional calls waiting.

#### Conditions

None

#### Default Setting

Each system phone has a both way loop key assigned to key 22.

- **Programming**

- **14-05-01: Trunk Groups**

- Assign trunks to trunk groups (1-25). In general, loop keys access trunks within specific trunk groups.

- **14-07-01: Trunk Access Map Setup**

- Set up the Trunk Access Maps. For example, if an extension's loop key is for incoming and outgoing, make sure the Trunk Access Map allows incoming and outgoing access. Also see Program 15-06 below.

- **15-06-01: Trunk Access Map for Extensions**

- Assign Trunk Access Maps to extensions. Also see Program 14-07 above.

- **15-07-01: Programming Function Keys**

- Program function keys as trunk group/loop keys (\*02 or \*05). For additional data, in Program 15-13 enter 0 (incoming only), 1 (outgoing only) or 2 (both ways).

- **15-13-01: Loop Keys**

- For each loop key on an extension, program options for Data 1 and Data 2 (see the chart below).

- **20-07-10: Class of Service Options (Administrator Level), Programmable Function Key Programming (Appearance Level)**

- If an extension should be able to use Programmable Functions Keys to program a loop key, enable this option in the user's Class of Service (1-15).

- **22-04-01: Incoming Extension Ring Group Assignment**

- Assign extensions to Ring Groups (1-25). An incoming loop key will ring only for those trunks programmed to ring. Also see Program 22-05.

- **22-05-01: Incoming Trunk Ring Group Assignment**

- Assign trunks to Ring Groups (1-25). An incoming loop key will ring only for those trunks programmed to ring. Also see Program 22-04 above.

- **Related Features**

- **Automatic Route Selection (ARS) / Central Office Calls, Answering / Central Office Calls, Placing**

- Program incoming and outgoing access and routing options.

- **Off Hook Signalling**

- 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 telephones according to their Ring Group assignments (Programs 22-04 and 22-05).

- **Direct Inward Dialling (DID) / Direct Inward Line (DIL) / Direct Inward System Access (DISA)**

Transferred DID, DIL, and DISA calls do not require ring group programming.

- **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 SPK 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)**
  - 01-25 = Trunk Groups**  
*If you selected option 2 in step 5 above, enter the incoming Trunk Group followed by the outgoing Trunk Group.*
7. Press SPK to hang up.

## Meet Me Conference

### • Description

With Meet Me Conference, an extension user can set up a Conference with their current call and up to 32 other internal or external parties (16 parties in total). Each party joins the Conference by Dialling a Meet Me Conference code. Meet Me Conference lets extension users have a telephone meeting -- without leaving the office.

### Conditions

- A. Up to four eight-party conferences may be established simultaneously.
- B. Conference circuits may be used by other facilities, such as barge in, conversation recording and tandem trunking.

### Default Setting

Enabled.

### • Programming

#### 15-07-01: Programming Function Keys

Assign function keys for Conference (code 07), External Zone Paging (code 19 + zone), External All Call Paging (code 20), Internal Zone Paging (code 21 + zone) and Meet Me Conference/Paging Pickup (code 23).

#### 20-06-01: Class of Service for Extensions

Assign a Class Of Service (1-15) to an extension.

#### 20-10-06: Class of Service Options (Answer Service) - Meet Me Conference and Paging

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to initiate a Meet Me Conference or Meet Me Page.

#### 31-01-04: System Options for Internal/External Paging - Privacy Release Time

Set the Privacy Release Time (0-64800 seconds). Once the user initiates Meet Me Conference, the system waits this interval for the Paged party to join the conversation.

### • Related Features

- **Conference**  
An extension user can also use other types of Conferences to join callers together.
- **Meet Me Paging**  
An extension user can have a telephone meeting with a co-worker on a Page zone.
- **Programmable Function Keys**  
Meet Me Conference requires a Conference key. In addition, Internal and External Paging keys simplify Meet Me Conference operation.

### • Operation

#### Meet Me External Conference

To make a Meet Me external Conference:  
System Phone

1. While on a call, press Conference key (PGM 15-07 or SC 851: 07).
2. Dial 803 and the External Paging Zone code (1-3 or 0 for All Call)  
OR  
Dial 751 and the Combined Paging Zone code 1-3 (for Internal/External Zones 1-3) or 0 (for Internal/External All Call).  
OR  
Press Page key (PGM 15-07 or SC 851: 19 + zone & 20).
3. Announce the zone.
4. When co-worker answers your page, press the Conference 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 (1-3 or 0 for All Call).  
OR  
Dial 751 and the Combined Paging Zone code 1-3 (for Internal/External Zones 1-3) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When co-worker answers your page, press the hookflash twice.
5. Repeat steps 1-4 for each co-worker you want to add.

**To join a Meet Me External Conference:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 865.
3. Dial the announced External Paging Zone code (0-3).  
*You connect to the other parties.*

**Meet Me Internal Conference:****To make a Meet Me Internal Conference:****System Phone**

1. While on a call, press Conference key (PGM 15-07 or SC 851: 07).
2. Dial 801 and the Internal Paging Zone code (0-6 or 00-32).  
OR  
Dial 751 and the Combined Paging Zone code 1-6 (for Internal/External Zones 1-6) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When co-worker answers your page, press the Conference 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 801 and the Internal Paging Zone code (0-6 or 00-32).  
OR  
Dial 751 and the Combined Paging Zone code 1-3 (for Internal/External Zones 1-3) or 0 (for Internal/External All Call).
3. Announce the zone.

4. When co-worker answers your page, press the hookflash twice.
5. Repeat steps 1-4 for each co-worker you want to add.

**To join a Meet Me Internal Conference:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift 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 (PGM 15-07 or SC 851: 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

One external paging zone is provided as a standard feature of the system. If more than one external paging zone is required, a 2PGDU unit must be installed in the system, providing an additional 2 zones.

### Default Setting

Enabled.

### • Programming

**Note:** For additional programming information on Paging, refer to the **Paging External** and **Paging Internal** features.

#### 15-07-01: Programming Function Keys

Assign function keys for External Zone Paging (code 19 + zone), External All Call Paging (code 20), Internal Zone Paging (code 21 + zone) or Meet Me Conference/Paging Pickup (code 23).

#### 20-06-01: Class of Service for Extensions

Assign a Class Of Service (1-15) to an extension.

#### 20-10-06: Class of Service Options (Answer Service) - Meet Me Conference and Paging

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to initiate a Meet Me Conference or Meet Me Page.

### • Related Features

- **Meet Me Conference**

An extension user can set up a Conference with their current call and up to 7 other inside parties.

- **Meet Me Paging Transfer**

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.

- **Paging, Internal / Paging, External**

An extension's access to internal and external page zones affects the Meet Me Paging feature.

- **Programmable Function Keys**

Internal and External Paging keys simplify Meet Me Paging operation.

### • Operation

**Meet Me External Page:**

**To make a Meet Me External Page:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 803 and the External Paging Zone code (1-3 or 0 for All Call).  
OR  
Dial 751 and the Combined Paging Zone code 1-3 (for Internal/External Zones 1-3) or 0 (for Internal/External All Call).
3. Announce the zone.  
OR
  1. At system phone, press the External Paging Zone key (PGM 15-07 or SC 851: 19 + zone & 20).
  2. Announce the zone.

**To join a Meet Me External Page:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 865.
3. Dial the announced External Paging Zone (0-3).  
*You connect to the other party.*

**Meet Me Internal Page****To make a Meet Me Internal Page:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 801 and dial the Internal Paging Zone code (0-6, 00-32).  
OR  
Dial 751 and the Combined Paging Zone code 1-3 (for Internal/External Zones 1-3) or 0 (for Internal/External All Call).
3. Announce the zone.  
OR
  1. At system phone, press the External Paging Zone key (PGM 15-07 or SC 851: 19 + zone & 20).
  2. Announce the zone.

**To join a Meet Me Internal Page:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift 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 (PGM 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 don't 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

One external paging zone is provided as a standard feature of the system. If more than one external paging zone is required, a 2PGDU unit must be installed in the system, providing an additional 2 zones.

### Default Setting

Enabled.

### • Programming

**Note:** For additional programming information on Paging, refer to the **Paging External** and **Paging Internal** features.

#### 15-07-01: Programming Function Keys

Assign function keys for External Zone Paging (code 19 + zone), External All Call Paging (code 20), Internal Zone Paging (code 21 + zone) and Meet Me Conference/Paging Pickup (code 23).

#### 20-06-01: Class of Service for Extensions

Assign a Class Of Service (1-15) to an extension.

#### 20-10-06: Class of Service Options (Answer Service) - Meet Me Conference and Paging

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to initiate a Meet Me Paging Transfer.

### • Related Features

- **Meet Me Conference**  
An extension user can set up a Conference with their current call and up to 7 other inside parties.
- **Meet Me Paging**  
An extension user can Page a co-worker and meet with them on a Page zone.
- **Paging, External**  
With External Paging, an extension user can broadcast an announcement over Paging equipment connected to external Paging zones.
- **Paging, Internal**  
Internal Paging lets extension users broadcast announcements to other keysets.
- **Programmable Function Keys**  
Function keys simplify Meet Me Paging Transfer operation.

### • Operation

### **Meet Me External Paging Transfer**

#### **To make a Meet Me External Paging Transfer:**

1. At system phone, while on a call, press HOLD.  
OR  
At single line telephone, while on a call, hookflash.
2. Press the External Paging Zone key (PGM 15-07 or SC 851: 19 + zone & 20).  
OR  
Dial 803 and the External Paging Zone code (1-3 or 0 for All Call).  
OR  
Dial 751 and the Combined Paging Zone code 1-3 (for Internal/External Zones 1-3) or 0 (for Internal/External All Call).
3. Announce the call.
4. When Paged party answers, hang up to Transfer the call to them.

#### **To join a Meet Me External Paging Transfer:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 865.
3. Dial the announced External Paging Zone (0-3).  
*You connect to the Paging party.*
4. Stay on the line.  
*After the Paging party hangs up, you connect to the transferred call.*

### **Meet Me Internal Paging Transfer**

#### **To make a Meet Me Internal Paging Transfer:**

1. At system phone, while on a call, press HOLD.  
OR  
At single line telephone, while on a call, hookflash.
2. Press Internal Paging Zone key (PGM 15-07 or SC 851: 20 + zone).  
OR  
Dial 801 and the Internal Paging Zone code (0-6 or 00-32).  
OR  
Dial 751 and the Combined Paging Zone code 1-3 (for Internal/External Zones 1-3) or 0 (for Internal/External All Call).
3. Announce the call.4. When Paged party answers, hang up to Transfer the call to them.  
*The answering party connects to the trunk call when you hang up.*

#### **To join a Meet Me Internal Paging Transfer:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift 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 (PGM 15-07 or SC 851: 23) if your extension is in the zone called.
3. Stay on the line.  
*After the Paging party hangs up, you connect to the transferred call.*

## Memo Dial

### • Description

While on an outside call, Memo Dial lets a display system phone user store an important number for easy redialling 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's memory. They can quickly call the Memo Dial number after hanging up.

When a user enters a Memo Dial number, the dialled digits do not output over the trunk. Dialling Memo Dial digits does not interfere with a call in progress.

### Conditions

When Memo Dial calls out, it dials out the entire stored number. Memo Dial does not automatically strip out trunk or PBX access codes if entered as part of the stored number.

### Default Setting

Disabled.

### • Programming

#### 15-07-01: Programming Function Keys

Assign a function key for Memo Dial (code 31).

### • Related Features

- **Central Office Calls, Placing**  
A user's outgoing dialling options affect how a Memo Dial call is placed.
- **Last Number Redial**  
Quickly redial the last outside number dialled.
- **Single Line Telephones**  
Memo Dial is not available at single line telephones.
- **Save Number Dialled**  
Save the last outside number dialled.

### • Operation

#### To store a number while you are on a call:

1. While on a call, press Memo Dial key (PGM 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 Memo Dial key (PGM 15-07 or SC 851: 31).
3. Press a CALL key.

*The stored number dials out only if you store a trunk access code before the number.*

OR  
Press line key.

*The stored number dials out.*

**To check to see the stored Memo Dial number:**

1. Do not lift handset.
2. Press Memo Dial key (PGM 15-07 or SC 851: 31).

*The stored number displays.*

**To cancel (erase) a stored Memo Dial number:**

1. Press a CALL key.
2. Press Memo Dial key (PGM 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 will not have to recall an unanswered extension. It also ensures that a user will 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 system phone 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.

### Message Waiting on Single Line Telephones

The system provides 4 methods of indicating Message Waiting on a Single Line Telephone (with or without a MW lamp). These methods are:

1. Special dial tone
2. Intermittent ringing
3. VRS announcement
4. Message waiting lamp

### Note the following items for this feature:

- This feature can apply to any analogue single line telephone.
- Since it's possible that a user will pick up the handset and dial without listening for dial tone, the system is able to detect Dialling during a VRS message and special dial tone.
- All of the message waiting indication methods may be active at any SLT.
- Options are available based on a station's class of service.
- A DSP daughter board must be installed for VRS messages.
- There is a programmable delay from the time a SLT goes off-hook until the VRS message begins. The default is set to 1 second.
- The time between intermittent rings is programmable. The default time is 1800 seconds (30 minutes). If this timer is set to "0" then the system rings once.
- These signalling methods are available to all analogue single line telephones, whether connected to an 308M/308ME card.
- If both the Message Wait dial tone and VRS message are active, the user will hear the VRS message first then hear the Message Wait dial tone. If the special dial tone is not set, then the user will hear regular dial tone.  
**Note:** The regular dial tone may be different based on the phone's status

(call forward, DND, etc.).

- The VRS announcement does not work when telephones have the following features set:

1. Outgoing Trunk Line Preference
2. Hot Line (Internal)
3. Hot Line (External)

### Conditions

Reminder messages require a DSP daughter board for VRS messages.

- A. Message Waiting on a Single Line Telephone is not indicated by the MW lamp.
- B. Message Waiting lamps at the SLT must be compatible with the Xen Topaz operation (24V to 100V switching at 500msec. interval).

### Default Setting

Enabled.

### • Programming

#### **15-07-01: Programming Function Keys**

Assign a function key for Message Waiting (code 38).

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-13-07: Class of Service Options (Supplementary Service) - Message Waiting**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to leave Messages Waiting.

#### **24-02-05: System Options for Transfer - Message Wait Ring Interval Timer**

For SLTs without message waiting lamps, this timer determines the amount of time between intermittent ringing. If this timer is set to '0' then the system rings once.

### • Related Features

- **Handsfree Answerback/Forced Intercom Ringing**

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 SPK.

- **Programmable Function Key**

A Message Waiting key simplifies this feature's operation.

- **Single Line Telephones**

The intermittent ringing or stutter dial tone options may be used to indicate voice mail messages for single line sets which do not have a Message Waiting lamp.

- **Voice Response System**

Reminder messages require a DSP daughter board for Voice Response System (VRS).

- **Voice Mail Integration**

Telephone-to-telephone Message Waiting works when the voice mail is installed. The MW LED may be used to indicate voice mail messages if there is no extension number assigned to the voice mail key in system programming.

The MSG key at system phone can also be set as the Voice Mail Message key.

## • Operation

### To leave a Message Waiting:

1. Call busy or unanswered extension.
2. Press Message Waiting key (PGM 15-07 or SC 851: 38)
3. Hang up.

*With system phones, the MW LED lights.*

### To answer a Message Waiting:

*When you have a message, your MW LED flashes fast for System Phones.*

1. At a system phone, press a SPK key and dial 841.  
OR  
Press Message Waiting key (PGM 15-07 or SC 851: 38).  
OR  
At single line telephones, lift the handset and dial 841.

*If the called extension doesn't answer, dial 0 or press your Message Waiting key to automatically leave them a message.*

*Normally, your MW LED goes out. If it continues to flash, you have new messages in your "Voice Mail" mailbox or a new "General Message". Go to "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 system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 873.
3. Hang up.

### To cancel the Messages Waiting you have left at a specific extension:

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 871.
3. Dial number of extension you don't want to have your messages.
4. Hang up.

### To check your messages:

1. Press CHECK
2. Dial 841.

*You can have any combination of the message types in the table below on your phone.*

If you see...	You have...
<b>VOICE MESSAGE n MESSAGE</b>	New messages in your Voice Mail mailbox
<b>CHECK MESSAGE VRS GENERAL MESSAGE</b>	A General message in Voice Mail that has not been heard.
<b>CHECK MESSAGE (name)</b>	Message Waiting requests left at your phone 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 a SPK key. You'll either:
  - Go to your Voice Mail mailbox.
  - Listen to the new General Message.
  - Automatically call the extension that left you a Message Waiting.

### Single Line Telephones:

#### **With VRS message only:**

1. Lift handset.
2. After programmed delay, the extension user hears the VRS message "You have a message".
3. Listen for dial tone.

#### **With special dial tone only:**

4. Lift handset.  
*The system provides the special Message Wait dial tone immediately.*

#### **With VRS and special dial tone:**

1. Lift handset.
2. After the programmed delay, the extension user hears the VRS message "You have a message".  
*The system provides the special Message Wait dial tone immediately.*

## Microphone Mute

### • Description

Microphone Mute lets a system phone user turn off their phone's handsfree or 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. The microphone stays off until the user turns it back on.

### Conditions

None

### Default Setting

Enabled (using MIC key).

### • Programming

#### 15-07-01: Programmable Function Keys

If an extension needs handset microphone mute, program a Handset Transmission Mute key (code 40). To program a Mic Mute key, use code 02 as the entry. The Mic Mute key will mute conversation on a handsfree call, while the Handset Mute key will mute the handset transmission on a non-handsfree call.

#### 20-06-01: Class of Service for Extensions

Assign a Class Of Service (1-15) to an extension.

### • Related Features

- **Handsfree Answerback/Forced Intercom Ringing**

Microphone Mute does not operate if the user calls another extension and the called extension responds without lifting the handset or pressing SPK. With Microphone Mute enabled, Handsfree Answerback callers to an extension hear a single beep (instead of two).

- **Programmable Function Keys**

Handset Microphone Mute requires a uniquely programmed function key.

- **Single Line Telephones**

Single line telephones cannot use Microphone Mute.

### • Operation

#### To mute your telephone's handset or Handsfree microphone while on a call:

1. Press MIC.

*This only turns off the Handsfree microphone.*

OR

Press Microphone Mute key (PGM 15-07 or SC 851: 40).  
This turns off both the handset and Handsfree microphone.

#### To turn your telephone's microphone back on:

1. Press MIC.

*Use MIC only if you pressed it initially to turn off your Handsfree microphone.*

OR

Press Microphone Mute key (PGM 15-07 or SC 851: 40).

*Use the Microphone Mute key only if you pressed it initially to turn off your handset or Handsfree microphone.*

## Multiple Directory Numbers / Call Coverage

### • Description

Multiple Directory Numbers let a system phone have more than one extension number. Calls can route to the system phone's installed number or to the system phone's "virtual extension" Multiple Directory Number key. This helps users identify incoming calls. For example, an extension installed at 304 (Sales) could have a virtual extension for 460 (Service). Calls to 304 ring the extension normally. Calls to 460 ring the Multiple Directory Number key. This lets the user at extension 304 differentiate Sales calls from Service calls.

### Call Coverage

A system phone can have Multiple Directory Number keys set up as Call Coverage keys for co-worker's extensions. The Call Coverage key lights when the co-worker's extension is busy and flashes slowly when the co-worker has an incoming call. The Call Coverage key can ring immediately when a call comes into the covered extension, ring after a delay or not ring at all. In addition, the system phone user can press the Call Coverage key to intercept their co-worker's incoming call. The user can also go off hook and press the Call Coverage key to call the covered extension.

If the covered extension is busy and they receive a second call, the covering extension's Call Coverage key will flash. The user just presses the flashing key to pick up the call.

The Call Coverage keys follow the extension's Do Not Disturb and Off-Hook Signalling programming. These keys do not, however, indicate the lamping for extensions in DND. If this is required, a Hotline key can be used instead.

### Place and Receive Calls on Call Coverage/Multiple Directory Number Keys

Multiple Directory Number keys/Call Coverage keys can be used three separate ways, depending on how the key is defined in Program 15-02-21.

- A DSS key to the extension and for receiving incoming calls
  - Answering incoming calls with the ability to place outgoing ICM or CO calls
- OR
- Just for receiving incoming calls

A system phone can have Multiple Directory Number/Call Coverage keys for many different extensions and virtual extensions. In addition, co-workers can share the same Multiple Directory Numbers. For example, everyone in the Service Department could have a key for the Sales Department's virtual extension.

### Auto Off-Hook Answer and Ringing Line Preference for Call Coverage Keys

An extension's Call Coverage Keys can be programmed to allow the user to simply pick up the handset to answer a ringing call. So as not to interfere with ringing trunk or Intercom calls, the system automatically assigns Call Coverage Key ringing with the lowest answering priority. If multiple Call Coverage Keys are ringing, answering priority is set first by the assigned ring pattern and then by the key position.

## Virtual Extension vs. Ring Groups

As the system does not allow voice mail calls to ring Ring Groups, a virtual extension can be created which will allow you to direct calls to more than one extension. When you program a Call Coverage Key for that extension to ring, the next call can then be answered.

This could allow a voice mail caller to dial the virtual extension and have all the extensions with the same virtual extension key ring. The system can be programmed as follows:

- Program 11-04, 15-01-01: Assign a virtual extension number and name (example: virtual port 1, extension 5400, Sales).
- Program 15-07: Assign a Call Coverage key (\*03) to an extension for the virtual extension number assigned.

The end user can then simply transfer the call to the virtual extension number (example: 5400). To allow calls to be queued at the virtual you must place the virtual within a Department Group and have the user transfer calls to the pilot number, the call is in placed in a queue and will be answered in turn as soon as the extension is available.

### Conditions

- A. More than one extension can share the same Multiple Directory Number.
- B. An extension can have more than on Multiple Directory Number (limited only by the number of available function keys).

### Default Setting

Disabled.

## • Programming

### 11-04-01: Virtual Extension Numbering

Assign extension numbers to virtual extensions (virtual extension ports=1-50).

### 15-01-01: Basic Extension Data Setup - Extension Name

Assign names to virtual extensions.

### 15-02-21: System Telephone Basic Data Setup, Virtual Extension Access Mode

Determine whether an extension's Virtual Extension/Call Coverage Key should be used as a DSS key to the extension and for receiving calls (0), answering incoming calls and ability to place outgoing ICM or CO calls (1), or just receiving incoming calls (2).

### 15-07-01: Programming Function Keys

Assign function keys for Multiple Directory Numbers (code \*03 + extension number).

### 15-08-01: Incoming Virtual Extension Ring Tone Setup

Assign a ring tone (0-4) to each extension port and virtual extension port assigned to a Multiple Directory Number key. If ringing is enabled for the key in Program 15-09, the key rings with the tone set in this program. Each port can have one of four different rings.

**15-09-01: Virtual Extension Ring Assignment**

Individually program an extension's Multiple Directory Number function keys to either ring (1) or not ring (0).

**15-10-01: Incoming Virtual Extension Ring Tone Order Setup**

Set the priority (1-4) for the Multiple Directory Number Ring Tones set in Program 15-08. When Multiple Directory Number calls ring an extension simultaneously, the tone with the highest priority (e.g., 1) rings. The other keys just flash.

**15-11-01: Virtual Extension Delayed Ring Assignment**

Individually program an extension's Multiple Directory Number keys for Delayed Ringing (1) or Immediate Ringing (0). Also see Program 20-04-03 above.

**20-04-03: System Options for Virtual Extensions - Call Coverage Delay Interval**

Multiple Directory Number/Call Coverage Keys set for Delayed Ringing (see Program 15-11 below) ring the covering extension after this interval.

**20-06-01: Class of Service for Extensions**

Assign a COS to each extension (1-15).

**20-07-10: Class of Service Options (Administrator Level) - Programmable Function Key**

Determine whether an extension's Class of Service allows a user to set up a Call Coverage key using service code 852 (Enable=1, Disable=0).

**20-10-08: Class of Service Options (Answer Service) - Auto Off-Hook Answer for Call Coverage Keys**

Determine whether an extension's Call Coverage Key should be automatically answered when the handset is lifted (0=disabled, 1=enabled). With multiple ringing calls, Programs 1508, 15-10 and 23-04 determine which call is answered first.

**23-04-01: Ringing Line Preference for Virtual Extensions**

When an extension has a virtual extension assigned to a Programmable Function Key, this program determines the priority (1-4) for a Ring Group (1-25) for automatically answering the ringing calls when the handset is lifted. If "00" is selected for the Ring Group, when the user lifts the handset, the user will answer a ringing call from any group.

**• Related Features**

- **Class of Service**  
Class of Service options apply to Multiple Extension Appearances.
- **Department Calling**  
Multiple Extension Appearances can be in Department Calling Groups.
- **Do Not Disturb / Off-Hook Signalling**  
A Call Coverage Key follows DND and Off-Hook Signalling programming for an extension.
- **Group Call Pickup**  
Multiple Extension Appearances can be in Call Pickup Groups.

- **Line Preference**  
An extension user can answer an outside call on a Call Coverage Key just by lifting the handset.
- **Programmable Function Keys**  
This feature requires uniquely programmed function keys.

## • Operation

### To answer a call ringing a Multiple Directory Number:

1. Press flashing Multiple Directory Number key (PGM 15-07 or SC 852: \*03 + ext.).

### To place a call to a Multiple Directory Number (including a Call Coverage key):

1. Press a CALL key.
2. Dial Multiple Directory Number number or press Multiple Directory Number key.

### To place a call from a Multiple Directory Number (including a Call Coverage key):

1. Press the Multiple Directory Number key.  
*ICM dial tone is heard.*
2. Place an intercom call or dial a trunk access code to seize an outside line and place your call.

### To set up a Call Coverage Key:

1. Press a SPK key.
2. Dial 852.
3. Press the programmable key you want to program.  
*The previously programmed entry displays.*
4. Dial \*03.
5. Dial the number of the extension you want to cover.
6. Press HOLD once for Immediate Ring  
*To set for Delayed Ring, skip to Step 8.*
7. Dial the Mode number(s) in which the key will be used.  
*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(s) in which the key will be used.  
*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 SPK to hang up.

## Music on Hold

### • Description

Music on Hold (MOH) sends music to calls on Hold and parked calls. The music lets the caller know that their 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 (synthesized) or from a customer-provided music source (i.e., tape deck, receiver, etc.).

**Note:** 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 Business Solutions Ltd hereby disclaims 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 - Via the EXMOH input or audio input via a 2PGDU card.

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.

2 - ACI input via a 2PGDU card.

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.

It is not possible to have an input via a 2PGDU card for internal calls, the external input must be via the Topaz Main Unit (EXMOH input).

### Music on Hold for non-DDI Trunk calls

The music on hold source is set per trunk port by Program 14-08

There are 3 options available:

0 - Use the music source set by Program 10-04-01

1 - Back Ground Music input on the NTCPU port

2 - ACI input via a 2PGDU card.

The music source will be used for outgoing trunk calls or incoming non-DDI calls only.

### Conditions

- A. Refer to the System Hardware Manual for instructions on how to install an external music source.
- B. The system supports one External Music On Hold source input, via either the built-in music port or the 2PGDU card.
- C. If a 2PGDU card is installed and has MOH assigned to one of its ports (Program

10-03-01 and 33-01-01=4), the built-in music port is no longer used for MOH, i.e. the 2PGDU card takes priority.

### Default Setting

Music On Hold is provided from the internal (synthesised) music source.

### • Programming

#### **10-04-01: Music on Hold Setup - Music on Hold Source Selection**

Determine whether the system should use internal (0) or external (1) music source.

#### **10-04-02: Music on Hold Setup - Music Selection for Internal Source**

Set the Music on Hold selection. The options are 0 (silence), 1-2 (synthesized music selections).

#### **10-04-03: Music on Hold Setup - Audio Gain Setup**

Set the Music on Hold audio gain (1-64).

#### **14-08-01: Music on Hold Source for Trunks**

For each trunk, set the Music on Hold source (0=Internal synthesized MOH, 1=Customer-provided source connected to BGM port, 2=Customer-provided source connected to ACI port).

#### **14-08-02: Music on Hold Source Port Number**

If the MOH type is "2" in 14-08-01, for each trunk enter the ACI source port number (0 – 96).

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-07-02: Class of Service Options (Administrator Level) - Changing the Music on Hold Tone**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to change the Music on Hold tone (Service Code 881).

#### **22-11-09: DID Translation Table Number Conversation - MOH Source**

For each DID translation Table entry (1-2000), specify the source of music to be used for DID trunks (0=IC/MOH port, 1=BGM port, 2=ACI port).

#### **22-11-10: DID Translation Table Number Conversion - ACI Music Source Port**

For each DID translation Table entry (1-2000), if item 2 is selected in 22-11-09, specify the port to be used for the source of music heard on DID trunks.

#### **33-01-01: ACI Port Type Setup**

Set each ACI software port for input (1) or input (2). Use input ports for Music on Hold sources.

### • Related Features

- **Single Line Telephones**

Single line telephones cannot change the Music on Hold tone

## • Operation

### To change the Music on Hold tone:

1. Press a SPK key.
2. Dial 881.
3. Dial Music on Hold tone code:
  - 00 No Tone (Silence)
  - 01 MOH tone
4. Press SPK to hang up.

Service code 881 will change the music on hold tone for any call that is set to use Program 10-04-01 as the music on hold source. When Program 10-04-01 is not set as the MOH source then the music on hold tone played to the held caller is shown below.

Program 10-04 setting	Type of call placed on hold	MOH set by Service Code 881=00	MOH set by Service Code 881=01 or 02
Program 10-04-01 set to 0 (Topaz tune)	Internal call	Silence	Topaz tune
	DDI call with 22-11-09=0 (Uses 10-04-01)	Silence	Topaz tune
	DDI call with 22-11-09=1 (BGM input)	BGM Input defined by 33-01-01	BGM Input defined by 33-01-01
	DDI call with 22-11-09=2 (EXMOH input)	EXMOH Input defined by 22-11-10	EXMOH Input defined by 22-11-10
Program 10-04-01 set to 1 (External)	Internal call	Silence	EXMOH Input on Topaz Main Unit
	DDI call with 22-11-09=0 (Uses 10-04-01)	Silence	EXMOH Input on Topaz Main Unit
	DDI call with 22-11-09=1 (BGM input)	BGM Input defined by 33-01-01	BGM Input defined by 33-01-01
	DDI call with 22-11-09=2 (EXMOH input)	EXMOH Input defined by 22-11-10	EXMOH Input defined by 22-11-10

## Name Storing

### • Description

Extensions and trunks can have names instead of just circuit numbers. These names show on a system phone's 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 be up to 12 digits long, consisting of alphanumeric characters, punctuation marks and spaces.

### Conditions

Although you can setup up to 12 characters for the name there will be certain displays where all 12 cannot be displayed, in this case the name will be truncated. Try to keep names to 8 characters or less, this will prevent the names being truncated on the display.

### Default Setting

Enabled.

### • Programming

#### **14-01-01: Basic Trunk Data Setup - Trunk Name**

Program names for system trunks.

#### **15-01-01: Basic Extension Data Setup - Extension Name**

Program name for system extensions (up to 12 characters).

#### **15-07-01: Programmable Function Keys**

Assign an Extension Name Change key (55) to extensions:

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-09-02: Class of Service Options (Call Service) - Trunk Name Display, Incoming**

In an extension's Class of Service, enable (1) or disable (0) the displaying of a trunk's name/ number when the trunk is ringing.

#### **20-13-21: Class of Service Options (Supplementary Service) - Extension Name**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to program their name.

### • Related Features

- **Single Line Telephones**

Analogue extensions cannot program names.

### • Operation

#### **To program an extension's name:**

1. Press a SPK key.
2. Dial 800  
OR  
Press Extension Name Change key (PGM 15-07 or SC 851: 55).
3. 3. Enter the extension number to be named.

## 4. 4. Enter name (see below).

*Your name can be up to 12 digits maximum.*

## 5. Press HOLD.

When entering names in the procedures below, refer to this chart. Names can be up to 12 digits long.	
Use this keypad digit ...	When you want to ...
1	Enter characters: 1 @ [ ¥ ] ^ _ ' {   } ? ?
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 ! " # \$ % & ' ( )
*	Enter characters: * + , - . / : ; < = > ?
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: STA). Pressing # again = Space.
DND/CONF	Clear the character entry one character at a time.

## 6. Press SPK to hang up.

## 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. The system allows Night Service to be enabled for each Night Service group (1-4), allowing each group to determine when their calls should switch modes. A user typically activates Night Service after normal working hours, when most employees are unavailable to answer calls. The system also provides external contacts to enable Night Service.

There are eight Night Service modes:

- Day 1 / Day 2 Modes - for normal working hours
- Night 1 / Night 2 Modes - after hours (usually evening)
- Midnight 1 / Midnight 2 Modes - late at night to early in the morning
- Rest 1 / Rest 2 Modes - interval usually used for lunch

### Assigned Night Answer (ANA)

With Assigned Night Answer, 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.

### 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. For more on setting up Universal Answer, turn to the "Central Office Calls, Answering" feature.

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 will ring 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 VRS. This lets outside callers, answered by the VRS, dial a code to have their call ring External Paging.

### Automatic Night Service

The system will allow or deny Automatic Night Service based on the extension's class of service programming. If allowed, the calls will then route according to the service patterns programmed.

### Conditions

- A. The following programs are affected by Night Mode:

15-06	22-05	25-04	34-02
15-09	22-07	25-05	34-03
15-11	22-08	25-08	34-04
20-06	22-12	25-09	
21-02	22-13	25-10	
21-04	23-03	25-11	

21-12	25-02	25-12
21-15	25-03	31-05

Almost all features are affected by Night Mode except for the following:

- Flexible System Numbering
- SMDR
- Volume Control

#### **Default Setting**

System is always in the Day Mode.

Automatic Night Mode switching is disabled (Program 12-01-02=0). Manual Night mode switching is enabled on the system (Program 12-01-01=1) but disabled in the telephones Class of Service (Program 20-07-01=0).

#### **• Programming**

##### **11-10-01: Service Code Setup (for System Administrator) - Day / Night Mode Switching**

Customize the service code (818) to be used for day/night mode switching.

##### **11-10-12: Service Code Setup (for System Administrator) – Night Mode Switching (Other Groups)**

Assign a service code Night Mode Switching of department groups other than your own (default: 718).

##### **12-01-01: Night Mode Function Setup - Manual Night Service Enable**

Allow (1) or prevent (0) Department Group extension members from activating Night Service.

##### **12-01-02: Night Mode Function Setup - Automatic Night Service Enabled**

Enable (1) or disable (0) Automatic Night Service for the system. Make sure to set the Service Patterns in 12-02, 12-03, and 12-04.

##### **12-02-01: Automatic Night Service Patterns**

Configure the Automatic Night Service patterns. Pattern 1 should begin at 00:00 (midnight). Make sure to include the mode information for each time period as the system assigns the Day Mode (0) to all time periods not assigned to modes 1-3.

##### **12-03-01: Weekly Night Service Switching**

Assign one of the ten Automatic Night Service patterns programmed in 12-02 to each day of the week.

##### **12-04-01: Holiday Night Service Switching**

Assign one of the ten Automatic Night Service patterns to holidays.

##### **12-05-01: Night Mode Group Assignment for Extensions**

Assign a Day/Night Mode Group (1-4) for each extension.

##### **12-06-01: Night Mode Group Assignment for Trunks**

Assign a Day/Night Mode Group (1-4) for each trunk port (1-51).

##### **12-07-01: Text Data for Night Mode**

Create an original text message for each day/night mode group (1-4) which will be displayed on an LCD of system phone telephone in each Night Mode.

**14-07-01: Trunk Access Map Setup**

To allow for UNA answering, set up the Trunk Access Maps (1-51). For UNA, extension must have incoming access to trunk ringing the External Paging speakers.

**15-06-01: Trunk Access Map for Extensions**

For UNA answering, assign Trunk Access Maps (1-51) to extensions. Make one entry for each Night Service mode.

**15-07-01: Programmable Function Keys**

Assign Night Service function keys (09) to extensions and set the key for the proper mode (Day, Night, Rest, etc.).

**20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

**20-07-01: Class of Service Options (Administrator Level) - Manual Night Mode Switching**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to manually switch the Night Mode (Service Code 818).

**22-04-01: Incoming Extension Ring Group Assignment**

To have trunks ring extension during the different Night Service modes (for ANA), assign extensions to Ring Groups (1-25). For each extension in the Ring Group, indicate in Program 22-06 if trunk should ring (1) or not ring (0).

**22-05-01: Incoming Trunk Ring Group Assignment**

To have trunks ring extensions for ANA, assign trunks to Ring Groups. You make a different entry for each Night Service mode.

**22-08-01: DIL/IRG No Answer Destination**

If a Universal Answer call rings longer than the DIL No Answer Time (Program 22-01-04), it routes to the Ring Group specified in this option (Ring Group (1-25), the VRS, or DSPDB Voice Mail (101)).

**31-05-01: Universal Night Answer**

For each Night Service Mode, assign which trunks should ring which External Paging Zones.

• **Related Features**

- **Central Office Calls, Answering and Placing/Ring Groups**  
There are separate Access Map and Ring Group programming entries for each Night Service mode (Day 1, Night 1, Midnight 1, Rest 1, Day 2, Night 2, Midnight 2, Rest 2). Also, "Universal Answer" allows an extension user to pick up a UNA call.
- **Paging, External**  
With Universal Night Answer, outside calls can ring External Paging Zones.
- **Programmable Function Keys**  
Function keys simplify activating Night Service.
- **Voice Response System (VRS)**

Using the service code defined in Program 11-15-09, a caller listening to the VRS message can have 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.

## • Operation

### To activate Night Service by Service codes:

1. 1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 818.
3. Dial 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 SPK to hang up.

### To activate Night Service by using programmable keys:

1. Press Night Service key (PGM 15-07 or SC 851: 09) + Mode code number (below).
  - 0 Toggle Day 1/Night 1 mode
  - 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 Night Answer External Page zones:

1. Place the CO call on hold and dial the Transfer to Trunk Ring Group code.  
*You will hear a confirmation tone.*
2. Hang up.  
*The call rings over the External Paging, enabling anyone to answer the call.*

### To activate Night Service for Other Groups

1. At system phone, press the CALL key.  
OR  
At single line telephone, lift handset.
2. Dial **718**.
3. Dial group number **(1-4)**.
4. Dial 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
5. Press SPK to hang up.

## Off Hook Signalling

### • Description

When a user calls an extension busy on a call, they can send an off hook signal through the handset and through the telephone's speaker indicating they are trying to get through. The signal is an off hook ringing over the idle (second) line appearance. Off Hook Signalling helps important callers get through, without waiting in line for the called extension to become free. The system provides the following Off Hook Signalling options:

- **Called Extension Block**  
The called extension's Class of Service may block incoming Off Hook Signalling attempts. This is beneficial to users that don't want interruptions while on a call.
- **Automatic Signalling**  
Calling a busy extension automatically initiates Off Hook Signalling. This option is useful to receptionists, operators and others that must quickly process calls. This is set in the called extension's Class of Service.
- **Manual Signalling**  
After reaching a busy extension, manual signalling gives the caller the choice of using Off Hook Signalling or activating other features. Extension's without automatic signalling have manual signalling. The users can dial a service code or press a Programmable Function Key to send Off Hook Signalling to the called phone.
- **Selectable Off Hook Signalling Mode**  
The Off Hook Signal can be muted ringing, no off hook ringing, a single beep in the handset, a beep in the speaker, or a beep in the handset - based on the caller's programming.
- **Off Hook Ringing**  
Use this option to enable or disable an extension's Off Hook Signalling for incoming calls (DID, trunk). If enabled, Off Hook Signalling occurs normally. If disabled, calls queue behind the extension's busy line appearance and the user gets no Off Hook Signalling indication. The second line appearance stays idle. The caller hears ringback tone while their call waits. This is set in the called extension's Class of Service.
- **DID Call Waiting**  
An extension can optionally have DID calls camp on with Off Hook/Call Wait signalling, without Off Hook/Call Wait signalling or no signalling. This is set in the called extension's Class of Service.
- **Block Manual Off Hook Signals**  
This Class of Service option enables/disables a busy extension's ability to block off hook signals manually sent from a co-worker. If disabled (not blocked), callers can dial the service code (assigned in 11-16-04) at busy or busy/ring to signal the extension. If enabled (blocked), nothing happens when the caller dials the service code (assigned in 11-16-04) to off hook signal.
- **Block Camp On**  
If an extension has Block Camp On enabled, callers to the extension cannot dial the service code (assigned in 11-16-05) to Camp On after hearing busy

or busy/ring. If the extension has Block Camp On disabled, callers are not prevented from Dialling the service code (assigned in 11-16-05) to Camp on after hearing busy or busy/ring. This is set in the called extension's Class of Service.

**Conditions**

None

**Default Setting**

Enabled

**• Programming****11-12-03: Service Code Setup (for Service Access) - Override (Off Hook Signalling)**

Assign a service code (809 by default) to be used for Off Hook Signalling Override.

**11-16-04: Single Digit Service Code Setup - Intercom Off Hook Signalling**

Assign a one-digit service code to be used for Off Hook Signalling.

**15-02-12: System Telephone Basic Data Setup - Off Hook Ringing**

For each extension, set Off Hook Ringing type: 0 (muted ring), 1 (no ring), 3 (beep in speaker), 4 (beep in handset).

**15-07-01: Programming Function Keys**

Assign a function key for Off Hook Signalling (code 33).

**20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

**20-13-05: Class of Service Options (Supplementary Service) - Off Hook Signalling Receive**

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to send Off Hook Signalling to a busy extension.

**20-13-06: Class of Service Options (Supplementary Service) - Automatic Off Hook Signalling**

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to automatically receive Off Hook Signals while busy on a call.

**20-18-06: Service Tone Timer - Call Waiting Tone Timer**

Use this timer to set the interval between Off Hook Signalling alerts.

**• Related Features****• Call Waiting/Camp On and Callback**

An extension user cannot Camp On to a busy extension or leave a Callback if Off Hook Signalling has already gone through. Off Hook Signalling allows an extension to block a caller's ability to dial 2 the service code (assigned in 11-16-05) to Camp On.

**• Direct Inward Dialling (DID)**

Refer to the DID feature for interaction between Off Hook Signalling and other DID programmed options.

**• Handsfree and Monitor**

You cannot send Off Hook Signals to an extension busy on a Handsfree (Speakerphone) call. The called extension's idle CALL key flashes fast, with no ringing.

- **Hotline**

The setting of Program 20-13-06 affects the BLF display for Hotline. Refer to this feature for additional information.

- **Intercom**

You cannot send Off Hook Signals to an extension that is already receiving a voice announcement.

- **Programmable Function Keys**

Function keys simplify sending Off Hook Signals.

- **Single Line Telephones**

Single line telephones can only send Off Hook Signals.

- **Operation**

**To send Off Hook Signals to an extension busy on a call:**

*Your extension may send Off Hook Signals automatically.*

1. Press Off Hook Signalling key (PGM 15-07 or SC 851: 33).
- OR

1. Press SPK
2. Dial 809

*You hear ringback.*

*To have your call voice-announce, dial 1.*

## 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.

One external paging zone is provided as a standard feature of the system. If more than one external paging zone is required, a 2PGDU unit must be installed, providing an additional 2 zones. In addition, each external zone of the 2PGDU card can have an associated relay contact. When a user pages to a zone, the corresponding contact activates (closes). This provides for Paging amplifier control. Refer to the system hardware manual for additional details.

### 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's warehouse and outside loading dock at the same time. Combined Paging is available for Paging zones 1-6 and All Call. Refer to Paging, Internal 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 will include 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 will be made on the external zones only.

### Remove Paging Information from Display Phones

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.

### Conditions

- A) One external paging zone is provided as a standard feature of the system. If more than one external paging zone is required, a 2PGDU unit must be installed in the system, providing an additional 2 zones.
- B) With Combined Paging, the system will allow a page over just the external page zone if the internal zone is busy or if there are no extensions in a page group.
- C) The paging speakers of the 2PGDU card are numbered 1-6, and the in-built paging speaker of the 308M unit is numbered 7.

### Default Setting

In-built paging speaker assigned to External Paging Zone 1.

### • Programming

#### 10-03-01 :PCB Setup – Terminal Type (2PGDU)

Set the terminal type to 6:External Speaker.

Assign port numbers in the following order to avoid duplication in Program 10-03-02:

Program 10-03-01 Port 3 = 9 (External Music Source), system assigns 10-03-02 = Port 1.

Program 10-03-01 Port 4 = 6 (External Speaker), system assigns 10-03-02 = Port 2.

**10-03-02 :PCB Setup – Logical Port Number (2PGDU)**

Assign port numbers for the devices assigned in Program 10-03-01. May be automatically assigned when Program 10-03-01 is set.

**15-07-01: Programming Function Keys**

Assign function keys for External Paging zones (19 + zone) and External All Call Page (20). If required, define a function key for a system phone to use the general purpose relay (50).

**20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

**20-13-29: Class of Service Options (Supplementary Service) - Paging Display**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to display incoming internal paging information on their display.

**31-01-02: System Options for Internal/External Paging - Page Announcement Duration**

Set the maximum allowable duration for a Paging announcement.

**31-04-01: External Paging Zone Group zone.**

Assign each External Paging Speaker (1-7) to an External Paging Group (1-6) used for accessing the zone.

**31-05-01: Universal Night Answer over External Speaker**

Assign Universal Night Answer ringing to each External Paging Speaker. For each trunk port, you make a separate entry for each External Paging zone (1-7).

**31-06-01: External Speaker Control**

Assign options for each External Paging Speaker (1-7): Splash Tone Before Page (Item 1), Splash Tone After Page (Item 2).

**31-06-04: External Speaker Control - CODEC Transmit Gain Setup****31-08-01: BGM on External Paging**

Assign the Background Music option for each External Paging Speaker (1-7). If enabled (1), the system will play Background Music over the zone when it is idle.

**• Related Features****• Central Office Calls, Placing**

A trunk port may be used for a talk back external page with the use of proper external paging equipment.

**• Night Service (Universal Night Answer)**

To have outside calls ring External Paging Zones at night, refer to the Night Service feature and Program 31-05.

**• Paging, Internal**

Internal Paging broadcasts announcements to extensions in programmed Internal Paging Zones.

**• Programmable Function Keys**

Function keys simplify External Paging operation.

**• Operation****To Page into an external zone:**

1. Press External Paging key (PGM 15-07 or SC 851: 19 + zone for External Paging zones or 20 for External All Call Paging).
2. Make Announcement.  
OR
  1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
  2. Dial 803 and the External Paging Zone code (1-6 or 0 for All Call).  
OR  
Dial 751 and the Combined Paging Zone code 1-6 (for Internal/External Zones 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 Announcement.

## Paging, Internal

### • Description

Internal Paging lets extension users broadcast announcements to other system phone 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's warehouse and outside loading dock at the same time. Combined Paging is available for Paging zones 1-6 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 be able to program a Function Key as a Combined Paging key. When an All Call External Page Function Key is programmed, it will include 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 will be made on the external zones only.

### Remove Paging Information from Display Phones

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.

#### Conditions

- A. Internal Paging does not require a 2PGDU unit.
- B. You can assign any number of extensions to an Internal or All Call Paging Zone.
- C. A system must have at least one extension port idle in order to make an Internal Page. If no extension port is idle, the extension performing the Page will hear a busy signal.
- D. With Combined Paging, the system allows a page over just the external page zone if the internal zone is busy or if there are no extensions in a page group.

#### Default Setting

Enabled.

### • Programming

#### 15-07-01: Programming Function Keys

Assign function keys for Internal Paging Zones (code 21 + page zone) and Internal All Call Paging (code 22) (Internal Page Zones 0, 1-6, 00, 01-32.)

#### 20-06-01: Class of Service for Extensions

Assign a Class Of Service (1-15) to an extension.

#### 20-13-29: Class of Service Options (Supplementary Service) - Paging Display

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to display incoming internal paging information on their display.

**31-01-01: System Options for Internal/External Paging - All Call Paging Zone Name**

Assign a name to the All Call Internal Paging Zone. The name shows on the display of the telephone making the announcement.

**31-01-02: System Options for Internal/External Paging - Page Announcement Duration**

Set the maximum allowable duration (0-64800 seconds) for a Paging announcement.

**31-02-01: Internal Paging Group Assignment - Internal Paging Group Number**

Assign extensions to Internal Paging Zones. An extension must be assigned to a 2-digit zone in order to access any of the 2-digit zones (Internal Page Zones 0, 1-6, 00, 01-32).

**31-02-02: Internal Paging Group Assignment - Internal All Call Paging Receiving**

Allow (1) or prevent (0) All Call Internal Paging for each extension. If allowed, extension can make and receive All Call Internal Paging announcements. If prevented, extension can only make All Call Internal Paging announcements.

**31-03-01: Internal Paging Group Settings - Internal Paging Group Name**

Program names for the Internal Paging Zones.

**31-03-02: Internal Paging Group Settings - Internal Paging Tone**

For each Internal Paging Zone, have normal (0), muted (1) or no (2) Internal Paging alert tones. If enabled (0 or 1), extensions hear two beeps before Paging announcements. If disabled, the extensions hear the announcement without the beeps. Muted tones can occur only if the extension user sets the telephone volume control switch to medium or high (Internal Page Zones 0, 1-6, 00, 01-32).

**31-07-01: Combined Paging Assignments**

For each External Paging Zone (1-6 and 0 for All Call), assign a corresponding Internal Zone for Combined Paging.

• **Related Features**

- **Meet Me Paging / Meet Me Paging Transfer**  
Preventing access to internal page also prevents these features.
- **Paging, External**  
An extension user can broadcast an announcement over an External Paging Zone.
- **Programmable Function Keys**  
Function keys simplify Internal Paging operation.

• **Operation**

To make an Internal Page announcement:

**System Phone**

1. Press the zone's Internal Paging key (PGM 15-07 or SC 851: 21 + 1-6 or 01-32 for zones, 22 for All Call).

OR

1. Press a SPK key.
2. Dial 801 and the Paging Zone number (0-6 or 00-32).

*Dialling 0 or 00 calls All Call Internal Paging.*

OR

Dial 751 and the Combined Paging Zone code 1-6 (for Internal/External Zones 1-6) 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 will be announced as an External Page only.*

3. Make announcement.
4. Press SPK to hang up.

### **Single Line Telephone**

1. Lift handset.
2. Dial 801 and the Paging Zone number (0-6 or 00-32).

*Dialling 0 or 00 calls All Call Internal Paging.*

Dial 751 and the Combined Paging Zone code 1-8 (for Internal/External Zones 1-6) or 0 (for Internal/External All Call).

3. Make 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 will recall the extension that initially parked it., however the call remains in the park orbit until it's answered. There are 64 Park Orbits (1-64) available for use.

### Extended Park

An extension's Class of Service determines whether it will use the normal Park Orbit Recall time or the Extended Park Orbit Recall time. The timers are set up 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's answered.

### Conditions

- A. An extension can park a call in any Park Orbit. However, an extension can only pick up a call Parked by a member of its own Park group (see Program 24-03).
- B. If an extension is not allowed access to trunks in the Access Maps (Programs 14-07 and 15-06), calls in Park and on Hold can be blocked.

### Default Setting

Enabled.

### • Programming

#### 15-07-01: Programming Function Keys

Assign a keys as a Park Orbit key (code \*04 plus Park orbit number [01-64]).

#### 20-06-01: Class of Service for Extensions

Assign a Class of Service (1-15) to extensions.

#### 20-11-19: Class of Service Options (Hold/Transfer Service) - Normal/Extended Park

Determine whether an extension's Class of Service should allow normal or extended Park (0=normal, 1=extended).

#### 24-01-02: System Options for Hold - Hold Recall Callback Time

A call left parked too long recalls the extension that initially parked it for this interval.

#### 24-01-06: System Options for Hold - Park Hold Time

Set the Park Hold Time (0-64800 seconds). A call left parked longer than this interval will recall the extension that initially parked it.

#### 24-01-07: System Options for Hold - Extended Park Hold Time

Set the Extended Park Hold Time (0-64800 seconds). A call left parked longer than this interval will recall the extension that initially parked it.

#### **24-03-01: Park Group**

Assign an extension to a Park Group (01-64). An extension can only pick up a call Parked by a member of its own Park Group.

#### • **Related Features**

- **Hold**  
A user can place a call in a temporary waiting state without putting it in orbit.
- **Programmable Function Keys**  
Function keys simplify Park operation.

#### • **Operation**

##### **To Park a call in a system orbit:**

*You can Park Intercom or trunk calls.*

1. Press Park key (PGM 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 SPK to hang up.

*If not picked up, the call will recall to you.*

OR

1. At system phone, press HOLD.  
OR  
At a single line telephone, hookflash.  
OR

2. Dial 831 and the Park orbit (01-64).  
*If you hear busy tone, the orbit is busy. Try another orbit.*

3. Use Paging to announce call.

4. Press SPK to hang up.

*If not picked up, the call will recall to you.*

*Note: 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. This applies to extended calls only.*

##### **To pick up a parked call:**

1. Lift handset.
2. Press Park key (PGM 15-07 or SC 852: \*04 + orbit).  
OR

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.

2. Dial 861 and the Park orbit (1-64).

##### **To park a call at your extension:**

1. Do not hang up.
2. Press HOLD and dial 773.

*At a SLT, hookflash instead of pressing HOLD.*

3. Page your co-worker to pick up the call.
4. Press SPK to hang up (or hang up at SLT).

*If not picked up, the call will recall to you .until either the call is answered or the caller hangs up.*

**To pick up a call parked at an extension (yours or a co-worker's):**

1. If parked at your extension:  
Press a SPK key and dial 773.

*At an SLT, skip pressing CALL.*

OR

**If parked at a co-worker's extension**

Press a SPK key dial 715 plus the co-worker's extension number.

*At an SLT, skip pressing CALL.*

## PBX Compatibility

### • Description

You can connect your phone system trunks to Centrex/PBX lines, rather than to telco trunk circuits. This makes the trunk inputs into 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, phone system users must first dial the PBX's trunk access code (usually 0).

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 for up to 4 groups of trunk access codes. The codes can be one or two digits long, 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 phone system provides the restriction, it restricts the digits Dialed after the PBX access code.
- **PBX Call Restriction**  
When the phone system does the Toll Restriction, it can further restrict users from Dialling PBX extensions. In this case, the only valid numbers are those Dialed after the PBX trunk access code. The only PBX facility phone system users can access are the PBX's outside trunks.
- **Automatic Pause**  
The system automatically pauses when it sees a PBX trunk access code during manual Dialling, Abbreviated Dialling, 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 an asterisk within a PBX access code. Otherwise, after the \*, the trunk would stop sending digits to the central office.

### Default Setting

Disabled.

### • Programming

#### **14-01-08: Basic Trunk Data Setup - Toll Restriction**

For each PBX trunk port, enable (0) or disable (1) Toll Restriction.

#### **14-04-01: Behind PBX Setup - Behind PBX**

For each PBX trunk port, enter 1. You make a separate entry for each Night Service mode.

#### **21-04-01: Toll Restriction Class**

Assign a Toll Restriction Class (1-15) to each extension.

**21-05-12: Toll Restriction Class - PBX Call Restriction**

For each Toll Restriction Class, enter 1 to restrict calls on the PBX trunk to outside calls only. Enter 0 to allow users to dial PBX extensions.

**21-06-08: Toll Restriction Table Data Setup - PBX Access Code**

Enter the system PBX access codes. The system can have up to 4 groups of codes. A code can be one or two digits long. Valid entries are 0-9, # and \*. Use Line Key 1 as a "don't care" digit. If using Account Codes, do not use the \* within the PBX Access Code.

**81-01-14: Analogue Trunk Initial Data Setup - Hookflash 1**

If the CONF key is set for transfer (in Program15-02-05), use this program to set the duration of the flash that occurs when a user presses the CONF key.

**• Related Features****• Account Codes**

When using Account Codes, do not use an asterisk within a PBX access code. Otherwise, after the \*, the trunk would stop sending digits to the central office.

**• Abbreviated Dialling****• The system automatically pauses after it finds a PBX access code in an Abbreviated dialling bin.**

If Abbreviated dialling 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.

**• Central Office Calls, Answering/ Ring Groups**

Users answer incoming calls on PBX trunks just like other trunks. All of the relevant access and Ring Group programming applies. Refer to these features for more details.

**• Central Office Calls, Placing**

Except for dialling the PBX access code, users place calls on PBX trunks just like other trunks. All of the relevant access programming applies. Refer to the Central Office Calls Placing feature for more details.

**• Direct Inward Lines**

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.

**• Direct Inward System Access**

You can program incoming DISA trunks to be outgoing PBX trunks. All PBX Compatibility restrictions and programming apply.

**• Flash**

Flash may allow access to certain PBX features - like Transfer. Make sure you program Flash for compatibility with the connected PBX

**• Toll Restriction**

PBX trunks can follow normal system Toll Restriction.

**• Trunk Groups and Trunk Group Routing****• 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 dialled it.

## • Operation

### To place a call over a PBX trunk:

1. At system phone, press a SPK key and dial 804.  
OR  
At single line telephone, lift handset and dial 804.
2. Dial PBX trunk group number (1-9, 01-32 or 01-25).
3. Dial PBX access code and number  
OR
1. (System Phone only) Press PBX trunk group key (PGM 15-07 or SC 852: \*02 + group).
2. Dial PBX access code and number.  
OR
1. At system phone, press a SPK key and dial 0.  
OR  
At single line telephone, lift handset and dial 0.
2. Dial PBX access code and number.  
OR
1. At system phone, press a SPK key.  
OR  
At single line telephone, Lift handset.
2. Dial 805.
3. Dial PBX trunk number (e.g., 05 for line 5).
4. Dial PBX access code and number.  
OR
1. Press PBX trunk key (PGM 15-07 or SC 851: 1 to 51).
2. Dial PBX access code and number.

**Note:** In all cases above, Toll Restriction may prevent your call.

## Prime Line Selection

### • Description

Prime Line Selection allows an extension 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.

A Prime Line is effectively a single exchange line placed into its own trunk group for outgoing access and its own ring group for incoming ringing.

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.)
- **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. The dispatcher would have the assurance that whenever a customer calls in, the dispatcher just lifts the handset get their call. (Incoming Prime Line Preference can optionally seize an idle line appearance.)

### Conditions

None

### Default Setting

Disabled.

### • Programming

#### **14-05-01: Trunk Groups**

Assign Prime Line to a separate trunk group for outgoing Prime Line selection. (Also see 14-06 and 21-02.)

#### **14-06-01: Trunk Group Routing**

Set up outbound route for trunk group that contains the Prime Line. (Also see 14-05 and 21-02.)

#### **14-07-01: Trunk Access Map Setup**

For outgoing Prime Line selection, assign each Prime Line trunk to a different Access Map and deny outbound access to all trunks except the Prime Line trunk (1-51).

#### **15-01-02: Basic Extension Data Setup - Outgoing Trunk Line Preference**

Enter 1 for this option so extension user seizes Prime Line when they lift the handset.

#### **15-02-10: System Telephone Basic Data Setup - Ringing Line Preference for Trunk Calls appearance.**

Enter 1 if lifting the handset should answer ringing Prime Line; enter 0 to seize idle line appearance.

**15-06-01: Trunk Access Map for Extensions**

Set assignment so extension(s) can have access to Prime Line. Deny outbound access to extensions that should not have Prime Line.

**21-02-01: Trunk Group Routing for Extensions**

Assign extension(s) to a Prime Line route (1-25) for outgoing Prime Line access.

**22-01-01: System Options for Incoming Calls - Incoming Call Priority**

Set incoming Prime Line preference. Enter 1 to answer ringing Prime Line; enter 0 to answer ringing Intercom call.

**22-04-01: Incoming Extension Ring Group Assignment**

Assign extension(s) to a ring group (1-25) that consists of the Prime Line.

**22-05-01: Incoming Trunk Ring Group Assignment**

Assign a Prime Line trunk to its own ring group (1-25).

**• Related Features**

- **Central Office Calls, Placing**  
Other programmed options for outgoing calls also affect a Prime Line.
- **Direct Inward Lines/Direct Inward System Access**  
DILs and DISA calls also ring extensions directly, even if not allowed in ring group programming.
- **Line Preference**  
Prime Line Selection directly interacts with Line Preference.
- **Voice Mail**  
If the DSPDB Voice Mail is installed, calls can be directed to the Voice Mail Auto Attendant ring group (101).

**• Operation****To place a call on your Prime Line:**

1. Lift handset.

*You hear dial tone on your Prime Line.*

**To answer a call on your Prime Line:**

1. Lift handset.

*Depending on your Line Preference programming, you'll 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 system phone 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.

A Private Line is one that is assigned to a single telephone, no other phones have access to the line.

- Incoming only  
The system phone has a Private Line only for incoming calls. The user cannot place calls on the Private Line.
- Outgoing only  
The system phone has a Private Line only for outgoing calls. The Private Line does not ring for incoming calls.
- Both ways  
The system phone has a Private Line for both incoming and outgoing calls.

### Conditions

None

### Default Setting

Disabled.

### • Programming

#### **14-07-01: Trunk Access Map Setup**

Assign Private Line to the Private Line Access Map (1-51) (see Program 15-06 below). Use option 5 for Incoming, option 7 for Both Ways and option 4 for Outgoing. In all other Access Maps, give option 3 to the Private Line.

#### **15-06-01: Trunk Access Map for Extensions**

Assign extension to have Private Line to an unused "Private Line" Access Map.

#### **15-07-01: Programming Function Keys**

Make sure extension has a line key (e.g., 012) for the Private Line.

#### **22-02-01: Incoming Call Trunk Setup**

Set the Trunk Service Type to 4 if routing unanswered Private Lines to voice mail or 0 if not routing to voice mail.

#### **22-04-01: Incoming Extension Ring Group Assignment**

Assign extension to Private Line's ring group. Set the ringing in Program 22-06 - use option 1 for Incoming or Both Ways Private Lines. Use option 0 for Outgoing Private Lines. Do not assign any other extensions to the Private Line ring group.

#### **22-05-01: Incoming Trunk Ring Group Assignment**

Assign Private Line to an unused "Private Line" ring group (1-25) (i.e., a ring group just for the Private Line).

## 22-07-01: DIL Assignment

If routing unanswered Private Lines to voice mail, assign DILs to the extensions.

### • Related Features

- **Call Forwarding**  
Private Lines do not follow Call Forwarding.
- **Central Office Calls, Placing**  
Other programmed options for outgoing calls also affect a Prime Line.
- **Line Preference**  
An extension user can have Line Preference options applied to their Private Line.
- **Prime Line Selection**  
A Private Line can also be a Prime Line.
- **Programmable Function Keys**  
You should always program a line key for each Private Line.
- **Single Line Telephones**  
Private Lines are not available on single line telephones.
- **Toll Restriction**  
Private Lines follow normal Toll Restriction.
- **Transfer**  
An extension user can Transfer their Private Line. Since other users have hold access (see Programming), the destination can answer the transferred Private Line and place it on Hold.
- **Voice Mail**  
If the DSPDB Voice Mail is installed, calls can be directed to the Voice Mail Auto Attendant ring group (101).

### • Operation

#### To place a call on your Private Line:

1. Press Private Line key.
2. Dial number.

#### To answer a call on your Private Line:

1. Press Private Line key or lift the handset.

## Programmable Function Keys

### • Description

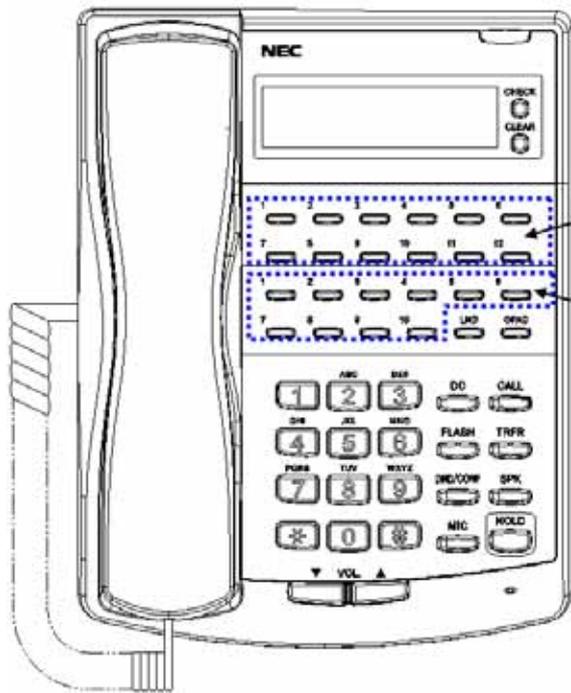
Each system phone has Programmable Function Keys. Programmable Function Keys simplify placing calls, answering calls and using certain features. You can customize the function of a system phone's programmable keys from your administration telephone, or the extension user can do it themselves. Depending on your telephone, you can have either 6 or 12 Programmable Function Keys, plus 10 additional keys (speed dial keys).

Note. The 22 keys (12+10) are ALL programmable function keys, they are separated into two groups (1-12 and 1-10) on the phone because the speed dial keys do not have lamps on the Topaz Talk phone.

When programming the keys within Topaz configuration mode with Program 15-07-01 remember that the keys are numbered 1 to 22.

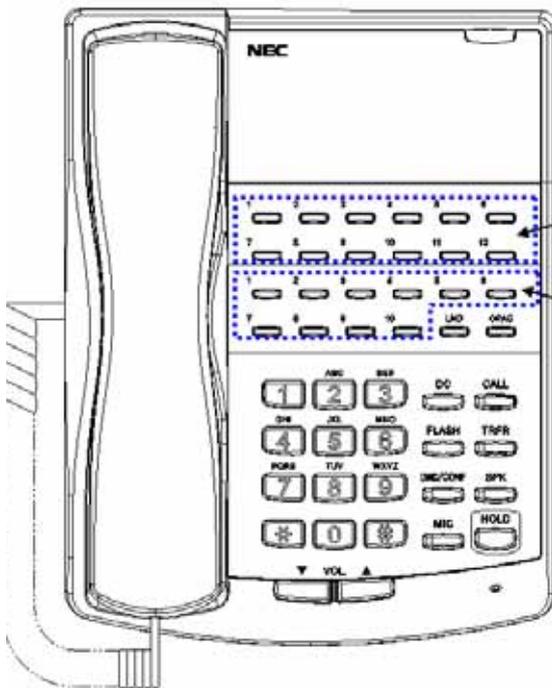
Keys 1-12 in Program 15-07-01 are function keys 1-12 on the phone.

Keys 13-22 in Program 15-07-01 are speed dial keys 1-10 on the phone.



12 Programmable Function Keys  
With dual colour lamps.

10 Programmable Function Keys  
(Speed Dial Keys).  
With dual colour lamps.



12 Programmable Function Keys  
With dual colour lamps.

10 Programmable Function Keys  
(Speed Dial Keys).  
No lamps.

### Conditions

- A. 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 Dialling 852 + \*04 must be undefined by Dialling 000 before it can be programmed as a Call Forward key by Dialling 851 + 16.
- B. Using Program 92-01 to copy a system phone's Programmable Function Keys will copy all the keys whether they exist on the phone to which the programming is being copied. This may cause confusion when trying to define a key which is already defined but which doesn't exist on the phone (will display as "DUPLICATE DATA". It is recommend to either clear these non-existent keys or to only copy from an extension which has the same or fewer numbers of keys than the extension to which the programming is being copied.

### Default Setting

The first 12 keys on a telephone are assigned by default as line keys (e.g., key 1 = line 01). Key 22 on each telephone is assigned as a both way loop key (type \*05 + 0).

### • Programming

#### **15-07-01: Programming Function Keys**

Assign the functions of a system phone's Programmable Function Keys. Refer to Tables 4 and 5 at the beginning of this manual.

#### **20-06-01: Class of Service for Extensions**

Assign Class of Service (1-15) to extensions.

#### **20-07-10: Class of Service Options (Administrator Level) - Programmable Function Key**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to program their own function keys.

**Note:** When programming a feature as a Programmable Function Key, refer to the feature's description for additional programming options.

### • Related Features

- **Abbreviated Dialling**  
Abbreviated dialling and One-Touch Calling also offer quick access to calls and features.
- **Direct Station Selection (DSS) Console**  
Programming a 64-button console requires separate programming. Refer to this feature for more details.

### • 24 Button Add on Console

The 24 button add on console can be attached to any Topaz Vision phone and will provide 24 additional programmable function keys.

The keys can be programmed by the user with service codes 851 or 852 in exactly the same way as the 22 function keys on the phone.

They can also be programmed within Topaz Configuration Mode using program 15-07-01. The add on console uses keys 23 to 46 within program 15-07-01.

## • Operation

### To change the function of a General Programmable Function Key:

1. Press **CALL** key.
2. Dial **851**.
3. Press the key you want to program.
4. Enter the 2-digit key function, followed by any additional information required by the function selected.
5. Press **HOLD**.
6. Press **SPK** key.

*Available functions are 00-99 (refer to chart SC 851 below) and line keys 01-51. To clear a key, enter 00.*

### To change the function of an Appearance Programmable Function Key:

1. Press a **SPK** key.
2. Dial **852**.
3. Press the key you want to program.
4. Enter the 3-digit key function and any additional information needed for the key.
5. Press the **SPK** key.

*Available functions are \*00-\*99 (refer to chart SC 852 below) and line keys 01-51. To clear 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 dialling 852 + \*04 must be undefined by dialling 000 before it can be programmed as a Call Forward key by dialling 851 + 16.*

### To check the function of a Programmable Function Key:

1. Press **CHECK**.

*Press the programmable key.  
The programmed function displays.*

### To Program a DSS/One-Touch Key:

1. Press **CALL**.
2. Dial **851**.
3. Press the Function Key to program.
4. Dial **Extension Number**, or **0 + Outside Number**.
5. Press **HOLD**.
6. Press **SPK**.

### Function Number List (00~99) for Service Code 851

Funct. No.	Function	Additional Data	LED Indication
00	Not Defined		
01	DSS/One-Touch	Extension number or Trunk Code + Outside No. (Max. 36 digits)	On (Red): Extension Busy (BLF) Off: Extension Idle Rapid Blink (Red): DND or CF Set
02	Microphone Key (ON/OFF)		On (Red): MIC On Off: MIC Off
03	DND Key		Red-On: DND Setup

04	BGM (ON/OFF)		On (Red): BGM On Off: BGM Off
05	Headset		On (Red): Headset Operating Off: Headset Idle
06	Transfer Key		None
07	Conference Key		Red-On: Conference Operating
08	Incoming Caller-ID List		Slow Blink (Red):Existing New CID On (Red): Existing Check CID Off: No CID
09	Operation Mode Switch	Mode number(1-8)	Red On: On mode
10	Call Forward-Immediate		Slow Blink (Red): Forwarding state Rapid Blink (Red): Forwarded State
11	Call Forward-Busy		Slow Blink (Red): Forwarding state Rapid Blink (Red): Forwarded State
12	Call Forward-No Answer		Slow Blink (Red): Forwarding state Rapid Blink (Red): Forwarded State
13	Call Forward-Busy/No Answer		Slow Blink (Red): Forwarding state Rapid Blink (Red): Forwarded State
14	Call Forward-Dual Ring		Slow Blink (Red): Forwarding state Rapid Blink (Red): Forwarded State
15	Call Forward - Follow Me		Slow Blink (Red): Forwarding state Rapid Blink (Red): Forwarded State
16	Call Forward – Select Option		Slow Blink (Red): Forwarding state Rapid Blink (Red): Forwarded State
17	Call Forward - Device		Slow Blink (Red): Forwarding state Rapid Blink (Red): Forwarded State
18	Text Message Setup	Message No.(01-20)	On (Red): Active by Function Key
19	External Group Paging	External Paging Zone No. (1-6)	On (Red): Active
20	External All Call Paging		On (Red): Active
21	Internal Group Paging	Internal Paging No.1-32	On (Red): Active
22	Internal All Call Paging		None
23	Meet-Me Answer to Internal Paging		None
24	Call Pickup for Own Group		None
25	Call Pickup for Another Group		None
26	Call Pickup for Specified Group	Call Pickup Group Number 01-32	None
27	Abbreviated Dial-Common/ Personal	Abbreviated dial No. (Common/Personal)	None
28	Abbreviated Dial-Group	Abbreviated dial No. (Group)	None

29	Repeat Dial		Rapid Blink (Red): Under repeat dial
30	Saved Number Redial		None
31	Memo Dial		None
32	Meet-Me Conference		None
33	Off-Hook Signalling		None
34	Break-In		None
35	Camp-On, Call-Back		Red-On: Under Camp-On
36	Department Step Call		None
37	DND/FWD Override Call		None
38	Message Waiting		None
39	Room Monitor		Rapid Blink (Red): Monitored Slow Blink (Red): Monitoring
40	Handset Transmission Cut-off		Red On: Transmission Cut-off
41	Secretary(Buzzer) Call	Extension No. (Max.4 digits)	On (Red): Transmission Side Rapid Blink (Red): Receiver Side
42	Boss-Secretary Call	Extension No. (Max.4 digits)	On (Red): Boss-Secretary mode
43	Series Call		None
44	Common Hold		None
45	Exclusive Hold		None
46	Department Group Log Out		On (Red): Logged out
49	Call Redirect	Extension Number or Voice Mail Number (Max.4 digits)	None
50	Account Code		None
52	Incoming Call Queuing Message Setup	Incoming Ring Group No.1-25	On (Red): Under setting
53	Queuing Message Starting		On (Red): Active
54	External Call Forward by Doorphone Box		On (Red): Active
55	Extension Name Edit		None
56	Presence Display Operation	1-100	On (Red): Presence
57	Presence Display Indication	1-100	On (Red): Presence
58	Department Incoming Call-Immediate	Extension Group No. 01-32	Slow Blink (Red): Active
59	Department Incoming Call-Delay	Extension Group No. 01-32	Slow Blink (Red): Active

60	Department Incoming Call-DND	Extension Group No. 01-32	Slow Blink (Red): Active
63	Outgoing Call Without Caller-ID (ISDN)		On (Red): Active
67	Mail Box (DSPDBU)	Extension No. or Department Group No. (Max.4 digits)	Rapid Blink (Green): New Message Received On (Red): Listening to messages Slow Flash: New Message Restriction Mode
68	Voice Mail Service (DSPDBU)	0 : Skip 1 : Back Skip 2 : Monitor	In case of 2:Monitor mode; Slow Blink (Red) : Monitor setting - Automatic On (Red): Monitor setting - Manual
69	Conversation Recording Service (DSPDBU)	0 : Conversation recording 1 : Delete, Re-recording 2 : Delete 3 : Immediate delivery	In case of 0:Conversation recording Rapid Blink (Red): Under recording (No Destination) On (Red): Under recording (Appointed Extension)
70	Automated Attendant for Extension (DSPDBU)	Extension No. or Department Group No. (Max.4 digits)	On (Red): Setup All Calls Rapid Blink (Red): Setup No Answer Calls Slow Blink (Red): Busy / No Answer Calls Wink Blink (Red): Busy Calls
71	Change Attendant Message (DSPDBU)	Extension Number or Pilot Number (Max.4 digits)	None
76	Toll Restriction in Credit	Extension Number (Max.4 digits)	
80	Tandem Ring Setup Key	(Max.4 digits)	On (Red): Master Side
81	Automatic Transfer to Transfer Key	Trunk Line No.01-51	On (Red): Set

**Function Number List (\*00~ \*99) for Service Code 852**

Funct. No.	Function	Additional Data	LED Indication
*00	Not Defined		
*01	Trunk Key	Trunk Number 01-51	
*02	Trunk Group/Loop Key	Trunk Group Number 01-25	
*03	Virtual Extension Key	Extension Number. or Department Group Number (Max.4 digits)	
*04	Park Hold Key	Park Number 01-64	
*05	Hybrid Operation Key (Loop key)	0 : Incoming 1 : Outgoing 2 : Both	

## Reason of Transfer Display

### • Description

The display at a system phone can show the reason that a call is ringing when it has been diverted/forwarded to them.

The reason can be call forward, DND or Absence message at the original target phone. The secondary target phone is then aware of the state of the original phone user and can answer the call appropriately.

### Conditions

This feature is available at the XN120 Vision phone only.

The feature will operate for DDI calls, DIL calls and DUD/DISA calls.

It will not operate for calls ring within a ring group.

### Default Setting

Disabled.

### • Programming

**20-13-23 : Display reason of transfer.**

### • Operation

The operation is automatic.

The display at the secondary target phone will show the following reasons the call has transferred to their phone.

Original extension has this set	At the secondary target extension the display will show
Call Forward Immediate	TRANSFER < name
Call Forward on Busy	TRANSFER BUSY < name
Call Forward on No Answer	TRANSFER No Answer< name
DND	TRANSFER DND < name
Absence Message (e.g. In Meeting Until 10:00)	In Meeting Until 10:00 < name

## Repeat Redial

### • Description

If a system phone user places a trunk call that is busy or unanswered, they can have Repeat Redial try it again later on. The user doesn't continually have to try the number again -- hoping it will go through. Repeat Redial automatically retries it until the called party answers (the number of retries is based on system programming).

### Conditions

Lifting the handset will cancel Repeat Redial.

### Default Setting

Enabled.

### • Programming

#### **15-07-01: Programming Function Keys**

Assign a function key for Repeat Redial (code 29).

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-08-07: Class of Service Options (Outgoing Call Service) - Repeat Redial**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Repeat Redial.

#### **21-08-01: Repeat Dial Setup - Repeat Redial Count**

Set how many times Repeat Redial will automatically repeat if the call does not go through.

#### **21-08-02: Repeat Dial Setup - Repeat Redial Interval Time**

Set the interval between Repeat Redial attempts (0-64800 seconds).

#### **21-08-03: Repeat Dial Setup - Repeat Dial Calling Timer**

Set how long the system waits (0-64800 seconds) for the called party to answer after a Repeat Redial. If the called party doesn't answer within this interval, the system hangs up and tries again (after the Repeat Redial Interval Time). For unanswered calls, the total time between retries is the sum of Items 21-08-02 and 21-08-03.

### • Related Features

- **Automatic Route Selection**

For systems with Automatic Route Selection, ARS selects the trunk for the Repeat Redial call.

- **Central Office Calls, Placing**

Other programmed options for outgoing calls can affect how a call is placed. Check or program these options as needed.

- **Last Number Redial/Save Number Dialed**

An extension user can quickly redial their last call.

- **Single Line Telephones**

Single line telephones cannot use Repeat Redial.

**• Operation****To use Repeat Redial (if the outside party you call is unavailable or busy):**

1. Place trunk call.  
*Listen for busy tone or ring-no-answer.*
2. Press DC + LND.  
OR  
Press Repeat Redial Key (PGM 15-07 or SC 851: 29).  
*Your Repeat Redial key flashes while you wait for the system to redial.*
3. Press SPK to hang up.  
*The system periodically redials the call.*
4. Lift handset when called party answers.

**To cancel Repeat Redial:**

1. Press DC.
2. Press LND.  
OR
1. Press Repeat Redial Key (PGM 15-07 or SC 851: 29).  
*See also Last Number Redial.*

## Ring Groups

### • Description

Ring Groups determine how trunks ring extensions. Generally, trunks ring extension's 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's Ring Group programming, assign ringing for the trunk.

Any number of extensions and trunks can be in a specific group. The system allows up to 25 Ring Groups.

If an extension has a line key for the trunk, Ring Group calls ring the line key. If the extension doesn't 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 Setting

All trunks are assigned in Ring Group 1, the first 16 extensions ring for all trunk calls and all other extensions only flash.

### • Programming

#### **15-07-01: Programming Function Keys**

Assign function keys as line keys (codes 1-51).

#### **22-04-01: Incoming Extension Ring Group Assignment**

Assign extensions to ring groups (1-25).

#### **22-05-01: Incoming Trunk Ring Group Assignment**

Assign trunks to ring groups (1-25).

#### **22-08-01: DIL/IRG No Answer Destination**

For DIL Delayed Ringing, assign the DIL No Answer Ring Group. An unanswered DIL rings this group after the DIL No Answer Time (Program 22-01-04) expires. DIL Delayed Ringing can also reroute outside calls ringing a Ring Group (1-25), the VRS, or DSPDB Voice Mail (101).

#### **22-12-01: DID Intercept Ring Group**

For each DID Translation Table, assign the destination for DID Intercept. The destination can be a Ring Group (1-25), DSPDB voice mail (101), the operator (9), or the VRS. For each table, make a separate entry for each Night Service mode.

#### **25-03-01: DID/DISA Transfer Ring Group With Incorrect Dialling**

Set the transfer destination for each DISA and Automated Attendant (OPA) trunk. The destination can be a Ring Group or Voice Mail , or the VRS . Make a separate entry for each Night Service mode. With the VRS, an incorrect dialling transfer can also reroute outside calls to this destination. The system allows Ring Groups=(1-25), VRS=(15) or DSPDB Voice Mail=(101).

**Note:** For incoming calls, Ring Group programming (22-04/22-05) overrides Access Map programming (14-07/15-06).

- **Related Features**

- **Direct Inward Dial (DID) / Direct Inward System Access (DISA)/Voice Response System (VRS)**  
DID, DISA and VRS overflow options can be to a Ring Group.
- **Direct Inward Line (DIL)**  
DILs ring extensions without being in a Ring Group.
- **Night Service**  
Ring Group programming can be different for each Night Service mode.
- **Programmable Function Keys**  
Function keys simplify answering incoming calls.
- **Transfer**  
Transferring calls to a Ring Group using a service code forwards the call to the group defined in Program 22-05.

- **Operation**

Refer to Central Office Calls, Answering.

## Ringdown Extension, Internal / External

### • Description

With a Ringdown Extension, a user can call another extension, outside number, or Abbreviated Dialling 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 phones, 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 interval. Depending on the setting of this interval, the extension user may be able to place other calls before the ringdown goes through.

The system allows each extension in the system to have a Ringdown Extension. All extensions can share the same Dialling number, if desired.

### Conditions

- A. Ringdown extension has no effect on an extension's current (active) call.
- B. The Ringdown Extension user must lift the handset for ringdown to work.

### Default Setting

Disabled.

### • Programming

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-08-09: Class of Service Options (Outgoing Call Service) - Hotline/Extension Ringdown**

In an extension's Class of Service, enable (1) or disable (0) ringdown. If disabled in Class of Service, the settings in Program 21-11 below have no effect.

#### **21-01-09: System Options for Outgoing Calls - Ringdown Extension Timer**

After the user lifts the handset, the extension automatically calls the ringdown destination after this interval (0-64800 seconds). A setting of '0' will immediately ring the programmed extension. Any other setting will delay the ringdown the number of seconds programmed.

#### **21-11-01: Extension Ringdown (Hotline) Assignments**

Program the ringdown (Hotline) source and destination (target) number, up to 24 digits (512 Hotline assignments). Remember to include the trunk access code (usually 0) in front of the number when dialling outside numbers. When programming Common Abbreviated Dialling numbers as the destination, the entry should be "853+bin number".

### • Related Features

- **Abbreviated Dialling**  
Ringdown Extension can use Abbreviated dialling numbers (and follow their trunk routing) as the destination number.
- **Call Forwarding**

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.

- **Call Waiting/Camp On, Callback and Off Hook Signalling**  
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 Signalling.
- **Do Not Disturb**  
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's DND.
- **Handsfree Answerback/Forced Intercom Ringing**  
If the destination extension has Handsfree Answerback enabled, the call will voice-announce. If the destination extension has Forced Intercom Ringing enabled, the call will ring.
- **Multiple Directory Numbers/Call Coverage Keys**  
A Multiple Directory Number key can be a ringdown destination. This would allow a 'front door' key to be programmed on every extension.

## • Operation

### To place a call if your extension has ringdown programmed:

1. Lift 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 will voice announce.*

*If the destination has Forced Intercom Ringing enabled, your call will ring.*

### To bypass ringdown (if enabled for your system phone):

1. Do not lift handset.
2. Press a SPK key.
3. Place Intercom or trunk call.

### To answer a call if you are another extension's ringdown destination:

1. Speak toward phone to answer incoming voice-announcement.  
OR  
Lift handset 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's left unattended. To use Room Monitor, the initiating extension and the receiving extension must activate it.

When using System Phones for monitoring, an extension user can only Monitor one extension at a time. However, many extensions can Monitor the same extension at the same time.

With single line phones, multiple SLTs can be programmed to be monitored by the same SLT. However, only one SLT can monitor another SLT at a time.

---

### CAUTION

The use of monitoring, recording or listening devices to eavesdrop, monitor, retrieve or record telephone conversations or other sounds activities, whether or not contemporaneous with its 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. *The Telecommunications (Interception) Act 1979 (Cth)*, *The Telecommunications Act 1997*, *The Privacy Act 1988* and State and Territory Listening Devices Legislation are all relevant. Some federal and state laws require some form of notification to all parties or require the consent of all parties to the telephone conversation, prior to monitoring or recording a telephone conversation. Some of these laws incorporate strict penalties. Section 6 of the Industry Guidelines recommend pre-recorded messages or verbal notification to alert callers that the calls may be monitored. Section 6 of the Industry Guidelines also make recommendations in relation to notifications in writing.

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### Conditions

- A. Room Monitor is for listening only. It does not allow for conversation between the monitoring and monitored extensions.
- B. An extension user cannot monitor an Attendant.
- C. A system phone user cannot monitor a single line phone and a single line phone cannot monitor a system phone.

### Default Setting

Disabled.

### • Programming

#### 15-07-01: Programming Function Keys

Assign a function key as a Room Monitor key (code 39) for both the extension being monitored and the extension initiating Room Monitor.

#### 20-06-01: Class of Service for Extensions

Assign a Class Of Service (1-15) to an extension.

**20-13-11: Class of Service Options (Supplementary Service) - Room Monitor, Initiating**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to initiate Room Monitor.

**20-13-12: Class of Service Options (Supplementary Service) - Room Monitor, Extension**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to be monitored.

• **Related Features**

• **Programmable Function Keys**

Room Monitor requires uniquely programmed function keys for system phones.

• **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.*

**System Phones:**

**To activate Room Monitor (at the initiating extension):**

1. Do not lift handset or press SPK.
2. Press Room Monitor key (PGM 15-07 or SC 851: 39).
3. Dial number of extension you want to monitor.

*You can place and answer other calls while Room Monitor is active.*

**To activate Room Monitor (at the extension to be monitored):**

1. Go to the extension you want to monitor.
2. Do not lift handset or press SPK.
3. Press Room Monitor key (PGM 15-07 or SC 851: 39).
4. Dial the number of the extension you are at.

*For example, if you are at extension 306, dial 306.*

*You can place and answer other calls while Room Monitor is active.*

**To cancel Room Monitor (at either extension):**

1. Press Room Monitor key at both the initiating extension and the monitored extension.

**Single Line Telephones:**

**To activate Room Monitor (at the extension to be monitored):**

1. Go to the extension you want to monitor.
2. Lift handset at the phone to be monitored.
3. Dial 770.
4. Dial 1.
5. Dial number of extension number which will be monitoring the phone.
6. Place the handset on the desk, placing the handset's transmitter towards the room.

*You cannot place or answer other calls while Room Monitor is active.*

**To activate Room Monitor (at the initiating extension):**

1. Lift handset at the phone which will be monitoring another phone.
2. Dial 770.
3. Dial 2.
4. Dial number of extension number which will be monitored.

*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 phones.

## Save Number Dialed

### • Description

Save Number Dialed permits an extension user to save their last outside number and easily redial it later on. For example, an extension user can recall a busy or unanswered number without manually Dialling the digits. The system retains the saved number until the user stores a new one in its place.

Save Number Dialed saves in system memory a Dialed number 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 pre-select a specific trunk if desired.

### Conditions

None

### Default Setting

Enabled.

### • Programming

#### 15-07-01: Programming Function Keys

Assign a function key as a Save key (code 30).

### • Related Features

- **Automatic Route Selection**  
For systems with Automatic Route Selection, ARS selects the trunk for the call unless the user preselects.
- **Central Office Calls, Placing**  
Other programmed options for outgoing calls can affect how a call is placed. Check or program these options as needed.
- **Last Number Redial**  
An extension user can quickly redial the last number placed.
- **Programmable Function Keys**  
Function keys simplify Save Number Dialed operation.
- **Repeat Redial**  
The system can automatically retry a trunk call that was unanswered or busy.

### • Operation

#### To save the outside number you just Dialed (up to 36 digits):

*Use this feature before hanging up.*

#### System Phone

1. Press Save Number Dialed key (PGM 15-07 or SC 851: 30).

#### Single Line Telephone

1. Hookflash.
2. Dial 815.

**To redial a saved number:****System Phone**

1. (Optional) Press line key.

*This selects a specific trunk for the call.*

2. Press Save Number Dialed key (PGM 15-07 or SC 851: 30).

*The stored number dials out.*

OR

1. Press a SPK key
2. Dial 815.

OR

- Press Save Number Dialed key (PGM 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. Hookflash.
2. Dial 815.

**To check to see the number you have saved:**

1. Press Save Number Dialed key (PGM 15-07 or SC 851: 30).

*The stored number displays for ten seconds.*

*The stored number dials out if you:*

- Lift the handset,
- Press an idle line key,
- Press a CALL key, or
- Press SPK

2. Press CLEAR.

**To clear your saved number:****System Phone**

1. Press a SPK key.
2. Dial 885.
3. Press SPK to hang up.

**Single Line Telephone**

1. Lift handset and dial 885.
2. Hang up.

## 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 System Phones 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's buzzer key. The called user can respond by placing an Intercom call to the calling party. The called extension's buzzer key continues to flash 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's most convenient.

An extension can have Secretary Call keys for any number of extensions, limited only by the available number of programmable keys.

### Conditions

- A. Secretary Call is not available to single line telephone users.
- B. Secretary Call does not set up an Intercom call.
- C. When assigning Secretary Call, a user enters the associated extension numbers, not port numbers.

### Default Setting

Disabled.

### • Programming

#### 15-07-01: Programming Function Keys

Assign function keys for Secretary Call buzzer (code 42 + Hold + the destination extension number). Both co-workers must have buzzer keys for each other.

### • Related Features

- **Programmable Function Keys**  
Secretary Call requires a uniquely programmed function key.
- **Single Line Telephones**  
Single line telephones cannot use Secretary Call.

### • Operation

#### To buzz your secretary or boss:

1. Do not lift handset.
2. Press buzzer key (PGM 15-07 or SC 851: 41 + sec. ext.).

*Your boss or secretary hears ringing.*

*Your buzzer key lights steadily.*

*Your boss's or secretary's buzzer key flashes fast.*

#### To check to see who left you a Secretary Call:

1. Do not lift handset.
2. Press CHECK.
3. Press flashing Secretary Call key.
4. Press CLEAR.

**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 your lit Secretary Call key.

**To cancel a Secretary Call left at your extension:**

1. Do not lift handset.
2. Press flashing Secretary Call key.

## Secretary Call Pickup

### • Description

Secretary Call Pickup lets a system phone 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 phone 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 Secretary Call Pickup keys 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.

### Default Setting

Disabled.

### • Programming

#### 15-07-01: Programming Function Keys

Assign function keys for Secretary Call Pickup (42 + boss ext). Unlike Secretary Call, you do not have to program a corresponding key at the source and destination extensions.

### • Related Features

- **Call Forwarding with Follow Me**

An extension user can also have Call Forwarding with Follow Me reroute a co-worker's calls to themselves.

- **Programmable Function Keys**

Secretary Call pickup requires a uniquely programmed function key.

- **Secretary Call (Buzzer)**

Co-workers can alert each other without disturbing their work.

- **Single Line Telephones**

A system phone can have a Secretary Call Pickup key for a single line telephone.

### • Operation

#### To activate Secretary Call Pickup:

1. Press your Secretary Call Pickup key (PGM 15-07 or SC 851: 42 + boss ext.).

*Your Secretary Call Pickup key lights and the Boss's telephone display shows "BOSS FWD>>".*

*Calls intended for covered extension ring your phone instead.*

#### To cancel Secretary Call Pickup:

1. Press your lit Secretary Call Pickup key (PGM 15-07 or SC 851: 42 + boss ext.).

#### To check a key's Secretary Call Pickup assignment:

1. Press CHECK.
2. Press your Secretary Call Coverage key (PGM 15-07 or SC 851: 42 + boss ext.).
3. Press CLEAR.

## Selectable Display Messaging

### • Description

An extension user can select a pre-programmed Selectable Display Message for their extension. Display system phone 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 system phone user calling the extension would see the message. Other than displaying the message, the system puts the call through normally. See table below for a list of the standard messages.

An extension user can add digits for date, time or phone number after messages 1-8 and 10 (up to 16 characters). For example, an extension user could select the message "B-TRIP BACK" and then enter the date. Callers see the original message followed by the appended date. They would then be able to tell when the user was coming back from Business Trip.

The default messages are:

No.	Message	Change "#" to ...
01	MEETING BY ##:##	Time (when meeting done)
02	ROOM - #####	Room Name or extension
03	COME BACK ##:##	Time (when returning)
04	CALL #####	11 digits (phone number)
05	CALL AFTER ##:##	Time (when returning)
06	LUNCH BACK ##:##	Time (when returning)
07	B. TRIP BACK ###/##	Date (when returning)
08	B. TRIP #####	10 digits (where reached)
09	GONE FOR THE DAY	
10	DAY OFF BY ###/##	Date (when returning)
11-20	MESSAGE 11-20	

Messages 11-20 are available for the user to select their own messages. They must be pre-set by the installer with program 20-16-01.

#### Conditions

None

#### Default Setting

Enabled.

• **Programming**

**15-07-01: Programming Function Keys**

Assign a function key for Call Forwarding (Device) (code 17) or Text Message (code 18). The Call Forwarding Device key allows the user to select a message each time they activate the feature, while the Text Message key automatically selects the message used when programming the key.

**20-02-07: System Options for System Telephones - Time and Date Display Mode**

Set the System Time and Date display mode. The time that displays in Selectable Display Messages follows this setting.

**20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

**20-13-19: Class of Service Options (Supplementary Service) - Selectable Display Messaging**

In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Selectable Display Messaging.

**20-16-01: Selectable Display Messages**

Program the Selectable Display Messages (1-20). Refer to the chart below for character entry.

Use this keypad digit ...	When you want to ...
1	Enter characters: 1 @ [ ¥ ] ^ _ ' {   } _@? ?
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 ! " # \$ % & , ( )
*	Enter characters: * + , - . / : ; < = > ?
OPAC	Accepts an entry (only required if two letters on the same key are needed).
DND/CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

- **Related Features**

- **Do Not Disturb**

- The DND key blinks when an extension is forwarded and it does not have Programmable Function Key programmed for 16 or 17. Setting a message will cancel a DND setting

- **Programmable Function Keys**

- Function keys simplify Selectable Display Messaging operation.

- **Operation**

- To select a message:**

1. Press a SPK key + dial 713.

OR

Press Call Forward (Device) key (PGM 15-07 or SC 851: 17).

OR

Press a CALL key + press Text Message key (PGM 15-07 or SC 851: 18) + enter digits to append, if needed + SPK to hang up.

2. Dial 3 + Message number (01-20).

*Use VOL ▼ or VOL ▲ to scroll through the messages.*

3. (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).*

*You enter the time in 24-hour format, but it displays in 12/24-hour format as specified in Program 20-02-07.*

4. Press SPK to hang up.

- To cancel a message:**

1. Press a SPK key + dial 713.

OR

Press Call Forward (Device) key (PGM 15-07 or SC 851: 17).

OR

Press a CALL key + press Text Message key (PGM 15-07 or SC 851: 18) + SPK to hang up.

2. Dial 3.

3. Press SPK to hang up.

## Serial Call

### • Description

Serial Call is a method of transferring 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 phone who needs technical advice. The CSR wants to send the call to Tech Service, but needs to advise the client of certain costs when Tech Service is done. Rather than transferring the call back and forth, the CSR can use Serial Call to Technical Service and announce, "I have a caller on the phone. I need to talk to them again. Just hang up when you're done and I'll get them back."

### Conditions

The transferring extension can remain off-hook to auto-receive the callback or hang up and it will ring back to them.

### Default Setting

Disabled.

### • Programming

#### 15-07-01: Programming Function Keys

Assign a programmable key as a Serial Call key (code 43).

### • Related Features

- **Programmable Function Keys**  
Serial Call requires a uniquely programmed function key.
- **Single Line Telephones**  
Serial Call is not available to single line telephones.
- **Transfer**  
An extension user can extend (send) a call to a co-worker.

### • Operation

#### To place a Serial Call to a co-worker:

1. Place or answer a call.
2. Press HOLD.
3. Dial co-worker's extension number.  
*Co-worker must lift handset to respond to your announcement.*
4. Press Serial Call key (PGM 15-07 or SC 851: 43) but do not hang up.

*When your co-worker hangs up the call, the system makes an automatic live transfer back to your extension.*

## Single Line Telephones, Analogue Sets

### • Description

The system is compatible with DTMF analogue single line telephones (SLTs). You can install single line telephones as On-Premise extensions only. Single line telephone users can dial codes to access many of the features available to system phone users. With Single Line Telephones, you can have your system simulate PBX type operation.

### SLT port specification

Idle voltage	24VDC
Loop current	20mA
Ringing Voltage (frequency)	180V P-P (25Hz sinusoidal)
Time Break recall	65 to 1000mS Configured by Program 82-04-04, 82-04-07 & 82-04-08
Message Waiting Indication	24V to 100V switched idle voltage at 500mS cycle
Caller ID	FSK or DTMF after first ring pulse Configured by Program 15-03-11
Maximum cable length	1500 metres (0.5mm conductor) (Approximately 250 Ohm loop resistance)
Voice Mail Connection	Yes

### Conditions

- A. Dial Pulse single line telephones are not supported.

### Default Setting

Single Line Telephones function as soon as they are installed and properly programmed.

### • Programming

#### 10-03-01: PCB Setup

Assign the device type for adapters.

#### 10-03-03: PCB Setup - Transmit CODEC Gain Type

Assign transmit and receive levels for single line telephones.

#### 10-09-01: DTMF and Dial Tone Circuit Setup

If the system has DTMF single line extensions, allocate at least one circuit for analogue extension DTMF reception (entry 0 or 1).

Use the following as a guide when allocating DTMF receivers:

- In light traffic sites, allocate one DTMF receiver for every 10 devices that use them.
- In heavy traffic sites, allocate one DTMF receiver for every 5 devices that use them.

#### 15-03-03: Single Line Telephone Basic Data Setup - Terminal Type

Enter 0 for normal single line telephones. Enter 1 if a Voice Mail port (refer to "Voice Mail Integration" for more).

**20-13-13: Class of Service Options (Supplementary Service) - Continued Dialling**

Set option to '0' to prevent dual DTMF tones when using Continued Dialling.

**80-03-01: DTMF Tone Receiver Setup**

**80-04-01: Call Progress Tone Detector Setup**

If required, modify the criteria for call progress tone detection for the DTMF tones received at a single line telephone.

**82-04-01: Analogue Station Initial Data Setup**

Set various timing parameters for the analogue station ports.

**• Related Features**

- **Single line telephone users have access to the following features:**

Abbreviated Dialling	Call Waiting/Camp On with Split
Account Codes	Callback
Alarm	Central Office Calls, Answering
Automatic Route Selection	Central Office Calls, Placing
Barge In	Conference
Call Forward All	Department Calling
Call Forward All with Follow Me	Department Step Calling
Call Forwarding/DND Override	Directed Call Pickup
Do Not Disturb	Message Waiting
Doorphone	Night Service
Flash	Off Hook Signalling
Forced Trunk Disconnect	Paging
Group Call Pickup	PBX Compatibility
Hold	Ringdown Extension
Intercom	Save Number Dialed
Intercom Ringing	Selectable Display Messages
Handsfree Answerback/Forced	Toll Restriction
Last Number Redial	Transfer
Line Preference	Trunk Queuing and Camp On
Meet Me Conference	Voice Mail
Meet Me Paging	Warning Tone for Long Conversation
Meet Me Paging Transfer	

- **Refer to the individual features for additional descriptive, programming and operational information.**

**• Operation**

Refer to the individual features listed in the Related Features chart above.

## Station Message Detail Recording

### • Description

Station Message Detail Recording (SMDR) provides a record of the system's 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's 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's 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's 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 won't include toll calls within the home area code. Digit Counting permits SMDR to include only the types of 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's name or extension number. Choose the method that makes it easier for you to track call usage.

#### Conditions

- A. The SMDR report does not include voice Intercom calls.
- B. The SMDR call buffer stores calls. The buffer stores calls when the SMDR device is unavailable. When the buffer fills, each new call is not recorded. The alarm display telephone assigned in Program 90-11-01 shows "SMDR Buffer Full," indicating that the buffer is full. To clear the buffer, the SMDR information must be printed out. When not using SMDR, make sure Program 90-13-01=0 or Program 90-11-01=0 otherwise the SMDR alarm will display to the extension in Program 90-11-01 or to the operator's extension.
- C. SMDR requires a connection to the EXIFU, via a COM port, or LAN port.
- D. To ensure accurate timing of outgoing call durations when using analogue PSTN lines, the line supervision facility "Line Reversal on Answer" must be subscribed to with your service provider and programmed into the system using Program 14-02-08 = 0.

#### Default Setting

Disabled.

## Sample SMDR Report

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	CLASS	TIME	LINE	DURATION	STATION	DIALLED No. / CLI	ACCOUNT
01	POT	10:44	LINE 001	00:00:30	STA 224	12039265400	8841
02	POT	10:46	LINE 001	00:00:45	STA 224	18874521	0
03	POT	10:47	LINE 001	00:00:29	STA 218	12039265441	0
04	PIN	10:48	LINE 002	00:00:39			NO ANSWER
05	ALB	10:50	02	00:00:40			
06	POT	10:55	LINE 002	00:00:00	STA 224		0
07	ALB	10:56	02	00:00:23			
08	BRD	10:56	LINE 002	00:00:00	STA 224		0
09	ALB	10:56	02	00:00:09			
10	BRD	10:56	LINE 002	00:00:00	STA 224	120366541233	0
11	ALB	10:56	02	00:00:09			
12	BRD	10:56	LINE 002	00:00:00	STA 224	181477445236	0
13	ALB	10:56	02	00:00:08			

<b>Definitions</b>	
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.)
LINE	Trunk number used for call
DURATION	How long 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.)
RD/COST	For outgoing calls, the cost if enabled. For incoming calls, the ring duration.
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
<b>Class Definitions</b>	
POT	Outgoing trunk call
POTA	Outgoing trunk call placed using Toll Restriction Override
PIN	Incoming trunk calls
ALB	All lines in group are busy (group number follows TIME field)
BRD	Call blocked due to Toll Restriction
PTRS	Transferred call
IVIN	Incoming ISDN trunk call
IVOT	Outgoing ISDN trunk call

<b>SMDR Report Format</b>	
<b>Character Position</b>	<b>Field Definition</b>
<b>Header Line</b>	
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	
<b>Header Line 2</b>	
1-3	Spaces
4-8	CLASS
9-10	Spaces
11-14	TIME
15-18	Space
72-75	PAGE
19-22	LINE
77-79	Report page number (e.g., 001)
23-26	Spaces
27-34	DURATION
35-36	Space
37-43	STATION
44-46	Spaces
47-53	DIALLED
54	Spaces
55-61	No./CLI
62-63	Spaces
64-70	64-70RD/COST
71	Spaces
72-78	ACCOUNT
CR & LF	
<b>SMDR Record</b>	
57-63	Spaces
1-2	Call record number 01-55

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3	Space
4-8	Call type (e.g., POT for outgoing)
9	Space
10-14	Time in 24 hour clock (HH:MM)
15	Space
6-10	Time in 24 hour clock (HH:MM)
15	Space
16-25	LINE, space, line number (e.g., LINE 01)
26	Space
27-34	Call Duration (HH:MM:SS)
35	Space
36-45	Station number (STA, space, nnnn) or name
46	Space
47-61	Number dialled (15 digits maximum)
62-63	Spaces
64-70	Ring duration for incoming. Cost for outgoing
71	Space
72-80	Account number or NO ANSWER



### Summary Reports

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

### SMDR Output Options

You can change the information output via the SMDR. The following options are available.

#### Omit dialled digits

Program 35-01-04



The SMDR will replace the dialled digits with an X character.

This will prevent the administrator seeing the exact number dialled but will not prevent any billing operation of the call logging application.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	POT	10:44	LINE	001	00:00:30	STA 224	120392654XX 8841

#### Minimum quantity of dialled digits

Program 35-01-05

The SMDR will only output the call record if the minimum quantity of digits are dialled for an outgoing call.

#### Minimum call duration

Program 35-01-06

The SMDR will only output the call record if the minimum call duration is reached for incoming and outgoing calls.

#### Minimum ring duration

Program 35-01-07



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The SMDR will only output the call record if the minimum ring duration is reached for incoming abandoned calls. An abandoned call is shown as NO ANSWER on the SMDR.

This timer does not affect calls that are answered.

**Trunk name or number**

Program 35-02-03

The SMDR can either enter the trunk name or trunk number in the LINE field for each call record.

The trunk name is set in program 14-01-01.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	POT	10:44 Line 001	00:00:30	STA 224	120392654XX	8841	

The trunk number is from 001 to 051.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	POT	10:44 001	00:00:30	STA 224	120392654XX	8841	

**Extension name or number**

The SMDR can either enter the extension name or extension number in the STATION field for each call record.

The extension name is set in program 15-01-01.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	POT	10:44 001	00:00:30	P.Jones	120392654XX	8841	

The extension number is set in program 11-01-02.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	POT	10:44 001	00:00:30	224	120392654XX	8841	

**All Lines Busy**

Program 35-02-10

The SMDR will output a call record each time a trunk group has all lines busy simultaneously.

The LINE field will show the trunk group number that is busy.

The DURATION field shows how long all lines were busy.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
05	ALB	10:50 002	00:01:40				

**DDI Name output**

Program 35-02-12

The call records for incoming ISDN DDI calls can show the name assigned to the DDI in the LINE field.

The DDI names are assigned in program 22-11-03 for each DDI number.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	IVIN	10:44 Main No	00:00:30	STA 224	01765768691		

**Date output for each call record**

Program 35-02-14

The call records can include the date in the LINE field.

The date is output as dd/mm followed by a space and then three digits to indicate the line number.

Note. When you enable date output the following options are ignored.

Program 35-02-03, Trunk name or number

Program 35-02-12, DDI name output

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	IVIN	10:44 09/03 001	00:00:30	STA 224	01765768691		

**DDI or CLIP number output**

Program 35-02-15

The call records for incoming ISDN DDI calls can show the DDI number instead of the CLIP number in the DIALLED No./CLI field.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	IVIN	10:44 001	00:00:30	STA 224	643111		

**DDI number or Line information output**

Program 35-02-16

The call records for incoming ISDN DDI calls can show the DDI number instead of the line name or number in the LINE field.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	IVIN	10:44 643111	00:00:30	STA 224	01765768691		

**• Programming****10-21-02: Hardware Setup - Baud Rate for COM Port**

If the SMDR connection is made using the COM port on the EXIFU unit, define the baud rate (0=4800, 1=9600, 2=19200, 3=38400, 4=57600, 5=115200).

**11-10-23: Service Code Setup (for System Administrator) - SMDR - Extension Accumulated Printout Code**

Assign a service code for printing Accumulated Extension Data (default: 721).

**11-10-24: Service Code Setup (for System Administrator) - SMDR - Group Accumulated Printout Code**

Assign a service code for printing Accumulated Department Group Data (default: 722).

**11-10-25: Service Code Setup (for System Administrator) - Account Code Accumulated Printout Code**

Assign a service code for printing Accumulate Account Code Data (Default: 723).

**14-01-06: Basic Trunk Data Setup - SMDR Print Out**

For each trunk, enter 0 if trunk's calls should appear on SMDR report. Enter 1 if trunk's calls should not appear on SMDR report.

**14-02-08: Analogue Trunk Data Setup – Answering Condition**

To ensure accurate timing of outgoing call durations when using analogue PSTN lines, the line supervision facility "Line Reversal on Answer" must be subscribed to with your service provider and programmed into the system using Program 14-02-08 = 0.

**15-01-03: Basic Extension Data Setup - SMDR Printout**

For each extension, enter 1 if extension's calls should appear on SMDR report. Enter 0 if extension's calls should not appear on SMDR report.

**20-06-01: Class of Service for Extensions**

Assign a Class of Service (1-15) to an extension.

**20-07-18: Class of Service Options (Administrator Level) - SMDR Printout Accumulated Extension Data**

In an extension's Class of Service, enable (1) or disable (0) and extension's ability to print Accumulated Extension Data (default: 0 [disabled]).

**20-07-19: Class of Service Options (Administrator Level) - SMDR Printout Accumulated STG Data**

In an extension's Class of Service, enable (1) or disable (0) and extension's ability to print Assign a service code for printing Accumulated Department Group Data (default: 0 [disabled]).

**20-07-20: Class of Service Options (Administrator Level) - SMDR Printout Accumulated Account Code Data**

In an extension's Class of Service, enable (1) or disable (0) and extension's ability to print Assign a service code for printing Accumulated Account Code Data (default: 0 [disabled]).

**35-01-01: SMDR Options - Output Port Type**

Specify the type of connection used for SMDR (0=No setting, 1=COM Port(EXIFU), 3=LAN Port (EXIFU). The baud rate for the COM port should be set in Program 10-21-02.

**35-01-04: SMDR Options - Omit (Mask) Digits**

Enter the number of digits (1-36) you want SMDR to block (i.e., "X" out). Enter 0 not to block any digits.

**35-01-05: SMDR Options - Minimum Number of SMDR Digits**

Enter the minimum number of digits a user must dial (1-24) before the system includes a call on the SMDR report. Enter 0 to include all outgoing calls, regardless of the number of digits dialed.

**35-01-06: SMDR Options - Minimum Call Duration**

Enter the minimum duration of a call (1-65535) that will print on the SMDR report. Enter 0 to have calls of any duration print.

**35-01-07: SMDR Options - Minimum Ringing Time**

Enter how long an unanswered call must ring (1-65535) before SMDR logs it as "No Answer". Enter 0 to allow all "No Answer" calls to print.

**35-02-01: SMDR Output Options - Toll Restricted Call**

Enter 1 if you want the SMDR report to include calls blocked by Toll Restriction. Enter 0 to exclude blocked calls.

**35-02-02: SMDR Output Options - PBX Calls**

If system is behind a PBX, enter 1 to have SMDR include all calls to the PBX. Enter 0 to have SMDR include only calls dialed using PBX trunk access code.

**35-02-03: SMDR Output Options - Display Trunk Name or Number**

Select whether the system should display the trunk name (0) or the number (1) on SMDR reports. ***If this option is set to "1", Program 35-02-14 must be set to "0".***

**35-02-04: SMDR Output Options - Daily Summary****35-02-05: Weekly Summary and****35-02-06: Monthly Summary**

Enter 1 to enable a summary report. Enter 0 to disable a summary report. 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.

**35-02-08: SMDR Output Options - Incoming Calls**

Enter 0 if you want the SMDR report to include incoming calls. Enter 1 if you want the SMDR report to exclude incoming calls.

**35-02-09: SMDR Output Options - Print Name or Number**

Enter 0 if you want the SMDR report to include the extension's name. Enter 1 if you want the SMDR report to include the extension's number.

**35-02-14: SMDR Output Options – Date**

Determine whether the date should be displayed on SMDR reports (0=not displayed, 1=displayed). ***This option must be set to "0" if the trunk name is set to be displayed in Program 35-02-03.***

**35-02-16: SMDR Output Options - Print Trunk Name or Received Dialed Number**

Enter 0 if you want the SMDR report to print the trunk port name (as assigned in Program 14-01-01). Enter 1 if you want the SMDR report to print the received dialed number. On ANI/DNIS trunks, if enabled (Program 2404:1), the DNIS digits can be printed on the SMDR reports instead of the trunk name. For DID trunks, if the received number is not defined in Program 22-11-01, then no number will be printed.

**80-05-01: Date Format for SMDR and System Reports**

Set the date format for SMDR (0=American, 1=Japanese or 2=European).

**• Related Features****• PBX Compatibility**

To use the PBX Call Reporting option, program system for behind PBX operation.

**• Operation**

Once installed and programmed, SMDR call recording operation is automatic.

**To activate SMDR Printout – Accumulated Extension Data:**

1. A system phone, press the **CALL** key.  
OR  
At single line telephone, lift handset.
2. Dial **721**.
3. Dial Extension Number, or skip for All Extensions.
4. Dial **#**.
5. Press **SPK** to hang up.

**To activate SMDR Printout – Accumulated Group Data:  
A system phone, press the CALL key.**

OR

At single line telephone, lift handset.

1. Dial **722**.
2. Dial Extension Number, or skip for All Extensions.
3. Dial **#**.
4. Press **SPK** to hang up.

**To activate SMDR Printout – Accumulated Account Code Data:**

1. A system phone, press the **CALL** key.  
OR  
At single line telephone, lift handset.
2. Dial **723**.
3. Dial Extension Number, or skip for All Extensions.
4. Dial **#**.
5. Press **SPK** to hang up.

## Tandem Trunking (Unsupervised Conference)

### • Description

Tandem Trunking allows an extension user to join two or more 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. In addition, the extension user that set up the Conference can end the tandem call at any time.

The number of Conference calls is limited by the number of Conference circuits in the system. Due to this fact, the maximum number of Conference members cannot exceed 32.

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 at any time.

There are two methods for Enhanced Tandem Trunking:

- Method A - Set Up Without Transfer Key  
An extension user can set up Tandem Trunking (Unsupervised Conference) by using the CONF key. This option uses a uniquely programmed Transfer key to set up a tandem call.
- Method B - Tandem Trunking on Hang Up  
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.

### Conditions

- A. Tandem Trunking requires analogue loop start trunks with disconnect supervision or ISDN trunks.
- B. The maximum number of trunk-to-trunk conferences allowed is determined by the Conference feature setup. See Programming below.

### Default Setting

Disabled.

### • Programming

#### Tandem Trunking Method A - Tandem Trunking from Conference

##### 14-01-04: Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls

Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.

**14-01-05: Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**

Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.

**14-01-13: Basic Trunk Data Setup - Loop Supervision**

For each trunk that should be able to participate in a tandem call, enter 1.

**15-07-01: Programming Function Keys**

(Optional) Assign a function key for Transfer (code 06).

**20-06-01: Class of Service for Extensions**

Assign a Class of Service (1-15) to an extension.

**20-13-08: Class of Service Options (Supplementary Service) – Conference**

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to initiate a Conference.

**20-13-10: Class of Service Options (Supplementary Service) - Barge In Mode**

In an extension's Class of Service, set whether an extension should be able to Barge In to a call and talk (1) or just monitor the call (0).

**20-11-14: Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer**

Disable (0) the Trunk-to-Trunk Transfer Restriction option.

**Tandem Trunking Method B - Tandem Trunking on Hang Up****14-01-04: Basic Trunk Data Setup – Transmit Gain Level for Conference and Transfer Calls**

Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.

**14-01-05: Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**

Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.

**14-01-13: Basic Trunk Data Setup - Loop Disconnect Supervision**

For each trunk, enter 1 to enable loop supervision.

**14-02-12: Detect Network Disconnect Signal**

Enable the network disconnect signal detection for proper release of analogue trunks.

**15-07-01: Programming Function Keys**

Assign a function key for Transfer (code 06).

**20-06-01: Class of Service for Extensions**

Assign a Class of Service (1-15) to an extension.

**20-07-11: Class of Service Options (Administrator Level) - Forced Trunk Disconnect**

In an extension's Class of Service, enter 1 to enable Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress (initially set up using Method B).

**20-13-08: Class of Service Options (Supplementary Service) – Conference**

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to initiate a Conference.

**20-13-10: Class of Service Options (Supplementary Service) - Barge In Mode**

In an extension's Class of Service, set whether an extension should be able to Barge In to a call and talk (1) or just monitor the call (0).

**20-11-14: Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer**

Disable (0) the Trunk-to-Trunk Transfer Restriction option.

**24-02-07: Forced release for Trunk-to-Trunk Transfer**

Specify the maximum length of time a trunk-to-trunk transfer (tandem transfer) can be in progress before it is forcibly disconnected (default=30 minutes).

- **Related Features**

- **Central Office Calls, Answering / Central Office Calls, Placing**  
Other programmed options for incoming and outgoing calls can affect how calls are handled. Check or program these options as needed.
- **Conference, Voice Call**  
Set up a Conference with a co-worker in your immediate work area.
- **Meet Me Conference**  
Meet Me Conference lets an extension user set up a Conference via Paging.
- **Meet Me Paging**  
Meet Me Paging lets an extension user set up a two-party meeting via Paging.

- **Operation**

**Method A - Tandem Trunking from Conference****To set up a Tandem Call:**

1. Place or answer first trunk call.
2. Press CONF key.
3. Place or answer second trunk call.
4. To add more calls to the tandem call, repeat from Step 2. or to set up the tandem call, press CONF key twice.  
*This sets up a Conference between you and both outside parties.*
5. Press Transfer key (PGM 15-07 or SC 851: 06).

**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 SPK 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 disconnect the Conference, you must use Forced Trunk Disconnect (i.e., Press the line key + 724).*

**Method B - Tandem Trunking on Hang up**

**To set up a Tandem Call:**

1. Answer first trunk call.
2. Press HOLD to place the first trunk call on Hold.
3. Place second trunk call.
4. Press Transfer key (PGM 15-07 or SC 851: 06) or hang up.

*This sets up an Unsupervised Conference with both outside parties.*

*The line keys for the trunks light steadily (red).*

*To disconnect the Conference, use Forced Trunk Disconnect (i.e., Press line key + 724).*

## Time and Date

### • Description

The system Time and Date for:

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

### Conditions

- The system retains the Time and Date after a power failure or system reset.
- The system can automatically adjust for daylight savings time if desired.
- The date must be set in system programming.

### Default Setting

Enabled.

### • Programming

#### **10-01-01: Time and Date**

Set the system Time and Date from your administrator's telephone.

#### **10-24 : Daylight Saving Setup**

#### **20-02-07: System Options for System Telephones - Time and Date Display Mode**

Select the display mode (type 1-8) for Time and Date (i.e., Time and Date format).

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-07-03: Class of Service Options (Administrator Level) - Time and Date**

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to set the Time and Date.

### • Related Features

- **Class of Service**  
Changing the time may change the current COS service depending on the COS mode setup.
- **Single Line Telephones**  
Single line telephones cannot set the Time and Date.

### • Operation

**To set the system Time:**

1. Press a SPK key.
2. Dial 828.
3. Dial two digits for the hour (24 hour clock, 13 = 1:00 PM).
4. Dial two digits for the minutes (00-60).
5. Press SPK to hang up.

## Toll Restriction

### • Description

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 Toll Restriction according to an extension's Toll Restriction Class. The system allows for up to 15 Toll Restriction Classes.

Toll Restriction offers the following capabilities:

- **Common Permit Code Table**

Use the Common Permit Code Table when you have numbers you want all Toll Restriction Classes to dial. To let all users dial 000 (000 is an emergency call in Australia), for example, put 000 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 4 digits max., using 0-9, #, \* and FLASH (as a wild card).

- **Common Restrict Code Table**

The Common Restrict Code Table lets you globally restrict certain numbers for all Toll Restriction Classes. To prevent all users from dialing directory assistance (411), for example, put 411 in the Common Restrict Code Table. Be sure you don't 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 4 digits max., using 0-9, #, \* and FLASH (as a wild card).

- **Restrict Code Table**

When you want Toll 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 Toll 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 4 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 Toll 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 03, for example, enter 103 in the Permit Code Table. 1 + 03 + NNx + nnnn are the only numbers users can dial. (If the same Toll 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 4 tables, with 60 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 4 digits in each table entry and 20 International Call Allow tables, with up to 6 digits in each table entry. Valid entries are 0-9, #, \* and FLASH (for a wild card).

- **Toll Restriction for Abbreviated Dialling**

Abbreviated Dialling can bypass or follow Toll Restriction. If you allow many users to program Abbreviated Dialling, consider Toll Restricting the numbers they dial. If only administrators can program Abbreviated Dialling, Toll Restriction may not be necessary. You can separately restrict Group and Common Abbreviated Dialling.

- **Call 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 8 to limit local callers to Dialling the exchange code (xxxx) and local address (nnnn) only. The system provides 4 tables in which you can make entries for this option. The range is 4-30 digits.

- **Toll Call Digit Counting**

With Toll Call Digit Counting, you can limit the number of digits long distance callers can dial. This lets you prevent callers from Dialling 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 Toll Free Trunks anytime -- to anywhere, without inadvertently being toll restricted.

- **PBX Call Restriction**

Toll 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 feature for the specifics.

#### Conditions

- A. If a Toll Restriction Class has the same entries in both a permit and restriction table, the system does not restrict the call.
- B. Toll Call Digit counting may prevent users from taking advantage of long distance automated services.
- C. Toll Restriction is applied when accessing ARS.

#### Default Setting

Disabled.

#### • Programming

##### **14-01-08: Basic Trunk Data Setup - Toll Restriction**

For each trunk, enter 0 to disable Toll Restriction; enter 1 to enable Toll Restriction.

##### **20-06-01: Class of Service for Extensions**

For each extension, assign a Class of Service (1-15).

- 20-08-02: Class of Service Options (Outgoing Call Service) - Trunk Calls**  
For each Class of Service, decide whether to enable (1) or disable (0) an extension's ability to place an outgoing trunk call.
- 20-13-20: Class of Service Options (Supplementary Service) - Account Code/ Toll Restriction Operator Alert**  
When toll restriction is violated, determine if the operator should be notified. (0=disable, 1=enable)
- 21-04-01: Toll Restriction Class**  
For each extension, assign a Toll Restriction Class for reach Night Service mode.
- 21-05-01: Toll Restriction Class - International Call Restriction Table**  
For the Toll Restriction Class you select, enable (1) or disable (0) the International Call Restrict Table (Program 21-06-01).
- 21-05-02: Toll Restriction Class - International Call Permit Table**  
For the Toll Restriction Class you select, enable (1) or disable (0) the International Call Permit Table (Program 21-06-02).
- 21-05-04: Toll Restriction Class - Maximum Number of Digits Table Assignments**  
For the Toll Restriction Class you select, disable (0) or enable (1) the dialling limit for calls. When enabling, select from entries 1-4 in Program 21-06-03.
- 21-05-05: Toll Restriction Class - Common Permit Code Table**  
For the Toll Restriction Class you select, enable (1) or disable (0) the Common Permit Code Table (Program 21-06-04).
- 21-05-06: Toll Restriction Class - Common Restrict Code Table**  
For the Toll Restriction Class you select, enable (1) or disable (0) the Common Restrict Code Table (Program 21-06-05).
- 21-05-07: Toll Restriction Class - Permit Code Table**  
For the Toll Restriction Class you select, disable (0) or enable the Permit Code Table. When enabling, select from tables 1-4 in Program 21-06-06.
- 21-05-08: Toll Restriction Class - Restrict Code Table**  
For the Toll Restriction Class you select, disable (0) or enable the Restrict Code Table. When enabling, select from tables 1-4 in Program 21-06-07.
- 21-05-09: Toll Restriction Class - Restriction for Common Abbreviated Dialling**  
For the Toll Restriction Class you select, enable (1) or disable (0) Toll Restriction for Common Abbreviated Dialling numbers.
- 21-05-10: Toll Restriction Class - Restriction for Group Abbreviated Dialling Numbers**  
For the Toll Restriction Class you select, enable (1) or disable (0) Toll Restriction for Group Abbreviated Dialling numbers.
- 21-05-11: Toll Restriction Class - Intercom Call Restriction**

For the Toll Restriction Class you select, enable (1) or disable (0) Intercom Call Restriction. If enabled, extensions cannot place or receive Intercom calls.

**21-05-12: Toll Restriction Class - PBX Call Restriction**

For the Toll Restriction Class you select, enable (1) or disable (0) PBX Call Restriction. Refer to the PBX Compatibility Feature.

**21-06-01: Toll Restriction Table Data Setup - International Call Restrict Table**

Enter the international dialling codes you want to restrict.

**21-06-02: Toll Restriction Table Data Setup - International Call Permit Table**

Enter the international dialling codes you want to permit.

**21-06-03: Toll Restriction Table Data Setup - Maximum Number of Digits Table Assignment**

Select the maximum number of digits allowed in outgoing calls for each table (4-30).

**21-06-04: Toll Restriction Table Data Setup - Common Permit Code Table**

Program codes into the Common Permit Code Table.

**21-06-05: Toll Restriction Table Data Setup - Common Restrict Table**

Program codes into the Common Restrict Code Table.

**21-06-06: Toll Restriction Table Data Setup - Permit Code Table**

Program codes into the Permit Code Tables.

**21-06-07: Toll Restriction Table Data Setup - Restrict Code Table**

Program codes into the Restrict Code Tables.

**21-06-08: Toll Restriction Table Data Setup - PBX Access Codes**

The system allows up to 4 tables for PBX access codes. Refer to the PBX Compatibility feature for the specifics.

• **Related Features**

• **Central Office Calls, Placing**

The system will allow or deny outgoing access to trunks depending on Toll Restriction.

• **Direct Inward System Access (DISA)**

When using DISA, additional programming is required for Toll Restriction (DISA, see Program 25-10).

• **Toll Restriction, Dial Block**

A user can temporarily block their extension's Toll Restriction access, preventing unwanted calls from being placed on their phone while they are away from their desk.

• **Toll Restriction Override**

A user can temporarily override an extension's Toll Restriction.

• **Operation**

**To place a trunk call if your system is Toll Restricted:**

1. Place call normally.

*If your Toll Restriction Class does not allow the number you dial, your call will be cut off.*

## Toll Restriction-Dial Block

### • Description

Toll Restriction-Dial Block lets a user temporarily block an extension's Toll Restriction. 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 system administrator. If Dial Block has already been set by an extension user, the supervisor can not release it. Additionally, if Dial Block has been set by the supervisor, and extension user can not 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

- A. If the system is reset by a cold start, the Dial Block feature is cleared.
- B. This feature is not available for ISDN S-Bus extensions.
- C. Both Programs 21-09-01 and 21-10 can be set at the same time. The system gives priority to the setting in Program 21-10.

### Default Setting

Disabled.

### • Programming

#### **11-10-17: Service Code Setup (for System Administrator) - Dial Block by Supervisor**

Assign a service code (101 by default) to be used by the supervisor to set Dial Block for another extension.

#### **11-11-33: Service Code Setup (for Setup/Entry Operation) - Dial Block**

Assign a service code (100 by default) to be used for Dial Block.

#### **20-06-01: Class of Service for Extensions**

Assign a COS to each extension (1-15).

#### **20-08-08: Toll Restriction Dial Block**

Enable (1) or disable (0) an extension's ability to use Dial Block.

#### **21-09-01: Dial Block Setup - Toll Restriction Class With Dial Block**

Assign a Toll Restriction Class of Service (1-15) when the Dial Block feature is used.

#### **21-09-02: Dial Block Setup - Supervisor Password**

Assign a 4-digit password to be used by the supervisor to enable or disable Dial Block for other extensions.

#### **21-10-01: Dial Block Restriction Class Per Extension**

Assign the Toll Restriction class (1-15) to be used by an extension when the Dial Block feature is enabled. If this data is "0", Toll Restriction Class follows Program 21-09-01.

#### **90-19-01: Dial Block Release**

Enter the extension number to be released from the Dial Block restriction. This program can be used when a password is forgotten by the user.

- **Related Features**

- **Toll Restriction**

- Dial Block can temporarily block an extension's Toll Restriction setting

- **Operation**

- To set Dial Block:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 700.
3. Dial the 4-digit Dial Block code.
4. Dial 1.  
*A confirmation tone is heard.*
5. Press SPK or replace the handset to hang up.

- To release Dial Block:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 700.
3. Dial the 4-digit Dial Block code.
4. Dial 0.  
*A confirmation tone is heard.*
5. Press SPK or replace the handset to hang up.

- To set Dial Block from another extension:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 701.
3. Dial the 4-digit Dial Block code.
4. Dial the extension number to be blocked.
5. Dial 1.  
*A confirmation tone is heard.*
6. Press SPK or replace the handset to hang up.

- To release Dial Block from another extension:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift 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.

*A confirmation tone is heard.*

6. Press SPK or replace the handset to hang up.

## Toll Restriction Override

### • Description

Toll Restriction Override lets a user temporarily bypass an extension's Toll Restriction. This helps a user that must place an important call that Toll Restriction normally prevents. For example, you could set up Toll Restriction to block 0011 calls and then provide a Toll Restriction Override code to your attendant and executives. When the attendant or executive needs to place a 0011 call, they just:

- Press CALL and dial their override code.
- Press a line key or dial a trunk access code (e.g., 0 or 805 002).
- Place the 0011 call without restriction.

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

### Conditions

None

### Default Setting

Disabled.

### • Programming

#### **11-11-36: Service Code Setup (for Setup/Entry Operation) - Walking Toll Restriction**

Assign a service code ( 163 763) for Toll Restriction Override.

#### **20-08-06: Class of Service Options (Outgoing Call Service) - Toll Restriction Override**

In an extension's Class of Service, enable (1) or disable (0) the ability to use Toll Restriction Override.

#### **21-01-07: System Options for Outgoing Calls - Toll Restriction Override Time**

Set the Toll Restriction Override Time (0-64800 seconds). After dialling the Toll Restriction Override codes, the system removes Toll Restriction for this interval.

#### **21-14-01: Walking Toll Restriction Password Setup - User ID**

Enter the Toll Restriction Override User ID codes (6 digits) into tables. Up to 500 different override codes can be entered.

#### **21-14-02: Walking Toll Restriction Password Setup - Walking Toll Restriction Class Number**

Enter the Walking Toll Restriction Class of Service (1-15) to be used for each table number assigned in 21-14-01.

#### **35-02-06 through 35-02-11 : SMDR Output Options**

Assign the output condition for the printer or PC. If the data is set to "1" (output), the symbol of the call will print as "POTW" and the password table number will be printed as "W/ @@@@@" (@@ equals the 3 digit table number) in the Account Code area.

### • Related Features

- **Station Message Detail Recording**  
In the *Class* heading in the SMDR report, POTW indicates that the call was placed using Toll Restriction Override.
- **Toll Restriction**  
Toll Restriction Override temporarily overrides an extension's Toll Restriction.
- **Voice Response System (VRS)**  
If the system has VRS, users hear, "*Your call cannot go through. Please call the operator*" when they dial a number that Toll Restriction prevents.

- **Operation**

**To temporarily override a restricted extension's Toll Restriction:**

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

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 763.
3. Dial the 6-digit Toll Restriction Override code. If you wait too long before going to the next step, you may have to repeat the procedure. You'll hear error tone if you dial your code incorrectly.
4. Press idle line key or dial trunk access code.
5. Dial number without restriction.

## Transfer

### • Description

Transfer permits an extension user to send (i.e., extend) 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 wishing to have a trunk call transferred to them presses the busy line key and waits for the call to complete. The system automatically sends them the call when the internal party to that call 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 HOLD, 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 TRFR or a Transfer Programmable Function key 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 will allow you to prevent a Transferred call from recalling the originating extension if the call is not answered.

#### Conditions

None

#### Default Setting

Enabled.

- **Programming**

- 15-07-01: Programming Function Keys**

- Extension users may want a function keys programmed for Transfer (code 06).

- 20-02-01: System Options for System Telephones - Retrieve the Line After Transfer**

- Enable (1) or disable (0) an extension's ability to answer a call after it's been transferred, but before it's answered.

- 20-03-01: System Options for Single Line Telephones - SLT Call Waiting Answer Mode**

- For a busy single line telephone, set the mode used to answer a camped-on trunk call:

- 0 = Press and release hookswitch to pick up waiting call
    - 1 = Press and release hookswitch and dial Service Code 894 to answer waiting call

- 20-06-01: Class of Service for Extensions**

- Assign a Class Of Service (1-15) to extensions.

- 20-11-06: Class of Service Options (Hold/Transfer Service) - Unscreened Transfer**

- In an extension's Class of Service, enable (1) or disable (0) the extension's ability to use Unscreened Transfer.

- 20-11-07: Class of Service Options (Hold/Transfer Service) - Transfer Without Holding**

- In an extension's Class of Service, enable (1) or disable (0) the extension's ability to use Transfer Without Holding.

- 20-11-08: Class of Service Options (Hold/Transfer Service) - Transfer Display**

- In an extension's Class of Service, enable (1) or disable (0) the extension's incoming Transfer pre-answer display.

- 20-11-11: Class of Service Options (Hold/Transfer Service) - Automatic On Hook Transfer**

- In an extension's Class of Service, enable (1) or disable (0) the extension's ability to use Automatic On Hook Transfer. If enabled, user must press HOLD and dial the extension number to Transfer the call. If disabled, a user must have a Transfer Programmable Function Key. To transfer the call, the user would press HOLD, dial the extension number, then press the Transfer Programmable Function key to complete the transfer.

- 20-11-18: Class of Service Options (Hold/Transfer Service) - No Recall**

- If an extension should not receive recalls of unanswered Transferred calls, disable this option (0=allow recalls, 1=prevent recalls).

- 24-02-01: System Options for Transfer - Busy Transfer**

- Prevent (0) or allow (1) extensions to transfer calls to busy extensions. If disabled, calls transferred to busy extensions recall immediately.

- 24-02-03: System Options for Transfer - Delayed Call Forwarding Time**

If activated at an extension, Delayed Call Forwarding occurs after this interval (0-64800 seconds). This also sets how long a Transferred call waits at an extension forwarded to Voice Mail before routing to the called extension's mailbox.

#### **24-02-04: System Options for Transfer - Transfer Recall Time**

Set the Transfer Recall Time (0-64800 seconds). An unanswered transferred call recalls to the extension that initially transferred it after this interval. This interval also sets how long a transferred call camps-on to a busy extension.

#### **• Related Features**

- **Caller ID**  
Unscreened Transfers from voice mail will show pre-answer Caller ID information.
- **Call Forwarding**  
With Transfer to Busy Extensions enabled (Program 24-02-01=1), Call Forwarding with Both Ringing offers a unique option. A transferred call will wait for either the forwarding or destination extension to become free. The call goes through to whichever extension becomes available first. If neither extension becomes free within the Transfer Recall Time, the call recalls the transferring extension.
- **Meet Me Paging Transfer**  
Page a co-worker and have the call automatically Transfer when the co-worker answers the Page.
- **Programmable Function Keys**  
When transferring, an extension user can press a One-Touch Key instead of dialing the extension number.
- **Serial Call**  
Serial Call is a method of transferring a call so it automatically returns to the transferring extension.

#### **• Operation**

##### **Transferring Trunk Calls**

##### **To Transfer a trunk call to a co-worker's extension:**

1. At system phone, press HOLD.  
OR  
At single line telephone, hookflash.

*You hear Transfer dial tone.*

2. Dial co-worker's extension number.

*If the extension is busy or doesn't 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 single line user has hung up the handset, the call can be retrieved by Dialling 815 and the extension number to which it had been transferred.*

3. Announce call and hang up.

*If you don't have Automatic On Hook Transfer, you must press TRFR or your Transfer Programmable Function Key to Transfer the call. If your co-worker doesn't want the call, press the flashing line key to return to the call. SLT users can retrieve the call by pressing hookflash. If a call has been transferred and the single line user has hung up the handset, the call can be retrieved by Dialling 815 and the extension number to which it had been transferred. If you don't want to screen the call, hang up without making an announcement.*

**To answer a call transferred to your extension:**

1. Lift the handset when a co-worker announces the call.

**Transferring Without Holding****To Transfer without holding (system phone only):**

1. Lift handset.
2. Press busy line key.
3. When original caller hangs up, you are connected.

**Transferring Intercom Calls****To Transfer your Intercom call:**

1. At system phone, press HOLD.  
OR  
At single line telephone, hookflash.
2. Dial extension to receive your call.

*If the extension is busy, doesn't answer or does not want the call, you can dial another extension number or press the lit CALL 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 single line user has hung up the handset, the call be can retrieved by Dialling 815 and the extension number to which it had been transferred.*

3. Announce your call and 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. If your co-worker just speaks toward their phone to answer, the Intercom call being transferred disconnects when you hang up. To Transfer the call unscreened, press your Transfer Programmable Function Key and hang up without making an announcement.*

## Trunk Group Routing

### • Description

Trunk Group Routing sets outbound call routing options for users that dial the Trunk Group Routing code (0) for trunk calls. Trunk Group Routing routes calls in the order specified by system programming. If a user dials 0 and all trunks in the first group are busy, the system may route the call to another group.

### Conditions

None

### Default Setting

Enabled. All trunks are in Group 1.

### • Programming

#### 11-01-01: System Numbering

Set up a Service Code for Alternate Trunk Route Access.

#### 11-09-01: Trunk Access Code

If required, change the single-digit Trunk Access Code (normally 0). If you change this code, you must also review the settings in 11-01 for the new code selected.

#### 11-09-02: Trunk Access Code - Alternate Trunk Route Access Code

Assign the Service Code set up in 11-01 for Alternate Trunk Route Access.

#### 14-05-01: Trunk Groups

Assign trunks to trunk groups (1-25).

#### 14-06-01: Trunk Group Routing

Set up an outbound routing table (1-25) for trunk groups assigned in Program 14-05.

#### 14-07-01: Trunk Access Map Setup

Access Map programming may limit Trunk Group Routing options.

#### 15-06-01: Trunk Access Map for Extensions

Access Map programming may limit Trunk Group Routing options.

#### 15-07 : Programming Function Keys

Assign a function key for Trunk Group Routing access (code \*02 + trunk group 01-25).

#### 21-02-01: Trunk Group Routing for Extensions

Assign the routes set in Program 14-06 to extensions.

#### 21-03-01: Trunk Group Routing for Trunks

Assigns the routes set in Program 14-06 for use with Automatic Extended Call Forward.

#### 21-15-01: Alternate Trunk Route for Extensions

Designate the trunk route accessed when a user dials the Alternate Trunk Route Access Code assigned in Program 11-09-02. Trunk Group Routing is set up in Program 14-06.

**23-03-01: Universal Answer/Auto Answer**

Assign trunk routes set in Program 14-06 to extensions for Universal Answer. If the call ringing the paging system is in an extension's assigned route, the user can dial the Universal Answer code ( #0 872) to pick up the call. This program also allows an extension user to automatically answer trunk calls ringing other extensions, based on Trunk Group Routing programming (defined in Program 14-06). (Trunk Group Routing=1-25)

**25-10-01: Trunk Group Routing for DISA**

Assign the Trunk Group Route chosen when a user places a DISA call into the system and dials 0. The Trunk Group Routing is defined in Program 14-06. If the system has ARS, dialling 0 accesses ARS. The route chosen is based on the DISA Class of Service, which is determined by the password the caller dials.

**25-12-01: Alternate Trunk Group Routing for DISA**

Define the trunk route selected when a DISA caller dials the Alternate Trunk Access Code assigned in Program 11-09-02. The route selected is based on the DISA caller's Class of Service, which is in turn determined by the password the caller dial. Program 14-06 is used to set up the Trunk Group Routing.

**• Related Features****• Automatic Route Selection (ARS)**

Dialling 0 activates ARS, overriding trunk group routing.

**• Central Office Calls, Placing**

Instead of using Trunk Group Routing, an extension user can place a trunk call by:

Pressing a line key

dialling a trunk service code

Pressing a trunk group key (refer to the Trunk Group feature)

dialling a trunk group service code (refer to the Trunk Group feature).

**• Programmable Function Keys**

Programmable Function Keys simplify placing calls using Trunk Group Routing.

**• Ringing Line Preference**

The system uses Trunk Group Routing programming (Program 14-06) when setting up Ringing Line Preference.

**• Trunk Groups**

Use trunk group programming to set the order in which users access trunks within a specific trunk group.

**• Operation****To place a call using Trunk Group Routing:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 0.
3. Dial number.  
OR

1. At system phone, press Trunk Group Routing key (PGM 15-07 or SC 852: \*05).  
*Also see the "Loop Keys" feature.*
2. Dial number.

## Trunk Groups

### • Description

Trunk Groups let you optimize trunk usage for incoming and outgoing calls. With Trunk Groups, users can have loop (rotary) keys for trunk calls. Incoming trunk group calls ring these loop keys. For outgoing calls, the user presses a loop key to access the first available trunk within the group. You set the access order in trunk group programming. The system allows up to 25 trunk groups.

Loop keys give an extension user more available function keys, since the user doesn't need a separate line key for each trunk. The user only needs one loop key for each trunk group. This simplifies placing and answering calls.

### Conditions

None

### Default Setting

All trunks are in group 1.

### • Programming

#### **10-09-01: DTMF and Dial Tone Circuit Setup**

Allocate the circuits on the 308M or DSPDB PCBs for DTMF receiving.

#### **14-05-01: Trunk Groups**

Assign trunks to trunk groups (1-25).

#### **14-07-01: Trunk Access Map Setup**

Assign trunks to Access Maps (1-51).

#### **15-06-01: Trunk Access Map for Extensions**

Assign Access Maps (1-51) to extensions.

#### **15-07-01: Programming Function Keys**

Assign function keys for trunk group access (code \*02 + group) or loop keys (code \*05 + 0=incoming, 1=outgoing, 2=both + trunk group (001-100). If loop keys are used, assign the loop key to a trunk group in Program 15-13.

#### **20-02-02: System Options for System Telephones - Trunk Loop Access Key Operating Mode**

Set the operating mode of the extension's trunk group keys (Incoming and Outgoing Access = 0, Outgoing Access =1, Incoming Access = 2).

### • Related Features

#### • **Abbreviated Dialling**

Unless a user preselects a trunk, Trunk Group programming selects the trunk Abbreviated dialling users for trunk calls.

#### • **Automatic Route Selection**

If a user dials a number that is not programmed in ARS, the system can route the call to a trunk group.

#### • **Central Office Calls, Placing**

Instead of using Trunk Groups, an extension user can place a trunk call by:

Pressing a line key  
dialling a trunk access code  
dialling a Trunk Group Routing code (0) - refer to the Trunk Group Routing feature

- **Direct Inward Dialling (DID)**

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.

- **Loop Keys**

Program a function key as a Loop Key to allow an extension user to answer incoming trunks within a trunk group.

- **Programmable Function Keys**

Function keys simplify placing and answering trunk group calls.

- **Ring Groups**

Trunks ring extensions according to Ring Group programming.

- **Trunk Group Routing**

Trunk Group Routing sets outbound call routing options for users that dial the Trunk Group Routing code (0) for trunk calls.

- **Operation**

**To place a call over a trunk group:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 804.
3. Dial trunk group number (1-9 or 01-25 ).
4. Dial number.  
OR
  1. Press trunk group key (PGM 15-07 or SC 852: \*02 + group)
  2. Dial number.

**To answer an incoming trunk group call:**

1. Lift handset.
2. Press 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

None

### Default Setting

Enabled.

### • Programming

#### **15-07-01: Programming Function Keys**

Assign a function key for Trunk Queuing and Trunk Camp On (code 35).

#### **20-01-08: System Options - Trunk Queuing Callback Time**

Set the Trunk Queuing Callback Time (0-64800 seconds). Trunk Queuing Callback rings an extension for this interval.

#### **20-01-09: System Options - Callback/Trunk Queuing Cancel Time**

Set the Callback/Trunk Queuing Cancel Time (0-64800 seconds). The system cancels an extension's Callback or Trunk Queuing request after this interval.

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-11-07: Class of Service Options (Hold/Transfer Service) - Transfer Without Holding**

Disable (0) an extension's ability to use Transfer Without Holding.

### • Related Features

- **Automatic Route Selection**  
With Automatic Route Selection, Trunk Queuing automatically queues for the least costly route.
- **Call Waiting/Camp On and Callback**  
A user can Camp On or leave a Callback request for an extension.
- **Central Office Calls, Placing**

Other programmed options for outgoing calls can affect how a call is placed. Check or program these options as needed (ex: access, line/loop keys, etc.).

- **Programmable Function Keys**  
Function keys simplify Trunk Queuing operation.

- **Operation**

**To queue for a busy trunk:**

1. Try to access busy trunk.
2. Press Trunk Queuing/Camp On key (PGM 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 handset.

**To cancel a Trunk/Camp On request:**

1. At system phone, press a SPK key.  
OR  
At single line telephone, lift handset.
2. Dial 870.
3. At system phone, press SPK to hang up.  
OR  
At single line telephone, hang up.

## Trunk to Trunk Forwarding

### • Description

Trunk to trunk forwarding refers to the forwarding of incoming trunk calls off premise. The forward can be set for each trunk and each trunk can have its own destination number that the calls are forwarded to.

The feature can be set for trunk ports that are set as Normal (Type 0 in Program 22-02-01) and can be used for COI and ISDN trunk ports.

The call forward is controlled by service codes. The destination can also be changed by the user for each night mode (1-8).

When call forward is set all incoming calls to the trunk will be forwarded immediately.

The destination of the call forward is saved in an Abbreviated Dial bin, the bin is defined by Program 24-04-01. If a different call forward destination is required for each night mode then a different Abbreviated Dial bin must be defined for each night mode.

A call that is forwarded will be disconnected after timers 25-07-07 & 08.

The outgoing trunk route is defined by Program 21-03-01. A free trunk within this route will be used when a call is forwarded.

Trunk to trunk transfer must be enabled for each trunk by Program 14-01-13. If this item is not enabled the call forward can not be set.

### Conditions

- A. Analogue trunks must have disconnect clear enabled to ensure the lines are cleared when a call is disconnected.
- B. Trunk to trunk call forward can not be set from an analogue SLT.

### Default Setting

The service code to enable trunk to trunk forwarding is 833.

The service code to disable trunk to trunk forwarding is 834.

The service code to set/change the destination number is 835.

Abbreviated Dial bin 1999 is used as the call forward destination for all night modes.

The disconnect timers are set to give a warning tone after 30 seconds and then disconnect after another 15 seconds.

The outgoing trunk route is not defined.

Trunk to trunk transfer is disabled.

Disconnect clear is not set.

Trunk to trunk call forward setting is enabled in Class of Service.

### • Programming

**11-10-06 : Service Code 833**

**11-10-07 : Service Code 834**

**11-10-08 : Service Code 835**

**13-04-01 : Abbreviated Dial Name and Number**

**14-01-13 : Trunk to trunk Transfer**

**20-07-05 : Class of Service**

**21-03-01 : Trunk Route for Automatic Trunk to Trunk Routing**

**24-04-01 : Destination Abbreviated Dial Bin Number**

**25-07-07 & 08 : DISA Conversation Timers**

**• Related Features**

- Trunk to Trunk Transfer
- Call Forward Off Premise
- Call Forward to Abbreviated Dial Bin
- Department Group Call Forward

**• Operation**

3. To set the destination number for each trunk port.
4. Press SPK to go off hook.
5. Dial 835.
6. Dial the trunk port number (001 to 200).
7. Dial the night mode number (1 to 8).
8. Dial the off premise destination number (do not include any trunk access digits).
9. Press HOLD to set the destination for other night modes.
10. Press SPK to hang up.

Note that at step 5 the destination number will be saved to the Abbreviated Dial bin number specified by Program 24-04-01 for the chosen night mode.

If the same Abbreviated Dial bin is also used for other night modes then you do not need to set them separately. For example at default bin number 1999 is used for all night modes so when a night mode destination number is set for any night mode it will be used for all night modes.

**To set the call forward for incoming calls to a trunk:**

1. Press SPK to go off hook.
2. Dial trunk to trunk call forward service code - 833.
3. Dial the trunk port number (001 to 200).
4. Press SPK to hang up.
5. Repeat steps 1 to 4 for further trunk ports.

**To cancel the call forward for incoming calls to a trunk:**

1. Press SPK to go off hook.
2. Dial trunk to trunk call forward cancel service code - 834.
3. Dial the trunk port number (001 to 200).
4. Press SPK to hang up.
5. Repeat steps 1 to 4 for further trunk ports.

## Trunk to Trunk Transfer

### • Description

Trunk to trunk transfer refers to the connection of any two trunk ports together.

#### • **Hold and Transfer.**

An extension user places one trunk call on hold and then either makes an outgoing call, answers an incoming call or retrieves a call from hold and transfers the two trunk calls together.

#### • **Withdraw from Conference.**

An extension user sets up a conference call with two (or more) trunk calls and then withdraws from the conference, leaving the trunk callers connected.

#### • **Extension User sets Call Forward Off Premise.**

An incoming trunk call is routed to an extension with call forward off premise. The user can set call forward off premise by setting call forward to an Abbreviated Dial bin or by Service Code 713+6+Trunk Access Code+off premise number.

#### • **A Trunk is routed directly Off Premise.**

The Topaz is configured to route the incoming DDI trunk directly to an off premise number. This is set in Program 22-11-02 by entering the trunk access code followed by the off premise extension number as the target for the DDI number e.g. 901509643111.

### Conditions

A. Two outgoing analogue trunks can not be connected together, this is because a disconnect clear signal is not generated by the PSTN for calls originated by the PBX.

B. The following tables show the settings required to allow the various trunk to trunk options.

For each call type the programming required is listed, use the key below for each Program number.

A - Program 14-01-13 Trunk to Trunk Transfer

B - Program 14-02-12 Network Disconnect Clear Signal for Analogue trunks

Two trunks call to be transferred		Required Settings
Trunk Call Type	Trunk Call	
Incoming Analogue	Incoming Analogue	A and B
	Outgoing Analogue	A and B
	Outgoing ISDN	A
Outgoing Analogue	Outgoing Analogue	Not available
	Outgoing ISDN	A
ISDN	Any trunk call type	A

### Default Setting

Trunk to Trunk transfer is disabled, Program 14-01-13.

Network Disconnect signal is disabled, Program 14-02-12.

Off Premise call forward is disabled, Program 20-11-12.

Trunk to Trunk disconnect timer is set to 1800 Seconds, Program 24-02-07.

DISA conversation (Trunk to Trunk conversation) timer is set to 45 Seconds, Program 25-07-07 & 08.

Route option for DISA class 1 is disabled, Program 20-14-02.

Trunk route for all trunk ports is set to 0 (None), Program 21-03-01.

Trunk to Trunk Transfer restriction is set to 'not restricted' for all classes of service, Program 20-11-14.

### • Programming

#### Disconnect timers for trunk to trunk calls.

**Program 24-02-07**, Trunk to Trunk disconnect timer, will disconnect all call types. The default setting is 1800 Seconds (30 minutes).

**Program 25-07- items 07 & 08**, DISA disconnect timers, will disconnect calls routed automatically by the Aspire. This includes calls forwarded off premise and trunks routed directly off premise.

#### Trunk Routing for calls routed directly off premise.

**Program 20-14-02** - An ISDN DDI routed directly off premise must have the Route Option enabled for DISA Class 1.

**Program 21-03-01** - An ISDN DDI routed directly off premise will need the trunk route defining for each incoming ISDN trunk port.

#### Trunk to Trunk transfer restriction.

**Program 20-11-14** - Must be set to 0 (Not restricted) to allow an extension to perform Hold and Transfer of two trunk calls.

**14-01-13 : Trunk to Trunk Transfer**

**14-02-12 : Network Disconnect Signal**

**20-11-12 : Off Premise Call Forward**

**20-11-14 : Trunk to Trunk Transfer Restriction**

**20-14-02 : Route Option for DISA**

**21-13-01 : Trunk Outgoing Route Access**

**24-02-07:Trunk to Trunk Disconnect Timer**

**25-07-07 & 08 : DISA Conversation Timer**

### • Related Features

- Hold
- Transfer
- Call Forward to Abbreviated Dial
- Call Forward Off Premise
- Trunk to Trunk Forwarding

- **Operation**

Refer to each Related Feature

## Voice Mail

### • Description

The DSPDB daughter board with a CF-( )1 CompactFlash card fitted provides the option for the Voice Mail System capable of the following features:

- **Leaving a Message**

Voice Mail lets a system phone 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's mailbox. There is no need to call back later. A VRS announcement can periodically remind users that they have messages waiting to which they have not responded.

- **Personal Greeting/Mailbox**

Each extension user may be assigned a voice mail box with their own personalised greeting message. Up to 3 different greeting messages may be recorded for each mailbox and enabled one at a time when appropriate. Up to 300 mail boxes may be assigned to extensions, virtual extensions, department groups, etc.

- **Personal Automated Attendant**

An extension user can forward their calls to Voice Mail on an Immediate or Busy/No Answer condition. Once forwarded, calls to the extension connect to that extension's mailbox and receive the personalised greeting message. The caller can leave a message in the mailbox instead of calling back later.

- **Single Digit Dialling from Greeting Message**

During the voice mail greeting message, the caller may be given the option to be transferred externally (via a Common/Personal Abbreviated Dialling Bin) or internally (Extension, Department Group, Virtual Extension) by dialling a single digit, as directed by the personalised mail box greeting. Each mailbox has its own set of single digit dialling destinations. Music on Hold or Ringback Tone can be played while the caller is being transferred. Note that the single digit dialling options remain the same for each of the 3 greeting messages. Use different digits for each greeting if required.

- **Conversation Record**

While on a call, an extension user can have Voice Mail record the conversation. The system phone user may be required to press the Voice Mail Record key, or this process can be automatic. Once recorded, the Voice Mail 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.

- **Remote Message Notification**

Remote message notification may be sent to a user whenever a new message is left in their mailbox. The message notification facility may call an extension, virtual extension, department group or an external number (e.g. mobile phone).

- **Message Centre Keys**

When there is more than one person sharing the same system phone, each may have their own mailbox with individual voice mail message keys. Each person can then see if they have a new message.

- **Single Line Telephone Access**

Analogue telephone users can forward their call to voice mail on an Immediate or Busy/No Answer condition. When retrieving messages by dialling into the voice mail system, analogue telephone users will automatically login to their own mailbox, only needing to enter their password if set. Analogue telephones user receive indication of a new voice mail message via either a flashing Message Waiting Lamp (if fitted), VRS Announcement (if DSPDBU card is installed), Stutter Dial Tone, or Intermittent Ringing Tone.

- **Remote Voice Mail Access**

You may retrieve your voice mail messages or change your mailbox settings remotely by dialling in to your voice mail greeting message and dialling \* Password#. You then have full access to all voice mail service codes. Dial \* # to exit from your mailbox and enter an other mailbox number.

#### Conditions

- 300 mailboxes max
- 100 messages per mailbox max.
- 3 selectable personal greetings

Item Name	Voice Channels (VRS/VMS)	CompactFlash Card Size	Recording Duration
DSPDBU-B1	Playback = 16 Record = 8	None	None
+ CF-B1		512MB	15 Hours
+ CF-C1		256MB	7.5 Hours
+ CF-D1		128MB	4.5 Hours

#### Default Setting

Disabled.

- **Programming**

#### 11-12-39: Service code setup (for Service Access) - VRS Access

Define the service code a user should dial to access the Voice Mail

#### 13-01-01 :Abbreviated Dialling Auto Outgoing Call Mode

Consider this Program when single-digit dialling options are required with the destination assigned as an Abbreviated Dialling Bin. To allow both extension numbers and outside numbers to be stored in Personal Abbreviated Dialling bins, assign PRG 13-01-01 (Abbreviated Dialling Auto Out-going Call Mode) to 1 = Extension outgoing mode. In this mode, a trunk access code (normally 0) must precede all external numbers.

When PRG 13-01-01 is set to 0 = Trunk outgoing mode, all numbers stored in abbreviated dialling bins are assumed to be external numbers, hence a trunk access code is not required.  
of three greetings

**14-09-01: Conversation Recording destination for trunks**

Recording destination dial number - for DSPDB Voice Mail enter code in command 11-12-39

**14-09-02: Automatic Recording**

Defines whether to automatically record on call answer (0 = no, 1 = yes).

**14-09-03: Recording contents storing method**

0 = specifies by dialling, 1 = own mailbox. If set to 0 the voice mail will 'call back' and require a mailbox be entered to store recording.

**14-09-04: Automatic recording for outgoing call**

Defines whether outgoing calls are automatically recorded (0 = off, 1 = on).

**15-07-01: Programmable function keys**

Setup voice mail related function keys on your keyphone or DSS/DLS console to allow more efficient use of Voice Mail.

**Code 67 + mail box number** - Mail box key for direct access to mailbox

**Code 68 + 0** - Voice Mail service - skip message forward and replaying

**Code 68 + 1** - Voice Mail service - skip message backward and replaying

**Code 69 + 0** - Conversation record - Start and stop manual conversation record

**Code 69 +1** - Conversation record - Delete a recorded conversation and re-record

**Code 69 + 2** - Conversation record - Cancel call record and delete

**Code 70 + mail box number** - Auto Attendant setting, set call forward to DSPDB Voice Mail.

**Code 71 + mail box number** - Switch answering message, select one 15-12-01:Conversation recording destination for extensions

Recording destination dial number - for DSPDB Voice Mail enter code in 11-12-39. If both programs 14-09 and 15-12 define a destination, the destination in 15-12 will be used.

**15-12-02: Automatic recording for extensions**

Defines whether to automatically record trunk calls on answer (0 = no 1 = yes).

**15-12-03: Recording contents storing method**

0 = specifies by dialling, 1 = own mailbox. If set to 0 the voice mail will 'call back' and require a mailbox to be entered to store recording.

**15-12-04: Automatic recording for outgoing call**

Defines whether outgoing calls are automatically recorded.

**20-06-01: Class of Service for Extensions**

Assign a Class of Service (1-15) to extensions.

**20-07-13: Class of Service Options (Administrator Level) - VRS Record**

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to record, erase and listen to VRS messages.

**22-05-01: Incoming trunk ring group assignment**

Selects the ring group the trunk will ring on a per trunk per day/night mode basis. To select the DSPDB Voice Mail voice mail enter 101.

**24-02-02 :MOH or Ringback Tone on Transferred Calls**

If the caller dials a digit during the automated attendant message and a transferred has been initiated, specify whether they will hear either Ring Back Tone (RBT) or Music On Hold (MOH), until the call is either answered or terminated.

**40-01-01: Voice mail basic setup - Voice channels**

Number of channels of DSPDB from 0-16 dedicated to voice mail.

**40-01-02: Voice mail basic setup - Time stamp**

Defines whether messages are time stamped (1 = enabled, 0 = disabled).

**40-01-03: Voice mail basic setup - Conversation record for after transfer**

Defines whether to continue conversation record after transfer (1 = yes, 0 = no).

**40-01-04: Voice mail basic setup - Auto. attendant for non-existing extensions**

Defines whether mailboxes without a telephone automatically have auto attendant set (0 = disable, 1 = enable).

**40-01-05: Voice mail basic setup - Maintenance time**

Defines the time that the voice mail performs self maintenance of DSPDB compact flash daily. (00:00 - 23:59)

Note: the voice mail will close down whilst performing this action.

**40-01-06: Voice mail basic setup - Automatic message erase**

Defines the number of days a new message will remain in a mailbox before it is auto erased : 0 - 180 days.

**40-02-01: Mailbox setup - Mailbox number**

This is the actual mailbox number up to 8 digits, if the mailbox is for an extension it should match the extension number. Up to 300 mailboxes can be assigned

**40-02-02: Mailbox setup - Mailbox password**

This defines the password for a particular mailbox. If using this command it is set at 4 digits if a password less than this length is required it should be set by entering individual mailboxes. If no password is required, leave blank.

**40-02-03 :Mailbox Setup - Single Digit Dialling**

Specify whether single digit dialling options shall be available during the voice mail greeting message for each voice mailbox (0 = Disable, 1 = Enable). This facility may also be enabled/disabled by the mailbox user by dialling Voice Mail Service Code 68#.

**40-03-01: Message recording setup - voice mail recording time**

Sets the maximum recording time of answering service message recording (1 to 10 minutes).

**40-03-02: Message recording setup - Guidance message in case recording not allowed**

When the answering service cannot record messages, sets whether to transmit the answering message of the mailbox or the fixed guidance (0 = fixed guidance, 1 = Answering message of mailbox).

**40-03-03: Message recording setup - Automatic answering transmission for busy line**

Defines whether to automatically play the answering message for a busy extension (0 = disable, 1 = enable).

**40-04-01: Live recording setup - operation mode when mailbox is not defined**

Defines whether to record conversation in temporary box or callback extension to enter mailbox if mailbox is not defined in 14-09-01 or 15-12-01 (0 = temporary box, 1 = callback operation).

**40-04-02: Live recording setup - Temporary box number**

Sets the box number to keep the unknown destination messages, 0 to 300 as defined in 40-02.

**40-04-03: Live recording setup - Live recording display**

Enables or disables the system's ability to display the recording feature active (0 = disabled, 1 = enabled).

**40-05-01: Call information setup (for notification) - Maximum number of outgoing calls**

Sets the maximum number of calls the voice mail can make simultaneously from 0 to 16, if set to 0 voice mail will not notify.

**40-05-02: Call information setup (for notification) - Trunk route number**

Sets the trunk route number to use for outgoing calls from 0 to 100, if set to 0 voice mail will not notify.

**40-05-03: Call information setup (for notification) - ISDN calling number setting**

Sets the caller number when an outgoing call is made using an ISDN line. Maximum 16 digits 0-9, \* and #.

**40-05-04: Call information setup (for notification) - Calling interval (extension)**

Sets the calling interval when calling an extension, 1 to 30 minutes.

**40-05-05: Call information setup (for notification) - Calling interval (trunk)**

Sets the calling interval when calling a trunk line, 1 to 30 minutes.

**40-05-06: Call information setup (for notification) - Maximum calling count (extension)**

Sets the maximum number of times to call an extension, 1 to 100.

**40-05-07: Call information setup (for notification) - Maximum calling count (trunk)**

Sets the maximum number of times to call an extension, 1 to 100.

**40-06-01: Trunk answering Service Setting - Operation mode**

Defines on a per trunk per day/night mode whether to enable General Auto Attendant = answering and recording, 1 = not used.

**40-06-02: Trunk answering Service Setting - transmission guidance number**  
Sets the Guidance message number from 1 to 48 played on a per trunk per day/night mode basis. If set to 0 the fixed guidance is transmitted.

**40-06-03: Trunk answering Service Setting - Message box number**  
Sets the message box number used for storing messages for trunk answering. 0 to 300 as defined in 40-02.

**40-09-01: Voice Mail Multiple Address Group setup**  
Defines up to 10 broadcast groups containing up to 100 mailboxes as defined in 40-02.

**40-13-01 :Mailbox Setup - Single Digit Dialling Destination**  
For each mailbox requiring Single Digit Dialling options, specify the destination for each digit to be dialled by the caller.

Specify per Mailbox number (001~300), per digit dialled (0~9):

- Extension Number (up to 4 digits),
- Department Group Pilot Number (up to 4 digits),
- Voice Mail Master Number (up to 4 digits), or
- Common/Personal Abbreviated Dialling Bin Number (enter 4 digits).

By default, Mailbox numbers 001~024 are assigned as follows:

- Dial 1 = Personal Abbreviated Dialling Bin 918
- Dial 2 = Personal Abbreviated Dialling Bin 919
- Dial 0, 3~9 = Not Specified

#### • Related Features

- **Direct Inward Dialling (DID) or Direct Dial In (DDI)**  
DID or DDI trunks can be directed at the DSPDB Voice Mail
- **Direct Inward Line (DIL)**  
DIL trunks can be directed at the DSPDB Voice Mail
- **Programmable Function Keys**  
Key telephones can have function keys enabled for ease of voice mail functionality
- **Date & Time setup**  
Sets the date and time transmitted on guidance
- **Night Service**  
Sets the operation mode for the system

#### • Operation

##### **Voice Mail Function Keys**

We recommend setting up Voice Mail related function keys on your Keyphone or DSS console to allow you to use Voice Mail more efficiently. (See also Programmable Function Keys.)

##### **Programming a Voice Mail Key:**

1. Press **SPK** key.
2. Dial **851**.
3. Press the key you want to program.
4. Enter the 2-digit function number, followed by any additional information required (see

table below).  
 5. Press **HOLD**.

<b>67 + Mail Box</b>	Mail Box Key	- for direct access to mailbox
<b>68 + 0</b>	Voice Mail Service	- skip message forward and replaying
<b>68 + 1</b>	Voice Mail Service	- skip message backward and replaying
<b>69 + 0</b>	Conversation Record	- Start/stop manual conversation record
<b>69 + 1</b>	Conversation Record	- Delete conversation and re-record
<b>69 + 2</b>	Conversation Record	- Cancel call record and delete
<b>70 + Mailbox</b>	Automated Attendant	- set call forward to Voice Mail.
<b>71 + Mailbox</b>	Greeting Message	- select one of three greetings.

**To check the function of a Programmable Function Key:**

**System Phase Only**

1. Press **CHECK**.
2. Press the programmed key.  
*The programmed function displays.*

**Voice Mail Service Codes**

In order to use the various services provided by voice mail, operation codes must be input.

There are two types of operation codes:

1. Service code: following the voice guidance, a code to select the service.
2. Option code: a number to select optional settings or operations of a service.

Function		Service Code	Optional Function	Option Code
Help		0#		
Play Message		1#	Replay Message	1#
			Pause/Restart the Playback	4#
			Erase Message and Play Next Message	7#
			Save Message and Play Next Message	9#
			Copy the Message	2#
			Skip Playback Forward 8 seconds	3#
			Skip Playback Backward 8 seconds	6#
			Broadcast the Message	28#
			Exit	*#
Erase All Messages		7#	Confirm Erase	0#
End Recording of Message		9#		
Broadcast Message to a Multiple Address Group		2#		
Greeting Message 1	Play	31#		
	Record	32#		
	Erase	37#		
Greeting Message 2	Play	35#		
	Record	33#		
	Erase	38#		
Greeting Message 3	Play	36#		
	Record	34#		
	Erase	39#		
Message Notification		61#	Notify to an Extension	1#
			Notify to an External Number	2#
			Cancel Notification	0#
			Exit	*#
Automated Attendant, All Calls		62#		
Play Messages "First In First Out"		63#		

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Play Messages "Last In First Out"	64#	
Password Setting	65#	
Message Registration Control Setting	66#	
Automated Attendant, Busy/NA	67#	
One-Digit Dialling Enable/ Disable	68#	
Exit	*#	

### **Mailbox Password**

You can set a four digit password for your mailbox.

#### **Setting Your Password: System Phone**

1. Press Voice Mail Access key (PGM 15-07 or SC 851:67 + Mailbox No.).
2. Dial service code **65#**.
3. Dial new four digit password.
4. Dial **#**.
5. Your password will be spoken back to you.
6. Dial **0#** to confirm (or **1#** to cancel).
7. Hang up.

#### **Single Line Telephone**

1. Press **SPK** or lift handset.
2. Dial **884** (default).
3. Enter mailbox number (and password).
4. Dial service code **65#**.
5. Dial new four digit password.
6. Dial **#**.
7. Your password will be spoken back to you.
8. Dial **0#** to confirm (or **1#** to cancel).
9. Hang up.

#### **Deleting Your Password: System Phone**

1. Press Voice Mail Access key (PGM 15-07 or SC 851:67 + Mailbox No.).
2. Dial service code **65#**.
3. Dial **9999**.
4. Dial **#**.
5. Dial **0#** to confirm (or **1#** to cancel).
6. Hang up.

**Single Line Telephone**

1. Press **SPK** or lift handset.
2. Dial **884** (default).
3. Enter mailbox number (and password).
4. Dial service code **65#**.
5. Dial **9999**.
6. Dial **#**.
7. Dial **0#** to confirm (or **1#** to cancel).
8. Hang up.

**Voice Mail Messages****Listening to Messages:****System Phone**

1. Press Voice Mail Access key (PGM 15-07 or SC 851:67 + Mailbox No.).
2. Messages are automatically played back.

**Single Line Telephone**

1. Press **SPK** key or lift handset.
2. Dial **884** (default).
3. Enter mailbox number (and password).
4. Dial service code **1#**.
5. Listen to messages.

**Recording a Message to Send to a Mailbox:**

1. Press **SPK** key or lift handset.
2. Dial **884** (default).
3. Dial **\***.
4. Dial the mailbox number you wish to send a message to.
5. Dial **#**.
6. Record message.
7. Hang up.

**Recording a Message to Send to a Broadcast List:**

It is possible to send a message to up to 100 mailboxes simultaneously. This feature is set up at installation and can create up to 10 Broadcast lists containing up to 100 mailboxes in each using programming command 40-09-01.

**System Phone**

1. Press Voice Mail Access key (PGM 15-07 or SC 851:67 + Mailbox No.).
2. Dial service code **2#**.
3. Dial abbreviated broadcast list number.
4. Record Message.
5. Hang up.

**Single Line Telephone**

1. Press **SPK** key or lift handset.
2. Dial **884** (default).
3. Enter mailbox number (and password).
4. Dial service code **2#**.
5. Dial abbreviated broadcast list number (0-9).
6. Record Message.
7. Hang up.

**Transferring a Message to a Broadcast List:**

1. After the message playback has ended,
2. Dial **28#**.
3. Dial abbreviated broadcast list number (0-9).
4. Dial **#**.
5. Dial **0#** to accept.
6. Hang up.

**Voice Mail Access from Outside Line:**

1. Dial in to listen to your personal greeting.
2. After your greeting has ended, two short beeps will be heard.
3. Enter your password (if set).
4. Dial **#**.
5. You now have access to the service code options for your mailbox, (e.g. dial **1#** to listen to your messages).

**Note:** Mailbox password must be set before external access is allowed

**Personal Answering Machine Emulation**

(External Voice Mail Integration Only - Not available with DSPDB Voice Mail)

**System Phone**

1. Press the Personal Answering Machine Emulation key (SC 851:16).
2. Dial **1** to Set, or **0** to Cancel.
3. Dial Call Forwarding type:  
**2** = All calls  
**3** = Outside calls only  
**4** = Intercom calls only
4. Press **SPK** to hang up.

**Single Line Telephone**

1. Press **SPK** key or lift handset.
2. Dial **888** (Call Forward to Station).
3. Dial **1** to Set, or **0** to Cancel.
4. Dial Call Forwarding type:
5. **2** = All calls  
**3** = Outside calls only

4 = Intercom calls only

6. Hang up.

### **Personal Automated Attendant**

There are 3 greeting messages available for each mailbox. Service codes are available to record, play or erase each individual message.

### **Setting Personal Automated Attendant Mode**

#### ***Multiline Telephone:***

1. Press Automated Attendant key (SC 851:70) repeatedly until the desired call forward setting is made - All, No Answer, Busy, Busy/No Answer, Cancel.  
-OR-
1. Lift Handset and dial voice mail access code 884 (default).
2. Enter mailbox number and password (if set).
3. Dial the required service code:  
**67#**, to toggle Forward Busy/No Answer on and off (default: off).  
**62#**, to toggle Forward All on and off (default: off).
4. Hang up.

#### ***Single Line Telephone:***

1. Lift Handset and dial voice mail access code 884 (default).
2. Enter password (if set). Mailbox number is not required.
3. Dial the required service code:  
**67#**, to toggle Forward Busy/No Answer on and off (default: off).  
**62#**, to toggle Forward All on and off (default: off).
4. Hang up.

### **Enabling Single Digit Dialling During Voice Mail Message**

#### ***Multiline Telephone:***

1. Press Voice Mail Access Key (SC 851:67).
2. Enter password (if set).
3. Dial service code **68#** to toggle facility on and off (default: off).
4. Hang up.  
-OR-
1. Lift Handset and dial voice mail access code **884** (default).
2. Enter mailbox number and password (if set).
3. Dial service code **68#** to toggle facility on and off (default: off).
4. Hang up.

#### ***Single Line Telephone:***

1. Lift Handset and dial voice mail access code **884** (default).
2. Enter password (if set). Mailbox number is not required.
3. Dial service code **68#** to toggle facility on and off (default: off).

4. Hang up.

### Storing Single Digit Dialling Destinations

By default, destinations for digits 1 and 2 are specified by storing them in Personal Abbreviated Dialling bins 918 and 919 respectively.

#### ***Multiline Telephone:***

1. Press **CALL** key.
2. Dial **853**.
3. Dial the Abbreviated Dialling bin number (default: dial 1= 918, dial 2 = 919).
4. Dial the telephone number you want to store:
  - Extension number (up to 4 digits), or
  - Outside number (trunk access code, e.g. 0, followed by telephone number).
5. Press **HOLD**.
6. Enter the associated name, using the dial pad characters.
7. Press **HOLD**.
8. Press **SPK** to hang up.

#### ***Single Line Telephone:***

SLT's cannot store abbreviated dialling numbers. Use WebPro/PCPro to store Personal Abbreviated Dialling numbers for SLT ports. Or, specify in system programming the use of Common Abbreviated Dialling bins (in PRG 40-13-01), then enter the required numbers using an MLT.

#### **To Record a Greeting Message:**

##### **System Phone**

1. Press Voice Mail Access key (SC 851:67)
2. Dial service code (see table below)
3. Record your message, after the beep.
4. Dial **9#** to end the recording.
5. Hang up.

##### **Single Line Telephone**

1. Lift Handset.
2. Dial **884** (default).
3. Enter password.
4. Dial service code (see table below).
5. Record your message, after the beep.
6. Dial **9#** to end the recording.
7. Hang up.

<b>32#</b> Record Message 1
<b>33#</b> Record Message 2
<b>34#</b> Record Message 3

**To Listen to a Greeting Message:****System Phone**

1. Press Voice Mail Access key (SC 851:67).
2. Dial service code (see table below).
3. Listen to the message and hang up.

**Single Line Telephone**

1. Lift Handset.
2. Dial **884** (default).
3. Enter password.
4. Dial service code (see table below).
5. Listen to the message and hang up.

<b>31#</b> Play Message 1
<b>35#</b> Play Message 2
<b>36#</b> Play Message 3

**To Erase a Greeting Message:****System Phone**

1. Press Voice Mail Access key (SC 851:67).
2. Dial service code (see table below).
3. Dial **0#** to erase message.

**Single Line Telephone**

1. Lift Handset.
2. Dial **884** (default).
3. Enter password.
4. Dial service code (see table below).
5. Dial **0#** to erase message.

<b>37#</b> Erase Message 1
<b>38#</b> Erase Message 2
<b>39#</b> Erase Message 3

**Selecting a Greeting Message to Play:****System Phone**

1. Press the Change Attendant Message key (code:71) repeatedly to toggle between the three answering messages. The lamp indicates which message is selected.

Message 1 = Lamp extinguished
Message 2 = lamp steady
Message 3 = lamp flashing.

*A Single Line Telephone, or a System Phone without a 'Change Attendant Message' key, cannot change the Greeting Message.*

*If "Busy Line Attendant Feature" has been set at installation, answering message 3 will play when the extension is busy, therefore messages 1 & 2 can only be used normal answering for Automated Attendant.*

### **Message Notification**

It is possible for the voice mail system to automatically notify you when a message has been left in your mailbox. The message notification feature can be set to call an extension or an external number.

#### **Setting Message Notification:**

##### **System Phone**

1. Press Voice Mail Access key (SC 851:67).
2. Dial service code **61#**.
3. Dial **1#** for an extension call, **2#** for an outside call, or **0#** to cancel.
4. If either **1#** or **2#** is dialled, enter telephone number followed by **#** (it is not necessary to enter a trunk access code).
5. The dialled number will be read out.
6. Dial **0#** to confirm (or **1#** to cancel).
7. Hang up.

##### **Single Line Telephone**

1. Press **SPK** key or lift handset.
2. Dial **884** (default).
3. Enter mailbox number (and password).
4. Dial service code **61#**.
5. Dial **1#** for an extension call, **2#** for an outside call, or **0#** to cancel.
6. If either **1#** or **2#** is dialled, enter telephone number followed by **#** (it is not necessary to enter a trunk access code).
7. The dialled number will be read out.
8. Dial **0#** to confirm (or **1#** to cancel).
9. Hang up.

#### **Cancelling Message Notification:**

##### **System Phone**

1. Press Voice Mail Access key (SC 851:67).
2. Dial service code **61#**.
3. Dial **0#** to cancel.
4. Dial **0#** to confirm (or **1#** to cancel).
5. Hang up.

##### **Single Line Telephone**

1. Press **SPK** key or lift handset.
2. Dial **884** (default).
3. Enter mailbox number (and password).

4. Dial service code **61#**.
5. Dial **0#** to cancel.
6. Dial **0#** to confirm (or **1#** to cancel).
7. Hang up.

### **Conversation Recording**

Conversation record is set up at install with the option of either Automatic or manual recording. Automatic conversation record automatically records the call upon answer whereas manual conversation recording requires the pressing of a function key to evoke the service.

To perform manual conversation record a key must be programmed on the keyphone. The Conversation Record key (code 69+0) is programmed via command 15-07-01 or service code 851.

Conversation recording can also be configured at installation via commands 14-09 and 15-12 to either record to your mailbox or to define the mailbox after the call has finished via a 'callback'. If the callback option is specified the voice mail will call you back after the conversation has ended and you must specify a mailbox for storage.

### **AUTOMATIC RECORDING**

Automatic Recording starts automatically when the call is answered.

### **MANUAL RECORDING**

#### **To Start Manual Recording:**

1. Press the Manual Conversation Recording Key at any time during the conversation.

#### **Storing a Manual Recording Message:**

1. If prompted at end of call, enter the mailbox number where to store message.  
-OR-  
If Callback Mode is set, wait for the Voice Mail system to ring back after call has ended, then enter the mailbox number where to store the message, and dial #.

*If you do not answer the callback or you do not specify a mailbox number, the recorded conversation will be deleted.*

### **Programming a Manual Conversation**

#### **Recording Key:**

1. Press **SPK** key.
2. Dial **851**.
3. Press the key you want to program.
4. Dial service code **69**.
5. Dial **0**.
6. Press **HOLD**.

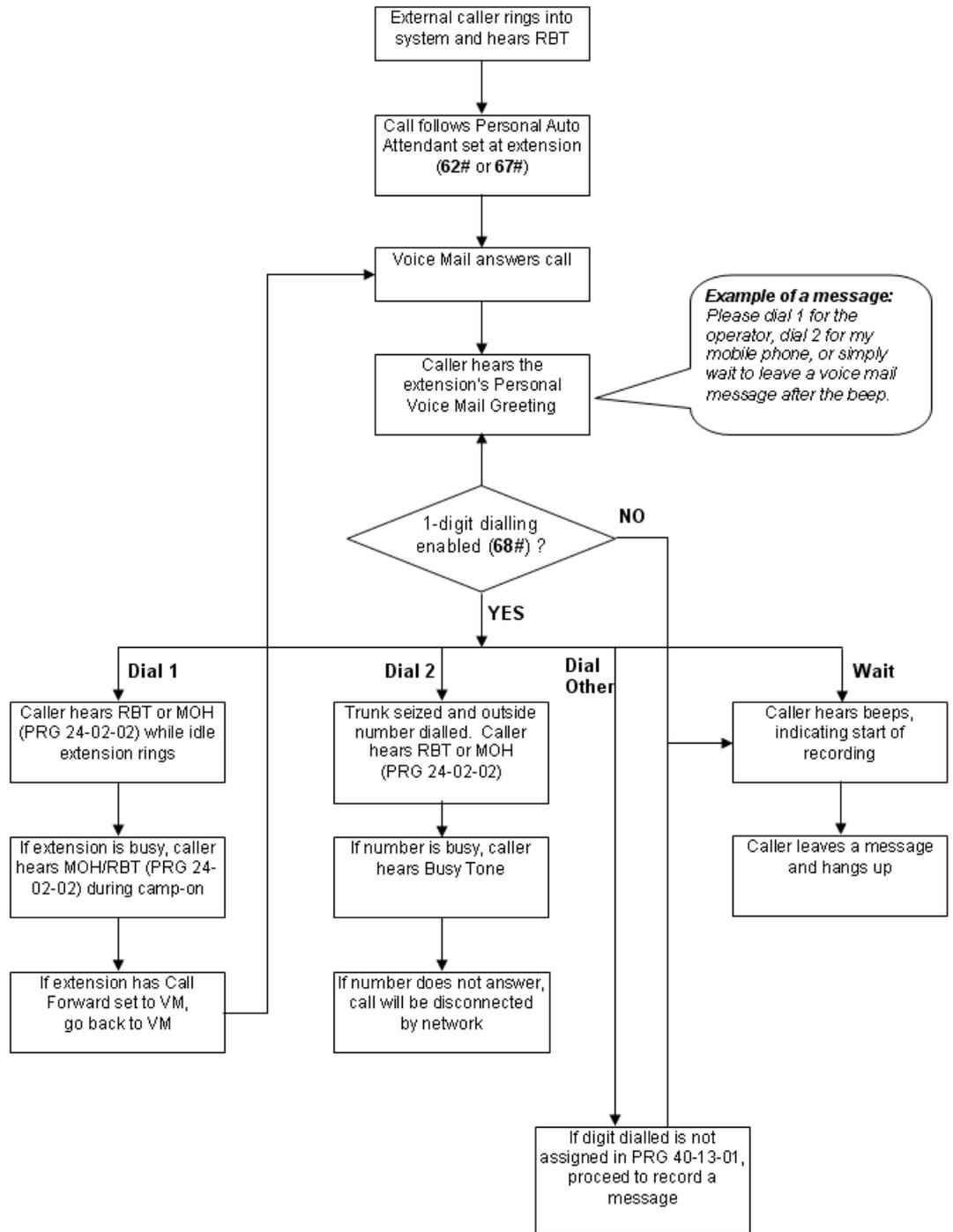
**Listening to a Recorded Conversation:****System Phone**

1. Press Voice Mail Access key (SC 851:67).
2. Messages are automatically played back.

**Single Line Telephone**

1. Press **SPK** key or lift handset.
2. Dial **884** (default).
3. Enter mailbox number (and password).
4. Dial service code **1#**.
5. Listen to messages.

**Personal Automated Attendant (Voice Mail) Operation**



## Voice Mail Integration

### • Description

The Voice Mail Integration feature provides the necessary interface between the Xen Topaz system and a locally-provided Voice Mail system. When a station is forwarded to the Voice Mail system and a station user calls that forwarded station, the call goes directly to the individual personal mail box. If the Voice Mail system has the ability, a message can be sent to the station indicating a Voice Mail Message was received. This feature supports analogue external voice mail systems only.

An externally integrated Voice Mail system 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's 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's 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 system phone 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's mailbox. There is no need to call back later. A Flashing Message Waiting Lamp and unique Dial Tone remind users that they have messages waiting to which they have not responded.

#### • Transferring to Voice Mail

By using Transfer to Voice Mail, a system phone extension user can Transfer a call to the user's own or a co-worker's mailbox. After the Transfer goes through, the caller can leave a message in the mailbox.

#### • Personal Answering Machine Emulation

A system phone user can have their idle extension emulate a personal answering machine. This lets Voice Mail screen their calls, just like their answering machine at home. If activated, the extension's incoming calls route to the user's subscriber mailbox. Once the mailbox answers, the user hears two alert tones followed by the caller's incoming message. The system phone user can then:

- Let the call go through to their mailbox
- Intercept the call before it goes to their mailbox (by pressing the CALL key on a system phone)
- Reject 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 any type of overflow, the outside calls ring Voice Mail until a port becomes available or the outside caller hangs up.

- **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 will be placed in queue. As the voice mail ports become available, the calls will be 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 will be handled as though there were no voice mail queuing feature enabled. The calls will either access voice mail if a port is available or they will receive a busy signal.

**Conditions**

- A. Ring Group calls do not follow extension call forwarding to voice mail.
- B. Some Voice Mail systems cannot set a message waiting indication.
- C. This facility allows the integration of various third-party voice mail systems. You may find that a particular system does not operate exactly as described here. Refer to your voice mail system instruction manual for further details.
- D. Voice Mail is compatible with System Phone and Single Line Telephones (SLTs) capable of generating DTMF (PB) dialling. If you intend to access the Voice Mail from outside the office, ensure the telephone you are using can also generate DTMF (PB) dialling.

**Default Setting**

Disabled.

- **Programming**

**10-09-01 :DTMF and Dial Tone Circuit Setup**

Assign at least one circuit for DTMF reception, of either type 0=Common Use (default) or 1=Extension Only. Use the following as a guide when allocating DTMF receivers:

- In light traffic sites, allocate one DTMF receiver for every 10 devices that use them.
- In heavy traffic sites, allocate one DTMF receiver for every five devices that use them.

**11-07-01 :Department Group Pilot Numbers**

Assign a Department Group pilot number for the Voice Mail (8 digits max). The extensions are assigned to the group in Program 16-02-01.

**15-03-03 :Single Line Telephone Basic Data Setup - Terminal Type**

Set all analogue ports used for Voice Mail as Type 1 : Special.

**15-07-01 :Programming Function Keys**

Assign a Voice Mail key to an extension. You must enter the Voice Mail key code (SC 851: code 77) followed by an extension number:

- Your own extension number if you are setting up your own Voice Mail key.
- A virtual extension number if you are setting up a Message Center key for a virtual extension.
- A co-worker's extension number if you are setting up a Message Center key for an installed extension.
- An uninstalled extension's number if you are setting up a Message Center key for an uninstalled extension.

Optionally, you may assign a Personal Answering Machine Emulation key (SC851: code 16).

**16-02-01 :Department Group Assignment for Extensions**

Put all the Voice Mail extensions in an extension group. This allows DILs to Voice Mail to ring other Voice Mail extensions when the DIL's assigned port is busy. Assign up to Voice Mail extensions to an Extension (Department) Group. Only one Voice Mail group is allowed per system. Assign the Department Group Pilot Number in Program 11-07-01.

**20-02-09 :System Options for System Telephones - Disconnect Supervision**

Enable (1) disconnect supervision for the system.

**24-02-02 :System Options for Transfer - MOH or Ringback on Transferred Calls**

Use this option to enable (0) or disable (1) MOH on Transfer. If enabled (0), a transferred caller hears Music on Hold while their call rings the destination extension. If disabled (1), a transferred caller hears ringback while their call rings the destination extension. For this option to work with voice mail, the transferred call must be an unscreened transfer.

**20-06-01 :Class of Service for Extensions**

Assign a Class of Service (1-15) to an extension.

**20-13-13 :Class of Service Options (Supplementary Service) - Continued Dialling**

Enable Continued Dialling (1) for all extensions that will dial Voice Mail features.

**22-01-04 :System Options for Incoming Calls - DIL No Answer Recall Time**

If setting up Delayed Voice Mail Overflow, enter a timer value greater than 0. Overflow will occur after this interval (provided the other related programming is correct). If setting up Immediate Voice Mail Overflow, enter 0.

**22-02-01 :Incoming Call Trunk Setup**

Assign Service Type 4 to each trunk you want to ring into Voice Mail as a Direct Inward Line (DIL).

**22-04-01 :Incoming Extension Ring Group Assignment**

To enable Voice Mail Overflow, assign selected extensions to a Ring Group that will ring for unanswered DILs to Voice Mail ports. In Program 22-06, enter 1 to enable overflow ringing.

**22-07-01 :DIL Assignment**

Assign a Voice Mail port as the DIL destination for each trunk that should directly ring into Voice Mail. If all Voice Mail ports are in the same unique Extension (Department) Group (see Program 16-02 below), the DIL will ring another Voice Mail port if its assigned port is busy.

**22-08-01 :DIL/IRG No Answer Destination**

For Voice Mail Overflow, enter the Ring Group that unanswered DILs to Voice Mail will ring after the DIL Call Waiting time (Program 22-01-04).

**24-02-03 :System Options for Transfer - Delayed Call Forwarding Time**

Set the interval a transferred call waits at a forwarded extension before routing to the called extension's mailbox.

**40-03-01 :Message Recording Setup - Voice Mail Recording Time**

Set the amount of time the voice mail can record a message (1-10 minutes).

**40-03-02 :Message Recording Setup - Guidance Message**

Select a guidance message in case recording is not allowed (0=fixed, 1=answer message mailbox).

**40-03-03 :Message Recording Setup - Response Message**

Determine if a response message is automatically sent out when busy (0=disable, 1=enable).

**45-01-01 :Voice Mail Integration Options, Voice Mail Department Group Number**

Assign which Extension (Department) Group number (0-64) is to be assigned as the voice mail group. An entry of '0' means there is no voice mail installed.

**45-01-02 :Voice Mail Integration Options, Voice Mail Master Name**

Enter the Voice Mail master name up to 12 characters.

**45-01-03 :Voice Mail Integration Options, Voice Mail Screening**

Enable (1) or disable (0) the system's ability to process the Call Screening commands (1 + extension number) sent from the Voice Mail. You should normally enable this option to allow for Voice Mail Call Screening. Disable this option if your system has been modified so that extensions begin with the digit 1 (e.g., 101, 102, etc.). Also see the Flexible System Numbering feature.

**45-01-04 :Voice Mail Integration Options, Park and Page**

Enable (1) or disable (0) the system's ability to process the Voice Mail's Park and Page (\*) commands. You should normally enable this option.

**45-01-05 :Voice Mail Integration Options, Message Wait**

Enable (1) or disable (0) the system's ability to process the Voice Mail's Message Wait (#) commands. You should normally enable this option. If enabled, be sure that the programmed Message Notification strings don't contain the code 805 for trunk access.

**Voice Mail Integration Strings**

#CCC	Direct logon <ul style="list-style-type: none"> <li>• CCC is extension number (2-3 digits).</li> </ul>
***1CCC	Pilot group logon <ul style="list-style-type: none"> <li>• CCC is extension number (2-3 digits).</li> </ul>
***2YYYYZZZ	Transferred call <ul style="list-style-type: none"> <li>• YYY is source [trunk TTT (3 digits) or extension (2-3 digits)].</li> <li>• ZZZ is extension [extension number, virtual extension or station group pilot number (2-3 digits)].</li> <li>• Both YYY and ZZZ must be sent.</li> </ul>
***3YYYYZZZ	Forwarded call "YYY is source [trunk TTT (3 digits) or extension (2-3 digits)] "ZZZ is extension [extension number, virtual extension or station group pilot number (2-3 digits)]. "Both YYY and ZZZ must be sent.
***4YYYYZZZ	Busy call <ul style="list-style-type: none"> <li>• YYY is source [trunk TTT (3 digits) or extension (2-3 digits)]</li> <li>• ZZZ is extension [extension number, virtual extension or station group pilot number (2-3 digits)].</li> <li>• Both YYY and ZZZ must be sent.</li> </ul>
***5YYYYZZZ	Ring No Answer call <ul style="list-style-type: none"> <li>• YYY is source [trunk TTT (3 digits) or extension (2-3 digits)]</li> <li>• ZZZ is extension [extension number, virtual extension or Station group pilot number (2-3 digits)].</li> <li>• Both YYY and ZZZ must be sent.</li> </ul>
***6TTT	External call directly to Voice Mail or via a Ring Group.
***7	Reset MWI sent on Topaz.
***8CCC	Conversation record <ul style="list-style-type: none"> <li>• CCC is extension number (2-3 digits).</li> </ul>
***9	Cleardown string (sent on hangup).

**Example: Active Voice Lingo Voice Mail System**

In this example, the Active Voice Lingo voice mail system is connected to the Topaz hybrid ports as an analogue device. The analogue ports connected to the Lingo need to be assign to a department group in Topaz system programming. This department group requires a Pilot number, which will provide the port hunting. Basic Program settings will include the following:

- 11-07 Specify the Pilot number for Department Group.
- 15-03-03 For the analogue ports connected to the Lingo, set to "1:Special".
- 16-02 Assign the analogue ports connected to the Lingo into a Department Group.
- 45-01 Enter the Department Group number that is being used for External Voice Mail.

For the Lingo system to integrate with Topaz, a switch file must be invoked within the Lingo. The switch file is resident in Lingo and can be invoked be typing INT=TOPAZ at the system integration line (System Integration Page 1, Line 2). If the Lingo system does not include the TOPAZ integration code, this may be entered manually, by typing the following lines into the Lingo file AVANALOG.AVD.

**[TOPAZ]**

```

Name=XEN TOPAZ
MaxDelayFirstDigit=3
MaxDelayNextDigit=1
MinExtSize=3
DefaultExtSize=3
Data1=***1I      DIRECT
Data2=#I         DIRECT
Data3=***2XXXF   NOANSWER
Data4=***3XXXF   NOANSWER
Data5=***4XXXF   NOANSWER
Data6=***6XXXF   NOANSWER
Data7=***5XXXF   NOANSWER
Data8=***6XXX     OPENING
Data9=***9       HANGUP

```

You may also require a new DEFAULT.SWS file for the Lingo to support the Topaz system. Contact your NEC or Active Voice representative for details on how this may be updated.

- **Related Features**

- **Call Forwarding, Fixed**

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 every user.

- **Direct Inward Line**

To have the Voice Mail Automated Attendant answer a trunk, program the trunk as a DIL to a Voice Mail port.

- **Message Waiting**

Message Waiting functions normally with Voice Mail installed.

- **One-Touch Calling**

An extension can have a One-Touch Key for the Voice Mail Master Number.

- **Programmable Function Keys**

Function keys simplify calling the Voice Mail system.

- **Ring Groups**

Ring Group calls do not follow extension call forwarding to voice mail.

- **Operation**

### CALLING YOUR MAILBOX

#### To call your mailbox:

*With a system phone, your Message Center keys flash red when they have messages waiting. If you don't have a Voice Mail key, your MW LED flashes instead.*

#### System Phone

1. Press your Voice Mail key (PGM 15-07 or SC 851: 77).

OR

Press the CALL key and dial the Voice Mail Master 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 phone.*

OR

Press the CALL key and dial 717.

2. If requested by Voice Mail, enter your security code.

*Ask your Voice Mail system administrator for your security code.*

*Normally, your MW LED goes out (if applicable). If it continues to flash, you have unanswered "Message Waiting" requests or a new "General Message". Go to "To check your messages" below.*

### **Single Line Telephone**

1. Lift handset and dial 717.

*If you are at a co-worker's phone, you can dial the Voice Mail master number and your mailbox number instead. You can also use this procedure from your own phone to call a co-worker's mailbox.*

2. If requested by Voice Mail, enter your security code.

### **LEAVING A MESSAGE (System Phone 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 Voice Mail key (PGM 15-07 or SC 851: code 77)

*The Voice Mail system will prompt you to leave a message.*

### **FORWARDING CALLS TO YOUR MAILBOX**

#### **To activate or cancel Call Forwarding:**

1. Press the CALL key (or lift handset) and dial 888.  
OR  
Press your Call Forward (Station) key (PGM 15-07 or SC 851: code 16).
2. Dial Call Forwarding condition:  
2 = Busy or not answered  
4 = Immediate  
6 = Not answered  
0 = Cancel
3. Dial Voice Mail master number or press Voice Mail key.
4. Dial Call Forwarding type:  
2 = All calls  
3 = Outside calls only  
4 = Intercom calls only
5. Press SPK to hang up (or go on-hook) if you dialed 888 in step 1.

*Your DND or Call Forwarding (Station) key flashes when Call Forwarding is activated.*

### **TRANSFERRING CALLS TO A MAILBOX**

#### **To Transfer your active call to a mailbox:**

##### **System Phone**

1. Press HOLD.
2. Press Voice Mail key (PGM 15-07 or SC 851: code 77).
3. 3. Dial number of mailbox to receive Transfer.

*This number can be your mailbox number or a co-worker's mailbox number.*

OR

Press DSS Console or One Touch key for extension who's mailbox will receive 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 will prompt your caller to leave a message in the mailbox you selected.*

OR

1. Dial extension number or press a DSS Console key for extension who's mailbox will receive the Transfer.
2. Press Voice Mail key (PGM 15-07 or SC 851: code 77).
3. Hang up.

*Voice Mail will prompt your caller to leave a message in the mailbox you selected.*

### Single Line Telephone

## 1. Press Hookflash.

## 2. 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.*

## 3. Hang up.

### PERSONAL ANSWERING MACHINE EMULATION (System Phone Only)

#### To set or cancel Personal Answering Machine Emulation:

## 1. Press idle CALL key (or lift handset) and dial 888.

OR

Press your Call Forward (Station) key (PGM 15-07 or SC 851: code 16).

## 2. Dial 1 and the Call Forwarding type:

2 = All calls

3 = Outside calls only

4 = Intercom calls only

## 3. Press SPK to hang up (or hang up at DSL/SLT) if you dialed 888 in step 1.

*Your DND or Call Forwarding (Station) key flashes when Call Forwarding is activated.*

#### 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.

## 2. Press the flashing CALL key 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

## 1. Lift the handset.

## 2. Press a line key or CALL key for a new call.

*The message is recorded in your mailbox.*

OR

## 1. (If you have Automatic Handsfree) Press a line key or CALL key for a new call.

*The message is recorded in your mailbox.*

OR

1. Press SPK to cut off the message broadcast and send the call to your mailbox.

*Voice Mail records the entire message in your mailbox.*

### **CHECKING YOUR MESSAGES (System Phone Only)**

#### **To check your messages:**

1. Press CHECK
2. Dial 841.

*You can have any combination of the message types in the table below on your phone.*

3. Press VOL ▲ or VOL ▼ to scroll through your display.
4. When you find the message you want to answer, press CALL. You'll either:
  - Go to your Voice Mail mailbox.
  - Listen to the new General Message.
  - Automatically call the extension that left you a Message Waiting.

**Note:** If you have multiple new messages in your voice mailbox and you exit the mailbox without listening to them all, the display on your system phone will show "NO MESSAGES", however the Message Waiting lamp will remain lit to indicate that there are still unread messages in your mailbox.

## Voice Response System (VRS)

### • Description

The DSPDBU daughter board provides the option for Voice Response System (VRS) which gives the system voice recording and playback capability. This enhances the system with:

- **VRS Messages** - are 48 system messages used for the General Message, Automated Attendant greetings and the Preamble message
- **General Message** - provides a pre-recorded message to which any user can listen
- **Personal Greeting** - lets an extension user record a message and forward their calls. Callers to the extension hear the recorded message and are then redirected.
- **Park and Page** - parks a call at an extension and automatically pages the user to pick it up
- **Automated Attendant (Operator Assistance)** - answers incoming calls, plays a greeting to the caller and then lets the caller directly dial a system extension
- **Voice Prompting Messages** - plays call and feature status messages to users
- **Preamble Message** - alerts callers of the cost and features of the “pay-per-call” service they have called. May also be used as an auto-answer with greeting application
- **Time, Date and Station Number Check** - lets a system phone extension user quickly hear a recording for the time, date, or the extension’s number.

### VRS Messages

The VRS allows you to record up to 48 VRS messages. You allocate these messages for Automated Attendant greetings, the General Message and the Preamble message. The maximum duration of any one VRS message is not programmable. VRS messages are stored permanently in the event of a power failure.

Any on-premise extension, DISA or DID caller can listen, record and erase VRS Messages (unless restricted in programming). DISA and DID callers use the same procedures as on-premise users, except that they must additionally enter a VRS password.

### General Message

A General Message is a pre-recorded 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 system phone and press 4 (for General Message). You can restrict the ability to record the General Message in an extension’s Class of Service. This allows you to give recording capability to the System Administrator or Communications Manager, for example, but not any employee. The MW LED at each telephone flashes when a new General Message is recorded. Once the extension user listens to the message, the MW LED goes out.

**Personal Greeting**

Personal Greeting allows an extension user to record a message and forward their calls. Callers to the extension hear the recorded message and are then forwarded to the new destination. With Personal Greeting, an extension user can add a personal touch to their Call Forwards. For example, a user can record:

*“Hi. This is John Smith. I’ll be out of the office today. In my absence, Mary Jones can answer all your questions. Please hold on for Mary.”*

After they record their Personal Greeting, the extension user chooses the condition that will activate Personal Greeting. Personal Greeting will activate for:

- Calls to the extension when it is busy or not answered
- All calls immediately
- Calls to the extension that are unanswered

The extension user then selects the destination for their calls. The choices are:

- A co-worker’s extension
- Personal Greeting only (without forwarding)
- The extension user’s own subscriber mailbox (if Voice Mail ([DSPDB-A2] is installed)
- Off-Premise via Common Abbreviated Dialling

In addition, the user can have Personal Greeting activate automatically for all calls, just CO (trunk) calls or just Intercom calls. When the user implements Personal Greeting for all calls, the system plays the greeting and reroutes:

- Calls transferred from the Automated Attendant (OPA)
- DISA calls ringing the extension
- DID calls ringing the extension
- Direct Inward Lines (DILs) ringing the extension
- Intercom calls

With Personal Greeting for only CO (trunk) calls, the system reroutes all of the calls listed above except Intercom calls.

Personal Greetings are stored permanently. If there is a commercial power failure or if the system resets, any recorded Personal Greetings are kept.

<b>Unique Personal Greeting Conditions</b>
If a call comes into the extension when there are no VRS ports available to play the Personal Greeting, the system forwards the call without playing the recorded message to the caller.
If an extension has Personal Greeting (RNA – Ring No Answer) enabled, Intercom calls that voice announce are not subject to Personal Greeting rerouting.
Personal Greeting does not reroute normal Ring Group calls. Calls transferred from a co-worker or Voice Mail route to the forwarding destination without listening to the Personal Greeting.

### **Park and Page**

When an extension user is away from their phone, Park and Page can let them know when they have a call waiting to be answered. To enable Park and Page, the user records a Personal Greeting along with an additional Paging announcement. Park and Page will then answer an incoming call and play 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 pre-recorded 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.

Park and Page follows the rules for Personal Greeting for All Calls, immediately rerouted. This means that Park and Page will activate for ringing Intercom calls, DID calls and DISA calls. It will also activate for calls transferred from the Automated Attendant. Additionally, calls from the Automated Attendant follow Automatic Overflow routing if not picked up. Park and Page will activate for transferred outside calls but 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.

### **Automated Attendant (Operator Assistance)**

Automated Attendant automatically answers outside calls, plays a pre-recorded 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 Dialling**

Single Digit Dialling allows Automated Attendant callers to dial extensions, Department Groups, Voice Mail or external numbers 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 9.*” You can set up single digit Dialling 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 will not be able to dial system extensions.)

- **Simultaneous Call Answering**

With VRS installed, the Automated Attendant can answer up to 16 calls 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 can't go through. This can happen if all VRS ports are busy, if the called extension doesn't answer, or if the caller misdials or waits too long to dial. (This would occur 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 three-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 48 VRS messages.

### **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. For example, if a user calls extension 200 when it is busy, they hear, "Station 200 is busy. For Callback, dial 2."

### **Preamble Message**

If the system has trunks that are part of the Caller Paid Service, the VRS can automatically play a pre-recorded message when a user answers the call. This pre-recorded message should describe the Caller Paid Service features and cost. The Preamble Message ensures that the caller is always aware that they have accessed a "pay-per-call" service. A system user cannot converse with the caller until the preamble message ends. If the caller hangs up before the message completes, they are not charged for the call. If the caller waits for the message to end, they can talk to a system user and call charging begins. The system will answer as many Caller Paid Service calls as there are available VRS ports. If a Caller Paid Service call comes in when all VRS ports are busy, the call will not appear on an extension until a VRS port is available.

You can also use the Caller Paid Service 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 system phone user can find out the time, date or the extension's number while their phone is idle (on hook). The time and date check saves the user time since they don't have to look for a clock or

calendar. Hearing the extension number conveniently identifies non-display System Phones. 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).

### 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. For example, if a user calls extension 300 when it is busy, they hear, "Station 300 is busy. For Callback, dial 2."

#### Conditions

- A. Park and Page announcements will only repeat once.
- B. VRS message record time is fixed at 2 minutes and it cannot be change.
- C. VRS Delay Message to a department group is only played when all parts in the group are busy
- D. Hardware Specifications

Item Name	Voice Channels (VRS Only)	CompactFlash Card Size	Recording Duration
DSPDBU-A1	Playback = 16 Record = 8	64MB	1.5 Hours

#### Default Setting

Disabled.

#### • Programming

##### 13-01-01 :Abbreviated Dialling Function Setup - Abbreviated Dialling Auto Outgoing Call mode

Assign as Trunk Outgoing Mode when all Abbreviated Dialling bins contain external numbers only. The trunk access code (default=0) is automatically prefixed to each number when dialled. Assign as Extension Outgoing Mode to allow Abbreviated Dialling bins to contain both external and internal numbers. In this case, external numbers must include the trunk access code (default=0) when the number is stored.

##### 15-07-01: Programming Function Keys

For one-button access to the Call Forwarding (device) setup code ( \*4 713), assign a Call Forwarding (Device) key (code 17).

##### 20-06-01: Class of Service for Extensions

Assign a Class of Service (1-15) to extensions.

##### 20-07-13: Class of Service Options (Administrator Level) - VRS Record

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to record, erase and listen to VRS messages.

##### 20-07-14: Class of Service Options (Administrator Level) - VRS General Message Listen

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to dial 4 or Service Code 111 711 and listen to their General Message.

**20-07-15: Class of Service Options (Administrator Level) - VRS General Message Record**

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to dial Service Code 112 712 and record, listen to and erase the General Message.

**20-11-15: Class of Service Options (Hold/Transfer Service) - VRS Personal Greeting**

In an extension's Class of Service, enable (1) or disable (0) the extension's ability to dial Service Code \*4 713 7 to record, listen to or erase a Personal Greeting. This option also affects Park and Page.

**22-02-01: Incoming Call Trunk Setup**

For each Night Service mode, enter 1 if trunk should be automatically answered by VRS Automated Attendant.

**22-04-01: Incoming Extension Ring Group Assignment**

Assign extensions to the Ring Group programmed in 25-03 and 25-04 that should receive the rerouted calls.

**22-14-xx: VRS Waiting Delayed Message for IRG**

Define for each incoming ring group the timers, VRS message number and tone kind for VRS Waiting Message.

**22-15- xx:VRS Waiting Message for Department Group**

Define for each Department (Extension) Group the timers, VRS message number and tone kind for VRS Waiting Message.

**24-02-02 :MOH or Ringback Tone on Transferred Calls**

If the caller dials a digit during the automated attendant message and a transferred has been initiated, specify whether they will hear either Ring Back Tone (RBT) or Music On Hold (MOH), until the call is either answered or terminated.

**24-02-03: System Options for Transfer - Delayed Call Forwarding Time**

Set how long a telephone with Personal Greeting options 2 or 6 enabled will ring before the call reroutes to the programmed destination.

**25-02-01: DID/DISA VRS Message**

For each Night Service mode, enter 1 at the "Talkie" prompt if trunk should be automatically answered by VRS and the message number the caller should hear (1-48).

**25-03-01: DID/DISA Transfer Ring Group With Incorrect Dialling**

Set the destination that Automated Attendant (OPA) calls ring if the OPA caller dials an incorrect extension number. This also sets the options for DISA calls. The system allows Ring Groups=1-25, VRS=15, DSPDB Voice Mail=101, In-Skin Voice Mail=102 or Disconnect=0.

**25-04-01: DID/DISA Transfer Ring Group With No Answer/Busy**

Set the destination that Automated Attendant (OPA) calls ring if the OPA caller dials an extension that doesn't answer or is busy. This also sets the options for DISA calls. The system allows Ring Groups=1-25, VRS=15, DSPDB Voice Mail=101, or Disconnect=0.

**25-05-01: DID/DISA Error Message Assignment**

For each trunk that will be answered by the VRS, enter the VRS message (1-16) the outside caller hears if they dial incorrectly after answer. If you enter 0, the call reroutes according to Program 25-03 and Program 25-04. Make one entry for each Night Service mode.

**25-06-02: DID/DISA One-Digit Code Attendant Setup**

Set up single digit dialling for Automated Attendant callers. For each VRS Message programmed to answer outside calls (see Program 22-05) , specify:

- The digit the Automated Attendant caller dials (0-9, \*, #). (Keep in mind that if you assign destinations to digits used for extension numbers, outside callers will not be able to dial system extensions.)
- The destination reached (four digits maximum) when the caller dials the single digit code. This may be an Extension Number, Department Group, or Common Abbreviated Dialling Bin Number.

**25-07-02: System Timers for DID/DISA - DID/DISA No Answer Time**

If an Automated Attendant (OPA) caller dials an extension that doesn't answer, the call will wait this interval before rerouting to the Ring Group specified in Program 25-03 and 25-04. This setting also affects unanswered DISA calls.

**25-13-01: System Option for DISA - VRS Password**

Enter the password DISA callers must dial before the system will allow them to record, listen to or erase VRS messages.

**31-02-01: Internal Paging Group Assignment - Internal Paging Group Number**

When using Park and Page, assign extensions to Internal Paging Zones. An extension must be assigned to a 2-digit zone in order to access any of the 2-digit zones (Internal Page Zones 0, 1-6, 00, 01-32).

**31-04-01: External Paging Zone Group**

When using Park and Page, assign each External Paging Zone (1-6) to an External Paging Group (1-8) used for accessing the zone.

**31-07-01: Combined Paging Assignments**

When using Park and Page, for each External Paging Zone (1-6 and 0 for All Call), assign a corresponding Internal Zone for Combined Paging.

**40-10-01: Voice Announcement Service Option - VRS Fixed Message**

Enable (1) or disable (0) the system's ability to play the fixed VRS messages (such as "You have a message.").

**40-10-02: Voice Announcement Service Option - General Message Number**

Enter the number of the VRS message you want to use for the General Message (01-48). The message you select should not be used as a VRS message.

**40-10-03: Voice Announcement Service Option - VRS No Answer Destination**

When all VRS ports are busy, incoming DILs and DISA calls wait for the VRS No-Answer Time (Program 40-10-04) and then ring the VRS No Answer Destination Ring Group.

**40-10-04: Voice Announcement Service Option - VRS No-Answer Time**

If an extension has Personal Greeting enabled and all VRS ports are busy, a DIL or DISA call to the extension will wait this interval for a VRS port to become free. If a VRS port is still not available, the call will ring the VRS No Answer Destination set in Program 40-10-03.

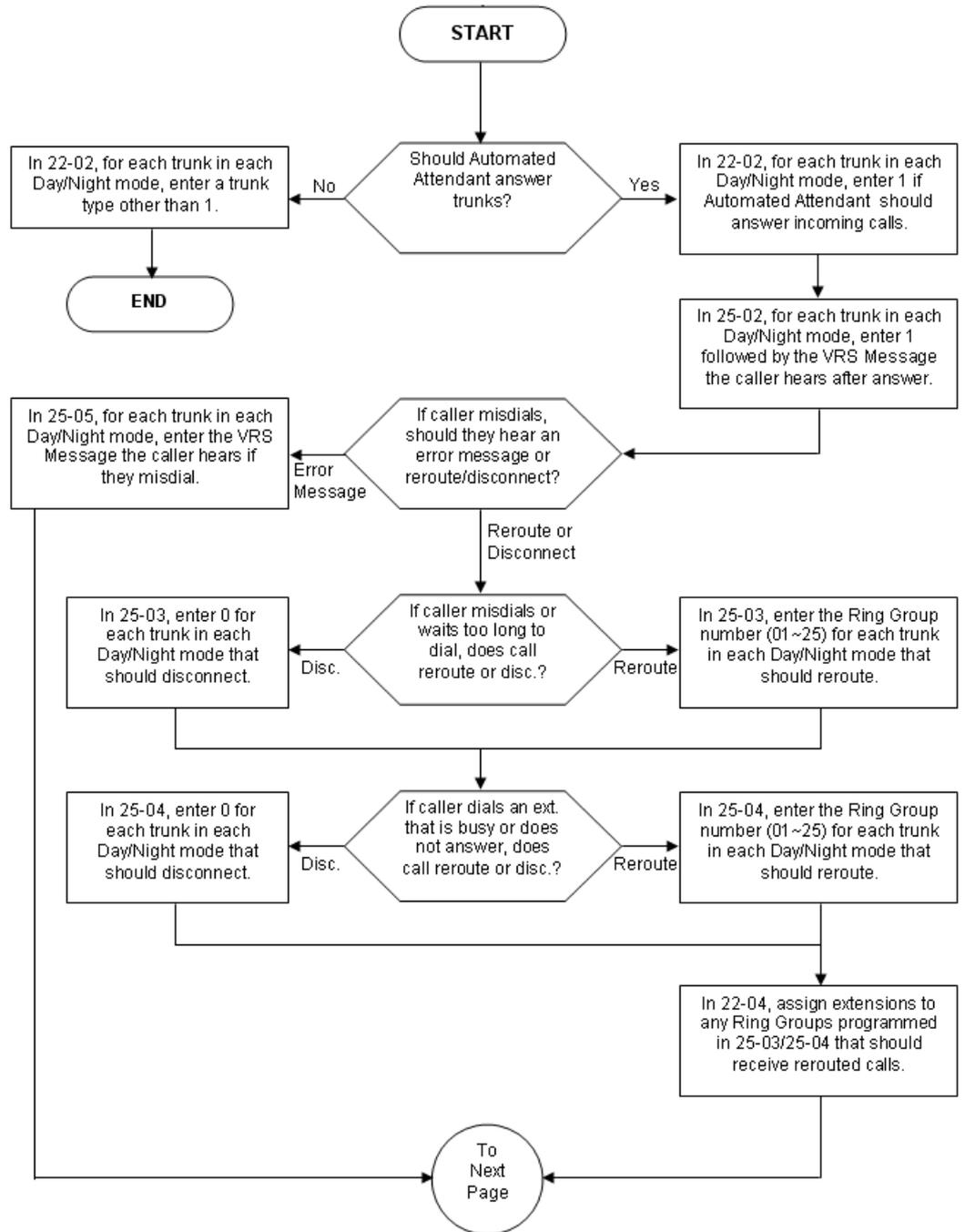
**40-10-05: Voice Announcement Service Option - Park and Page Repeat Timer**

If a Park and Page is not picked up within this interval, the Paging announcement repeats.

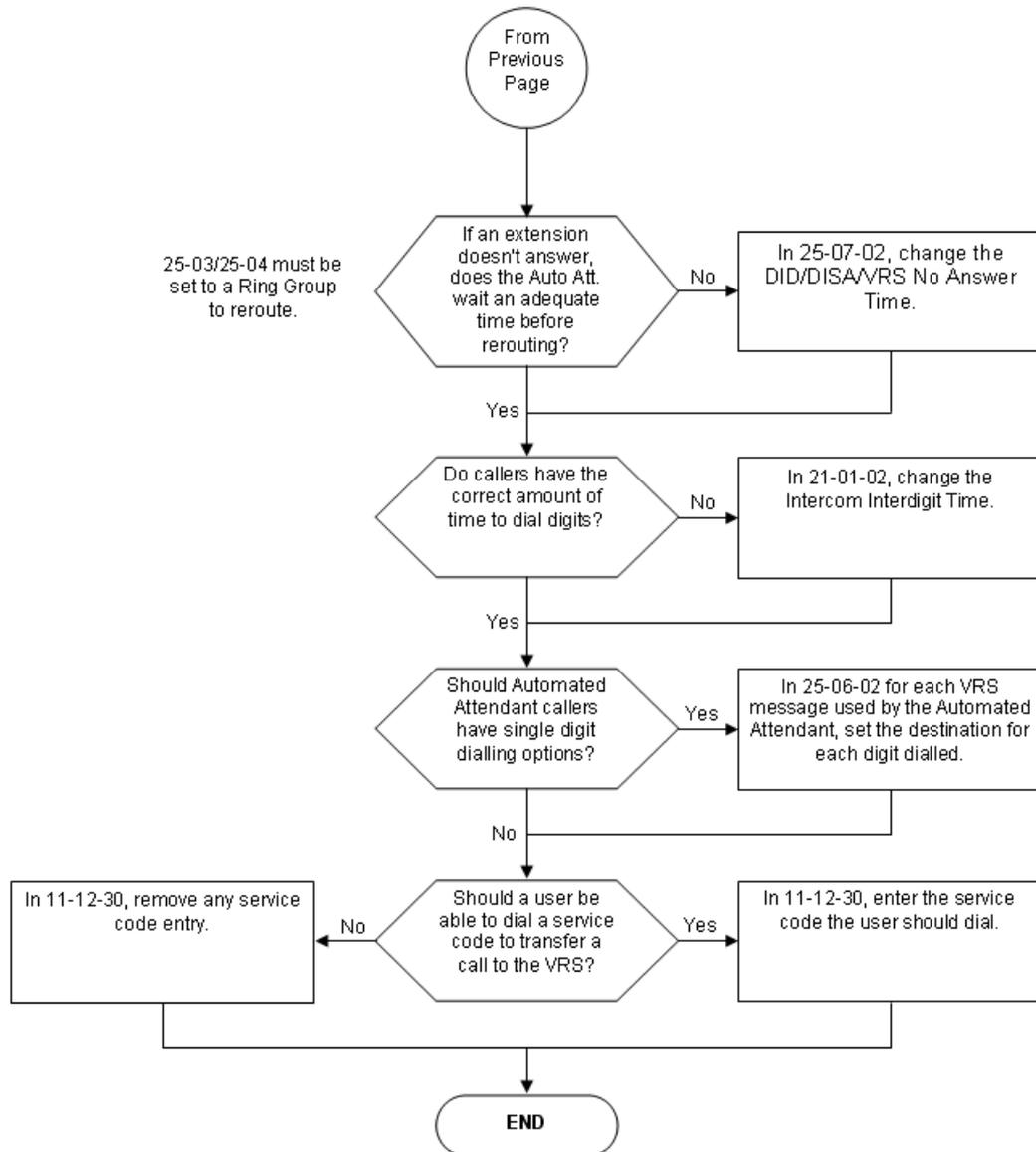
**40-11-01: Pre-Amble Message Assignment**

For each trunk that should have the Preamble option, enter the number of the VRS message (1-48) that is your recorded preamble message. Enter 0 for no preamble.

### Trunk Automated Attendant (Operator Assist) Programming



**Trunk Automated Attendant (Operator Assist) Programming (Cont.)**



**• Related Features**

**• Voice Mail**

Park and Page and Personal Greeting can also be programmed in the VRS.

**• Operation**

**VRS Messages**

**To Record a VRS Message:**

1. Press **SPK** key or lift handset.
2. Dial **716**.
3. Dial **7** (Record).
4. Dial the message number (01-48).

*Ensure that the message number selected is not used for other VRS functions.*

5. Record your message, after the beep.  
*Normally, your message cannot exceed 2 minutes. If you hear, "Recording finished," you have exceeded the allowed message length.*
6. Press # to end the recording.
7. Hang up.

**To Listen to a Recorded Message:**

1. Press **SPK** key or lift handset.
2. Dial **716**.
3. Dial **5** (Listen).
4. Dial the message number (01-48).  
*You'll hear the previously recorded message. If you hear a beep instead, there is no previous message recorded.*
5. Press # to listen to the message again.
6. Repeat from step 3 to listen to another message.
7. Hang up.

**To Erase a Recorded Message:**

1. Press **SPK** key or lift handset.
2. Dial **716**.
3. Dial **3** (Erase).
4. Dial the message number (01-48).
5. Press **HOLD** (system phone only) to cancel the procedure without erasing (and return to step 3).
6. Hang up to erase the message.

**To Record, Listen to or Erase a VRS Message via DISA:**

1. Place a call into the system.
2. After the system answers, dial the DISA password (default=000000).
3. Dial **716** and the VRS password.
4. Dial the function you want.  
**7** = Record  
**5** = Listen  
**3** = Erase
5. Dial the message number (01-48).
6. Record the message and press # to end recording.
7. If you dialled **7** to record, you can dial # to listen to the message you just recorded.
8. If you dialled **5** to listen, you can dial **5** and message number to hear it again or if you want to record, listen to or erase another message, go to step 4.
9. If you dialled **3** to erase, you must go to step 7 (hang up).
10. Hang up.

**VRS Message Numbers:**

By default, VRS message numbers are not assigned. Enter into the table below the message numbers which have been assigned to common VRS messages in your system.

Message Name	Message No. (01~48)
Automated Attendant	
Guidance Message	
General Message	
Preamble Message	

### General Message

#### To Listen to the General Message:

##### System Phone

Your MW LED flashes when there is a new General Message. A voice message periodically reminds you.

1. While telephone is idle, dial **4**.  
-OR-
2. Press the **SPK** key or lift handset.
3. Dial **711**.
4. Listen to the General Message.  
*Normally, your MW LED goes out. If it continues to flash, you have an unanswered "Message Waiting" requests or new messages in your "Voice Mail" mailbox.*

##### Single Line Telephone

1. Press the **SPK** key or lift the handset.
2. Dial **712**.
3. Dial **5** (Listen).
4. Listen to message.
5. Dial **5** again to repeat.
6. Hang up.

#### To Record the General Message:

1. Press the **SPK** key or lift the handset.
2. Dial **712**.
3. Dial **7** (Record).
4. Record message, then dial **#** when finished.
5. Hang up.

#### To Erase the General Message:

1. Press the **SPK** key or lift the handset.

2. Dial **712**.
3. Dial **3** (Erase).
4. Press **HOLD** to cancel without erasing (System Phone only).
5. Hang up.

### Personal Greeting

#### To enable a Personal Greeting:

1. Press the **SPK** key or lift handset, and Dial **713**.  
-OR-  
Press the Call Forwarding (Device) key (SC 851:17).
2. Dial **7**.
3. Record your Personal Greeting, or if you already have Personal Greeting or Park and Page set up, you can dial:  
**7** to re-record  
**5** to listen (then **#** to listen again)  
**3** to erase (press **HOLD** to cancel erase)
4. Dial **#** + Personal Greeting condition:  
**2** = Busy/No Answer  
**4** = Immediate All Calls  
**6** = No Answer
5. Dial the destination to receive your calls. The destination can be:
6. A co-worker's extension.
7. Your Voice Mailbox (by dialling the Voice Mail master number).
8. Off-premise via Common Abbreviated Dialling (by entering 813 + bin).
9. Greeting without forwarding so caller hears busy (by entering your extension number).
10. You cannot forward to a Department Group pilot number.
11. Dial Personal Greeting type:  
**2** = All calls  
**3** = Outside calls only  
**4** = Intercom calls only
12. Hang up.  
*Your DND or Call Forwarding (Device) Programmable Function Key flashes when Call Forwarding is activated.*

#### To cancel your Personal Greeting:

1. Press the **SPK** key or lift handset.
2. Dial **713 + 73**.
3. Hang up.

### Park and Page

#### To have the System Page you when you have a Call:

1. Press the **SPK** key or lift handset, and Dial **713**.  
-OR-  
Press the Call Forwarding (Device) key (SC 851:17).
2. Dial **7**.

3. Record your Personal Greeting, or if you already have Park and Page or Personal Greeting set up, you can dial:  
7 to re-record  
5 to listen (then # to listen again)  
3 to erase (press **HOLD** to cancel erase)
4. Dial **#7**.
5. Record your Page Message.
6. Dial # + Paging Zone Access Code.  
*E.g. Internal Zone 1 = 801 + 1.*  
*External Zone 1 = 803 + 1.*  
*Combined Zone 1 = 751 + 1.*
7. Dial Park and Page type:  
2 = All calls  
3 = Outside calls only
8. Hang up.  
*Your DND or Call Forwarding (Device) Programmable Function Key flashes when Call Forwarding is activated.*

**To Pick Up your Park and Page:**

1. Press the **SPK** key or lift handset.
2. Dial **715** + Your Extension Number.

**To Cancel your Park and Page:**

1. Press the **SPK** key or lift handset.
2. Dial **713** + **73**.
3. Hang up.

**Preamble Message****To Answer a Call with Preamble Message:**

1. Answer the ringing call and wait for the preamble message to finish.  
*The line key turns solid red as the system automatically plays the preamble message to the caller.*
2. When you hear two beeps and the line key turns green, converse with the caller.

**Checking Time/Date & Station Number****System Phone Only****To listen to the Station Number:**

1. While telephone is idle, dial **6**.

**To listen to the Time/Date:**

1. While telephone is idle, dial **8**.

## Volume Controls

### • Description

Each system phone user can control the volume of incoming ringing, splash tone, Paging, Background Music, Handsfree and your handset. System Phones consolidate all adjustments into the volume buttons. Pressing the VOLUME UP or VOLUME DOWN will adjust the volume level for whichever feature is active (outside call, ICM, ICM ringing, paging, etc.). Pressing these keys when the phone is idle will adjust the contrast level of the telephone's display. The users should set the volumes for their most comfortable levels.

### Conditions

The contrast is not adjustable when the phone has background music enabled.

### Default Setting

Enabled.

### • Programming

None

### • Related Features

None

### • Operation

#### To adjust the volume of incoming ringing and splash tone:

1. If the phone is idle, dial 829. If the phone is ringing, skip to Step 2.
2. Press VOLUME ▼ or VOLUME p.

#### To adjust the volume of incoming Paging announcements, Handsfree, the handset or Background Music:

1. Press VOLUME ▼ or VOLUME p.

*The feature must be active to change the volume. Pressing the volume keys when the phone is idle will adjust the display's contrast.*

## Warning Tone For Long Conversation

### • Description

The system can broadcast warning tones to a trunk caller warning them that they have been on the call too long. The tones are just a reminder -- the user can disregard the tones and continue talking if they choose. The outside caller does not hear the warning tones. In addition, 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 analogue 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.

### 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.

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 will occur 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

None

### Default Setting

Disabled for all trunks.

### • Programming

#### **14-01-17: Basic Trunk Data Setup - Trunk to Trunk Warning Tone for Long Conversation Alarm**

Determine whether DISA callers should hear the Warning Tone for Long Conversations (0=disabled, 1=enabled).

#### **20-06-01: Class of Service for Extensions**

Assign a Class Of Service (1-15) to an extension.

#### **20-13-01: Class of Service Options (Supplementary Service) - Long Conversation Alarm**

In an extension's Class of Service, enable (1) or disable (0) Warning Tone for Long Conversation.

**20-21-01: System Options for Long Conversation - Long Conversation Alarm 1**

After a user places a trunk call, the system sends the first warning tone to their extension after this interval (0-64800 seconds).

**20-21-02: System Options for Long Conversation - Long Conversation Alarm 2**

After hearing the first warning tone, the system sends additional warning tones after this interval (0- 64800 seconds). The warning tones continue, spaced by this interval, until the user hangs up.

**21-01-03: System Options for Outgoing Calls - Trunk Interdigit Time (External)**

Determine the length of time the system should wait before starting the Warning Tone Timer.

**25-07-07: System Timers for DID/DISA - DISA Conversation Warning Tone Time**

Determine the length of time the system should wait before the Warning Tone is heard by DISA callers (0-64800 seconds). If an outside call is transferred or forwarded off-premise using an outside trunk, this timer starts immediately. This will occur if either trunk involved in the call is programmed for the Warning Tone (Program 14-01-17).

**25-07-08: System Timers for DID/DISA - DISA Long Conversation Disconnect**

Determine how long after the Warning Tone is heard the system will wait before disconnecting DISA calls.

**• Related Features****• Central Office Calls, Answering**

Warning Tone for Long Conversation does not occur for incoming trunk calls.

**• Central Office Calls, Placing / Toll Restriction**

Warning Tone for Long Conversation occurs for all outgoing trunk calls, regardless of how they are placed or other outgoing restrictions.

**• Direct Inward System Access (DISA)**

Warning Tone for Long Conversation can be enabled for DISA calls.

**• Intercom**

Warning Tone for Long Conversation does not occur for Intercom calls.

**• Long Conversation Cutoff**

Warning Tone for Long Conversation can be used with the Long Conversation Cutoff feature for outgoing calls.

**• Single Line Telephones**

Warning tones are not available to single line telephone (SLT) users.

**• Operation**

Warning Tone for Long Conversation is automatic if programmed.

