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# ***KDX 500***

## ***PROGRAMMING GUIDE***

KEY SYSTEM U.S.

W.P.B., FL 33407



# TABLE OF CONTENTS

<b>Hardware Programming .....</b>	<b>01</b>
Initial Setup .....	01
Memory Protection .....	01
Load Factory Default .....	01
<b>Software Programming.....</b>	<b>02</b>
LCD Display Keyphone.....	02
List of Terms Used .....	02
Port and Station Numbering .....	02
Trunk Numbering .....	04
Night Service-Day Mode and Night Mode Operation.....	04
<b>System Programming .....</b>	<b>05</b>
Accessing System Programming.....	05
Entering Password .....	06
Entering System Programming while on Trunk Call.....	06
Selecting a Program Section .....	07
Exiting from System Programming.....	07
Using Programming Keys.....	08
Saving a Change.....	08
Entering a Station Number instead of a Port Number .....	09
Getting a Busy Signal.....	09

# System Defaults

## Section 1: Trunk Programming

Trunk Class of Service.....	11
Trunk Specifications.....	11
Private Lines .....	11
Trunk Hunt Groups.....	12
Trunk Ringing.....	12
External Call Forwarding.....	12
Trunk Dial Operation.....	13
SMDR Operation.....	13
Forced Account Code.....	13

## Section 2: Station Programming

Station Class of Service.....	13
Console.....	14
Operator Operation.....	15
Station Hunt Group.....	15
Station.....	15
Station Call Forwarding.....	15
Single Line Telephone.....	16

## Section 3: System Programming

General Defaults.....	16
Feature Access Codes.....	16
Tenant Service.....	16
System Alarms.....	17
Paging.....	17
External Relay.....	17
Door Phone.....	17
Voice Mail Interface.....	17
Inband Signaling 2.....	17
Toll Restriction.....	18
Automatic Route Selection .....	18

# HARDWARE PROGRAMMING

## Initial Setup

When the system is first installed, the System Default Programming Data must be loaded into memory. To ensure the default condition, the memory must be cleared before loading the data.

## Memory Protection

The User Defined Programming Data is stored in memory as it is changed. A 3.9v NiCad Battery (BT1) ensures the Data will be stored in memory when power is lost. The Battery is controlled by SW1 on the CCU-A and should remain on at all times.

A Dip Switch (DSW1, located on CCU-A) is used to select factory default or user defined programming upon power up. When the DSW1 is in the "ON" position user defined memory is retained during a power failure (**Providing SW1 on CCU-A is in the "ON" position**).

## Load Default

To clear the memory and load the System Default Programming Data:

- (a) Set the system power On/Off switch to OFF. The power indicator is off.
- (b) Set Dip Switch-1 on DSW1 to the "OFF" position (**ON CCU-A**)
- (c) Set the system power On/Off switch to ON. The power indicator is on and the memory is cleared.
- (d) After system power is restored and phones are operating normally return Dip Switch-1 on DSW2 to the "ON" position.

**Caution:** Remember to make sure SW1 is in the "ON" position to retain any program changes during loss of power.

## SOFTWARE PROGRAMMING

Software Programming involves changing the default data to make the system fully compatible with the needs of the user.

Note: Only one person at a time is allowed access to Software Programming.

### LCD Display phone

A LCD Display phone is a required tool when programming the system.

### List of Terms Used

<b>C.O.</b>	Central Office Line (Telephone line coming into the building).
<b>Console</b>	Attendant / Operator Station.
<b>DTMF</b>	Dual Tone Multi-Frequency. Trunk Type.
<b>Keyphone</b>	Key Telephone.
<b>LCD</b>	Liquid Crystal Display.
<b>PABX</b>	Private Automatic Branch Exchange.
<b>Port</b>	A Port for A Telephone.
<b>Pulse</b>	Pulse Dialing. Trunk Type.
<b>SLP</b>	Single-Line Telephone.
<b>Trunk</b>	Can be a C.O. Line or PABX Line.

### Port and Station Numbering

Port numbering is fixed. The position of the Port on the Station Card and the location of the Station Card determine it in the system. The maximum number of Ports depends on the configuration of the system. The Port number is used when doing System Programming.

A Station Number is a flexible number assigned to each Port for intercom calling and identification. Station Numbers can be one to four digits and different length Station Numbers can be mixed (e.g. 1 - 6, 10 - 69, 100 - 699, 1000-6999).

**Note:** Watch for Station Numbering conflicts. For example, if Station Number 20 is used, Station Numbers 200 - 209, 2000-2099 are unavailable.

Following is the default Station Numbering (using 16 port station cards):

Card No.	Port No.	Station No.
1	01-16	100-115
2	17-32	116-131
3	33-48	132-147
4	49-64	148-163
5	65-80	164-179
6	81-96	180-195
7	97-112	196-211
8	113-128	212-227
9	129-144	228-243
10	145-160	244-259
11	161-176	260-275
12	177-192	276-291
13	193-208	292-307
14	209-224	308-323
15	225-240	324-339
16	241-256	340-355
17	257-272	356-371
18	273-288	372-387
19	289-304	388-403
20	305-320	404-419
21	321-336	420-435
22	337-352	436-451
23	353-368	452-467
24	369-384	468-483
25	385-400	484-499

See (Section2-Mode 70) Flexible Station Number Assignment for setting Station Numbers.

**Note:** No Error Message or Busy Signal will be given if duplicate Station Numbers are entered.  
For Station calling the first one found will be used.

## Trunk Numbering

Trunk Numbers are fixed by the position of the Trunk on the Trunk Card and the location of the Trunk Card in the system. Upon power up the CCU-A will scan the system from left to right - bottom to top. The first card found would be the first COU-A card assigned and will continue in consecutive order.

Card No.	Trunk No.
1	1-8
2	9-16
3	17-24
4	25-32
5	33-40
6	41-48
7	49-56
8	57-64
9	65-72
10	73-80
11	81-88
12	89-96

## Night Service - Day Mode and Night Mode Operation

For some features it is desirable to separate the operation of the system into Day Mode and Night Mode. The features include Trunk Ringing, Toll Plans, and External Call Forwarding.

Day Mode and Night Mode are used for Day and Night operation, respectively when the user's requirements are generally very different for the affected features. The Day Mode and Night Mode transfer times are set and controlled by the Console.

Refer to the **Users' Guide** for more information to switch between Day and Night Service.

# System Programming

## Accessing Programming

Access to Programming is protected by the use of a password. Only one user can enter Programming at a time.

There are three ways to enter System Programming.

1.

**Entering the Master Password from the Console.**

**2. Entering the System Password from the Console or from any Display phone, which has Programming Rights.**

**3. Entering the System Password as an account number while on an outside Trunk Call from the Console, or from any Display phone, which has Programming Rights.**

Any time the Busy Signal is received when attempting to access Programming, it means the attempt was unsuccessful. There are four possible reasons for an unsuccessful access:

1. **Pressing the wrong key.**

2. **Entering an incorrect password.**

3. **Using a keyphone, which is not the current Console or does not have Programming Rights.**

4. **Another system user is already accessing Programming.**

## Entering Password

There are two passwords for System Programming: Master and System.

### Master Password

The Master Password allows the current Console to access System Programming. To enter System Programming from the Console using the Master Password, press:

**[ PROG-PROG-DATA-DATA-6-HOLD ]**

### System Password

The System Password allows the Console or any Display phone with (Section 2-Mode 12) Programming Rights to access System Programming. See (Section 3-Mode 01) System Password for setting the System Password. The Default password is 123.

To access System Programming from any Display phone, press:

**[ PROG-PROG-1-2-3-HOLD ]**

Pressing the PROG key lights the PROG lamp. Accessing System Programming starts the PROG lamp flashing. If the Busy Signal is received, press RLS and start again.

## Entering System Programming while on a Trunk Call

To access System Programming **while on a Trunk Call**, press:

**[ MSG-1-2-3-PROG ]**

Accessing System Programming starts the PROG lamp flashing.

Note: When the RLS key is pressed to exit from System Programming, the outside Trunk line will be

released.

## Selecting a Program Section

Programming is divided into 3 separate Sections, each Section contains Modes 01-99 (not all modes are used).

After accessing Programming, a Section must be selected to change a Mode. The LCD display prompts for a Section number.



PROGRAM SECTION

**1 = Trunk Programming**

**2 = Station Programming**

**3 = System Programming**

After selecting a Program Section, a 2-digit Mode number must be selected to change default data. The LCD display prompts for a Mode number.



M:.  
Enter Mode No.

The dot on the LCD display is a prompt for entering a digit. If an invalid digit or mode number is entered a Busy Signal is returned.

### Changing to a Different Mode

After a Mode has been selected, press DATA to change to a different Mode. This returns to a LCD display prompt for entering a Mode number.

### Changing to a Different Programming Section

When in a Program Section, Press DATA 2 times to select another Program Section.

## Exiting from System Programming

To exit from System Programming, press RLS, the Keyphone goes idle. System Programming is now available for others to use. ***Make sure any changes to a Mode have been saved before exiting from***

*System Programming. Press HOLD to save changes.*

## Using Programming Keys

Some keys on the Keyphone have a special function during System Programming. The keys and functions are listed below. Some keys also have a special function for a particular Mode; they are explained in the description of the applicable Mode.

KEY	FUNCTION
DATA	To select a new Mode or Section
MSG	To set or Yes
FLASH	To clear existing value or No
MIC	To scroll backward
TSF	To scroll forward
HOLD	To save changed Data
RLS	To exit System Programming
CONF	To make change system wide

## Saving a Change

Press HOLD to save a change after new information is entered. An “ \* “ in the top left-hand corner of the LCD display confirms the saved change.

Press HOLD to save change.

*:01 01 C.O.
TRUNK TYPE

**Note: In Section 1 Mode 01, press CONF instead of HOLD will save the change to all the Trunks at the same time.**

## Entering a Station Number instead of Port Number

Where System Programming requires a Port Number to be entered, a Station Number can be entered instead. To enter a Station Number, press the PROG key and then enter the Station Number, System will convert to Port Number. Once a valid Station Number has been entered, proceed with the next step.

Examples:

Enter Port Number

e.g. Press PROG then enter Station Number

M:02
ST:

Note: A Station Number saved as data is shown as the corresponding Port Number.

## Getting a Busy Signal

Anytime a Busy Signal is returned, an invalid key or operation was attempted.

To recover from an error when in System Programming, press DATA. The LCD display will prompt for a new Mode number.

# ***SYSTEM DEFAULTS***

## **Trunk Programming Mode Defaults**

### **Trunk Class-of-Service**

(Mode 01) Trunk Type	C.O. Line
(Mode 02) Trunk Signal Type	DTMF
(Mode 03) Centrex Trunk Operation	No
(Mode 04) Loop Supervision Disconnect	No
(Mode 05) Caller ID Name	No
(Mode 06) Ring-back Tone on Transfer	No
(Mode 07) Disable Trunk	No
(Mode 10) Loud Bell 1 - Day	Ring
(Mode 11) Loud Bell 1 - Night	Ring
(Mode 12) Loud Bell 2 - Day	No Ring
(Mode 13) Loud Bell 2 - Night	No Ring
(Mode 14) Loud Bell 3 - Day	No Ring
(Mode 15) Loud Bell 3 - Night	No Ring
(Mode 16) Loud Bell 4 - Day	No Ring
(Mode 17) Loud Bell 4 - Night	No Ring
(Mode 20) SMDR Incoming	No Print
(Mode 21) SMDR Transferred	No Print

### **Trunk Specifications**

(Mode 30) Trunk Names	None
(Mode 31) Pulse Dialing Pulses per Second	20 pps
(Mode 32) Pulse Dialing Break Make Ratio	60 / 40
(Mode 33) Trunk Flash Time	1000 ms
(Mode 34) Trunk Pause Time	1800 ms
(Mode 35) DTMF Tone Length	70 ms
(Mode 36) Ring Pause Time	3 seconds
(Mode 37) Trunk Music Source	Internal Music

### **Private Lines**

(Mode 40) Private Line Assignment	None
(Mode 41) Private Line Access	Closed
(Mode 42) Private Line - Common Ring Day	No
(Mode 43) Private Line - Common Ring Night	No
(Mode 44) Private Line Pickup	Denied

**Trunk Hunt Groups**

(Mode 50) Trunk Hunt Group Programming	All Trunks in Group 1 only
(Mode 51) Automatic Trunk Hunt Group Access	Automatic
(Mode 52) Terminal Trunk Hunt Group Access	Yes

**Trunk Ringing**

(Mode 60) Console Ring Delay Time	No Delay
(Mode 61) Console Incoming Call Ringing	Ring
(Mode 62) Second Console Ring Delay Time	No Delay
(Mode 63) Second Console Incoming Call Ringing	Ring
(Mode 64) Console Off Hook Ringing	No
(Mode 65) Trunk Station Hunt Group Ringing - Day	None
(Mode 66) Trunk Station Hunt Group Ringing - Night	None
(Mode 67) Flexible Ring Delay Time - Day	No Delay
(Mode 68) Flexible Ring - Day	None
(Mode 69) Flexible Ring Delay Time - Night	No Delay
(Mode 70) Flexible Ring - Night	None
(Mode 71) Stepped Ringing	No
(Mode 72) Flexible Off Hook Ringing	No
(Mode 73) Common Ring Delay Time - Day	No Delay
(Mode 74) Common Ring - Day	None
(Mode 75) Common Ring Delay Time - Night	No Delay
(Mode 76) Common Ring - Night	None
(Mode 77) Common Off Hook Ringing	No
(Mode 78) Softkey Pattern for Trunk Ringing	Flashing Red

**External Call Forwarding**

(Mode 80) External Call Forwarding Delay Time	No Delay
(Mode 81) External Call Forwarding - Day	No Forwarding
(Mode 82) External Call Forwarding - Night	No Forwarding
(Mode 83) External Call Forwarding Duration	0 Second

**Trunk Dial Operation**

(Mode 85) Call Duration Warning Tone Time	180 Seconds
(Mode 86) No Dial Time-out	No Time-out
(Mode 87) Keyphone Trunk Dial Time	No Limit

**SMDR Operation**

(Mode 90) SMDR Minimum Call Duration	10 Seconds
(Mode 91) SMDR Print Intercom Calls	No Print
(Mode 92) SMDR Print Appointment Calls	No Print
(Mode 93) SMDR Date Format	MM/DD

**Forced Account Code**

(Mode 94) Forced Account Code	No
(Mode 95) Forced Account Code Length	6
(Mode 96) Forced Account Code Table	Empty

**Station Programming Mode Defaults****Station Class-of-Service**

(Mode 01) Put Call on Hold	Yes
(Mode 02) Call Pickup	Yes
(Mode 03) Receive Paging Calls	Yes
(Mode 04) Make Paging Calls	Yes
(Mode 05) Be Barged Into	Yes
(Mode 06) Barge Another Station	No
(Mode 07) Ring for System Alarm	Ring
(Mode 08) Call Duration Warning Tone	No
(Mode 09) Camp-On Tone	Yes
(Mode 10) Off Hook Ring Tone	Yes
(Mode 11) Hold Recall Remind Tone	Yes
(Mode 12) Programming Rights	Yes
(Mode 13) Set Message Waiting Lamp	No
(Mode 14) Automatic Message Callback	No
(Mode 15) Message Waiting Indication on DSS Unit	No

---

(Mode 20) Intercom Call Voice Announce	Yes
(Mode 21) Intercom Microphone On	Yes
(Mode 22) Voice Announce Ring	Tone
(Mode 23) Automatic Outside Line	No
(Mode 24) Idle Trunk Access Microphone	Yes
(Mode 25) Speed Dial Directory	No
(Mode 26) Display Caller ID Information	Yes
(Mode 27) Operator Call	Yes
(Mode 31) House Phone	No
(Mode 32) Ring Door Phone Group 1	No Ring
(Mode 33) Ring Door Phone Group 2	No Ring
(Mode 34) Voice Mail Port	No
(Mode 35) Receive DTMF on Intercom	No
(Mode 36) Allow Intercom Calls	Yes
(Mode 37) Reserve Trunk or Station (7)	Yes
(Mode 38) Use Call Forward (71, 72)	Yes
(Mode 39) Set Wake-up / Remind Calls (741, 742)	Yes
(Mode 40) Set Message Waiting (743)	Yes
(Mode 41) Answer a Page Call (745)	Yes
(Mode 42) Program Personal Speed Dial (746)	Yes
(Mode 43) Set Do-Not-Disturb (747)	Yes
(Mode 44) Use Conference (748)	Yes
(Mode 45) Use Lock Code (749)	Yes
(Mode 46) Use Hold Pickup (75)	Yes
(Mode 47) Use Call Parking (76)	Yes
(Mode 48) Use Individual Trunk Access (77)	Yes
(Mode 49) Access Speed Dial (70)	Yes

### **Console**

(Mode 50) Console	Port 01
(Mode 51) Second Console	None
(Mode 52) Console Hold Recall Busy Remind	30 seconds
(Mode 53) Console System Hold Recall Delay Time	60 Seconds
(Mode 54) Second Console System Hold Recall Delay Time	60 Seconds
(Mode 55) Console System Hold Recall Release Time	60 Seconds
(Mode 56) Console Call Waiting Busy Remind	15 seconds

**Operator Operation**

(Mode 57) Operator Call Destination	Console
(Mode 58) Ring Two Operators	One
(Mode 59) Camp-On Ring for Station calling Busy Operator	No

**Station Hunt Groups**

(Mode 60) Station Hunt Groups	None
(Mode 61) Terminal Station Hunt Group Access	Yes

**Station**

(Mode 70) Flexible Station Number Assignment	System DIP Switch 6
(Mode 71) Station Names	None
(Mode 72) Station Group Assignment	Same as Station Card
(Mode 73) Softkey Assignment	Trunks only
(Mode 74) Trunk Hunt Group Assignment	Trunk Hunt Group 1
(Mode 75) Station Music Source	Internal Music
(Mode 76) Maximum Trunk Call Duration	No Limit
(Mode 77) System Hold Recall Time	180 Seconds
(Mode 78) System Hold Recall Busy Remind	30 seconds
(Mode 79) Transfer Recall Time	No Recall
(Mode 81) Reserve Recall Time	20 seconds
(Mode 82) Keyphone Automatic Busy Release Time	15 seconds

**Station Call Forwarding**

(Mode 83) No Answer Forward Time	10 Seconds
(Mode 84) Call Forward Busy Ring Time	No Ring
(Mode 85) Call Forward - All Calls	None
(Mode 86) Call Forward - Busy / No Answer	None
(Mode 87) Call Forward Incoming Calls	Yes
(Mode 88) Call Forward Busy Ring	No Ring

**Single-line Telephone**

(Mode 90) SLP Dial Time	20 Seconds
(Mode 91) SLP Absolute Dial Timer	Yes
(Mode 92) SLP Lower Flash Limit	120 ms
(Mode 93) SLP Upper Flash Limit	600 ms
(Mode 94) SLP Message Waiting Lamp Time	No Lamp
(Mode 95) Message Waiting Ring Time	No Ring
(Mode 96) Set SLP Special Tone	Yes
(Mode 97) SLP Basic or Advanced Ringing	Yes
(Mode 98) Urgent Call Time	Disabled

**System Programming Mode Defaults****General Defaults**

(Mode 01) System Password	123
(Mode 02) Clock Display Format	12 Hour format
(Mode 03) Automatic Night Transfer on Weekends	Night
(Mode 04) Conference Tone	Yes
(Mode 05) Transfer Call on Hook Down	No
(Mode 06) Headset Operation	No
(Mode 09) System Date & Time	N/A

**Feature Access Codes**

(Mode 15) Operator Access Code	0
(Mode 16) Trunk Hunt Group Access Code	9
(Mode 17) Trunk Hunt Group 8 Access Code	8
(Mode 18) Dial 7 Feature Access Code	7
(Mode 19) Intercom Call Access Code	None

**Tenant Service**

(Mode 20) Trunk Tenant Service	None
(Mode 21) Station Tenant Service	None
(Mode 22) Tenant Operators	None
(Mode 23) Unrestricted Tenant Intercom Access	No

**System Alarms**

(Mode 30) Weekday System Alarms	None
(Mode 31) Saturday System Alarms	None
(Mode 32) Sunday System Alarms	None
(Mode 33) Station Alarm Duration	25 Seconds
(Mode 34) DVA Port	None

**Paging**

(Mode 35) Zone Paging Port Assignment	None
(Mode 36) Page Tone	No
(Mode 37) Page Music Source	Internal Music

**External Relay**

(Mode 40) External Relay Control	N/A
(Mode 41) External Relay Default	Open

**Door Phone**

(Mode 45) Door Phone Ring Group 1	None
(Mode 46) Door Phone Ring Group 2	None

**Voice Mail Interface**

(Mode 50) Voice Mail Station Hunt Group (9)	None
(Mode 51) Use Voice Mail Inband Signaling	No
(Mode 52) Voice Mail Inband Signaling Packets	None
(Mode 53) Voice Mail Trunk Incoming Call Packets	None
(Mode 54) Inband Signaling DTMF Tone Length	70 ms

**Inband Signaling 2**

(Mode 55) Use Inband Signaling 2	No
(Mode 56) Inband Signaling Packets 2	None
(Mode 57) Trunk Incoming Call Packets 2	None

**Toll Restriction**

(Mode 60) Station Toll Plan Assignment - Day	Toll Plan 0 - No Restriction
(Mode 61) Station Toll Plan Assignment - Night	Toll Plan 0 - No Restriction
(Mode 62) Toll Restriction Override Password	None
(Mode 63) Speed Dial Toll Restriction Break Point	200
(Mode 64) Check-In Call Restriction	0, 9, 4, D
(Mode 70) Common Restricted Numbers	None
(Mode 71) Common Unrestricted Numbers	None
(Mode 72) Long Distance Call Prefix	1
(Mode 73) Digit Length Restriction	None
(Mode 74) Class-of-Restriction - Trunk	None
(Mode 75) Local Call Restriction	None
(Mode 76) Long Distance Call Restriction	None
(Mode 77) PABX Trunk Access Code	9
(Mode 78) Ignore PABX Access Code	No

**Automatic Route Selection**

(Mode 80) Use Automatic Route Selection	No
(Mode 81) Force ARS	No
(Mode 82) Automatic Route Selection Time-out	5 seconds
(Mode 83) Area Code Table	Empty
(Mode 84) Office Code Table	Empty
(Mode 85) Route Table	Trunk Hunt Group 1
(Mode 86) Time Period	None
(Mode 87) Holiday Table	Empty
(Mode 88) Addition / Subtraction Table	Empty

## **Trunk Programming Section**

System Programming is divided into three separate sections for ease of access. The sections are Trunk Programming Section, Station Programming Section, and System Programming Section.

Trunk Programming Section has been grouped into categories.

- Trunk Class-of-Service
- Trunk Specifications
- Private Lines
- Trunk Hunt Groups
- Trunk Ringing
- External Call Forwarding
- Trunk Dial Operation
- SMDR Operation
- Forced Account Codes

### **Trunk Numbers**

Trunk Numbers are fixed by the position of the Trunk on the Trunk Card and the location of the Trunk Card in the system.

For ease of operation for the Station user, Trunk numbers are displayed as 1 - 96.

Large Systems, which can have up to 96 Trunks, Trunks 01 - 09, use **0** at the start when using Trunk numbers in System Programming. Dial 77,tk to access a Trunk requires a 0 only when more than 8 Trunks are installed in the System.

## **Trunk Class-of-Service**

Trunk Class-of-Service is used to define the operation of individual Trunks.

### **(Mode 01) Trunk Type**

The system is normally connected directly to C.O. Lines but can be set to work behind another PABX. When a Trunk is set as a PABX Line the PABX Trunk Access Code will be ignored for Toll Restriction, and will not be shown on the SMDR output.

See (System Programming Section - Mode 77) PABX Trunk Access Code for setting the PABX Trunk Access Code.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **01**

```
M:01 .
TRUNK TYPE
```

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 3

```
M:01 03      C.O.
TRUNK TYPE
```

**Step 4:** Press **MSG** for PABX or **FLASH** for C.O.

e.g. Set to PABX line

```
M:01 03      PABX
TRUNK TYPE
```

**Step 5:** Press **HOLD** to save change.

```
*:01 03      PABX
TRUNK TYPE
```

**Step 6:** (Optional) Press **CONF** to set ALL Trunks the same.

```
*:02 04      PULSE
TRUNK SIGNAL
```

**Step 7:** (Optional) Press **TRF** to scroll forward to the next Trunk or **MIC** to scroll backward to the previous Trunk. Repeat from Step 4.

e.g. Move to next Trunk

```
M:01 04      C.O.
TRUNK TYPE
```

**(Mode 02) Trunk Signal Type**

Each Trunk can be set for either DTMF or Pulse signalling. When a Trunk is connected to a Central Office (or PABX) which recognizes both DTMF and Pulse signalling, set the Trunk to DTMF. Set a Trunk to Pulse signalling only when Pulse is the only type of signalling recognized.

Refer to the *Easy Reference Guide* for how to change the signal type while dialing on a Trunk.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **02**

```
M:02 .
TRUNK SIGNAL
```

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 4

```
M:02 04      DTMF
TRUNK SIGNAL
```

**Step 4:** Press **MSG** for DTMF or **FLASH** for Pulse.

e.g. Set to Pulse Signaling

```
M:02 04      PULSE
TRUNK SIGNAL
```

**Step 5:** Press **HOLD** to save change.

```
*:02 04      PULSE
TRUNK SIGNAL
```

**Step 6:** (Optional) Press **CONF** to set ALL Trunks the same.

```
*:02 04      PULSE
TRUNK SIGNAL
```

**Step 7:** (Optional) Press **TRF** to scroll forward to the next Trunk or **MIC** to scroll backward to the previous Trunk. Repeat from Step 4.

e.g. Move to next Trunk

```
M:02 05      DTMF
TRUNK SIGNAL
```

**(Mode 03) Centrex Trunk Operation**

Each Trunk can be set to support Centrex Trunk operation for Single-Line Telephones.

**(MSG = Yes = Centrex)**

When set for Centrex operation, Single-Line Telephones can do a Flash on a Trunk by putting the Trunk on Hold then immediately dial a 6 to reaccess the Trunk.

**Programming Procedure:**

See (Trunk Programming Section - Mode 02) Trunk Signal Type and follow the programming procedure for setting Centrex Trunk Operation.

**(Mode 04) Loop Supervision Disconnect**

Each Trunk can be set to support Loop Supervision Disconnect operation for automatic termination of Trunk calls by the Central Office exchange.

**(MSG = Yes = Loop Supervision Disconnect)**

**Note:** The facility used by Loop Supervision Disconnect is supplied by the Central Office exchange and is not available to every exchange (or country).

**Programming Procedure:**

See (Trunk Programming Section - Mode 02) Trunk Signal Type and follow the programming procedure for setting Loop Supervision Disconnect.

**(Mode 05) Caller ID Name**

When using Caller ID for identification on Incoming Calls, each Trunk can be set to display either the number or name for Keyphones.

**(MSG = Yes = Caller ID Name, FLASH = No = Caller ID Number)**

The Caller ID information is shown on the LCD display of the Keyphone and when printing Incoming SMDR Call Records.

**Note:** The facility used for Caller ID is supplied by the Central Office exchange and may not be able to always supply either number or name (not available in every country).

Refer to the *Installation Guide* for more information on using Caller ID.

**Programming Procedure:**

See (Trunk Programming Section - Mode 02) Trunk Signal Type and follow the

programming procedure for setting Caller ID Name.

**(Mode 06) Ring-back Tone on Transfer**

Each Trunk can be set to give Ring-back Tone in place of music on being transferred to a Station. (**MSG** = Yes = Ring-back on Transfer, **FLASH** = No = Music)

See (Trunk Programming Section - Mode 37) Trunk Music Source for how to set the music source for a Trunk on hold.

**Programming Procedure:**

See (Trunk Programming Section - Mode 02) Trunk Signal Type and follow the programming procedure for setting Ring-back Tone on Transfer.

**(Mode 07) Disable Trunk**

Each Trunk can be disabled. Disable Trunk is used to restrict access to an unconnected Trunk. Once disabled, the Trunk can not be accessed and it will not ring for an Incoming Call. It can also be used to temporarily disable a bad Trunk.  
(**MSG** = Yes = Disable Trunk, **FLASH** = No = Normal)

**Programming Procedure:**

See (Trunk Programming Section - Mode 02) Trunk Signal Type and follow the programming procedure for setting Disable Trunk.

**(Mode 10) Loud Bell 1 - Day**

There are four zones available for Loud Bell operation. Each Trunk can be set to ring a Loud Bell for an Incoming Call for either Day Mode or Night Mode. The Loud Bell will ring immediately using the standard Trunk Ring cadence.

Each Trunk can be set to ring Loud Bell 1 for an Incoming Call during Day Mode.  
(**MSG** = Ring, **FLASH** = Not Ring)

Refer to the *Installation Guide* for more information on connecting a Loud Bell.

See (System Programming Section - Mode 40) External Relay Control for how to set an External Relay to work with a Loud Bell.

**Programming Procedure:**

See (Trunk Programming Section - Mode 02) Trunk Signal Type and follow the programming procedure for setting Loud Bell 1 - Day.

**(Mode 11) Loud Bell 1 - Night**

Each Trunk can be set to ring a Loud Bell 1 for an Incoming Call during Night Mode.  
(MSG = Ring, FLASH = Not Ring)

**Programming Procedure:**

See (Trunk Programming Section - Mode 10) Loud Bell 1 - Day for how to set a Loud Bell to ring.

**(Mode 12) Loud Bell 2 - Day**

Each Trunk can be set to ring Loud Bell 2 for an Incoming Call during Day Mode.  
(MSG = Ring, FLASH = Not Ring)

**Programming Procedure:**

See (Trunk Programming Section - Mode 10) Loud Bell 1 - Day for how to set a Loud Bell to ring.

**(Mode 13) Loud Bell 2 - Night**

Each Trunk can be set to ring a Loud Bell 2 for an Incoming Call during Night Mode.  
(MSG = Ring, FLASH = Not Ring)

**Programming Procedure:**

See (Trunk Programming Section - Mode 10) Loud Bell 1 - Day for how to set a Loud Bell to ring.

**(Mode 14) Loud Bell 3 - Day**

Each Trunk can be set to ring Loud Bell 3 for an Incoming Call during Day Mode.  
(MSG = Ring, FLASH = Not Ring)

**Programming Procedure:**

See (Trunk Programming Section - Mode 10) Loud Bell 1 - Day for how to set a Loud Bell to ring.

**(Mode 15) Loud Bell 3 - Night**

Each Trunk can be set to ring a Loud Bell 3 for an Incoming Call during Night Mode.

**(MSG = Ring, FLASH = Not Ring)**

**Programming Procedure:**

See (Trunk Programming Section - Mode 10) Loud Bell 1 - Day for how to set a Loud Bell to ring.

**(Mode 16) Loud Bell 4 - Day**

Each Trunk can be set to ring Loud Bell 4 for an Incoming Call during Day Mode.

**(MSG = Ring, FLASH = Not Ring)**

**Programming Procedure:**

See (Trunk Programming Section - Mode 10) Loud Bell 1 - Day for how to set a Loud Bell to ring.

**(Mode 17) Loud Bell 4 - Night**

Each Trunk can be set to ring a Loud Bell 4 for an Incoming Call during Night Mode.

**(MSG = Ring, FLASH = Not Ring)**

**Programming Procedure:**

See (Trunk Programming Section - Mode 10) Loud Bell 1 - Day for how to set a Loud Bell to ring.

**(Mode 20) SMDR Incoming**

The normal SMDR Call Record output shows only the outgoing calls. Incoming Calls can also be set to print. **(MSG = Print Incoming Calls)**

Refer to the *Installation Guide* for more information on the SMDR.

**Programming Procedure:**

See (Trunk Programming Section - Mode 02) Trunk Signal Type and follow the programming procedure for setting SMDR to print Incoming Calls.

**(Mode 21) SMDR Transferred**

The normal SMDR Call Record output shows only the outgoing calls. Trunk Calls can be set to print each time they are transferred. (**MSG** = Print for Transfer)  
When set the Call duration is reset each time a Trunk is transferred.  
Refer to the *Installation Guide* for more information on the SMDR.

**Programming Procedure:**

See (Trunk Programming Section - Mode 02) Trunk Signal Type and follow the programming procedure for setting SMDR to print transferred Trunk Calls.

## Trunk Specifications

Trunk Specifications define the general operation of all Trunks.

### (Mode 30) Trunk Names

Each Trunk can be assigned a Name up to eight characters long. The name is used in place of the Trunk number when making Trunk Calls, etc.

#### Keys:

1	QqZz
2	AaBbCc
3	DdEeFf
4	GgHhIi
5	JjKkLl
6	MmNnOo
7	PpQqRrSs
8	TtUuVv
9	WwXxYy
0	Space then complete range of characters.
*	Move left one space.
#	Move right one space.

#### Programming Procedure:

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **30**

```
M: 30 .
TRUNK NAME
```

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 3 which has no name

```
M: 30 03
TRUNK NAME
```

**Step 4:** Press **FLASH** to clear (any existing name).

```
M: 30 03
TRUNK NAME
```

**Step 5:** Enter name by pressing the correct lettered key.

e.g. Press **5** five times for 'L' in           M:30 03 L  
Local 3.   TRUNK NAME

**Step 6:** Press **#** to move to next letter or **\*** back to the previous letter.

e.g. Move to next letter                       M:30 03 L  
  TRUNK NAME

**Step 7:** Enter next letter.

e.g. Press **6** six times for 'o' in           M:30 03 Lo  
Local 3.                                        TRUNK NAME

**Step 8:** Repeat the above two steps until the Trunk name is entered.

Press **HOLD** to save change.

\*:30 03 Local 3  
TRUNK NAME

**Step 9:** (Optional) Press **TRF** to scroll forward to the next Trunk or **MIC** to scroll backward to the previous Trunk. Repeat from Step 4.

e.g. Move to next Trunk                       M:30 04  
  TRUNK NAME

**(Mode 31) Pulse Dialing Pulses per Second**

Trunk Pulse Dialing can be set to either 10 pps or 20 pps.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [PROG-PROG-1-2-3-HOLD] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode 31

M: 31                    10  
PULSE PER SECOND

**Step 3:** Press **MSG** for 10 pps or **FLASH** for 20 pps.

e.g. Set to 20 pps

M: 31                    20  
PULSE PER SECOND

**Step 4:** Press **HOLD** to save change.

\*: 31                    20  
PULSE PER SECOND

**(Mode 32) Pulse Dialing Break / Make Ratio**

Trunk Pulse Dialing can use either a 60 / 40 or 66 / 33 Break / Make Ratio.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [PROG-PROG-1-2-3-HOLD] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode 32

M: 32                    60/40  
B/M RATIO

**Step 3:** Press **MSG** for 66 / 33 or **FLASH** for 60 / 40

e.g. Set to 66 / 33 pps

M: 32                    66/33  
B/M RATIO

**Step 4:** Press **HOLD** to save change.

\*: 32                    66/33  
B/M RATIO



**(Mode 33) Trunk Flash Time**

The Flash Time used on Trunks can be set from 50 ms to 2550 ms (n x 10 ms).

When the Trunk Flash Time is used for Redial it is set for a duration which will guarantee the termination of the Trunk Call.

When the Trunk Flash Time is used for Centrex Trunk Operation it is set for a shorter period than the minimum Flash time required for terminating a Trunk Call.

**Note:** The facility used for Centrex operation is supplied by the Central Office exchange and is not available to every exchange (or country).

See (Trunk Programming Section - Mode 03) Centrex Trunk Operation for how to set a Trunk for Centrex operation.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **33**

e.g. Currently set to 1800 ms

M:33            180  
TRUNK FLASH TIME

**Step 3:** Press **FLASH** to clear (an existing time).

M:33            0  
TRUNK FLASH TIME

**Step 4:** Enter new Flash Time **5 - 255**

e.g. Set to 1200 ms (n = 120)

M:33            120  
TRUNK FLASH TIME

**Step 5:** Press **HOLD** to save change.

\*:33            120  
TRUNK FLASH TIME

**Note:** The minimum Trunk Flash Time is 50 ms (n = 5), and the maximum time is 2550 ms (n = 255).

**(Mode 34) Trunk Pause Time**

The Pause Time used on Trunks can be set from 500 ms to 2550 ms (n x 10 ms).

The Trunk Pause Time is used with Redial, Auto Redial, and Speed Dial. It is the delay after accessing a Trunk before automatic dialing.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode 34

e.g. Currently set to 1500 ms

```
M:34          150
TRUNK PAUSE TIME
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:34          0
TRUNK PAUSE TIME
```

**Step 4:** Enter new Pause Time **50 - 255**

e.g. Set to 1800 ms (n = 180)

```
M:34          180
TRUNK PAUSE TIME
```

**Step 5:** Press **HOLD** to save change.

```
*:34          180
TRUNK PAUSE TIME
```

**Note:** The minimum Trunk Pause Time is 500 ms (n = 50).

**(Mode 35) DTMF Tone Length**

The DTMF Tone Length can be set from 50 ms to 250 ms (n x 10 ms).

The DTMF Tone Length determines how quickly a Trunk generates DTMF dialing. Setting the DTMF Tone Length too short results in the Central Office exchange missing DTMF digits or ignoring the dialing completely.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **35**

e.g. Currently set to 70 ms

```
M: 35          7
DTMF TONE LENGTH
```

**Step 3:** Press **FLASH** to clear (an existing length).

```
M: 35          0
DTMF TONE LENGTH
```

**Step 4:** Enter new DTMF Tone Length **5 - 25**

e.g. Set to 80 ms (n = 8)

```
M: 35          8
DTMF TONE LENGTH
```

**Step 5:** Press **HOLD** to save change.

```
*: 35          8
DTMF TONE LENGTH
```

**Note:** The minimum DTMF Tone Length is 50 ms (n = 5), and the maximum is 250 ms (n = 25).

**(Mode 36) Ring Pause Time**

The Ring Pause Time used on Trunks can be set from 2000 ms to 6000 ms (n x 10 ms).

The Ring Pause Time is the maximum time, after a ring pulse, that the system waits for the next ring pulse. If this time lapses the system will clear ringing for the unanswered incoming Trunk call.

The Ring Pause Time allows for differences in ring cadences used by different Central Office exchanges which may have 2, 3, 4, or even 5 seconds between ring pulses. Setting the Ring Pause Time too low will result in the ringing for the incoming Trunk call being cleared before the next ring pulse.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **36**

e.g. Currently set to 3.2 seconds

```
M:36          320
RING PAUSE TIME
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:36          0
RING PAUSE TIME
```

**Step 4:** Enter new Pause Time **200 - 600**

e.g. Set to 4.2 seconds (n = 420)

```
M:36          420
RING PAUSE TIME
```

**Step 5:** Press **HOLD** to save change.

```
*:36          420
RING PAUSE TIME
```

**Note:** The minimum Ring Pause Time is 2000 ms (n = 200).

**(Mode 37) Trunk Music Source**

There are three music sources available to a Trunk on hold, one internal and two external. The two external music sources each require a device to be connected to the system.

Refer to the *Installation Guide* for more information on connecting an External Music Source.

See (Trunk Programming Section - Mode 06) Ring-back Tone on Transfer for how to set Ring-back Tone in place of music on a Trunk being transferred to a Station.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **37**

M:37 .  
TK MUSIC SOURCE

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 4

M:37 04           1  
TK MUSIC SOURCE

**Step 4:** Press **1** for internal, **2** for external 1, or **3** for external 2.

e.g. Set to External Music Source 1

M:37 04           2  
TK MUSIC SOURCE

**Step 5:** Press **HOLD** to save change.

\*:37 04           2  
TK MUSIC SOURCE

**Step 6:** (Optional) Press **CONF** to set ALL Trunks the same.

\*:37 04           2  
TK MUSIC SOURCE

**Step 7:** (Optional) Press **TRF** to scroll forward to the next Trunk or **MIC** to move backward to previous Trunk. Repeat from Step 4.

e.g. Move to next Trunk

M:37 05           1  
TK MUSIC SOURCE

## **Private Lines**

### **(Mode 40) Private Line Assignment**

Each Trunk can be set as a Private Line for up to eight Stations. Only the set Stations can access a Private Line unless Private Line Access is set to open.

Incoming Calls for a Private Line will ring only the assigned Flexible Ring Stations and the assigned Station Hunt Group for that Trunk (they do not need to be assigned to the Private Line). However, if the first position of the Private Line Assignment for the Trunk is vacant, the Private Line will ring as a normal Trunk.

See (Trunk Programming Section - Mode 67) Flexible Ring - Day and (Trunk Programming Section - Mode 69) Flexible Ring - Night for setting which Station Ports will ring for each Private Line.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **40**

```
M:40 .
PRIV LINE ASSIGN
```

**Step 3:** Enter Trunk number **01- 96**

e.g. Trunk 1

```
M:40 01 .
PRIV LINE ASSIGN
```

**Step 4:** Enter a memory position **1 - 8**. **Note:** The memory position is a counter to keep track of how many ports have been entered, up to 8 ports can be assigned per Trunk.

e.g. The second position is Port 24

```
M:40 01 2 24
PRIV LINE ASSIGN
```

**Step 5:** Press **FLASH** to clear (any existing Station Port).

```
M:40 01 2
PRIV LINE ASSIGN
```

**Step 6: Enter new Station Port number 001 - 400**

e.g. Set to Station Port 021

M:40 01 2 21  
PRIV LINE ASSIGN**Step 7: Press HOLD to save change.**\*:40 01 2 21  
PRIV LINE ASSIGN**Step 8: (Optional) Press TRF to move to the next memory position or MIC to scroll backward. Repeat from Step 6.**e.g. Move to next position Port 025  
is the third Station Port.M:40 01 3 25  
PRIV LINE ASSIGN**Entry Definitions:**

TT-Trunk No.

P - Position No. M:40 **TT P** **XXX**

XXX- Station Port PRIV LINE ASSIGN

**(Mode 41) Private Line Access**

Access to Trunks assigned as Private Lines is normally restricted to the Stations assigned to the Private Line. Private Line access can be set open.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode 41

```
M:41 .
PRIV LINE ACCESS
```

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 1

```
M:41 01  CLOSED
PRIV LINE ACCESS
```

**Step 4:** Press **MSG** for Open or **FLASH** for Closed.

e.g. Open Private Line access

```
M:41 01  OPEN
PRIV LINE ACCESS
```

**Step 5:** Press **HOLD** to save change.

```
*:41 01  OPEN
PRIV LINE ACCESS
```

**Step 6:** (Optional) Press **CONF** to set ALL Trunks the same.

```
*:41 01  OPEN
PRIV LINE ACCESS
```

**Step 7:** (Optional) Press **TRF** to move to the next Trunk or **MIC** to scroll backward. Repeat from Step 6.

e.g. Move to next Trunk

```
M:41 02  OPEN
PRIV LINE ACCESS
```

**(Mode 42) Private Line - Common Ring Day**

When in Day Mode, Incoming Calls on Private Lines can be set to also ring the Common Ring Day Stations.

See (Trunk Programming Section - Mode 74) Common Ring - Day and (Trunk Programming section - Mode 76) Common Ring - Night for setting Common Ring Stations.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **42**

M:42 .  
PRIV DAY RING

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 4

M:42 04 NO  
PRIV DAY RING

**Step 4:** Press **MSG** for Ring (Yes) or **FLASH** for Not Ring (No).

e.g. Set to ring Common Ring Day Stations.

M:42 04 YES  
PRIV DAY RING

**Step 5:** Press **HOLD** to save change.

\*:42 04 YES  
PRIV DAY RING

**Step 6:** Press **CONF** to set ALL Trunks the same.

\*:42 04 YES  
PRIV DAY RING

**Step 7:** (Optional) Press **TRF** to scroll forward to next Trunk or **MIC** to move backward to previous Trunk. Repeat from Step 4.

e.g. Move to next Trunk

M:42 05 YES  
PRIV DAY RING

**(Mode 43) Private Line - Common Ring Night**

When in Night Mode, Incoming Calls on Private Lines can be set to also ring the Common Ring Night Stations.

See (Trunk Programming Section - Mode 74) Common Ring - Day and (Trunk Programming section - Mode 76) Common Ring - Night for setting Common Ring Stations.

**Programming Procedure:**

See (Trunk Programming Section - Mode 42) Private Line - Common Ring Day and follow the programming procedure for setting Common Ring - Night to ring for Private Lines.

**(Mode 44) Private Line Pickup**

Normally, only Stations which can access a Private Line can pickup a ringing Private Line. Private Line Pickup can be allowed by all Stations.

See (Station Programming Section - Mode 02) Call Pickup for how to set Call Pickup for Stations.

**Programming Procedure:**

See (Trunk Programming Section - Mode 42) Private Line - Common Ring Day and follow the programming procedure for setting Private Line Pickup.

## **Trunk Hunt Groups**

Trunk Hunt Groups are used to set the order and priority of accessing Trunks and keep incoming calls away from outgoing calls. Trunk Hunt Groups allow local and long distance Trunks to be grouped separately. Redial, Auto Redial, Speed Dial, and Automatic Route Selection all use Trunk Hunt Groups to select Trunks.

### **(Mode 50) Trunk Hunt Group Programming**

The system has eight Trunk Hunt Groups (1 - 8) which are used for Automatic Trunk Selection. Redial, Speed Dial, Auto Redial, and External Call Forwarding all use the Trunk Hunt Group assigned to the Station.

**Note:** Remove all unused Trunks from the Trunk Hunt Groups.

Each Trunk Hunt Group can have the maximum number of Trunks available for the system assigned to it.

See (Station Programming Section - Mode 74) Trunk Hunt Group Assignment for assigning a Trunk Hunt Group to a Station.

See (System Programming Section - Mode 16) Trunk Hunt Group Access Code for how to set the Access Code for accessing a Trunk Hunt Group.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **50**

M:50 .  
TRUNK HUNT GROUP

**Step 3:** Enter Trunk Hunt Group number **1 - 8**

e.g. Trunk Hunt Group 2

M:50 2 .  
TRUNK HUNT GROUP

**Step 4:** Enter a memory position number **01- 64** **Note:** The memory position is a counter to keep track of how many Trunks have been entered, up to 64 Trunks can be assigned per Trunk Group.

e.g. The fourth position is Trunk 4      M:50 2 04      4  
TRUNK HUNT GROUP

**Step 5:** Press **FLASH** to clear (an existing Trunk).

M:50 2 04  
TRUNK HUNT GROUP

**Step 6:** Enter new Trunk number **01 - 96**

e.g. Set to Trunk 21      M:50 2 04      21  
TRUNK HUNT GROUP

**Step 7:** Press **HOLD** to save change.

\*:50 2 04      21  
TRUNK HUNT GROUP

**Step 8:** Press **TRF** to scroll forward to next memory position or **MIC** to scroll backward to previous memory position. Repeat from Step 5.

e.g. Move to next position      M:50 2 05      5  
Trunk 5 is the fifth Trunk  
In the Group.      TRUNK HUNT GROUP

**(Mode 51) Automatic Trunk Hunt Group Access**

When the Trunk Hunt Group Access Code (9 or 0), either the Trunk Hunt Group assigned to the Station is automatically used, or a second digit (1 - 8) must be dialed to specify which Trunk Hunt Group to use.

See (Station Programming Section - Mode 74) Trunk Hunt Group Assignment for assigning a Trunk Hunt Group to a Station.

See (System Programming Section - Mode 16) Trunk Hunt Group Access Code for how to set the Access Code for accessing a Trunk Hunt Group.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **51**

```
M: 51          NO
AUTO TRUNK GROUP
```

**Step 3:** Press **MSG** for Automatic Access (Yes) or **FLASH** for No.

e.g. Set to use Automatic Trunk Hunt Group Access.

```
M: 51          YES
AUTO TRUNK GROUP
```

**Step 4:** Press **HOLD** to save change.

```
*: 51          YES
AUTO TRUNK GROUP
```

**(Mode 52) Terminal Trunk Hunt Group Access**

Trunks are always accessed from a Trunk Hunt Group starting at the first position of the Trunk Hunt Group and accessing the first available idle Trunk found.

An alternative to terminal access is distributed access where the Trunks are accessed in rotation.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **52**

```
M:52 .
TERMINAL TK ACC
```

**Step 3:** Enter Trunk Hunt Group number **1 - 8**

e.g. Trunk Hunt Group 2

```
M:52 2      YES
TERMINAL TK ACC
```

**Step 4:** Press **MSG** for Terminal Access (Yes) or **FLASH** for Distributed Access (No).

e.g. Set to use distributed Access

```
M:52 2      NO
TERMINAL TK ACC
```

**Step 5:** Press **HOLD** to save change.

```
*:52 2      NO
TERMINAL TK ACC
```

**Step 6:** (Optional) Press **CONF** to set ALL Trunk Hunt Groups the same.

```
*:52 2      NO
TERMINAL TK ACC
```

**Step 7:** (Optional) Move to next Group. Press **MIC** to scroll backward, **TRF** to scroll forward.

e.g. Move to next Trunk Hunt Group

```
M:52 3      NO
TERMINAL TK ACC
```

## **Trunk Ringing**

Trunk Ringing has a wide range of different ring options which allow both basic ringing and custom ringing for individual Trunks.

### **Normal Trunk Ringing**

1. After Console Ring Delay Time expires, ring Console if set to ring.
2. After Second Console Ring Delay Time expires, ring Second Console if set to ring.
3. Ring a Station from a Station Hunt Group if set to ring.
4. After Flexible Ring Delay Time expires, ring Flexible Ring Stations.
5. After Common Ring Delay Time expires, ring all Common Ring Stations.

### **(Mode 60) Console Ring Delay Time**

The Console has a Delay Time before the Console will ring for an Incoming Call.

The Delay Time can be set from 0 to 9999 seconds. If set to 0 there will be no delay.

#### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **60**

```
M: 60          0
CONS 1 DELAY
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M: 60          0
CONS 1 DELAY
```

**Step 4:** Enter new Console Ring Delay Time **0 - 9999**

e.g. Set Delay Time to 20 seconds

```
M: 60          20
CONS 1 DELAY
```

**Step 5:** Press **HOLD** to save change.

```
*: 60          20
CONS 1 DELAY
```

**(Mode 61) Console Incoming Call Ringing**

Incoming Calls can be set to ring at the Console (after the Console Ring Delay Time).

If the Console is set to Ring, it will be reminded when busy if Console Ring Busy Remind has been set. If set to Not Ring, it will still ring if set as a Flexible Ring Station or Common Ring Station.

See (Trunk Programming Section - Mode 64) Common Ring Busy Remind for how to set the Common Ring Busy Remind Time.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **61**

```
M:61 .
CONS 1 INCOMING
```

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 4

```
M:61 04      RING
CONS 1 INCOMING
```

**Step 4:** Press **MSG** for Ring or **FLASH** for Not Ring.

e.g. Set the Console to not ring

```
M:61 04 NOT RING
CONS 1 INCOMING
```

**Step 5:** Press **HOLD** to save change.

```
*:61 04 NOT RING
CONS 1 INCOMING
```

**Step 6:** (Optional) Press **CONF** to set ALL Trunks the same.

```
*:61 04 NOT RING
CONS 1 INCOMING
```

**Step 7:** (Optional) Press **TRF** to scroll forward to next Trunk or **MIC** to move backward to previous Trunk. Repeat from Step 4.

e.g. Move to next Trunk

```
M:61 05      RING
CONS 1 INCOMING
```

**(Mode 62) Second Console Ring Delay Time**

The Second Console has a Delay Time before the Second Console will ring for an Incoming Call.

The Delay Time can be set from 0 to 9999 seconds. If set to 0 there will be no delay.

**Programming Procedure:**

See (Trunk Programming Section - Mode 60) Console Ring Delay Time and follow the programming procedure for setting Second Console Ring Delay Time.

**(Mode 63) Second Console Incoming Call Ringing**

Incoming Calls can be set to ring at the Second Console (after the Second Console Ring Delay Time).

If the Second Console is set to Ring, it will be reminded when busy if Console Ring Busy Remind has been set. If set to Not Ring, it will still ring if set as a Flexible Ring Station or Common Ring Station.

See (Trunk Programming Section - Mode 64) Common Ring Busy Remind for how to set the Common Ring Busy Remind Time.

**Programming Procedure:**

See (Trunk Programming Section - Mode 61) Console Incoming Call Ringing and follow the programming procedure to set Second Console Incoming Call Ringing.

**(Mode 64) Console Off Hook Ringing**

If the Console and Second Console are busy when an Incoming Call is trying to ring, an Off Hook Ring signal can be given that there is an Incoming Call.

The Console Off Hook Ring Time can be set from 1 to 9999 seconds. If set to 0 there will be no Off Hook Ringing.

The Console and Second Console will receive Off Hook Ringing when busy if the Consoles have been set to ring in Console Ring, Flexible Ring, or Common Ring.

See (Station Programming Section - Mode 10) Off Hook Ring Tone for how to restrict a Station Port from ringing when Off Hook.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **64**

e.g. The Remind Time is currently  
30 seconds.

```
M:64          30
CONS BUSY REMIND
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:64          0
CONS BUSY REMIND
```

**Step 4:** Enter new Console Ring Busy Remind Time **1 - 9999**

e.g. Set Remind Time to 40 seconds.

```
M:64          40
CONS BUSY REMIND
```

**Step 5:** Press **HOLD** to save change.

```
*:64          40
CONS BUSY REMIND
```

**(Mode 65) Trunk Station Hunt Group Ringing - Day**

Each Trunk can be set to ring a Station Hunt Group for Incoming Calls.

A Station Hunt Group can be set for both Day Mode and Night Mode.

If one or more Stations from the assigned Station Hunt Group are already ringing due to being a Flexible Ring Station, Console, or Second Console, no extra Station from the Station Hunt Group will ring.

If set to 0 no Station Hunt Group will be used.

See (Station Programming Section - Mode 60) Station Hunt Groups for how to set up a Station Hunt Group.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **65**

```
M:65 .
ST GP RING - DAY
```

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 4 has no Station Hunt Group set.

```
M:65 04      0
ST GP RING - DAY
```

**Step 4:** Enter Station Hunt Group number **1- 8** or press **FLASH** to set to 0.

e.g. Set to Station Hunt Group 2

```
M:65 04      2
ST GP RING - DAY
```

**Step 5:** Press **HOLD** to save change.

```
*:65 04      2
ST GP RING - DAY
```

**Step 6:** (Optional) Press **CONF** to set ALL Trunks the same.

```
*:65 04      2
ST GP RING - DAY
```

**Step 7:** (Optional) Press **TRF** to scroll forward to next Trunk or **MIC** to move backward to previous Trunk. Repeat from Step 4.

```
e.g. Move to next Trunk           M:65 05      0
     Trunk 5 has no Station Hunt   ST GP RING - DAY
     Group set.
```

### **(Mode 66) Trunk Station Hunt Group Ringing - Night**

Each Trunk can be set to ring a Station Hunt Group for Incoming Calls when the system is in Night Mode.

A Station Hunt Group can be set for both Day Mode and Night Mode.

If one or more Stations from the assigned Station Hunt Group are already ringing due to being a Flexible Ring Station, Console, or Second Console, no extra Station from the Station Hunt Group will ring.

If set to 0 no Station Hunt Group will be used.

See (Station Programming Section - Mode 60) Station Hunt Groups for how to set up a Station Hunt Group.

See (Trunk Programming Section - Mode 65) Trunk Station Hunt Group Ringing - Day and follow the programming procedure to set Trunk Station Hunt Group Ringing - Night.

**(Mode 67) Flexible Ring Delay Time - Day**

Each Trunk can have a Delay Time before the Flexible Ring Stations will ring for an Incoming Call.

The Delay Time can be set from 0 to 9999 seconds. If set to 0 there will be no delay.

The Flexible Ring Delay Time can be set for Day Mode, Night Mode, or both.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **67**

```
M:67 .
FLEX RING DELAY
```

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 12 has a 10 second Flexible Ring Delay Time.

```
M:67 12      10
FLEX RING DELAY
```

**Step 4:** Press **FLASH** to clear (an existing time).

```
M:67 12      0
FLEX RING DELAY
```

**Step 5:** Enter new Flexible Ring Delay Time.

e.g. Set Delay Time to 15 seconds for Trunk 12.

```
M:67 12      15
FLEX RING DELAY
```

**Step 6:** Press **HOLD** to save change.

```
*:67 12      15
FLEX RING DELAY
```

**Step 7:** (Optional) Press **CONF** to set ALL Trunks the same.

```
*:67 12      15
FLEX RING DELAY
```

**Step 8:** (Optional) Press **TRF** to scroll forward to next Trunk or **MIC** to move backward to previous Trunk. Repeat from Step 4.

e.g. Move to next Trunk

```
M:67 13      0
FLEX RING DELAY
```



**(Mode 68) Flexible Ring - Day**

Each Trunk can ring up to sixteen selected Stations for an Incoming Call. These Stations are known as the Flexible Ring Stations. The Flexible Ring Stations will ring for an Incoming Call only after the Flexible Ring Delay Time expires.

Flexible Ring Stations can be set for Day Mode, Night Mode, or both.

If a Flexible Ring Station is busy, it will be reminded if Flexible Off Hook Ringing (Trunk Programming Section - Mode 72) has been set.

See (Trunk Programming Section - Mode 40) Private Line Assignment if setting Flexible Ring for a Private Line.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **68**

M:68 .  
FLEX RING - DAY

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 5

M:68 05 .  
FLEX RING - DAY

**Step 4:** Enter a Flexible Ring Station memory position **01 – 16** **Note:** The memory position is a counter to keep track of how many ports have been entered, up to 16 Station ports can be assigned to Ring per Trunk.

M:68 05 01  
FLEX RING - DAY

**Step 5:** Press **FLASH** to clear an existing Station Port number.

M:68 05 01  
FLEX RING - DAY

**Step 6: Enter new Station Port number 001 - 400**

e.g. Set to Port 012

M:68 05 01 012  
FLEX RING - DAY**OR Press MSG for Station Hunt Group 1 - 9**

e.g. Set to Station Hunt Group 9.

M:68 05 01STGP:9  
FLEX RING - DAY**Step 7: Press HOLD to save change.**\*:68 05 01 12  
FLEX RING - DAY**Step 8: (Optional) Press TRF to scroll forward to next memory position or MIC to move backward. Repeat from Step 4.**e.g. Move to next memory position  
To set Port 021 to ring.M:68 05 02  
FLEX RING - DAY**(Mode 69) Flexible Ring Delay Time - Night**

Each Trunk can have a Delay Time before the Flexible Ring Stations will ring for an Incoming Call when the system is in Night Mode.

The Delay Time can be set from 0 to 9999 seconds. If set to 0 there will be no delay.

The Flexible Ring Delay Time can be set for Day Mode, Night Mode, or both.

**Programming Procedure:**

See (Trunk Programming Section - Mode 67) Flexible Ring Delay Time - Day and follow the programming procedure to set Flexible Ring Delay Time - Night.

**(Mode 70) Flexible Ring - Night**

Each Trunk can ring up to sixteen selected Stations for an Incoming Call when the system is in Night Mode. These Stations are known as the Flexible Ring Stations. The Flexible Ring Stations will ring for an Incoming Call only after the Flexible Ring Delay Time expires.

Flexible Ring Stations can be set for Day Mode, Night Mode, or both.

If a Flexible Ring Station is busy, it will be reminded if Flexible Off Hook Ringing (Trunk Programming Section - Mode 72) has been set.

See (Trunk Programming Section - Mode 40) Private Line Assignment if setting Flexible Ring for a Private Line.

**Programming Procedure:**

See (Trunk Programming Section - Mode 68) Flexible Ring - Day and follow the programming procedure to set Flexible Ring - Night.

**(Mode 71) Stepped Ringing**

The Flexible Ring Stations for a Trunk can be set to ring all at once or in a stepped pattern.

When Stepped Ringing is set for a Trunk, only one Flexible Ring Station will initially ring for an Incoming Call, an additional Flexible Ring Station will start ringing every six seconds. They will ring in the order set in (Trunk Programming Section - Mode 68) Flexible Ring - Day and (Trunk Programming Section - Mode 70) Flexible Ring - Night. Stepped Ringing affects both Private Lines and normal Trunks.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **71**

M:71 .  
STEPPED RINGING

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 2

M:71 02 NO  
STEPPED RINGING

**Step 4:** Press **MSG** (Yes) for Stepped Ringing or **FLASH** (No) for normal.

e.g. Set Trunk to use  
Stepped Ringing.

M:71 02 YES  
STEPPED RINGING

**Step 5:** Press **HOLD** to save change.

\*:71 02 YES  
STEPPED RINGING

**Step 6:** (Optional) Press **CONF** to set ALL Trunks the same.

\*:71 02 YES  
STEPPED RINGING

**Step 7:** (Optional) Press TRF to scroll forward to the next Trunk or **MIC** to move backward to previous Trunk. Repeat from Step 4.

e.g. Move to next Trunk

M:71 03 NO  
STEPPED RINGING

**(Mode 72) Flexible Off Hook Ringing**

Flexible Ring Stations that are busy when an Incoming Call is ringing can be given a Ring signal that there is an Incoming Call.

The Flexible Off Hook Ring Time can be set from 1 to 9999 seconds. If set to 0 there will be no Off Hook Ringing.

The Console and Second Console will receive Off Hook Ringing only if (Trunk Programming Section - Mode 64) Console Off Hook Ringing has been set.

See (Station Programming Section - Mode 10) Off Hook Ring Tone for how to restrict a Station Port from receiving Off Hook Ringing.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **72**

e.g. There is currently no Off Hook Ringing for Flexible Ring Stations. M:72 0  
FLEX BUSY REMIND

**Step 3:** Press **FLASH** to clear (an existing time).

M:72 0  
FLEX BUSY REMIND

**Step 4:** Enter new Flexible Off Hook Ring Time **1 - 9999**

e.g. Set Off Hook Ring Time to 60 seconds. M:72 60  
FLEX BUSY REMIND

**Step 5:** Press **HOLD** to save change.

\*:72 60  
FLEX BUSY REMIND

**(Mode 73) Common Ring Delay Time - Day**

Each Trunk can have a Delay Time before the Common Ring Stations will ring for an Incoming Call.

The Delay Time can be set from 0 to 9999 seconds. If set to 0 there will be no delay.

The Common Ring Delay Time can be set for Day Mode, Night Mode, or both.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **73**

M:73 .  
COMM RING DELAY

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 3 has a 15 second  
Common Ring Delay Time.

M:73 03           15  
COMM RING DELAY

**Step 4:** Press **FLASH** to clear (an existing time).

M:73 03           0  
COMM RING DELAY

**Step 5:** Enter new Common Ring Delay Time **0 - 9999**

e.g. Set Delay Time to 10 seconds for  
Trunk 3.

M:73 03           10  
COMM RING DELAY

**Step 6:** Press **HOLD** to save change.

\*:73 03           10  
COMM RING DELAY

**Step 7:** (Optional) Press **CONF** to set ALL Trunks to the same Time.

\*:73 03           10  
COMM RING DELAY

**Step 8:** (Optional) Press **TRF** to scroll forward to next Trunk or **MIC** to move backward to previous Trunk. Repeat from Step 4.

e.g. Move to next Trunk

M:73 04           0  
COMM RING DELAY



**(Mode 74) Common Ring - Day**

The system can ring up to twenty-four selected Stations for an Incoming Call. These Stations are known as the Common Ring Stations. The Common Ring Stations will ring for an Incoming Call only after the Common Ring Delay Time expires.

Common Ring Stations will ring for Incoming Calls on all Trunks. (Private Lines are a possible exception depending on how the Private Line is set up.)

Common Ring Stations can be set for Day Mode, Night Mode, or both.

If a Common Ring Station is busy it will be reminded if a Common Off Hook Ring Time has been set.

See (Trunk Programming Section - Mode 40) Private Line Assignment if setting Common Ring for a Private Line.

See (Trunk Programming Section - Mode 68) Flexible Ring - Day and (Trunk Programming Section - Mode 70) Flexible Ring - Night for how to set Flexible Ring Stations.

See (Trunk Programming Section - Mode 77) Common Off Hook Ringing for how to make busy Common Ring Stations ring.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode 74

```
M:74 .
COMM RING - DAY
```

**Step 3:** Enter a Common Ring Station memory position **01 – 24** **Note:** The memory position is a counter to keep track of how many ports have been entered, up to 16 Station ports can be assigned to Ring per Trunk.

```
e.g. Set Ports 13, 14, 16, and 18 as
Common Ring Stations.      M:74 01
                           COMM RING - DAY
```

**Step 4:** Press **FLASH** to erase an existing Station Port number.

```
M:74 01
COMM RING - DAY
```

**Step 5: Enter new Station Port number 001 - 400**

e.g. Set to Port 13.

M:74 01 13  
COMM RING - DAY**OR Press MSG for Station Hunt Group 1 - 9**

e.g. Set to Station Hunt Group 1

M:74 01 STGP:1  
COMM RING - DAY**Step 6: Press HOLD to save change.**\*:74 01 13  
COMM RING - DAY**Step 7: (Optional) Press TRF to scroll forward to next memory position or MIC to move backward to previous memory position. Repeat from Step 4.**e.g. Move to next position to set  
Port 14.M:74 02  
COMM RING - DAY**(Mode 75) Common Ring Delay Time - Night**

Each Trunk can have a Delay Time before the Common Ring Stations will ring for an Incoming Call when the system is in Night Mode.

The Delay Time can be set from 0 to 9999 seconds. If set to 0 there will be no delay.

The Common Ring Delay Time can be set for Day Mode, Night Mode, or both.

**Programming Procedure:**

See (Trunk Programming Section - Mode 73) Common Ring Delay Time - Day and follow the programming procedure to set Common Ring Delay Time - Night.

**(Mode 76) Common Ring - Night**

The system can ring up to twenty-four selected Stations for an Incoming Call when the system is in Night Mode. These Stations are known as the Common Ring Stations. The Common Ring Stations will ring for an Incoming Call only after the Common Ring Delay Time expires.

Common Ring Stations will ring for Incoming Calls on all Trunks. (Private Lines are a possible exception depending on how the Private Line is set up.)

Common Ring Stations can be set for Day Mode, Night Mode, or both.

See (Trunk Programming Section - Mode 77) Common Off Hook Ringing for how to make busy Night Common Ring Stations ring.

A Station from a Station Hunt Group can also be set to ring. Only one Station from the Station Hunt Group will be set to ring. Other Stations in the Station Hunt Group will not be busy reminded.

See (Trunk Programming Section - Mode 40) Private Line Assignment if setting Common Ring for a Private Line.

See (Trunk Programming Section - Mode 68) Flexible Ring - Day and (Trunk Programming Section - Mode 70) Flexible Ring - Night for how to set Flexible Ring Stations.

**Programming Procedure:**

See (Trunk Programming Section - Mode 74) Common Ring - Day and follow the programming procedure to set Common Ring - Night.

**(Mode 77) Common Off Hook Ringing**

Common Ring Stations that are busy when an Incoming Call is trying to ring can be given a Off Hook Ring signal that there is an Incoming Call.

The Common Off Hook Ring Time can be set from 1 to 9999 seconds. If set to 0 there will be no Off Hook Ringing.

The Console and Second Console will be reminded only if (Trunk Programming Section - Mode 64) Console Off Hook Ring has been set.

See (Station Programming Section - Mode 10) Off Hook Ring Tone for how to restrict a Station Port from receiving Off Hook Ringing.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **77**

e.g. The Off Hook Ring Time  
is currently 30 seconds.

```
M:77          30
COMM BUSY REMIND
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:77          0
COMM BUSY REMIND
```

**Step 4:** Enter new Common Off Hook Ring Time.

e.g. Set Off Hook Ring Time to  
60 seconds.

```
M:77          60
COMM BUSY REMIND
```

**Step 5:** Press **HOLD** to save change.

```
*:77          60
COMM BUSY REMIND
```

**(Mode 78) Softkey Pattern for Trunk Ringing**

When an Incoming Call rings a Station, the line appearance on the Keyphone can be either a quick flashing red or steady green to indicate ringing.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .  
Enter Mode No.
```

**Step 2:** Enter Mode **78**

```
M:78          RED  
TK RING PATTERN
```

**Step 3:** Press **MSG** for Green or **FLASH** for Red.

e.g. Use green to show Incoming Call.

```
M:78          GREEN  
TK RING PATTERN
```

**Step 4:** Press **HOLD** to save change.

```
*:78          GREEN  
TK RING PATTERN
```

## **External Call Forwarding**

There are two methods of Call Forwarding: External and Station.

External Call Forwarding can be set individually for each Trunk for Day Mode and for Night Mode.

External Call Forwarding to an External number is achieved by the use of Speed Dial bins.

After the External Call Forwarding Delay Time expires, a second Trunk is accessed, using Automatic Trunk Selection, and then the number in the assigned Speed Dial bin is dialed. After the External Call Forwarding Duration time expires, both Trunks are automatically released.

Incoming Calls cannot be Call Forwarded to an external number when the Station set to Call Forward is busy. Each Station can handle only ONE External Call Forwarding at a time.

**Note:** Ensure that the Speed Dial bin is not restricted for the Station that has to dial the number. Speed Dial bins above the (System Programming Section - Mode 63) Speed Dial Toll Restriction Break Point are NOT Toll restricted.

See (Station Programming Section) Station Call Forwarding for how to set Call Forwarding for individual Stations.

**(Mode 80) External Call Forwarding Delay Time**

A Delay Time can be set for Incoming Call ringing duration, before External Call Forwarding is executed.

The Delay Time can be set from 0 to 9999 seconds. If set to 0 there will be no delay.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **80**

e.g. There is no delay

```
M:80          0
EXT C/F DELAY
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:80          0
EXT C/F DELAY
```

**Step 4:** Enter new External Call Forwarding Delay Time **0 - 9999**

e.g. Set Delay Time to 15 seconds.

```
M:80          15
EXT C/F DELAY
```

**Step 5:** Press **HOLD** to save change.

```
*:80          15
EXT C/F DELAY
```

**(Mode 81) External Call Forwarding - Day**

Speed Dialing is used to store the number to be dialed for External Call Forwarding. A separate Speed Dial bin (01 - 09, 100 - 499) can be assigned to each Trunk for Day Mode, Night Mode, or both.

If set to 0 there will be no External Call Forwarding.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **81**

M:81 .  
EXT C/F - DAY

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 18 is not External  
Call Forwarding.

M:81 18           0  
EXT C/F - DAY

**Step 4:** Press **FLASH** to clear (an existing Speed Dial).

e.g. Set No Call Forwarding

M:81 18           0  
EXT C/F - DAY

**Step 5:** Enter new Speed Dial bin (01 - 09, 100 - 499)

e.g. Set to Speed Dial bin 167

M:81 18           167  
EXT C/F - DAY

**Step 6:** Press **HOLD** to save change.

\*:81 18           167  
EXT C/F - DAY

**Step 7:** (Optional) Press **TRF** to scroll forward to the next Trunk or **MIC** to move backward to previous Trunk. Repeat from Step 4.

e.g. Move to next Trunk  
No Call Forwarding is set.

M:81 19           0  
EXT C/F - DAY

**(Mode 82) External Call Forwarding - Night**

Speed Dialing is used to store the number to be dialed for External Call Forwarding. A separate Speed Dial bin (01 - 09, 100 - 499) can be assigned to each Trunk for Day Mode, Night Mode, or both.

**Programming Procedure:**

See (Trunk Programming Section - Mode 81) External Call Forwarding - Day and follow the programming procedure to set External Call Forwarding - Night.

**(Mode 83) External Call Forwarding Duration**

The External Call Forwarding Duration determines the length of the call before the Trunks are automatically released.

The call duration can be set from 1 to 9999 seconds. If set to 0 there will be no External Call Forwarding.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **83**

e.g. Call Duration is currently  
180 seconds.

```
M:83          180
EXT C/F DURATION
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:83          0
EXT C/F DURATION
```

**Step 4:** Enter new Call Duration.

e.g. Set Call Duration 300 seconds.

```
M:83          300
EXT C/F DURATION
```

**Step 5:** Press **HOLD** to save change.

```
*:83          300
EXT C/F DURATION
```

## **Trunk Dial Operation**

### **(Mode 85) Call Duration Warning Tone Time**

When a Station is on an Outgoing Call an audible Warning Tone is given to the Station at a regular interval to indicate the duration of the call.

The time interval for the Warning Tone can be set from 30 to 9999 seconds.

See (Station Programming Section - Mode 08) Call Duration Warning Tone for how to set the Call Duration Warning Tone for individual Stations.

**Warning:** Do NOT set Call Duration Warning Tone on a Station port used for Voice Mail or Fax machine as it may interfere with operation of these devices.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **85**

e.g. Currently set to 180 seconds.

```
M:85          180
WARN TONE TIME
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:85          0
WARN TONE TIME
```

**Step 4:** Enter new Warning Tone Time **30 - 9999**

e.g. Set to 120 seconds.

```
M:85          120
WARN TONE TIME
```

**Step 5:** Press **HOLD** to save change.

```
*:85          120
WARN TONE TIME
```

**(Mode 86) No Dial Time-out**

A time duration can be set to limit Trunk access with no digits being dialed. The Trunk is released once the time has expired.

The No Dial Time can be set from 1 to 9999 seconds. If set to 0 there will be no Time-out.

**Note:** A Trunk can be accessed at the same time it is about to ring. This means the user connects with the Incoming Call but for the system it is an Outgoing Call. If this occurs when No Dial Time has been set, a digit has to be dialed, otherwise, the Trunk will be released once the No Dial Time has expired.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **86**

e.g. It is set for no Time-out.

```
M:86          0
NO DIAL TIME-OUT
```

**Step 3:** Press **FLASH** to clear (an existing time).

e.g. Set to no Time-out

```
M:86          0
NO DIAL TIME-OUT
```

**Step 4:** Enter new No Dial Time **1 - 9999**

e.g. Set No Dial Time to 20 seconds

```
M:86          20
NO DIAL TIME-OUT
```

**Step 5:** Press **HOLD** to save change.

```
*:86          20
NO DIAL TIME-OUT
```

**(Mode 87) Keyphone Trunk Dial Time**

A time duration can be set to limit Keyphone dialing time on a seized Trunk at the start of a Trunk Call.

Once the time expires the Keyphone can not dial out on the Trunk.

The Keyphone Trunk Dial Time can be set from 1 to 9999 seconds. If set to 0 there will be no Dial Time limit.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **87**

e.g. Dial Time is currently  
40 seconds.

```
M:87          40
KEY TK DIAL TIME
```

**Step 3:** Press **FLASH** to clear (an existing time).

e.g. Set no Dial Time limit

```
M:87          0
KEY TK DIAL TIME
```

**Step 4:** Enter new Dial Time.

e.g. Set Dial Time to 25 seconds

```
M:87          25
KEY TK DIAL TIME
```

**Step 5:** Press **HOLD** to save change.

```
*:87          25
KEY TK DIAL TIME
```

## **SMDR Operation**

The SMDR is used to output details of Call Records in ASCII format to a printer. The Call Records can also be used by a Call Accounting device, Inn Fone Front Desk package, or a Property Management System (PMS).

Incoming Calls, Transferred Calls, Intercom Calls, Appointment / Wake-up Calls can also be printed by the SMDR.

Refer to the *Installation Manual* on how to set up the SMDR.

### **(Mode 90) SMDR Minimum Call Duration**

A Minimum Call Duration for Outgoing Calls being printed by the SMDR (Station Message Detail Recorder) can be set. Outgoing Calls of duration less than the minimum will not be printed.

The Minimum Call Duration can be set from 0 to 9999 seconds.

#### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **90**

e.g. Minimum Time is currently  
15 seconds.

```
M:90          15
SMDR MIN DURATON
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:90          0
SMDR MIN DURATON
```

**Step 4:** Enter new Minimum Call Duration **0 - 9999**

e.g. Set Minimum Time to 10 seconds

```
M:90          10
SMDR MIN DURATON
```

**Step 5:** Press **HOLD** to save change.

```
*:90          10
SMDR MIN DURATON
```

**(Mode 91) SMDR Print Intercom Calls**

The SMDR is used to output details of Call Records in ASCII format to a printer. Intercom Calls can also be printed by the SMDR.

Setting Intercom Calls to print will result in one record for each Intercom Call made on the system. This is normally only used for trouble shooting.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode 91

```
M:91          NO
INTERCOM CALLS
```

**Step 3:** Press **MSG** for Print or **FLASH** for No Print.

e.g. Set to printing Intercom Calls

```
M:91          YES
INTERCOM CALLS
```

**Step 4:** Press **HOLD** to save change.

```
*:91          YES
INTERCOM CALLS
```

**(Mode 92) SMDR Print Appointment Calls**

The SMDR is used to output details of Call Records in ASCII format to a printer. Appointment / Wake-up Calls can also be printed by the SMDR.

Setting Appointment / Wake-up Calls to print will result in one record for each Appointment / Wake-up Call made on the system. All three attempts to make a Wake-up Call will be shown. This is normally only used for Hotel operation to confirm the Wake-up Call was made.

The Daily Wake-up / Remind Call is not printed.

**Programming Procedure:**

See (Trunk Programming Section - Mode 91) SMDR Print Intercom Calls and follow the programming procedure to set SMDR Print Appointment Calls.

**(Mode 93) SMDR Date Format**

The SMDR is used to output details of Call Records in ASCII format to a printer. The date format for each record can be in a DD/MM or MM/DD format.

Incoming Calls, Transferred Calls, Intercom Calls, Appointment / Wake-up Calls when printed by the SMDR also use this format.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **93**

M: 93            MM/DD  
SMDR DATE FORMAT

**Step 3:** Press **MSG** for DD/MM or **FLASH** for MM/DD.

e.g. Set date to DD/MM format

M: 93            DD/MM  
SMDR DATE FORMAT

**Step 4:** Press **HOLD** to save change.

\*: 93            DD/MM  
SMDR DATE FORMAT

## **Forced Account Code**

### **(Mode 94) Forced Account Code**

Forced Account Code can be used to ensure an account code is entered before an idle Trunk is accessed.

Forced Account Code can use either a length or a verification table to recognize account code numbers.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **94**

```
M: 94          NO
FORCE ACC CODE
```

**Step 3:** Press **MSG** (Yes) for Forced or **FLASH** (No) Not Forced.

e.g. Set to use Forced Account Code

```
M: 94          YES
FORCE ACC CODE
```

**Step 4:** Press **HOLD** to save change.

```
*: 94          YES
FORCE ACC CODE
```

**(Mode 95) Forced Account Code Length**

Forced Account Code can be used to ensure an account code is entered before an idle Trunk is accessed.

The account code length can be set from 1 to 6 digits. If set to 0 the Forced Account Code Table will be used to verify the account codes.

**Note:** The Forced Account Code Length must be set to 0 to use the Forced Account Code Table.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **95**

e.g. Account Code Length is set to  
6 digits.

```
M:95          6
ACC CODE LENGTH
```

**Step 3:** Press **FLASH** to clear (an existing length).

```
M:95          0
ACC CODE LENGTH
```

**Step 4:** Enter new Account Code Length **0 - 6**

e.g. Set for 4 digit Account Codes

```
M:95          4
ACC CODE LENGTH
```

**Step 5:** Press **HOLD** to save change.

```
*:95          4
ACC CODE LENGTH
```

**(Mode 96) Forced Account Code Table**

Forced Account Code can be used to ensure an account code is entered before an idle Trunk is accessed.

The account code table can have up to 96 different account codes. Forced Account Code Length must be set to 0 to use the account code table to verify the account codes.

**Note:** The Forced Account Code Length must be set to 0 to use the Forced Account Code Table.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode 96

```
M:96 .
ACC CODE TABLE
```

**Step 3:** Enter memory position number **01 – 96** **Note:** The memory position is a counter to keep track of how many Account codes have been entered, up to 96 Account codes can be assigned.

```
e.g. first Account Code      M:96 01  4728
                              ACC CODE TABLE
```

**Step 4:** Press **FLASH** to clear (an existing Account Code).

```
M:96 01
ACC CODE TABLE
```

**Step 5:** Enter new Account Code (up to 6 digits).

```
e.g. Set Account Code to 2881  M:96 01  2881
                              ACC CODE TABLE
```

**Step 6:** Press **HOLD** to save change.

```
*:96 01  2881
ACC CODE TABLE
```

**Step 7:** (Optional) Press **TRF** to scroll forward to next memory position or **MIC** to move backward to previous memory position. Repeat from Step 4.

```
e.g. Move to next Account Code  M:96 02  5532
                              ACC CODE TABLE
```

## **Station Programming Section**

System Programming is divided into three separate sections for ease of access. The sections are Trunk Programming Section, Station Programming Section, and System Programming Section.

Station Programming Section has been grouped into categories.

- Station Class-of-Service
- Console
- Operator Operation
- Station Hunt Groups
- Station
- Station Call Forwarding
- Single-line Telephone

### **Ports and Station Numbering**

Station Port numbering is fixed by the position of the Port on the Station Card and the location of the Station Card in the system. The number of Station Ports depends on the configuration of the system. The Station Port number is used when doing System Programming.

A Station number is a flexible number assigned to each Station Port for intercom calling and identification. Station numbers can be one to four digits and different length Station numbers can be mixed (e.g. 1 - 6, 10 - 69, 100 - 699, 1000 - 6999).

**Note:** Watch for Station numbering conflicts. For example, if Station number 20 is used, Station numbers 200 - 209 and 2000 - 2099 are unavailable.

The default Station numbering is set by System DIP switch 6. Refer to the *Hardware Programming* section for more on setting DIP switches.

**Programming using Flexible Station Numbers**

When System Programming requires a Station Port number to be entered, a Station number can be entered instead. The Station number can be used in two places: one is as an index parameter, the second is as the data value to be saved.

To enter a Station number, press the **PROG** key and then enter the Station number. Once a valid Station number has been entered, proceed with the next step.

Example:

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .  
Enter Mode No.
```

**Step 2:** Enter Mode **04**

```
M:04  
Make Paging Call
```

**Step 3:** Enter a Station number (instead of Port No.) Press **PROG + Station No.**

e.g. System automatically enters  
proper Port number 16.

```
M:04 16      YES  
ST:25      LCD
```

Proceed to next Step

## **Station Class-of-Service**

Station Class-of-Service is used to define the operation of individual Station Ports.

### **(Mode 01) Put Call on Hold**

Each Station Port can be restricted from putting a Trunk or Intercom Call on hold. When a Station Port, which is restricted from putting a call on hold, presses the **HOLD** key or does a hook-flash, the Station Port remains with the call.

**Warning:** The Console, Operator, and Voice Mail ports need to put a call on hold to transfer a call.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **01**

```
M:01 .
PUT CALL ON HOLD
```

**Step 3:** Enter Station Port number **001 - 400**

e.g. Port 023 is Station 132.

```
M:01 23      YES
ST:132  LCD
```

**Step 4:** Press **MSG** (Yes) for Put Call on Hold **or FLASH** (No) to restrict.

e.g. Set to restrict putting a call on hold.

```
M:01 23      NO
ST:132  LCD
```

**Step 5:** Press **HOLD** to save change.

```
*:01 23      NO
ST:132  LCD
```

**Step 6:** (Optional) Press **CONF** to set ALL Station Ports the same. **Please note Warning.**

e.g. All Stations can not put a call on hold.

```
*:01 23      NO
ST:132  LCD
```

**Step 7:** (Optional) Press **TRF** to scroll forward to next Station Port or **MIC** to move backward. Repeat from Step 4.

e.g. Move to next Station Port  
Port 24 can put a call on hold.

```
M:01 24      YES
ST:138  LCD
```

**(Mode 02) Call Pickup**

Each Station Port can be restricted from doing Call Pickup.

**(MSG = Yes = Allow Call Pickup)**

All three types : System Call Pickup, Group Call Pickup, and Directed Call Pickup are restricted.

Refer to the *Easy Reference Guide* for how to use Call Pickup from a Station.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Call Pickup.

**(Mode 03) Receive Paging Calls**

Paging Calls can be made through External Page Zones or over the speaker of idle Keyphones. Station Ports can be restricted from receiving Paging Calls.

**(MSG = Yes = Receive Paging Calls)**

Refer to the *Easy Reference Guide* for how to make a Paging Call from a Station.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Receive Paging Calls.

**(Mode 04) Make Paging Calls**

Paging Calls can be made through External Page Zones or over the speaker of idle Keyphones. Station Ports can be restricted from making a Paging Call.

**(MSG = Yes = Make Paging Calls)**

Refer to the *Easy Reference Guide* for how to make a Paging Call from a Station.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Make Paging Calls.

**(Mode 05) Be Barged Into**

A Keyphone can be allowed to Barge or Monitor another Station. A Station can be protected from being Barged or Monitored.

**(MSG = Yes = Not protected from Barging and Monitoring)**

Refer to the *Easy Reference Guide* for how to make a Monitoring Call or Barge a Trunk or Station.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Be Barged Into.

**(Mode 06) Barge Another Station**

A Keyphone can be allowed to Barge or Monitor another Station. A Keyphone Station can be given the privilege of Barging or Monitoring another Station.

**(MSG = Yes = Can Barge or Monitor another Station)**

Refer to the *Easy Reference Guide* for how to make a Monitoring Call or Barge a Trunk or Station.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Barge Another Station.

**(Mode 07) Ring for System Alarm**

System Alarms can be set to put music over the speaker of idle Keyphones. A Keyphone Station can be restricted from receiving System Alarms.

**(MSG = Ring for System Alarms, FLASH = Not Ring)**

See (System Programming Section) System Alarms for how to set System Alarms.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Ring for System Alarms.

**(Mode 08) Call Duration Warning Tone**

When a Station is on an Outgoing Call an audible Warning Tone is given to the Station at a regular interval to indicate the duration of the call. A Station can be restricted from receiving the audible Warning Tone.

**(MSG = Yes = Warning Tone)**

See (Trunk Programming Section - Mode 85) Call Duration Warning Tone Time for setting the warning tone time.

**Warning:** Do NOT set Call Duration Warning Tone on a Station port used for Voice Mail or Fax machine as it may interfere with operation of these devices.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Call Duration Warning Tone.

**(Mode 09) Camp-On Tone**

When a Trunk or Station Call is transferred to a busy Station a Camp-On Tone is given to the Station. This is a short Ring burst if Keyphone or audible Tone if single-line telephone. A Station can be restricted from receiving the Camp-On Tone.

**(MSG = Yes = Camp-On Tone)**

Refer to the *Easy Reference Guide* for how to Transfer a Call to another Station.

**Warning:** Do NOT set Camp-On Tone on a Station port used for Voice Mail or Fax machine as it may interfere with operation of these devices.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Camp-On Tone.

**(Mode 10) Off Hook Ring Tone**

When an Incoming Call on a Trunk is ringing a busy Station a Ring Tone is given to the Station. This is a short Ring burst if Keyphone or audible Tone on handset if single-line telephone. A Station can be restricted from receiving the Off Hook Ring Tone.

**(MSG = Yes = Off Hook Ring Tone)**

See (Trunk Programming Section) Trunk Ringing for how to set a Station Port to ring for an Incoming Call.

**Warning:** Do NOT set Off Hook Ring Tone on a Station port used for Voice Mail, Fax machine or Modem as it may interfere with operation of these devices.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Busy Remind Tone.

**(Mode 11) Hold Recall Remind Tone**

When a Call has been on Hold for longer then the Hold Recall Time, the Call rings the Station which put the Call on Hold. If the Station is busy, a Hold Recall Remind Tone is given to the Station. This is a short Ring burst if Keyphone or audible Tone if single-line telephone. A Station can be restricted from receiving the Hold Recall Remind Tone. **(MSG = Yes = Hold Recall Remind Tone)**

See (Station Programming Section - Mode 77) System Hold Recall Time, (Mode 78) System Hold Recall Busy Remind, and (Mode 79) Transfer Recall Time for how to set Hold Recall.

**Warning:** Do NOT set Hold Recall Remind Tone on a Station port used for Voice Mail or Fax machine as it may interfere with operation of these devices.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Hold Recall Remind Tone.

**(Mode 12) Programming Rights**

A Keyphone can access System Programming using a password. The PROG Lamp on the Keyphone will light when accessing programming. A Station can be restricted from accessing System Programming. Restricting Programming Rights also denies System Speed Dial Programming access.

**(MSG = Yes = Programming Rights)**

**Note:** A Keyphone set as Console 1 can always access System Programming using the Master Password.

See *Introduction to Programming* for how to access System Programming from a Keyphone.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Programming Rights.

**(Mode 13) Set Message Waiting Lamp**

When a message has been set to a single-line telephone, a Message Waiting Lamp can be set to indicate that a message is waiting. If the Station is busy the Lamp will remain off. A Station can be set to use the Message Waiting Lamp feature.

**(MSG = Yes = Set Message Waiting Lamp)**

See (Station Programming Section - Mode 94) SLP Message Waiting Lamp Time for how to set the Message Waiting Lamp Cadence on a single-line telephone.

**Note:** The single-line telephone must have a Neon lamp which works with 90 VDC across Tip & Ring to be used as a Message Waiting Lamp. Not all systems provide the 90 VDC.

Refer to the *Easy Reference Guide* for more information about setting and answering a Message Waiting.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Set Message Waiting Lamp.

**(Mode 14) Automatic Message Callback**

When a message has been set to a Station Port, the Station will ring at a regular interval if idle to indicate that a message is waiting. When answered the Station will call to the Station which left the message. A Station can be set to use the Automatic Message Callback feature.

**(MSG = Yes = Automatic Message Callback)**

See (Station Programming Section - Mode 95) Message Waiting Ring Time for how to set the interval between ring attempts.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Automatic Message Callback.

**(Mode 15) Message Waiting Indication on DSS Unit**

When a message has been set to a Station Port, a Message Waiting Lamp can be set to indicate that a message is waiting. When a Station has a Message Waiting, the DSS Unit can also be set to show an indication. This allows the Operator to know which Stations have a Message Waiting.

See (Station Programming Section) Single-line Telephone for how to set up Message Waiting for a Single-line Telephone Port.

Refer to the *Easy Reference Guide* for how to set a Message to a Station.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure to set Message Waiting Indication on DSS Unit.

**(Mode 20) Intercom Call Voice Announce**

When receiving an Intercom Call, a Keyphone can be set to either ring until answered or give a short tone before switching to Voice Announce. If the Station has set Call Forward - Busy / No Answer then the Station will ring automatically.

**(MSG = Yes = Voice Announce, FLASH = No = Ring)**

**Warning:** Do NOT use Intercom Call Voice Announce in an environment which has a high back ground noise level.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Intercom Call Voice Announce.

**(Mode 21) Intercom Microphone On**

When a Voice Announce Intercom Call is made to a Keyphone, the microphone can be set to automatically turn on for Voice response.

**(MSG = Yes = Microphone On)**

**Note:** If the microphone is set to turn on for a Voice Announce Call, then the call is considered to be answered (i.e. Call Pickup will not work).

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Intercom Microphone On.

**(Mode 22) Voice Announce Ring**

When an Intercom Call is made to a Keyphone which is set for Voice Announce, either a one-second ring or a short tone is received before the caller can announce the call.

**(MSG = Ring, FLASH = Tone)**

**Note:** If the microphone is set to turn on for a Voice Announce Call, then the call is considered to be answered (i.e. Call Pickup will not work).

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the

programming procedure for setting Voice Announce Ring.

**(Mode 23) Automatic Outside Line**

A Station Port can be set so that lifting the handset automatically accesses a Trunk from a Trunk Hunt Group. This eases operation of devices which only do outward dialing. (**MSG** = Yes = Automatic Outside Line)

See (Station Programming Section - Mode 74) Trunk Hunt Group Assignment for assigning a Trunk Hunt Group to a Station Port.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Automatic Outside Line.

**(Mode 24) Idle Trunk Access Microphone**

When a Keyphone accesses an idle Trunk, the microphone can be set to automatically turn on. (**MSG** = Yes = Microphone On)

Refer to the *Easy Reference Guide* for how to access an idle Trunk.

**Warning:** Do NOT use Idle Trunk Access Microphone in an environment which has a high background noise level.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Idle Trunk Access Microphone.

**(Mode 25) Speed Dial Directory**

A Keyphone can be set to use the Speed Dial Directory when accessing Speed Dial to preview the number and name before accessing a Trunk and dialing. (**MSG** = Yes = Use Speed Dial Directory)

Refer to the *Easy Reference Guide* for how to access and program Speed Dial bins.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the

programming procedure for setting Speed Dial Directory.

**(Mode 26) Display Caller ID Information**

When using Caller ID for identification on Incoming Calls, each Trunk can be set to display either the number or name for Keyphones. The Caller ID information is shown on the LCD display of the Keyphone and when printing Incoming SMDR Call Records.

**(MSG = Yes = Display Caller ID Information)**

See (Trunk Programming Section - Mode 05) Caller ID Name for how to set the Name of the calling party on the display.

**Note:** The facility used for Caller ID is supplied by the Central Office exchange and may not be able to always supply either number or name (not available in every country).

Refer to the *Installation Guide* for more information on using Caller ID.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Display Caller ID Information.

**(Mode 27) Operator Call**

A Station Port can be restricted from dialing 0 for the Operator when on a Trunk.

**(MSG = Yes = Can Dial 0 for Operator)**

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Operator Call.

**(Mode 31) House Phone**

A Station Port can be set to work as a House Phone. Lifting the handset automatically calls the Operator. **(MSG = Yes = House Phone)**

See (Station Programming Section) Operator Operation for how to set Operator Call Destination.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting House Phone.

**(Mode 32) Ring Door Phone Group 1**

A Station Port can be set to ring all Stations assigned in Door Phone Ring Group 1. Lifting the handset automatically rings the Stations assigned to the ring group.

**(MSG = Ring, FLASH = Not Ring)**

See (System Programming Section - Mode 45) Door Phone Ring Group 1 for how to set Station Ports to ring for the Door Phone.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Ring Door Phone Group 1.

**(Mode 33) Ring Door Phone Group 2**

A Station Port can be set to ring all Stations assigned in Door Phone Ring Group 2. Lifting the handset automatically rings the Stations assigned to the ring group.

**(MSG = Ring, FLASH = Not Ring)**

See (System Programming Section - Mode 46) Door Phone Ring Group 2 for how to set Station Ports to ring for the Door Phone.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Ring Door Phone Group 2.

**(Mode 34) Voice Mail Port**

A Station Port can be set as a Voice Mail Port. Voice Mail Ports are normally single-line telephone ports. Programming a Station Port as a Voice Mail Port will stop interference from Camp-On Tone, Busy Remind Tone, and Hold Recall Remind Tone which tend to interfere with Voice Mail operation. DTMF signals will also be generated for Station Ports which do not generate DTMF. Supervised transfers will automatically ring voice announce Keyphones. **(MSG = Yes = Voice Mail Port)**

See (System Programming Section) Voice Mail Interface for how to set a Station Port as a Voice Mail Port.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the

programming procedure for setting Voice Mail Port.

**(Mode 35) Receive DTMF on Intercom**

A Station Port can be set to receive DTMF during an Intercom Call. A second Inband Signaling scheme is available for a second set of devices which require Inband Signaling. DTMF signals will also be generated for Station Ports which do not generate DTMF. (**MSG** = Yes = Receive DTMF on Intercom)

See (System Programming Section) Inband Signaling 2 for how to set a Station Port to receive DTMF on Intercom.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Receive DTMF on Intercom.

**(Mode 36) Allow Intercom Calls**

A Station Port is normally allowed to make Station to Station Intercom Calls. A Station can be restricted from initiating an Intercom Call. Stations can not be restricted from receiving an Intercom Call. (**MSG** = Yes = Allow Intercom Calls)

Refer to the *Easy Reference Guide* for how to make an Intercom Call to another Station.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for setting Allow Intercom Calls.

**(Mode 37) Reserve a Trunk or Station (7)**

A Station Port can be allowed to reserve a busy Trunk or Station. When the Trunk or Station become idle the reserving Station will be automatically called, answering will access the Trunk or call the reserved Station. A Station can be restricted from reserving a busy Trunk or Station. (**MSG** = Yes = Allow Reserve a Trunk or Station)

Refer to the *Easy Reference Guide* for how to reserve a busy Trunk or Station.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting Reserve a Trunk or Station.

**(Mode 38) Use Call Forward (71, 72)**

A Station Port can use Call Forwarding to forward a call directed at that Station. A Station can forward all calls or when busy / no answer. A Station can be restricted from using Call Forward. (**MSG** = Yes = Allow setting Call Forward)

See (Station Programming Section) Station Call Forwarding for how to set a Station Call Forwarding.

Refer to the *Easy Reference Guide* for how to access and program Call Forward.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting Use Call Forward.

**(Mode 39) Set Wake-up / Remind Calls (741, 742)**

A Station Port can be allowed to set a Wake-up / Remind Call. A daily or once only call can be set up. A Station can be restricted from setting a Wake-up / Remind Call. (**MSG** = Yes = Allow setting a Wake-up / Remind Call)

Refer to the *Easy Reference Guide* for how to set a Wake-up / Remind Call.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting Set Wake-up / Remind Calls.

**(Mode 40) Set Message Waiting (743)**

A Station Port can be allowed to set a Message Waiting on another Station. The MSG Lamp on a Keyphone or single-line telephone will light when a message is waiting. A Station can be restricted from setting a Message Waiting. (**MSG** = Yes = Allow setting Message Waiting)

Refer to the *Easy Reference Guide* for how to set a Message Waiting.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting Set Message Waiting.

**(Mode 41) Answer a Page Call (745)**

Paging Calls can be made through External Page Zones or over the speaker of idle Keyphones. A Paging Call can be answered from a Station. Station Ports can be restricted from answering Paging Calls.

**(MSG = Yes = Allow Answer Paging Calls)**

Refer to the *Easy Reference Guide* for how to make a Paging Call from a Station.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting Answer Paging Calls.

**(Mode 42) Program Personal Speed Dial (746)**

Each Station Port has nine Personal Speed Dial bins (01 - 09). A Speed Dial bin has to be programmed before it can be used. A Station can be restricted from programming the Personal Speed Dial bins.

**(MSG = Yes = Allow Program Personal Speed Dial)**

Refer to the *Easy Reference Guide* for how to access and program Speed Dial bins.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting Program Personal Speed Dial.

**(Mode 43) Set Do-Not-Disturb (747)**

A Station Port can be allowed to set Do-Not-Disturb for privacy or blocking calls to the Station. The DND Lamp on a Keyphone will light when Do-Not-Disturb is set. A Station can be restricted from setting Do-Not-Disturb. Single-line telephones will receive special tone when Do-Not-Disturb is set.

**(MSG = Yes = Allow setting Do-Not-Disturb)**

Refer to the *Easy Reference Guide* for how to set Do-Not-Disturb.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the

programming procedure for restricting Use Do-Not-Disturb.

**(Mode 44) Use Conference (748)**

A Station Port can be allowed to set up a Conference Call between two or more parties. The INT Lamp on a Keyphone will light when a Conference is made. A Station can be restricted from setting up a Conference Call.

(MSG = Yes = Allow making Conference Call)

Refer to the *Easy Reference Guide* for how to set up a Conference Call.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting Use Conference.

**(Mode 45) Use Lock Code (749)**

A Station Port can be allowed to lock the Station to restrict access for outgoing calls. Check In / Check Out can be used to clear lock codes. A Station can be restricted from using a Lock Code. (MSG = Yes = Allow setting Lock Code)

Refer to the *Easy Reference Guide* for how to use Lock Code.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting Use Lock Code.

**(Mode 46) Use Hold Pickup (75)**

A Station Port can be allowed to access the last Trunk or Station put on hold by another Station. This is an alternate to using a Call Park Bin. A Station can be restricted from using Hold Pickup. (MSG = Yes = Allow using Hold Pickup)

Refer to the *Easy Reference Guide* for how to use Hold Pickup.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting Use Hold Pickup.

**(Mode 47) Use Call Parking (76)**

A Trunk or Station can be transferred into one of ten system Call Park bins. A Station Port can be restricted from accessing the Call Park bins.

(MSG = Yes = Allow using Call Parking)

Refer to the *Easy Reference Guide* for how to use Call Parking.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting Use Call Parking.

**(Mode 48) Use Individual Trunk Access (77)**

Individual Trunks can be accessed by a Station Port. The Trunk is accessed if it is either idle or on hold. A Station can be restricted from using individual trunk access.

(MSG = Yes = Allow using Individual Trunk Access)

Refer to the *Easy Reference Guide* for how to access individual Trunks.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting Use Individual Trunk Access.

**(Mode 49) Access Speed Dial (70)**

The system has 400 System Speed Dial bins (100 - 499) and each Station Port has nine Personal Speed Dial bins (01 - 09). Speed Dial bins are also used for Call Forwarding. A Station can be restricted from accessing Speed Dial bins.

(MSG = Yes = Allow access to Speed Dial)

**Note:** Speed Dial bins are also used for Call Forwarding. Denying access will also deny the Call Forwarding.

Refer to the *Easy Reference Guide* for how to access and program Speed Dial bins.

**Programming Procedure:**

See (Station Programming Section - Mode 01) Put Call on Hold and follow the programming procedure for restricting access to Speed Dial.

## **Console**

The system can operate with one or two Consoles.

The Second Console can work either in parallel or differently to the main Console. The Console(s) have separate Incoming Call Ringing assignments, Console System Hold Recall Delay times, and when called as the Operator.

When a Station calls the Operator the call will ring the Tenant Operator, a Station from a Station Hunt Group or the Console(s).

### **(Mode 50) Console**

The Station which is to be the main Console can be chosen. The Console can be assigned two different Station Ports. One for Day Mode and one for Night Mode.

There must always be a Console and the Console must be a Keyphone.

Refer to the *Easy Reference Guide* on how to set an alternate Operator for the Operator Stations.

See (Station Programming Section) Operator Destination for how to set the Operator Call destination.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **50**

```
M:50 .
CONSOLE 1
```

**Step 3:** Enter **1** for Day or **2** for Night

e.g. The Day Console is currently  
Port 1.

```
M:50 1      1
CONSOLE 1
```

**Step 4:** Press **FLASH** to clear (an existing Station Port number).

```
M:50 1
CONSOLE 1
```



**(Mode 52) Console Hold Recall Busy Remind**

If the Console and Second Console are busy when a call put on hold is trying to recall, a Remind signal can be given that there is a recalling Trunk or Station.

The Console Hold Recall Busy Remind can be set from 1 to 9999 seconds. If set to 0 there will be no Busy Remind.

Console Hold Recall Busy Remind overrides System Hold Recall Busy Remind for the Console and Second Console.

See (Trunk Programming Section - Mode 64) Console Ring Busy Remind for setting a Remind signal to the Console and Second Console for an Incoming Call.

See (Station Programming Section - Mode 77) System Hold Recall Time for setting the Hold Recall Time for calls put on hold by the Console and Second Console.

See (Station Programming Section - Mode 79) Transfer Recall Time for setting the Recall Time for unanswered transferred Trunk Calls.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **52**

e.g. No Console Hold Recall  
Busy Remind.

```
M:52          0
CONS HOLD REMIND
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:52          0
CONS HOLD REMIND
```

**Step 4:** Enter new Console Hold Recall Busy Remind time **1 - 9999**

e.g. Set Console Hold Recall Busy  
Remind to 60 seconds.

```
M:52          60
CONS HOLD REMIND
```

**Step 5:** Press **HOLD** to save change.

```
*:52          60
CONS HOLD REMIND
```

**(Mode 53) Console System Hold Recall Delay Time**

When a Trunk has been on hold for the System Hold Recall Time it will try to ring the Station which put it on hold. After a Trunk Call recalls a Station it will also recall the Console(s). The delay after a Station is recalled can be programmed. After the Console(s) have been ringing for the Console System Hold Recall Release Time, and is unanswered, the Trunk Call will be released.

The Delay Time can be set from 0 to 9999 seconds. If set to 0 there will be no delay.

Intercom Calls on hold, by another Station, for the System Hold Recall Time will not recall to the Console and Second Console.

See (Station Programming Section - Mode 77) System Hold Recall Time for setting the System Hold Recall Time.

See (Station Programming Section - Mode 79) Transfer Recall Time for setting the Recall Time for unanswered transferred Trunk Calls.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **53**

e.g. The Delay Time is currently  
60 seconds.

```
M:53          60
SYS HOLD DELAY 1
```

**Step 3:** Press **FLASH** to clear an existing time.

```
M:53          0
SYS HOLD DELAY 1
```

**Step 4:** Enter new Console System Hold Recall Delay Time **0 - 9999**

e.g. Set Delay Time to 45 seconds.

```
M:53          45
SYS HOLD DELAY 1
```

**Step 5:** Press **HOLD** to save change.

```
*:53          45
SYS HOLD DELAY 1
```

**(Mode 54) Second Console System Hold Recall Delay Time**

When a Trunk has been on hold for the System Hold Recall Time it will try to ring the Station which put it on hold. After a Trunk Call recalls a Station it will also recall the Console(s). The delay after a Station is recalled can be programmed. After the Console(s) have been ringing for the Console System Hold Recall Release Time, and is unanswered, the Trunk Call will be released.

The Delay Time can be set from 0 to 9999 seconds. If set to 0 there will be no delay.

Intercom Calls on hold, by another Station, for the System Hold Recall Time will not recall to the Console and Second Console.

See (Station Programming Section - Mode 77) System Hold Recall Time for setting the System Hold Recall Time.

See (Station Programming Section - Mode 79) Transfer Recall Time for setting the Recall Time for unanswered transferred Trunk Calls.

**Programming Procedure:**

See (Station Programming Section - Mode 53) Console System Hold Recall Delay Time and follow the programming procedure to set the Second Console System Hold Recall Delay Time.

**(Mode 55) Console System Hold Recall Release Time**

When a Trunk has been on hold for the System Hold Recall Time it will try to ring the Station which put it on hold. After a Trunk Call recalls a Station it will also recall the Console(s). After the Console(s) have been ringing for the Console System Hold Recall Release Time, and is unanswered, the Trunk Call will be released. This does not effect Trunk Calls put on hold by the Console(s).

The Release Time can be set from 1 to 9999 seconds. If set to 0 there will be no release.

See (Station Programming Section - Mode 77) System Hold Recall Time for setting the System Hold Recall Time.

See (Station Programming Section - Mode 79) Transfer Recall Time for setting the Recall Time for unanswered transferred Trunk Calls.

**Programming Procedure:**

See (Station Programming Section - Mode 53) Console System Hold Recall Delay Time and follow the programming procedure to set the Console System Hold Recall Release Time.

**(Mode 56) Console Call Waiting Busy Remind**

If the Console and Second Console are busy when a Station is trying to call the Operator, a Remind signal can be given that there is a Station trying to call.

The Console Call Waiting Busy Remind can be set from 1 to 9999 seconds. If set to 0 there will be no Busy Remind.

See (Station Programming Section - Mode 59) Camp-On Ring for Station calling Busy Operator for setting Stations to Camp\_on Ring the Console and Second Console.

**Programming Procedure:**

See (System Programming Section - Mode 53) Console System Hold Recall Delay Time and follow the programming procedure for setting the Console Call Waiting Busy Remind.

## **Operator Destination**

When a Station calls the Operator the call will ring the Tenant Operator, a Station from a Station Hunt Group or the Console(s).

Normally when the Operator is dialed, the main Console will ring. The Second Console will ring if the main Console is busy. However both the Console and Second Console can ring simultaneously when the Operator is called.

A Station Hunt Group can be assigned as the destination for Operator Calls. This allows a group of Stations to share the Operator duties.

When using Tenant Service the Station assigned as Tenant Operator has priority over the assigned system Operator(s).

### **(Mode 57) Operator Call Destination**

Normally when the Operator is dialed, the Console or Second Console will ring.

A Station Hunt Group can be assigned as the destination for Operator Calls. This allows a group of Stations to share the Operator duties.

See (Station Programming Section - Mode 50) Console and (Station Programming Section - Mode 51) Second Console for how to set a Station as a Console.

See (Station Programming Section - Mode 60) Station Hunt Groups for how to set up a Station Hunt Group.

See (System Programming Section - Mode 15) Operator Access Code for how to set the code to call the Operator.

### **Programming Procedure:**

See (System Programming Section - Mode 22) Tenant Operators for how to set an Operator for a Tenant Group.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **57**

e.g. Operator is Console and  
Second Console.

M:57                   0  
OPERATOR DESTN

**Step 3:** Press **FLASH** to clear (an existing Station Hunt Grou).

e.g. Set to Console

M:57                   0  
OPERATOR DESTN

**Step 4:** Enter Station Hunt Group number **1 - 8**

e.g. Set Operator to Station  
Hunt Group 2.

M:57                   2  
OPERATOR DESTN

**Step 5:** Press **HOLD** to save change.

\*:57                   2  
OPERATOR DESTN

**(Mode 58) Ring Two Operators**

Normally when the Operator is dialed, the main Console will ring. The Second Console will ring if the main Console is busy. However both the Console and Second Console can ring simultaneously when the Operator is called.

When a Station calls the Operator both the Console and Second Console will ring if idle. If Operator Destination is set to a Station Hunt Group then two idle Stations are selected to ring from the Group.

See (Station Programming Section - Mode 50) Console and (Station Programming Section - Mode 51) Second Console for how to set a Station as a Console.

See (Station Programming Section - Mode 60) Station Hunt Groups for how to set up a Station Hunt Group.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **58**

```
M: 58          NO
RING TWO OPERATO
```

**Step 3:** Press **MSG** (Yes) for Ring Two Operators or **FLASH** (No) for Ring 1<sup>st</sup> Console.

e.g. Set to ring two Operators.

```
M: 58          YES
RING TWO OPERATO
```

**Step 4:** Press **HOLD** to save change.

```
*: 58          YES
RING TWO OPERATO
```

**(Mode 59) Camp-On Ring for Station calling Busy Operator**

When a Station calls the Operator the call will ring the Tenant Operator, a Station from a Station Hunt Group or the Console(s). But when the assigned Operator Station(s) are all busy, the Station gets Busy Tone.

For a busy Operator the Station can camp-on to the Operator and be connected when the Operator becomes available. The Station will receive Ring-Back Tone.

See (Station Programming Section - Mode 50) Console and (Station Programming Section - Mode 51) Second Console for how to set a Station as a Console.

**Programming Procedure:**

See (Station Programming Section - Mode 58) Ring Two Operators and follow the programming procedure to set Camp-On Ring for Station calling Busy Operator.

## **Station Hunt Groups**

### **(Mode 60) Station Hunt Groups**

The system has nine Station Hunt Groups. The first eight are regular Station Hunt Groups which can be used for many purposes while Station Hunt Group 9 is used specifically for Voice Mail. Each group can have up to sixteen Stations assigned.

See (Trunk Programming Section - Mode 65) Trunk Station Hunt Group Ringing - Day and (Trunk Programming Section - Mode 66) Trunk Station Hunt Group Ringing - Night for how to set a Trunk to ring a Station Hunt Group.

See (System Programming Section - Mode 50) Voice Mail Station Hunt Group for how to set a Station Hunt Group for Voice Mail.

Refer to the *Easy Reference Guide* on how to access a Station Hunt Group.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **60**

```
M:60 .
ST HUNT GROUP
```

**Step 3:** Enter Station Hunt Group number **1 - 8**

e.g. Station Hunt Group 1

```
M:60 1 .
ST HUNT GROUP
```

**Step 4:** Enter memory position number **01 – 16** **Note:** A memory position is a counter to keep track of how many Station Ports have been entered, up to 16 ports can be assigned per Station Group.

e.g. The fourth position is not set.

```
M:60 1 04
ST HUNT GROUP
```

**Step 5:** Press **FLASH** to clear an existing Station Port number.

```
M:60 1 04
ST HUNT GROUP
```

**Step 6:** Enter new Station Port number **001 - 400**

e.g. Set to Port 21

M:60 1 04 21  
ST HUNT GROUP**Step 7:** Press **HOLD** to save change.\*:60 1 04 21  
ST HUNT GROUP**Step 8:** Press **TRF** to scroll forward to next memory position or **MIC** to move backward to previous memory position. Repeat from Step 5.

e.g. Move to next position

M:60 1 05  
ST HUNT GROUP

**(Mode 61) Terminal Station Hunt Group Access**

Stations are always accessed from a Station Hunt Group starting at the first position of the Station Hunt Group and accessing the first idle Station.

An alternative to terminal hunting is distributed hunting where the Stations are accessed in rotation.

See (System Programming Section - Mode 50) Voice Mail Station Hunt Group for how to set a Station Hunt Group for Voice Mail.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **61**

M:61 .  
TERMINAL ST ACC

**Step 3:** Enter Station Hunt Group number **1 - 9**

e.g. Station Hunt Group 2

M:61 2 YES  
TERMINAL ST ACC

**Step 4:** Press **MSG** (Yes) for terminal **or** **FLASH** (No) for distributed.

e.g. Set to use distributed Access

M:61 2 NO  
TERMINAL ST ACC

**Step 5:** Press **HOLD** to save change.

\*:61 2 NO  
TERMINAL ST ACC

**Step 6:** (Optional) Press **CONF** to set ALL Station Hunt Groups the same.

\*:61 2 NO  
TERMINAL ST ACC

**Step 7:** (Optional) Press **TRF** to scroll forward to next Group **or** **MIC** to move backward to previous Group. Repeat from Step 4.

e.g. Move to next Station Hunt Group

M:61 3 NO  
TERMINAL ST ACC

## Station

### (Mode 70) Flexible Station Number Assignment

A Station number is a flexible number assigned to each Port for Intercom Calling and identification. Each Port can be assigned only one Station number.

Station numbers can be one to four digits and different length Station numbers can be mixed (e.g. 1 - 6, 10 - 69, 100 - 699, and 1000 - 6999).

Refer to the *Ports and Station Numbering* section for more information on Station numbers.

### Programming Procedure:

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **70**

```
M:70 .
FLEX NO. ASSIGN
```

**Step 3:** Enter Station Port number **001 - 400**

e.g. Port 016 is Station number 116

```
M:70 16      116
ST:116
```

**Step 4:** Press **FLASH** to clear (an existing Station number).

e.g. Erase Station number.

```
M:70 16
ST:116
```

**Step 5:** Enter new Station number.

e.g. Set Port 016 to Station number 219.

```
M:70 16      219
ST:116
```

**Step 6:** Press **HOLD** to save change.

```
*:70 16      219
ST:219
```

**Step 7:** (Optional) Press **TRF** to scroll forward to next Port or **MIC** to move backward to previous Port. Repeat from Step 4.

e.g. Move to next Port  
Port 17 is Station number 117.

```
M:70 17      117
ST:117
```

**(Mode 71) Station Names**

Each Station can be assigned a Name up to eight characters long. The name is used in place of the Station number when making Intercom Calls, etc.

**Keys:**

<b>1</b>	QqZz
<b>2</b>	AaBbCc
<b>3</b>	DdEeFf
<b>4</b>	GgHhIi
<b>5</b>	JjKkLl
<b>6</b>	MmNnOo
<b>7</b>	PpQqRrSs
<b>8</b>	TtUuVv
<b>9</b>	WwXxYy
<b>0</b>	Space then complete range of characters.
<b>*</b>	Move left one space.
<b>#</b>	Move right one space.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **71**

M:71 .  
STATION NAMES

**Step 3:** Enter Station Port number **001 - 400**

e.g. Port 12 is Station 112.

M:71 12  
ST:112

**Step 4:** Press **FLASH** to clear (an existing name).

M:71 12  
ST:112

**Step 5:** Enter name by pressing the correct lettered key.

e.g. Press **2** for 'A' in Accounts

M:71 12 A  
ST:112



**(Mode 72) Station Group Assignment**

There are eight Station Groups (1 - 8) to which Stations can be assigned. Stations are grouped together for Paging a Group of Keyphones, and Group Call Pickup. A Station can be assigned to more than one Group or no groups.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **72**

M:72 .  
ST GROUP ASSIGN

**Step 3:** Enter Station Port number **001 - 400**

e.g. Port 11 is Station 111.

M:72 11 .  
ST:111

**Step 4:** Enter Group number **1 - 8**

e.g. Group 3

M:72 11 3 NO  
ST:111

**Step 5:** Press **MSG** (Yes) to set Station Group or **FLASH** (No) to clear.

e.g. Set Port 11 to Group 3

M:72 11 3 YES  
ST:111

**Step 6:** Press **HOLD** to save change.

\*:72 11 3 YES  
ST:111

**Step 7:** (Optional) Press **CONF** to set ALL Stations the same.

\*:72 11 3 YES  
ST:111

**Step 8:** (Optional) Press **TRF** to scroll forward to next Group or **MIC** to move backward to previous Group. Repeat from Step 5.

e.g. Move to next position  
Port 11 is not part of  
Station Group 4.

M:72 11 4 NO  
ST:111

**(Mode 73) Softkey Assignment**

Each Keyphone has up to thirty-two programmable softkeys (01 - 32). Softkey positions (33 - 64) can also be programmed to provide additional Softkeys which are accessed using the **FLASH** key when the Keyphone is idle.

Each DSS Unit has sixty-four programmable softkeys (01 - 64) used when a DSS Unit is identified as being connected to the Port.

Each softkey can be used for Direct Station Selection (DSS/BLF), Station Hunt Group Access, Direct Trunk Selection, Trunk Hunt Group Access, One Touch Speed Dial, Park Bin Access, Wake-Up Call Access, Check Out / In Access, Record, or Call Forwarding Access.

Softkey plans are ignored for Single-Line Telephone Ports as they have no effect.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **73**

```
M:73 .
SOFTKEY ASSIGN
```

**Step 3:** Enter Station Port number **001 - 192**

e.g. Port 18.

```
M:73 18 .
ST:18
```

**Step 4:** Enter a softkey 01 - 24.

e.g. The fifth softkey is Trunk 5

```
M:73 18 05 TK:5
ST:18
```

**Step 5:** Press **FLASH** to clear the existing setting.

```
M:73 18 05
ST:18
```

**Step 6:** Press **MSG** to step through the softkey types : Direct Station Selection (DSS/BLF), Station Hunt Group Access, Direct Trunk Selection, Trunk Hunt Group Access (Trunk Pool key), One Touch Speed Dial, Park Bin Access, Call Forward Access, Wake-Up Call Access, Check Out / In Access, or Record.

**1. Direct Station Selection (DSS/BLF):**

Enter new Station Port number **001 - 400**

e.g. Set to Port 34.

```
M:73 18 05 34
ST:18
```

**2. Station Hunt Group Access:**

Press **MSG** once to enter new Station Hunt Group.

```
M:73 18 05STGP:
ST:18
```

Enter Station Hunt Group number **1 - 9**

e.g. Set to Station Hunt Group 4

```
M:73 18 05STGP:4
ST:18
```

**3. Direct Trunk Selection:**

Press **MSG** twice to enter new Trunk.

```
M:73 18 05 TK:
ST:18
```

Enter Trunk number **01 - 96**

e.g. Set to Trunk 2

```
M:73 18 05 TK:02
ST:18
```

**4. Trunk Hunt Group Access:**

Press **MSG** three times to enter new Trunk Hunt Group.

```
M:73 18 05TKGP:
ST:18
```

Enter Trunk Hunt Group number **1 - 8**

e.g. Set to Trunk Hunt Group 2

```
M:73 18 05TKGP:2
ST:18
```

### 5. One Touch Speed Dial:

Press **MSG** four times to enter new Speed Dial.

```
M:73 18 05SD@  
ST:18
```

Enter Speed Dial bin **01 - 09, 100 - 499**

e.g. Set to Speed Dial bin 109.

```
M:73 18 05SD@109  
ST:18
```

### 6. Park Bin Access:

Press **MSG** five times to enter Park Bin Access.

```
M:73 18 05Park  
ST:18
```

Enter Park bin **0 - 9**

e.g. Set to Park bin 2

```
M:73 18 05Park 2  
ST:18
```

### 7. Call Forwarding Access:

Press **MSG** six times to enter new Call Forwarding Access.

```
M:73 18 05Fwrd  
ST:18
```

Enter type of Call Forwarding 1 - 2 for All or Busy / No Answer.

e.g. Set to 2 for Busy / No Answer

```
M:73 18 05Fwrd 2  
ST:18
```

### 8. Wake-Up Call Access:

Press **MSG** seven times to enter Wake-Up Call Access.

```
M:73 18 05WAKEUP  
ST:18
```

**9. Check Out / In Access:**

Press **MSG** eight times to enter Check Out / In Access.

```
M:73 18 05CHKOUT
ST:18
```

**10. Record Button:**

Press **MSG** nine times to enter Record button.

```
M:73 18 05RECORD
ST:18
```

**Step 7:** Press **HOLD** to save change.

```
*:73 18 05 TK:2
ST:18
```

**Step 8:** Press **CONF** to set All Stations the same.

e.g. Set to Speed Dial 109 for  
all Stations.

```
C:73 18 05SD@109
ST:11
```

**Step 9:** Press **TRF** to scroll forward to next softkey or **MIC** to move backward to previous softkey. Repeat from Step 5.

e.g. Move to next softkey  
The sixth Softkey is Trunk 6.

```
M:73 18 06 TK:6
ST:18
```

**(Mode 74) Trunk Hunt Group Assignment**

There are eight Trunk Hunt Groups (1 - 8) which can be used by Stations for Automatic Trunk Selection.

See (Trunk Programming Section - Mode 50) Trunk Hunt Group Programming for how to set the Trunk Hunt Groups.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **74**

M:74 .  
TK GROUP ASSIGN

**Step 3:** Enter Station Port number **001 - 400**

e.g. Port 014 is Station 113 and is using Trunk Hunt Group 3.

M:74 14           3  
ST:113

**Step 4:** Enter new Trunk Hunt Group **1 - 8**

e.g. Set to Trunk Hunt Group 2.

M:74 14           2  
ST:113

**Step 5:** Press **HOLD** to save change.

\*:74 14           2  
ST:113

**Step 6:** (Optional) Press **CONF** to set ALL Stations the same.

\*:74 14           2  
ST:113

**Step 7:** (Optional) Press **TRF** to scroll forward to next port or **MIC** to move backward to previous Port. Repeat from Step 4.

e.g. Move to next Port 015 is using Trunk Hunt Group 1.

M:74 15           1  
ST:114

**(Mode 75) Station Music Source**

There are three music sources available to a Station Port for back ground music, one internal and two external. The two external music sources each require a device to be connected to the system.

Refer to the *Installation Guide* for more information on connecting an External Music Source.

Refer to the *Easy Reference Guide* on how to access Back Ground Music for a Keyphone.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **75**

M:75 .  
ST MUSIC SOURCE

**Step 3:** Enter Station Port number **001 - 400**

e.g. Port 7 is Station 106

M:75 07           1  
ST:106

**Step 4:** Press **1** (internal), **2** (external 1), or **3** (external 2).

e.g. Set to External Music Source 1.

M:75 07           2  
ST:106

**Step 5:** Press **HOLD** to save change.

\*:75 07           2  
ST:106

**Step 6:** (Optional) Press **CONF** to set ALL Stations the same.

\*:75 07           2  
ST:106

**Step 7:** (Optional) Press **TRF** to scroll forward to next Port or **MIC** to move backward to previous Port. Repeat from Step 4..

e.g. Move to next Station Port.

M:75 08           1  
ST:107

**(Mode 76) Maximum Trunk Call Duration**

A Maximum Trunk Call Duration time can be set. If the duration is exceeded the Trunk Call is terminated. A warning tone will be given ten seconds before the call is terminated.

The Maximum Trunk Call Duration can be set from 1 to 9999 seconds. If set to 0 there will be no Maximum Trunk Call Duration.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **76**

```
M:76 .
MAX TK CALL TIME
```

**Step 3:** Enter Station Port number **001 - 400**

e.g. Port 24, Station 123 has a limit of 600 seconds (10 minutes).

```
M:76 24      600
ST:123
```

**Step 4:** Press **FLASH** to clear (an existing time).

```
M:76 24      0
ST:123
```

**Step 5:** Enter new Maximum Trunk Call Duration.

e.g. Set Maximum Time to 1200 seconds.

```
M:76 24      1200
ST:123
```

**Step 6:** Press **HOLD** to save change.

```
*:76 24      1200
ST:123
```

**Step 7:** Press **CONF** to set ALL Stations the same.

```
*:76 24      1200
ST:123
```

**Step 8:** Press **TRF** to scroll forward to next Port or **MIC** to move backward to previous Port.

e.g. Move to next Port.  
Port 25 has no limit.

```
M:76 25      0
ST:225
```

**(Mode 77) System Hold Recall Time**

The System Hold Recall Time for a Trunk or Intercom Call can be set from 1 to 9999 seconds.

If the System Hold Recall Time is set to 0, a call put on hold will never recall (Infinite Hold Recall).

System Hold Recall Time is also used by all Intercom Calls put on hold and only the Station which put the Intercom Call on hold will be recalled.

See (Station Programming Section - Mode 53) Console System Hold Recall Delay Time and (Station Programming Section - Mode 54) Second Console System Hold Recall Delay Time for how a Trunk Call will eventually recall to the Console and Second Console.

See (Station Programming Section - Mode 76) Maximum Trunk Call Duration and follow the programming procedure for setting the System Hold Recall Time.

**(Mode 78) System Hold Recall Busy Remind**

Stations which are busy when a call put on hold is trying to recall can be given a Remind signal that there is a recalling Trunk or Station.

The System Hold Recall Busy Remind can be set from 1 to 9999 seconds. If set to 0 there will be no Busy Remind.

Console Hold Recall Busy Remind overrides System Hold Recall Busy Remind for the Console and Second Console.

See (Trunk Programming Section - Mode 72) Flexible Ring Busy Remind and (Trunk Programming Section - Mode 77) Common Ring Busy Remind for setting a Remind signal to a Station for an Incoming Call.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **78**

e.g. System Hold Recall Busy  
Remind is 60 sec.

M:78                   60  
SYS HOLD REMIND

**Step 3:** Press **FLASH** to clear (an existing time).

M:78                   0  
SYS HOLD REMIND

**Step 4:** Enter new System Hold Recall Busy Remind time **1 - 9999**

e.g. Set System Hold Recall Busy  
Remind to 90 seconds.

M:78                   90  
SYS HOLD REMIND

**Step 5:** Press **HOLD** to save change.

\*:78                   90  
SYS HOLD REMIND

**(Mode 79) Transfer Recall Time**

The Transfer Recall Time for a Trunk Call can be set from 1 to 9999 seconds.

If the Transfer Recall Time is set to 0, a transferred Trunk Call which is not answered by the target Station will not recall to the Station which transferred the Trunk.

Transfer Recall Time is not used for transferred Intercom Calls.

**Programming Procedure:**

See (Station Programming Section - Mode 76) Maximum Trunk Call Duration and follow the programming procedure for setting the Transfer Recall Time.

**(Mode 81) Reserve Recall Time**

When a Station is ringing for a reserved Trunk or Station, the callback will be automatically canceled if not answered within the Reserve Recall Time.

The Reserve Recall Time can be set from 1 to 9999 seconds.

Refer to the *Easy Reference Guide* for how to reserve a busy Trunk or Station.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **81**

e.g. Reserve Recall Time is  
20 seconds.

```
M:81          20
RESERVE RECALL
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:81          0
RESERVE RECALL
```

**Step 4:** Enter Reserve Recall Time.

e.g. Set Reserve Recall Time to  
15 seconds.

```
M:81          15
RESERVE RECALL
```

**Step 5:** Press **HOLD** to save change.

```
*:81          15
RESERVE RECALL
```

**(Mode 82) Keyphone Automatic Busy Release Time**

A Keyphone receiving Busy Tone automatically releases and resets after the Automatic Busy Release Time expires. A Keyphone in System Programming does not release.

The Automatic Busy Release Time can be set from 1 to 9999 seconds. If set to 0 there is no Automatic Release.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **82**

e.g. Automatic Release after  
15 seconds.

M:82                   15  
AUTO RLS TIME

**Step 3:** Press **FLASH** to clear (an existing time).

e.g. Set no Automatic Release

M:82                   0  
AUTO RLS TIME

**Step 4:** Enter Keyphone Automatic Release Time.

e.g. Set Automatic Release Time to  
10 seconds.

M:82                   10  
AUTO RLS TIME

**Step 5:** Press **HOLD** to save change.

\*:82                   10  
AUTO RLS TIME

## **Station Call Forwarding**

There are two methods of Call Forwarding: External and Station.

Station Call Forwarding can be set individually for each Station.

A Station has the choice of two ways to forward calls: All or Busy / No Answer. Each can be set to Call Forward to either another Station or to an External number. Call Forwarding to an External number is achieved by the use of Speed Dial bins.

Call Forwarding - All Calls - All Calls are automatically forwarded with no delay.

Call Forwarding - Busy / No Answer - All Calls will be forwarded if the Station is busy or after the Station rings for the programmed no answer time.

Call Forwarding to an External number - A Trunk ringing the Station is treated the same as External Call Forwarding. Stations calling the Station will access a Trunk automatically and dial the number in the assigned Speed Dial bin.

A Call can not be transferred to a Station which has Call Forwarding - All Calls or Call Forwarding - Busy (when busy) set to an External number. This would automatically connect the calling Station to an outside line.

**Note:** Ensure that the Speed Dial bin is not restricted for the Station that has to dial the number. Speed Dial bins above the (System Programming Section - Mode 63) Speed Dial Toll Restriction Break Point are NOT Toll restricted.

### **Programming Procedure:**

See (Trunk Programming Section) External Call Forwarding for how to set Call Forwarding for individual Trunks.

Refer to the *Easy Reference Guide* for how to set Call Forwarding for a Station.

**(Mode 83) No Answer Forward Time**

When using Call Forward - Busy / No Answer a Station can be programmed to forward calls to another Station (or External number) if not answered within a programmed time.

The No Answer Forward Time can be set from 10 to 9999 seconds. One Trunk ring cycle equals 4 seconds.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **83**

e.g. Currently set to 10 seconds.

```
M:83          10
NO ANSWER TIME
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:83          0
NO ANSWER TIME
```

**Step 4:** Enter new No Answer Forward Time.

e.g. Set to 16 seconds.

```
M:83          16
NO ANSWER TIME
```

**Step 5:** Press **HOLD** to save change.

```
*:83          16
NO ANSWER TIME
```

**Note:** The minimum No Answer Forward Time is 10 seconds.

**(Mode 84) Call Forward Busy Ring Time**

When using Call Forward - Busy / No Answer a Station can be programmed to ring for a programmed time before forwarding calls to another Station (or External number) if the Station is busy.

The Call Forward Busy Ring Time can be set from 0 to 9999 seconds.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **84**

e.g. Currently set to 10 seconds.

M:84                   20  
C/F BUSY TIME

**Step 3:** Press **FLASH** to clear (an existing time).

M:84                   0  
C/F BUSY TIME

**Step 4:** Enter new Call Forward Busy Ring Time **0 - 9999**

e.g. Set to 10 seconds.

M:84                   10  
C/F BUSY TIME

**Step 5:** Press **HOLD** to save change.

\*:84                   10  
C/F BUSY TIME

**(Mode 85) Call Forward - All Calls**

A Station has the choice of two ways to forward calls: All or Busy / No Answer.

All Calls are automatically forwarded with no delay to either another Station, a Station Hunt Group, or to an External number. A Speed Dial bin (01 - 09, 100 - 499) is used to store the External number to be dialed.

Call forwarding to an External number has to be set from the individual Stations.

**Warning:** Careful consideration must be taken when setting Call Forwarding for Voice Mail ports, Fax machines, Modems, and other similar devices.

Refer to the *Easy Reference Guide* for how to set Call Forwarding for a Station.

See (Station Programming Section - Mode 38) Use Call Forward for allowing or restricting Stations from setting Call Forward.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **85**

M: 85 .  
C/F ALL CALLS

**Step 3:** Enter Station Port number **001 - 400**

e.g. Port 11 is Station 110.

M: 85 11  
ST:110

**Step 4:** Press **FLASH** to clear (an existing Station Port number).

e.g. Set No Call Forwarding.

M: 85 11  
ST:110

**Step 5:** Enter new Station Port number **001 - 400**

e.g. Set to Station Port 45

M: 85 11            45  
ST:110

**OR** Press **SPEED** + Speed Dial bin **01 - 09, 100 - 499**

e.g. Set to Station Port 45

M: 85 11            45  
ST:110

**Step 6:** Press **HOLD** to save change.

```
*:85 11      167
  ST:110
```

**Step 7:** (Optional) Press **CONF** to set ALL Stations the same. **Please note Warning.**

```
*:85 11      167
  ST:110
```

**Step 8:** (Optional) Press **TRF** to scroll forward to next Station Port or **MIC** to move backward to Previous Port. Repeat from Step 4.

```
e.g. Move to next Station Port      M:85 12
     No Call Forwarding is set.     ST:111
```

### **(Mode 86) Call Forward - Busy / No Answer**

A Station has the choice of two ways to forward calls: All or Busy / No Answer.

All Calls will be forwarded if the Station is busy or after the Station rings for the programmed no answer time to either another Station, a Station Hunt Group, or to an External number. A Speed Dial bin (01 - 09, 100 - 499) is used to store the External number to be dialed.

A busy Station can be programmed to ring for a programmed time before forwarding calls to another Station (or External number).

Call forwarding to an External number has to be set from the individual Stations.

**Warning:** Careful consideration must be taken when setting Call Forwarding for Voice Mail ports, Fax machines, Modems, and other similar devices.

Refer to the *Easy Reference Guide* for how to set Call Forwarding for a Station.

See (Station Programming Section - Mode 38) Use Call Forward for allowing or restricting Stations from setting Call Forward.

### **Programming Procedure:**

See (Station Programming Section - Mode 85) Call Forward - All Calls and follow the programming procedure to set Call Forward - Busy / No Answer.

**(Mode 87) Call Forward Incoming Calls**

When an Incoming Call on a Trunk is ringing a Station, which has Call Forwarding set, the Incoming Call will be forwarded. A Station can be restricted from Call Forwarding unanswered Incoming Calls.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **87**

M:87 .  
C/F INCOMING

**Step 3:** Enter Station Port number **001- 400**

e.g. Port 23 is Station 132

M:87 23      YES  
ST:132

**Step 4:** Press **MSG** (Yes) for Call Forward Incoming Calls or **FLASH** (No) to restrict.

e.g. Set to stop forwarding  
Incoming Calls.

M:87 23      NO  
ST:132

**Step 5:** Press **HOLD** to save change.

\*:87 23      NO  
ST:132

**Step 6:** (Optional) Press **CONF** to set ALL Station Ports the same.

e.g. All Stations can not forward  
Incoming Calls.

\*:87 23      NO  
ST:132

**Step 7:** (Optional) Press **TRF** to scroll forward to next Station Port or **MIC** to move backward to previous Port. Repeat from Step 4.

e.g. Move to next Station Port.  
Port 24 can forward Incoming  
Calls.

M:87 24      YES  
ST:138

**(Mode 88) Call Forward Busy Ring**

When a Trunk or Station is attempting to ring a busy Station, which has Call Forward - Busy / No Answer set, the call will be forwarded. An optional delay can be added to allow the Station time to answer the call. (**MSG** = Yes = Call Forward Busy Ring)

See (Station Programming Section - Mode 87) Call Forward Incoming Calls and follow the programming procedure for setting Call Forward Busy Ring.

## Single-line Telephone

### (Mode 90) SLP Dial Time

On some systems single-line telephones must share a DTMF receiver(s). For equal sharing of this facility a time limit for dialing must be set. Only single-line telephones which are assigned a DTMF receiver will get Dial Tone. The single-line telephone will receive a Busy Tone after the Dial Time has expired if not making a Trunk or Intercom Call.

The SLP Dial Time can be either an absolute time beginning from when the single-line telephone first receives Dial Tone or a time-out after the last digit dialed.

DTMF single-line telephones can still dial through on a Trunk after the elapsed time.

The SLP Dial Time can be set from 5 to 9999 seconds.

### Programming Procedure:

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **90**

e.g. Dial Time is currently  
40 seconds.

```
M:90          40
SLP DIAL TIME
```

**Step 3:** Press **FLASH** to clear (an existing time).

e.g. Clear before entering new time.

```
M:90          0
SLP DIAL TIME
```

**Step 4:** Enter new Dial Time **5 - 9999**

e.g. Set Dial Time to 25 seconds.

```
M:90          25
SLP DIAL TIME
```

**Step 5:** Press **HOLD** to save change.

```
*:90          25
SLP DIAL TIME
```

**(Mode 91) SLP Absolute Dial Timer**

On some systems single-line telephones must share a DTMF receiver(s). For equal sharing of this facility a time limit for dialing must be set. The SLP Dial Time can be either an absolute time beginning from when the single-line telephone first receives Dial Tone or a time-out after the last digit dialed.

**Note:** SLP Dial Time is redundant for some systems and single-line interface cards as they have one DTMF receiver per port.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **91**

```
M:91          YES
ABSOLUTE TIMER
```

**Step 3:** Press **MSG** (Yes) for Absolute Timer or **FLASH** (No) for Reset every digit.

e.g. Set to reset timer after every digit dialed.

```
M:91          NO
ABSOLUTE TIMER
```

**Step 4:** Press **HOLD** to save change.

```
*:91          NO
ABSOLUTE TIMER
```

**(Mode 92) SLP Lower Flash Limit**

The Upper and Lower SLP Flash Limits can be set to ensure accurate Flash or Hook Flash detection (n x 10 ms).

	Pulse				
	Dialing	Ignore	Hook Flash	Hook Down	>
0	80	Lower	Upper		
		Flash Limit	Flash Limit		

Any pulses with a duration less than 80 ms are considered to be Pulse dialing.

All pulses or flashes with a duration between 80 ms and the Lower Flash Limit are ignored.

Any flashes between the Upper and Lower Flash Limits are considered to be a hookswitch Flash.

All flashes greater than the Upper Flash Limit are considered to be a disconnect.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **92**

e.g. Lower Flash Limit is currently  
80 ms.

```
M:92      8
MIN SLP FLASH
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:92      0
MIN SLP FLASH
```

**Step 4:** Enter new Lower Flash Limit

e.g. Set Lower Flash Limit to  
120 ms (n = 12).

```
M:92     12
MIN SLP FLASH
```

**Step 5:** Press **HOLD** to save change.

```
*:92     12
MIN SLP FLASH
```

**Note:** The minimum SLP Upper and Lower Flash Limit is 80 ms (n = 8); maximum time is 1000 ms (n = 100).

**(Mode 93) SLP Upper Flash Limit**

The Upper and Lower SLP Flash Limits can be set to ensure accurate Flash or Hook Flash detection ( $n \times 10$  ms).

The Upper Flash Limit should be higher than the Lower Flash Limit.

**Programming Procedure:**

See (Station Programming Section - Mode 92) SLP Lower Flash Limit and follow the programming procedure to set the SLP Upper Flash Limit.

**(Mode 94) SLP Message Waiting Lamp Time**

When a message has been set to a single-line telephone, a Message Waiting Lamp can be set to indicate that a message is waiting. If the Station is busy the Lamp will remain off. A Station can be set to use the Message Waiting Lamp feature. When a single-line telephone has a Message Waiting the Lamp will flash at a programmable interval.

The SLP Message Waiting Lamp Time can be set from 1 to 20 seconds. If set to 0 there will be no Message Waiting Lamps.

**Note:** The single-line telephone must have a Neon lamp which works with 90 VDC across Tip & Ring to be used as a Message Waiting Lamp. Not all systems provide the 90 VDC.

Refer to the *Easy Reference Guide* for more information about setting and answering a Message Waiting.

See (Station Programming Section - Mode 13) Set Message Waiting Lamp for how to set the Message Waiting Lamp on a single-line telephone.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **94**

M:94                   0  
SLP MESSAGE LAMP

**Step 3:** Press **FLASH** to clear an existing time

e.g. Set to no Message Waiting Lamps.   M:94                   0  
SLP MESSAGE LAMP

**Step 4:** Enter SLP Message Waiting Lamp Time **1 - 20**

e.g. Set Message Waiting Lamp to  
flash every 10 seconds.                   M:94                   10  
SLP MESSAGE LAMP

**Step 5:** Press **HOLD** to save change.

\*:94                   10  
SLP MESSAGE LAMP

**(Mode 95) Message Waiting Ring Time**

When a Station Port has a Message Waiting it can be set to give a RING RING at a programmable interval. If the Station is answered during the ringing it can be set to call back to the Station which set the message.

The Message Waiting Ring Time can be set from 1 to 15 minutes. If set to 0 there is no ring for Message Waiting.

Refer to the *Easy Reference Guide* for more information about setting and answering a Message Waiting.

See (Station Programming Section - Mode 14) Automatic Message Callback for how to set a Station to automatically call back the Station leaving the message.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **95**

```
M:95          0
SLP MESSAGE RING
```

**Step 3:** Press **FLASH** to clear (an existing time).

e.g. Set to no ring for Message waiting.

```
M:95          0
SLP MESSAGE RING
```

**Step 4:** Enter Message Waiting Ring Time **1 - 15**

e.g. Set Stations to ring every 2 minutes for Message Waiting.

```
M:95          2
SLP MESSAGE RING
```

**Step 5:** Press **HOLD** to save change.

```
*:95          2
SLP MESSAGE RING
```

**(Mode 96) Set SLP Special Tone**

When a message has been set to a single-line telephone, a Message Waiting Lamp can be set to indicate that a message is waiting. When a single-line telephone goes off-hook and there is a Message Waiting, the single-line telephone can be given a special tone to indicate that a message is waiting.

**Note:** Use of the Special Tone for Message Waiting Indication on single-line telephones is not necessary when using Message Waiting Lamps.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **96**

```
M:96          YES
SLP SPECIAL TONE
```

**Step 3:** Press **MSG** (Yes) for Special Tone or **FLASH** (No) for normal Dial Tone.

```
e.g. Set to receive normal Dial Tone.  M:96          NO
SLP SPECIAL TONE
```

**Step 4:** Press **HOLD** to save change.

```
*:96          NO
SLP SPECIAL TONE
```

**(Mode 97) SLP Basic or Advanced Ringing**

**This mode is currently not used. It will be available in later versions of software.**

**(Mode 98) Urgent Call Time**

When a Single-line Telephone goes off-hook it can be made to call the Operator after a period of time to notify about the off-hook condition. Urgent Call Time sets the time after which the off-hook Single-line Telephone will ring the Operator.

The Urgent Call Time can be set from 1 to 9999 seconds. If set to 0 there is no Urgent Call Time.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **98**

```
M:98          0
URGENT CALL TIME
```

**Step 3:** Press **FLASH** to clear (an existing time).

e.g. Set to no Urgent Call Time.

```
M:98          0
URGENT CALL TIME
```

**Step 4:** Enter Urgent Call Time **1 -9999**

e.g. Set SLP to ring after 2 minutes.

```
M:98          120
URGENT CALL TIME
```

**Step 5:** Press **HOLD** to save change.

```
*:98          120
URGENT CALL TIME
```



## **System Programming Section**

System Programming is divided into three separate sections for ease of access. The sections are Trunk Programming Section, Station Programming Section, and System Programming Section.

System Programming Section has been grouped into categories.

- General Defaults
- Feature Access Codes
- Tenant Service
- System Alarms
- Paging
- External Relay Controls
- Door Phone
- Voice Mail Interface
- Inband Signaling 2
- Toll Restriction
- Automatic Route Selection

## **General Defaults**

### **(Mode 01) System Password**

The System Password is used when accessing System Programming.

The System Password is a combination of up to six keys (0 - 9, \*, #).

Refer to the start of the *Programming Guide* on how to enter System Programming.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **01**

e.g Default password

M:01      123  
PASSWORD

**Step 3:** Press **FLASH** to erase an existing or default password.

M:01  
PASSWORD

**Step 4:** Enter new password (up to 6 keys).

e.g. Enter key combination

M:01      #92\*13  
PASSWORD

**Step 5:** Press **HOLD** to save new password.

\*:01      #92\*13  
PASSWORD

**(Mode 02) Clock Display Format**

The clock display on LCD Keyphones can be set to either 12 Hour or 24 Hour format. This mode also sets the format used with the SMDR output of Call Records.

See (System Programming Section - Mode 09) System Date & Time for how to change the system date and time.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .  
Enter Mode No.
```

**Step 2:** Enter Mode **02**

```
M:02      24 HOUR  
CLOCK FORMAT
```

**Step 3:** Press **MSG** for 12 Hour or **FLASH** for 24 Hour.

e.g. Set to 12 Hour format

```
M:02      12 HOUR  
CLOCK FORMAT
```

**Step 4:** Press **HOLD** to save change.

```
*:02      12 HOUR  
CLOCK FORMAT
```

**(Mode 03) Automatic Night Transfer on Weekends**

When the system using Night Service has been set to use Automatic Night Transfer for automatically switching between Day Mode and Night Mode, it is often undesirable to have the system stay in Night Mode on weekends.

The system can be set to ignore Automatic Night Transfer on weekends. Thus, when the system switches to Night Mode on Friday, it stays in Night Mode until switching to Day Mode on Monday.

**Note:** Automatic Night Transfer on Weekends has no affect when Night Service is set using Manual Night Transfer.

Refer to the *Easy Reference Guide* on how to set Night Service and Automatic Night Transfer.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

M:.  
Enter Mode No.

**Step 2:** Enter Mode **03**

M:03                   NO  
WEEKEND TRANSFER

**Step 3:** Press **MSG** (Yes) for stay in Night Mode **or FLASH** (No) for Night Transfer.

e.g. Set to stay in Night Mode  
for weekend.

M:03                   YES  
WEEKEND TRANSFER

**Step 4:** Press **HOLD** to save change.

\*:03                   YES  
WEEKEND TRANSFER

**(Mode 04) Conference Tone**

When a Conference is established by a Station a Tone can be used to signal to the parties in the Conference that they are in a Conference. The Conference Tone is generated once every 32 seconds. (**MSG** = Yes = Conference Tone)

**Programming Procedure:**

See (System Programming Section - Mode 03) Automatic Night Transfer on Weekends for how to set Conference Tone.

**(Mode 05) Transfer Call on Hook Down**

To transfer a Trunk or Station to another Station, the call is first put on hold, the receiving Station is called, then the **TRF** key is pressed to transfer the Trunk or Station. An alternate method is available which merely involves hanging up to actually do the transfer instead of pressing the **TRF** key.

(**MSG** = Yes = Transfer on Hook Down, **FLASH** = No = Press **TRF** key to transfer)

**Programming Procedure:**

See (System Programming Section - Mode 03) Automatic Night Transfer on Weekends for how to set Transfer Call on Hook Down.

**(Mode 06) Headset Operation**

Individual Keyphones can be set to work with Headset Operation. Headset Operation is switched On and Off from each individual Keyphone. All Keyphones can be restricted from setting Headset operation.

(**MSG** = Yes = Allow Stations to be set for Headset Operation)

**Note:** Only certain types of Keyphone can use Headset operation. Headset Operation also stops the Keyphone from being used in Handsfree mode.

Refer to the *Special Feature Section - Headset Operation* on how to set Headset Operation can be set for a Keyphone.

**Programming Procedure:**

See (System Programming Section - Mode 03) Automatic Night Transfer on Weekends for how to set Headset Operation.

**(Mode 09) System Date & Time**

The System is equipped with a real-time clock.

The real-time clock is used for setting the start time of Trunk Calls and for the date and time displayed on the LCD displays.

See (System Programming Section - Mode 02) Clock Display Format to change the time format on the LCD display between 24 Hour and 12 Hour.

Refer to the *Easy Reference Guide* on how to set the System Date and Time from the Console or Second Console.

Day of Week (0 = Sun, 1 = Mon, 2 = Tues, 3 = Wed, 4 = Thurs, 5 = Fri, 6 = Sat)

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **09**

e.g. The current Date is shown.

M:09 1  
Date 98/01/01

**Step 3:** Enter new Date - must be **YYMMDD**

e.g. 981108 for 8th November 1998

M:09 1  
Date 98/11/08

**Step 4:** Display automatically changes.

Enter new Time - must be **HHMM** (In 24 Hour format)

e.g. 1547 for 3:47 in the afternoon.

M:09 2  
Time 15:47

**Step 5:** Display automatically changes.

Enter Day of Week **0 - 6**

e.g. 4 for Thursday

M:09 3  
Day of Week Thu

**Step 6:** Press **HOLD** at any stage to save a change.

\*:09 3  
Day of Week Thu

## **Feature Access Codes**

There are five Feature Access Codes which can be set to customize the system operation for users. These codes can be changed to allow flexibility in Station numbering schemes. The Feature Access Codes are listed by priority below:

- Operator Access Code
- Trunk Hunt Group Access Code
- Trunk Hunt Group 8 Access Code
- Dial 7 Feature Access Code
- Intercom Call Access Code

### **(Mode 15) Operator Access Code**

When a Station calls the Operator the call will ring the Tenant Operator, a Station from a Station Hunt Group or the Console(s). The access code for calling the Operator can be programmed. If 0 is used for the Operator Access Code then 0 should not be set for any other access code.

See (Station Programming Section - Mode 50) Console and (Station Programming Section - Mode 51) Second Console for how to set a Station as the Console.

See (Station Programming Section) Operator Destination for how to set an alternate Operator for the Operator Stations.

See (System Programming Section - Mode 22) Tenant Operators for how to set an Operator for a Tenant Group.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode 15

e.g. "0" is the default code.

M:15                   0  
OPERATOR ACCESS



**Step 3:** Press **FLASH** to clear.

```
M:15
OPERATOR ACCESS
```

**Step 4:** Enter new access code **0 - 9, \*, #**

e.g. Set 1 for Operator Access

```
M:15          1
OPERATOR ACCESS
```

**Step 5:** Press **HOLD** to save change.

```
*:15          1
OPERATOR ACCESS
```

### **(Mode 16) Trunk Hunt Group Access Code**

Automatic Trunk Selection can be done by dialing an access code. If 9 is used for the Trunk Hunt Group Access Code then 9 should not be set for any other access code.

When accessing a Trunk Hunt Group, either the Trunk Hunt Group assigned to the Station is automatically used, or a second digit (1 - 8) must be dialed to specify which Trunk Hunt Group to use.

See (Trunk Programming Section - Mode 50) Trunk Hunt Group Programming for how to set up Trunk Hunt Groups.

See (Station Programming Section - Mode 74) Trunk Hunt Group Assignment for how to set the default Trunk Hunt Group for a Station.

### **Programming Procedure:**

See (System Programming Section - Mode 15) Operator Access Code for how to set the Trunk Hunt Group Access Code.

**(Mode 17) Trunk Hunt Group 8 Access Code**

A second Trunk Hunt Group Access Code is provided for accessing Trunk Hunt Group 8. If 8 is used for the Trunk Hunt Group 8 Access Code then 8 should not be set for any other access code.

See (Trunk Programming Section - Mode 50) Trunk Hunt Group Programming for how to set up Trunk Hunt Groups.

**Programming Procedure:**

See (System Programming Section - Mode 15) Operator Access Code for how to set the Trunk Hunt Group 8 Access Code.

**(Mode 18) Dial 7 Feature Access Code**

A number of features are available to each Station which all start with the same access code. This allows the features to be accessed by Single-line Telephones. If 7 is used for the Dial 7 Feature Access Code then 7 should not be set for any other access code.

Refer to the *Easy Reference Guide* on how to use the Dial 7 Features from a Station.

See (Station Programming Section) Station Class-of-Service for how to restrict Dial 7 Features to Stations.

**Programming Procedure:**

See (System Programming Section - Mode 15) Operator Access Code for how to set the Dial 7 Feature Access Code.

**(Mode 19) Intercom Call Access Code**

A Intercom Call Access Code can be set for access Stations. If a Intercom Access Code is set than it must be dialed to provide access to Station numbers.

See (Station Programming Section - Mode 70) Flexible Station Number Assignment for how to set a Flexible number for a Station.

**Programming Procedure:**

See (System Programming Section - Mode 15) Operator Access Code for how to set the

Intercom Call Access Code.

## **Tenant Service**

### **(Mode 20) Trunk Tenant Service**

Up to eight Tenants can be supported on the same system. Stations can be restricted to accessing Trunks with the same Tenant number. 0 means the Trunk is unrestricted and can be accessed by any Station.

#### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **20**

```
M:20 .
TRUNK TENANT
```

**Step 3:** Enter Trunk number **01 - 96**

e.g. Trunk 1

```
M:20 01      2
TRUNK TENANT
```

**Step 4:** Press **FLASH** to clear (an existing Tenant number).

```
M:20 1      0
TRUNK TENANT
```

**Step 5:** Enter new Tenant number **1 - 8**

e.g. Set Trunk 1 to Tenant 3

```
M:20 1      3
TRUNK TENANT
```

**Step 6:** Press **HOLD** to save change.

```
*:20 1      3
TRUNK TENANT
```

**Step 7:** (Optional) Press **TRF** to scroll forward to next Trunk **or** **MIC** to move backward to previous Trunk. Repeat from Step 4.

e.g. Move to next Trunk

```
M:20 2      0
TRUNK TENANT
```

**(Mode 21) Station Tenant Service**

Up to eight Tenants can be supported on the same system. Stations can be restricted to calling Stations with the same Tenant number. 0 means the Station is unrestricted and can be called by any Station.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode 21

```
M:21 .
STATION TENANT
```

**Step 3:** Enter Port number **001 - 400**

e.g. Port 12 has not been assigned a Tenant number.

```
M:21 12      0
ST:12
```

**Step 4:** Press **FLASH** to clear (an existing Tenant number).

```
M:21 12      0
ST:12
```

**Step 5:** Enter new Tenant number **1 - 8**

e.g. Set Station 12 to Tenant 3

```
M:21 12      3
ST:12
```

**Step 6:** Press **HOLD** to save change.

```
*:21 12      3
ST:12
```

**Step 7:** (Optional) Press **TRF** to scroll forward to next Port or **MIC** to move backward to previous Port. Repeat from Step 4.

e.g. Move to next Station

```
M:21 13      0
ST:13
```

**(Mode 22) Tenant Operators**

Each Tenant can be assigned a different Station to ring when the Operator is called. The Tenant Operator does not have to be assigned the same Tenant number. The Station assigned as Tenant Operator has priority over the assigned system Operator. If no Tenant Operator is assigned then the system Operator is used.

See (Station Programming Section - Mode 50) Console and (Station Programming Section - Mode 51) Second Console for how to set a Station as the Console.

See (Station Programming Section) Operator Destination for how to set an alternate Operator for the Operator Stations.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **22**

```
M:22 .
TENANT OPERATORS
```

**Step 3:** Enter Tenant number **1 - 8**

e.g. Tenant 3

```
M:22 3
TENANT OPERATORS
```

**Step 4:** Press **FLASH** to clear (an existing Station Port).

```
M:22 3
TENANT OPERATORS
```

**Step 5:** Enter new Station Port **1 - 400**

e.g. Set Tenant 3 Operator to Station port 021.

```
M:22 3      21
TENANT OPERATORS
```

**Step 6:** Press **HOLD** to save change.

```
*:22 3      21
TENANT OPERATORS
```

**Step 7:** (Optional) Press **TRF** to scroll forward to next Tenant or **MIC** to move backward to previous Tenant. Repeat from Step 4.

e.g. Move to next Tenant.

```
M:22 4
TENANT OPERATORS
```



**(Mode 23) Unrestricted Tenant Intercom Access**

Each Tenant is restricted from calling Stations assigned to other Tenants. Each Tenant can be set for unrestricted Intercom access.

Intercom restriction does not apply when calling Operator Stations.

See (Station Programming Section) Operator Destination for how to set an alternate Operator for the Operator Stations.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode 23

```
M:23 .
TENANT INTERCOM
```

**Step 3:** Enter Tenant number 1 - 8

e.g. Tenant 5

```
M:23 5      NO
TENANT INTERCOM
```

**Step 4:** Press **MSG** for Intercom access (Yes) or **FLASH** (No) for No Intercom access.

e.g. Set Tenant 5 Stations to  
unrestricted Intercom access.

```
M:23 5      YES
TENANT INTERCOM
```

**Step 5:** Press **HOLD** to save change.

```
*:23 5      YES
TENANT INTERCOM
```

**Step 6:** (Optional) Press **TRF** to scroll forward to next Tenant number or **MIC** to move backward to previous Tenant number. Repeat from Step 4.

e.g. Move to next Tenant

```
M:23 6      NO
TENANT INTERCOM
```

## **System Alarms**

There are three sets of System Alarms, each effective during a specific time of the week. Monday to Friday inclusive (Mode 30), Saturday (Mode 31), and Sunday (Mode 32).

### **(Mode 30) Weekday System Alarms**

There can be up to eight System Alarms set for the weekdays (effective for Monday to Friday inclusive). A System Alarm puts the Background Music over the External Paging Port and through the Keyphone speakers.

See (Station Programming Section - Mode 07) Ring for System Alarm for how to stop the System Alarm for individual Keyphones.

Refer to the *Easy Reference Guide* for how to set Station Alarms.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **30**

```
M:30 .
SYS ALARMS
```

**Step 3:** Enter Alarm number **1 - 8**

e.g. Alarm 1 is currently not set

```
M:30 1      00:00
SYS ALARMS  0
```

**Step 4:** Press **FLASH** to clear (an existing Alarm).

```
M:30 1      00:00
SYS ALARMS  0
```

**Step 5:** Enter new Alarm Time (must be HHMM in 24 Hour format).

e.g. 1725 for 5:25 in the afternoon.

```
M:30 1      17:25
SYS ALARMS  0
```

**Step 6:** Enter Alarm duration **1 - 9999** seconds

e.g. Set to 15 seconds.

M:30 1 17:25  
SYS ALARMS 15**Step 7:** Press **HOLD** to save change.\*:30 1 17:25  
SYS ALARMS 15**Step 8:** Move to next alarm. Press **MIC** to scroll backward, **TRF** to scroll forward.e.g. Move to next alarm  
No Alarm has been set.M:30 2 00:00  
SYS ALARMS 0**(Mode 31) Saturday System Alarms**

There can be up to eight System Alarms set for Saturday. A System Alarm puts the Background Music over the External Paging Port and through the Keyphone speakers.

**Programming Procedure:**

See (System Programming Section - Mode 30) Weekday System Alarms and follow the programming procedure to set Saturday System Alarms.

**(Mode 32) Sunday System Alarms**

There can be up to eight System Alarms set for Sunday. A System Alarm puts the Background Music over the External Paging Port and through the Keyphone speakers.

**Programming Procedure:**

See (System Programming Section - Mode 30) Weekday System Alarms and follow the programming procedure to set Sunday System Alarms.

**(Mode 33) Station Alarm Duration**

The duration for a Station to ring for a Wake-Up / Remind Call can be set.

The Station Alarm Duration can be set from 10 to 9999 seconds.

Refer to the *Easy Reference Guide* for how to set Station Wake-Up / Remind Calls.

See (Station Programming Section - Mode 39) Set Wake-up / Remind Calls for how to restrict a Station from setting a Wake-up / Remind Call.

See (Operator Feature Section) Hotel Features for how to set a Wake-up / Remind Call for a Station from an Operator Station.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **33**

e.g. Station Alarm Time is  
25 seconds.

```
M:33          25
ST ALARM TIME
```

**Step 3:** Press **FLASH** to clear (an existing time).

```
M:33          0
ST ALARM TIME
```

**Step 4:** Enter Station Alarm Time **10 - 9999**

e.g. Set Station Alarm Time to  
30 seconds.

```
M:33          30
ST ALARM TIME
```

**Step 5:** Press **HOLD** to save change.

```
*:33          30
ST ALARM TIME
```

**(Mode 34) DVA Port**

When a Station has been set up with a Wake-up / Remind Call the Station will ring at the programmed time. When answered the Station will receive either music or be connected to the DVA Port. If there is no assigned DVA Port or if the DVA Port is busy then the Station will only get music.

A Station Hunt Group can also be assigned as the DVA Port. Only one Station from the Station Hunt Group will be selected.

Refer to the *Easy Reference Guide* for how to set Station Wake-Up / Remind Calls.

See (Station Programming Section - Mode 39) Set Wake-up / Remind Calls for how to restrict a Station from setting a Wake-up / Remind Call.

See (Operator Feature Section) Hotel Features for how to set a Wake-up / Remind Call for a Station from an Operator Station.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode 34

M: 34  
DVA PORT

**Step 3:** Press **FLASH** to erase (an existing Station Port or Station Group).

M: 34  
DVA PORT

**Step 4:** Enter a new Station Port **001 - 400**

e.g. Set to Port 013

M: 34                    13  
DVA PORT

**OR** Press **MSG** for Station Hunt Group **1 - 9**

e.g. Set to Station Hunt Group 1

M: 34                    STGP:1  
DVA PORT

**Step 5:** Press **HOLD** to save change.

\*: 34                    13  
DVA PORT



## Paging

### (Mode 35) Zone Paging Port Assignment

There can be up to eight Zones assigned for External Paging. The eighth Zone is the External Paging connection built into the system. The other seven Zones use normal Station Ports.

Refer to the *Easy Reference Guide* for how to do Paging.

#### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode 35

```
M: 35 .
ZONE PAGE ASSIGN
```

**Step 3:** Enter Zone number 1 - 7

e.g. Zone 1 is currently set to  
Port 26.

```
M: 35 1      26
ZONE PAGE ASSIGN
```

**Step 4:** Press **FLASH** to erase (an existing Port number).

```
M: 35 1
ZONE PAGE ASSIGN
```

**Step 5:** Enter new Port number 001 - 400

e.g. Set to Port 65

```
M: 35 1      65
ZONE PAGE ASSIGN
```

**Step 6:** Press **HOLD** to save change.

```
*: 35 1      65
ZONE PAGE ASSIGN
```

**Step 7:** (Optional) Press **TRF** to scroll forward to next Zone or **MIC** to move backward to previous. Repeat from next Step 4.

e.g. Move to next Zone  
No Port has been set

```
M: 35 2
ZONE PAGE ASSIGN
```

**(Mode 36) Page Tone**

When making a Paging Call, a tone can be given at the start to announce the Paging Call.

Refer to the *Easy Reference Guide* for how to do Paging.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **36**

M: 36                    NO  
PAGE TONE

**Step 3:** Press **MSG** (Yes) for Page Tone or **FLASH** (No) for none.

e.g. Set to use Page Tone

M: 36                    YES  
PAGE TONE

**Step 4:** Press **HOLD** to save change.

\*: 36                    YES  
PAGE TONE

**(Mode 37) Page Music Source**

There are three music sources available to the External Paging Output, one internal and two external. The two external music sources each require an external music source to be connected to the system.

Refer to the *Installation Guide* for more information on connecting an External Music Source.

Refer to the *Easy Reference Guide* for how to do Paging.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing **[PROG-PROG-1-2-3-HOLD]** from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **37**

```
M: 37          1
PAGE MUSIC SOURC
```

**Step 3:** Press **1** (internal), **2** (external 1), or **3** (external 2).

e.g. Set to External Music Source 1

```
M: 37          2
PAGE MUSIC SOURC
```

**Step 4:** Press **HOLD** to save change.

```
*: 37          2
PAGE MUSIC SOURC
```

## **External Relay Controls**

### **(Mode 40) External Relay Control**

This mode is currently not used. It will be available in later versions of software.

### **(Mode 41) External Relay Default**

This mode is currently not used. It will be available in later versions of software.

## **Door Phone**

### **(Mode 45) Door Phone Ring Group 1**

When a Station is set to work as a Door Phone, a ring group of Station Ports need to be assigned. Lifting the handset automatically rings the Station Ports assigned to Ring Group 1. All Station Ports in Ring Group 1 will ring if idle.

See (Station Programming Section - Mode 32) Ring Door Phone Group 1 for how to set a Station Port to work as a Door Phone Port.

### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **45**

```
M:45 .
DOOR RING GP 1
```

**Step 3:** Enter position number **01 - 16**

e.g. No port has been set for  
position 1

```
M:45 01      26
DOOR RING GP 1
```

**Step 4:** Press **FLASH** to erase (an existing Port number).

```
M:45 01
DOOR RING GP 1
```

**Step 5:** Enter new Port number **1 - 400**

e.g. Set to Port 65.

```
M:45 01      65
DOOR RING GP 1
```

**Step 6:** Press **HOLD** to save change.

```
*:45 01      65
DOOR RING GP 1
```

**Step 7:** (Optional) Press **TRF** to scroll forward to next position or **MIC** to move backward to previous position. Repeat from Step 4.

e.g. Move to next position  
No Port has been set

```
M:45 02
DOOR RING GP 1
```

**(Mode 46) Door Phone Ring Group 2**

When a Station is set to work as a Door Phone, a ring group of Station Ports need to be assigned. Lifting the handset automatically rings the Station Ports assigned to Ring Group 2. All Station Ports in Ring Group 2 will ring if idle.

See (Station Programming Section - Mode 33) Ring Door Phone Group 2 for how to set a Station Port to work as a Door Phone Port.

**Programming Procedure:**

See (System Programming Section - Mode 45) Door Phone Ring Group 1 and follow the programming procedure for setting Door Phone Ring Group 2.

## Voice Mail Interface

### (Mode 50) Voice Mail Station Hunt Group (9)

The system has nine Station Hunt Groups. The first eight are regular Station Hunt Groups which can be used for many purposes while Station Hunt Group 9 is used specifically for Voice Mail.

See (Station Programming Section - Mode 60) Station Hunt Groups for how to set a normal Station Hunt Group.

Refer to the *Easy Reference Guide* on how to access a Station Hunt Group.

### Programming Procedure:

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **50**

```
M:50 .
VM ST HUNT GROUP
```

**Step 3:** Enter a memory position **01 – 16** **Note:** The memory position is a counter to keep track of how many ports have been entered, up to 16 ports can be assigned.

```
e.g. The fourth position is not set. M:50 04
VM ST HUNT GROUP
```

**Step 4:** Press **FLASH** to clear (an existing Station Port number).

```
M:50 04
VM ST HUNT GROUP
```

**Step 5:** Enter new Station Port number **001 - 400**

```
e.g. Set to Port 21. M:50 04 21
VM ST HUNT GROUP
```

**Step 6:** Press **HOLD** to save change.

```
*:50 04 21
VM ST HUNT GROUP
```

**Step 7:** (Optional) Press **TRF** to scroll forward to next position or **MIC** to move backward to previous position. Repeat from Step 4.

e.g. Move to next position

```
M:50 05
VM ST HUNT GROUP
```

### **(Mode 51) Use Voice Mail Inband Signaling**

When using Voice Mail with the system, integration between the Voice Mail and system can be either SMDI or Inband Signaling.

Refer to the *Installation Guide* for more information on connecting a Voice Mail system.

#### **Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M:.
Enter Mode No.
```

**Step 2:** Enter Mode **51**

```
M:51          NO
USE VM INBAND
```

**Step 3:** Press **MSG** (YES) for Inband Signaling or **FLASH** (No) for none.

e.g. Set to use Inband Signaling

```
M:51          YES
USE VM INBAND
```

**Step 4:** Press **HOLD** to save change.

```
*:51          YES
USE VM INBAND
```

**(Mode 52) Voice Mail Inband Signaling Packets**

This mode is currently not used. It will be available in later versions of software.

**(Mode 53) Voice Mail Trunk Incoming Call Packets**

This mode is currently not used. It will be available in later versions of software.

**(Mode 54) Inband Signaling DTMF Tone Length**

The Inband Signaling DTMF Tone Length can be set from 50 ms to 250 ms (n x 10 ms).

The Inband Signaling DTMF Tone Length determines how quickly the DTMF is generated for Inband Signaling. Setting the DTMF Tone Length too short results in the device receiving the Inband Signaling to miss digits or ignore the Inband Signaling completely.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **54**

e.g. Currently set to 100 ms

```
M:54          10
INBAND DTMF LEN
```

**Step 3:** Press **FLASH** to clear (an existing length).

```
M:54          0
INBAND DTMF LEN
```

**Step 4:** Enter new DTMF Tone Length **5 - 250**.

e.g. Set to 80 ms (n = 8)

```
M:54          8
INBAND DTMF LEN
```

**Step 5:** Press **HOLD** to save change.

```
*:54          8
INBAND DTMF LEN
```

**Note:** The minimum Inband Signaling DTMF Tone Length is 50 ms (n = 5), and the maximum is 250 ms (n = 25).

## **Inband Signaling 2**

### **(Mode 55) Use Inband Signaling 2**

This mode is currently not used. It will be available in later versions of software.

### **(Mode 56) Inband Signaling Packets 2**

This mode is currently not used. It will be available in later versions of software.

### **(Mode 57) Trunk Incoming Call Packets 2**

This mode is currently not used. It will be available in later versions of software.

## **Toll Restriction**

Toll Plans are designed to restrict Station user access for making outgoing calls. There are fifteen separate Toll Plans.

<b>Toll Plan</b>	<b>Restriction</b>	<b>Key</b>
0	No Restriction	<b>FLASH</b>
1	Fully Programmable	<b>1</b>
2	Fully Programmable	<b>2</b>
3	Fully Programmable	<b>3</b>
4	Fully Programmable	<b>4</b>
5	Fully Programmable	<b>5</b>
6	Fully Programmable	<b>6</b>
7	1st digit cannot be 0	<b>7</b>
8	1st digit cannot be 1	<b>8</b>
9	1st digit cannot be 0 or 1	<b>9</b>
A	1st digit must be 1	<b>0</b>
B	1st two digits cannot be 00	<b>*</b>
C	1st two digits cannot be 09	<b>#</b>
D	Use only Common Unrestricted Numbers	<b>CONF</b>
E	Use only System Speed Dial	<b>CAMP</b>
F	No outward dialing	<b>REDIAL</b>

If a Station Port is set to Toll Plan 0, there is no call restriction.

Toll Plans 1 to 6 have a (Mode 73) Digit Length Restriction and can have a Class-of-Restriction (Toll Plan) set for each Trunk. See (Mode 74) Class-of-Restriction - Trunk, (Mode 75) Local Call Restriction, and (Mode 76) Long Distance Call Restriction.

Toll Plans 1 to F can be further restricted using Common Restriction tables. See (Mode 70) Common Restricted Numbers and (Mode 71) Common Unrestricted Numbers.

See (Mode 60) Station Toll Plan Assignment - Day and (Mode 61) Station Toll Plan Assignment - Night for setting the Toll Plan for Stations.

**(Mode 60) Station Toll Plan Assignment - Day**

Each Station Port can be assigned two different Toll Plans. One for Day Mode and one for Night Mode.

Toll Plans are designed to restrict what calls the user can make on the system. There are fifteen separate Toll Plans. If a Station Port is set to Toll Plan 0, it will have no call restriction.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **60**

```
M:60 .
TOLL PLAN - DAY
```

**Step 3:** Enter Port number **001 - 400**

e.g. Port 37 is Station number 37  
Currently has no restriction

```
M:60 37      0
ST:37
```

**Step 4:** Press **FLASH** to reset a Toll Plan to 0.

```
M:60 37      0
ST:37
```

**Step 5:** Enter new Toll Plan **0 - F**

e.g. Set Port 37 to Toll Plan 7  
Cannot dial numbers starting  
With 0

```
M:60 37      7
ST:37
```

**Step 6:** Press **HOLD** to save change.

```
*:60 37      7
ST:37
```

**Step 7:** Press **TRF** to scroll forward to next port **or** **MIC** to scroll backward to previous port.

e.g. Move to next Port  
Port 38 currently has no  
restriction

```
M:60 38      0
ST:38
```

**(Mode 61) Station Toll Plan Assignment - Night**

Each Station Port can be assigned two different Toll Plans. One for Day Mode and one for Night Mode.

Toll Plans are designed to restrict what calls the user can make on the system. There are fifteen separate Toll Plans. If a Station Port is set to Toll Plan 0, it will have no call restriction.

See (System Programming Section - Mode 60) Station Toll Plan Assignment - Day and follow the programming procedure to assign a Toll Plan.

**(Mode 62) Toll Restriction Override Password**

Toll Restriction on a Trunk Line can be overridden by a password. There are eight Toll Restriction Override Passwords available to the system.

The password is a combination of up to six keys (0 - 9, \*, #).

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **62**

M:62  
TOLL OVERRIDE

**Step 3:** Enter Password number **1 - 8**

e.g. Password 1 is currently not set

M:62 1  
TOLL OVERRIDE

**Step 4:** Press **FLASH** to erase an existing password.

M:62 1  
TOLL OVERRIDE

**Step 5:** Enter new password (up to 6 keys).

e.g. Enter key combination

M:62 1 #11\*22  
TOLL OVERRIDE

**Step 6:** Press **HOLD** to save new password.

\*:62 1 #11\*22  
TOLL OVERRIDE

**Step 7:** Move to next Password. Press **TRF** to scroll forward or **MIC** to move backward.

e.g. Move to next Password

M:62 2  
TOLL OVERRIDE

**(Mode 63) Speed Dial Toll Restriction Break Point**

A range of System Speed Dial bins can be set to ignore Toll Restriction. The Speed Dial Break Point can be set from 100 to 499.

If the Break Point is set to 200 then System Speed Dial bins 100 - 199 are Toll Restricted while System Speed Dial bins 200 - 499 are **NOT** Toll Restricted.

**Note:** If a Station is set to Toll Plan 0 (No Restriction) then it can dial any System Speed Dial bins with NO restriction.

Refer to the *Easy Reference Guide* for how to program System Speed Dial numbers.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **63**

```
M:63          200
SPD BREAK POINT
```

**Step 3:** Press **FLASH** to clear an existing Break Point.

```
M:63          0
SPD BREAK POINT
```

**Step 4:** Enter new Break Point.

e.g. Set Speed Dial bins 400 - 499 as  
NOT Toll Restricted

```
M:63          400
SPD BREAK POINT
```

**Step 5:** Press **HOLD** to save change.

```
*:63          400
SPD BREAK POINT
```

**(Mode 64) Check-In Call Restriction**

When the Operator uses the Check-In / Check-Out feature, the Operator can lock a Station, set Do-Not-Disturb, or change the Toll Restriction. The Toll Restriction for the Station can be set to either 0 for All Calls (Toll Plan 0), 1 for Local (Toll Plan 9), 2 for Credit Card (Toll Plan 4), and 3 for Speed Dial only (Toll Plan D).

The Toll Restriction which is used for restricting Local Calls can be programmed.

See (Operator Features Section) Hotel Features for how to set an alternate Operator for the Operator Stations.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

M: .  
Enter Mode No.

**Step 2:** Enter Mode **64**

M:64 .  
CHECK-IN TOLL RN

**Step 3:** Enter a position number **1 - 4**

e.g. Local restriction is  
set for Toll Plan 9

M:64 2 9  
CHECK-IN TOLL RN

**Step 4:** Press **FLASH** to clear existing Toll Plan.

M:64 2  
CHECK-IN TOLL RN

**Step 5:** Enter new Toll Plan **0 - F**

e.g. Set to Toll Plan 7 for Local  
and Credit Card calls

M:64 2 7  
CHECK-IN TOLL RN

**Step 6:** Press **HOLD** to save change.

\*:64 2 7  
CHECK-IN TOLL RN

**Step 7:** Press **TRF** to scroll forward to next position or **MIC** to move backward.

e.g. Move to next number  
second number is currently  
set to 1975.

M:64 3 4  
CHECK-IN TOLL RN

**(Mode 70) Common Restricted Numbers**

There can be up to eight Common Restricted Numbers set.

Common Restricted Numbers affect all Stations restricted by Toll Plans 1 to C and can be used for setting system-wide restrictions.

**Programming Procedure:**

**Step 1:** Enter Programming Mode by Pressing [**PROG-PROG-1-2-3-HOLD**] from any Display phone.

```
M: .
Enter Mode No.
```

**Step 2:** Enter Mode **70**

```
M:70 .
COMMON RESTRICT
```

**Step 3:** Enter a position number **1 - 8**.

e.g. first number is currently  
set to 1411

```
M:70 1 1411
COMMON RESTRICT
```

**Step 4:** Press **FLASH** to erase an existing number.

```
M:70 1
COMMON RESTRICT
```

**Step 5:** Enter new number up to 6 digits

e.g. Set number to 1900

```
M:70 1 1900
COMMON RESTRICT
```

**Step 6:** Press **HOLD** to save change.

```
*:70 1 1900
COMMON RESTRICT
```

**Step 7:** Press **TRF** to scroll forward or **MIC** to move backward to previous position.

e.g. Move to next number  
second number is currently  
set 10 1975

```
M:70 2 1975
COMMON RESTRICT
```

**(Mode 71) Common Unrestricted Numbers**

There can be up to eight Common Unrestricted Numbers set.

Common Unrestricted Numbers affect all Stations restricted by Toll Plans 1 to F and can be used for setting system-wide restrictions.

See (Mode 70) Common Restricted Numbers and follow the programming procedure to set Common Unrestricted Numbers.

**(Mode 72) Long Distance Call Prefix**

The Long Distance Call Prefix needs to be set for use with (Mode 76) Long Distance Call Restriction. These tables can be ignored by clearing the Long Distance Call Prefix.

**Programming Procedure:**

Enter Mode 72

e.g. Long Distance Call Prefix is 1

```
M:72          1
LONG DIST PREFIX
```

Press **FLASH** to ignore Long Distance Call Restriction tables.

```
M:72
LONG DIST PREFIX
```

Enter new Long Distance Call Prefix.

e.g. Set Long Distance Call Prefix to 0

```
M:72          0
LONG DIST PREFIX
```

Press **HOLD** to save change.

```
*:72          0
LONG DIST PREFIX
```

**(Mode 73) Digit Length Restriction**

Toll Plans 1 - 6 have a Digit Length Restriction (0 - 32).

Digit Length Restriction provides a simple call restriction. When set to 7 only local numbers can be dialed. When set to 0 there will be no Digit Length Restriction.

**Programming Procedure:**

Enter Mode 73

```
M:73 .
DIGIT LENGTH
```

Enter Toll Plan number (1 - 6).

e.g. Toll Plan 3 has Length Restriction 7

```
M:73 3      7
DIGIT LENGTH
```

Press **FLASH** to clear an existing length.

e.g. Set no Digit Length Restriction

```
M:73 3      0
DIGIT LENGTH
```

Enter new Length Restriction (1 - 32).

e.g. Set Length Restriction to 8

```
M:73 3      8
DIGIT LENGTH
```

Press **HOLD** to save change.

```
*:73 3      8
DIGIT LENGTH
```

Move to next Toll Plan. Press **MIC** to scroll backward, **TRF** to scroll forward.

e.g. Move to previous Toll Plan  
Toll Plan 2 has Length Restriction 9

```
M:73 2      9
DIGIT LENGTH
```

**(Mode 74) Class-of-Restriction - Trunk**

Toll Plans 1 - 6 can have a Class-of-Restriction (Toll Plan) set for each Trunk.

This allows very complex Toll Restrictions.

**Programming Procedure:**

Enter Mode 74

```
M:74 .
COR TRUNK
```

Enter Toll Plan number (1 - 6).

e.g. Toll Plan 2

```
M:74 2 .
COR TRUNK
```

Enter Trunk number (1# - 96).

e.g. Trunk 15 has Class-of-Restriction 0

```
M:74 2 15      0
COR TRUNK
```

Press **FLASH** to clear an existing Class-of-Restriction.

e.g. Set to Class-of-Restriction 0.

```
M:74 2 15      0
COR TRUNK
```

Enter new Class-of-Restriction (1 - F).

e.g. Set to Class-of-Restriction 5

```
M:74 2 15      5
COR TRUNK
```

Press **HOLD** to save change.

```
*:74 2 15      5
COR TRUNK
```

Move to next Trunk. Press **MIC** to scroll backward, **TRF** to scroll forward.

e.g. Move to next Trunk  
Trunk 16 has Class-of-Restriction 7

```
M:74 2 16      7
COR TRUNK
```

**(Mode 75) Local Call Restriction**

Class-of-Restrictions 1 - 6 each have two Call Restriction tables of 48 numbers. One set of tables is used for Local Call Restriction and the other for Long Distance Call Restriction. The tables can be used for listing which numbers to be allowed or denied.

The table default is Allow, so a Deny (**CAMP**) must be put at the top of the table when listing which numbers to be denied. When used as an "Allow" table only entries in the table will be allowed, everything else is automatically denied. When used as a "Deny" table only entries in the table will be denied, everything else is automatically allowed.

The digit \* is a "wildcard" entry (\* = all digits 0 - 9). More than one wildcard can be used in a number.

**Programming Procedure:**

Enter Mode 75

```
M:75 .
LOCAL RESTRICT
```

Enter Class-of-Restriction number (1 - 6).

e.g. Class-of-Restriction 2

```
M:75 2 .
LOCAL RESTRICT
```

Enter position number (1# - 48).

e.g. position 1 has no number set

```
M:75 2 01
LOCAL RESTRICT
```

Press **FLASH** to erase an existing number.

```
M:75 2 01
LOCAL RESTRICT
```

1. Press **CAMP** to set the table for Deny.

e.g. Set table to Deny

```
M:75 2 01 D
LOCAL RESTRICT
```

**2. Enter new number (up to 6 digits).**

e.g. Enter number 5571

M:75 2 01 5571  
LOCAL RESTRICT**3. Enter new number (up to 6 digits) with a wildcard.**e.g. Enter number 3\*7  
(i.e. 307, 317, 327, 337, ..., 397)M:75 2 01 3\*7  
LOCAL RESTRICTPress **HOLD** to save change.\*:75 2 01 3\*7  
LOCAL RESTRICTMove to next position. Press **MIC** to scroll backward, **TRF** to scroll forward.e.g. Move to next position  
position 2 has number 55567 enteredM:75 2 02 55567  
LOCAL RESTRICT**(Mode 76) Long Distance Call Restriction**

Class-of-Restrictions 1 - 6 each have two Call Restriction tables of 48 numbers. One set of tables is used for Local Call Restriction and the other for Long Distance Call Restriction. The tables can be used for listing which numbers to be allowed or denied.

When using the Long Distance Restriction tables, the Long Distance Call Prefix is assumed so it is not required to be entered into the tables.

The table default is Allow, so a Deny (**CAMP**) must be put at the top of the table when listing which numbers to be denied. When used as an "Allow" table only entries in the table will be allowed, everything else is automatically denied. When used as a "Deny" table only entries in the table will be denied, everything else is automatically allowed.

See (Mode 72) Long Distance Call Prefix for how to set the Long Distance Call Prefix.

See (Mode 75) Local Call Restriction and follow the programming procedure to set Long Distance Call Restriction tables.

**(Mode 77) PABX Trunk Access Code**

A PABX Trunk Access Code can be set for PABX Lines.

When a Trunk is as a PABX Line the PABX Trunk Access Code will not be appear on the SMDR output.

See (Trunk Programming Section - Mode 01) Trunk Type for setting a Trunk as a PABX Line.

**Programming Procedure:**

Enter Mode 77

e.g. PABX Trunk Access Code is 1

```
M:77      1
PABX TK ACCESS
```

Enter new PABX Trunk Access Code.

e.g. Set PABX Trunk Access Code to 0

```
M:77      0
PABX TK ACCESS
```

Press **HOLD** to save change.

```
*:77      0
PABX TK ACCESS
```

**(Mode 78) Ignore PABX Access Code**

The system can be set to ignore the PABX Access Code on PABX Lines when using Toll Restriction.

**Programming Procedure:**

Enter Mode 78

M:78 NO  
IGNORE PABX CODE

Press **MSG** to ignore PABX Access Code or **FLASH** to not ignore.

e.g. Set to ignore PABX Access Code

M:78 YES  
IGNORE PABX CODE

Press **HOLD** to save change.

\*:78 YES  
IGNORE PABX CODE

## **Automatic Route Selection**

### **(Mode 80) Use Automatic Route Selection**

Automatic Route Selection can be used to direct calls to specific Trunk Hunt Groups when placing outside calls. This allows the user to access the most economical line available.

When Automatic Route Selection is set the system waits until Keyphone users have dialed three or four digits before accessing a Trunk. For Single-Line Telephone users the system waits until there is a pause in dialing before accessing a Trunk.

### **Programming Procedure:**

Enter Mode 80

```
M:80          NO
AUTO ROUTE SELCT
```

Press **MSG** to use ARS (Yes) or **FLASH** to not use ARS (No).

e.g. Set to use Automatic Route Selection

```
M:80          YES
AUTO ROUTE SELCT
```

Press **HOLD** to save change.

```
*:80          YES
AUTO ROUTE SELCT
```

**(Mode 81) Force ARS**

A Station can be forced to use Automatic Route Selection when trying to access an individual Trunk or when using 77 to access Trunks. This only applies when using Automatic Route Selection.

**Programming Procedure:**

Enter Mode 81

```
M:81 .
FORCE ARS
```

Enter Station Port number (1# - 400).

e.g. Port 28 which is Station 127

```
M:81 28      NO
ST:127 LCD
```

Press **MSG** for Force ARS (Yes) or **FLASH** for No.

e.g. Set to Force ARS

```
M:81 28      YES
ST:127 LCD
```

Press **HOLD** to save change.

```
*:81 28      YES
ST:127 LCD
```

Press **CONF** to set ALL Station Ports the same.

e.g. All Stations must follow ARS

```
*:81 28      YES
ST:127 LCD
```

Move to next Station Port. Press **MIC** to scroll backward, **TRF** to scroll forward.

e.g. Move to next Station Port  
Port 24 must always follow ARS

```
M:81 29      YES
ST:128 LCD
```

**(Mode 82) Automatic Route Selection Time-out**

For Automatic Route Selection, Keyphones automatically access a Trunk after 3 to 4 digits, Single-Line Telephones require a pause after dialing to show the complete number has been dialed. This is because the DTMF signals generated by the Single-Line Telephone will interfere with the Auto Dialing after the system has determined which Trunk to access.

The Automatic Route Selection Time-out can be set from 1 to 9999 seconds. A time of 3 to 5 seconds is recommended.

**Programming Procedure:**

Enter Mode 82

e.g. ARS Time-out is 5 seconds

```
M:82      5
ARS TIME-OUT
```

Press **FLASH** to clear an existing time.

```
M:82      0
ARS TIME-OUT
```

Enter ARS Time-out.

e.g. Set ARS Time-out to 3 seconds

```
M:82      3
ARS TIME-OUT
```

Press **HOLD** to save change.

```
*:82      3
ARS TIME-OUT
```

**(Mode 83) Area Code Table**

There can be up to ninety-six Area Codes set in the Area Code Table. The Area Code Table is used when the telephone number dialed starts with the Long Distance Call Prefix.

Each three digit Area Code can be set to one of eight routes. The order is 01 - 96 with the first match being the one used. If an Area Code is not present in the Area Code Table the default route 1 is used.

The digit \* can be used as a "wildcard" (\* = all digits 0 - 9). More than one wildcard can be used in a Area Code.

See (Mode 72) Long Distance Call Prefix for setting the Long Distance Call Prefix.

See (Mode 85) Route Table for how to set up the routes.

**Programming Procedure:**

Enter Mode 83

```
M:83 .
AREA CODE TABLE
```

Enter position number (1# - 96).

e.g. first position is empty

```
M:83 01          1
AREA CODE TABLE
```

Press **FLASH** to erase an existing Area Code.

```
M:83 01          1
AREA CODE TABLE
```

Enter new Area Code (3 digits).

e.g. Set number to 213

```
M:83 01      213 1
AREA CODE TABLE
```

Enter new Route (1 - 8).

e.g. Set to route 3

```
M:83 01      213 3
AREA CODE TABLE
```

Press **HOLD** to save change.

\*:83 01 213 3  
AREA CODE TABLE

Move to next position. Press **MIC** to scroll backward, **TRF** to scroll forward.

e.g. Move to next number

M:83 02 1  
AREA CODE TABLE

### **(Mode 84) Office Code Table**

There can be up to ninety-six Office Codes set in the Office Code Table. The Office Code Table is used when the telephone number dialed does not start with the Long Distance Call Prefix.

Each three digit Office Code can be set to one of eight routes. The order is 01 - 96 with the first match being the one used. If an Office Code is not present in the Office Code Table the default route 1 is used.

The digit \* can be used as a "wildcard" (\* = all digits 0 - 9). More than one wildcard can be used in a Office Code.

See (Mode 83) Route Table for how to set up the routes.

**(Mode 85) Route Table**

Each route can have a Trunk Hunt Group set for each Time Period (1 - 8). Time Periods 1 - 7 are programmable while Time Period 8 is used for Holidays and Weekends.

See (Mode 86) Time Period for how to set Time Periods for routes.

See (Mode 87) Holiday Table for setting Holidays.

**Programming Procedure:**

Enter Mode 85

```
M:85 .
ROUTE TABLE
```

Enter Route number (1 - 8).

e.g. Route 3

```
M:85 3 .
ROUTE TABLE
```

Enter Time Period (1 - 8).

e.g. Time Period 2

```
M:85 3 2      1
ROUTE TABLE
```

Enter new Trunk Hunt Group (1 - 8).

e.g. Set to Trunk Hunt Group 5

```
M:85 3 2      5
ROUTE TABLE
```

Press **HOLD** to save change.

```
*:85 3 2      5
ROUTE TABLE
```

Move to next Time Period. Press **MIC** to scroll backward, **TRF** to scroll forward.

e.g. Move to next Time Period

```
M:85 3 3      1
ROUTE TABLE
```

**(Mode 86) Time Period**

Each route has eight Time Periods (1 - 8). Time Periods 1 - 7 are programmable while Time Period 8 is used for Holidays and Weekends.

The seven programmable Time Periods are defined by six programmable times. The times can be set to the hour.

Time Period 1- Midnight to Time 1  
 Time Period 2- from Time 1 to Time 2  
 Time Period 3- from Time 2 to Time 3  
 Time Period 4- from Time 3 to Time 4  
 Time Period 5- from Time 4 to Time 5  
 Time Period 6- from Time 5 to Time 6  
 Time Period 7- from Time 6 to Midnight

If the times are not set then Time Period 1 is used by default. If a Time is not set then it is treated as midnight.

See (Mode 85) Route Table for setting Routes.

See (Mode 87) Holiday Table for setting Holidays.

**Programming Procedure:**

Enter Mode 86

```
M:86 .
ARS TIME PERIOD
```

Enter Time (1 - 6).

e.g. Time 1

```
M:86 1      0
ARS TIME PERIOD
```

Press **FLASH** to erase an existing Time.

e.g. Time Period 1

```
M:86 1      0
ARS TIME PERIOD
```

Enter new Time (0 - 24).

e.g. Set to 8:00 am

M:86 1 8  
ARS TIME PERIOD

Press **HOLD** to save change.

\*:86 1 8  
ARS TIME PERIOD

Move to next Time Period. Press **MIC** to scroll backward, **TRF** to scroll forward.

e.g. Move to next Time Period

M:86 1 0  
ARS TIME PERIOD

**(Mode 87) Holiday Table**

There can be up to sixteen Holidays set for Automatic Route Selection.

When a Holiday is set the day is treated the same as a Weekend. The set Time Periods are ignored and the Trunk Hunt Group set for Time Period 8 is used instead.

See (Mode 85) Route Table for how to set up the routes.

See (Mode 86) Time Period for how to set Time Periods for routes.

**Programming Procedure:**

Enter Mode 87

```
M:87 .
HOLIDAY TABLE
```

Enter position number (1# - 16).

e.g. fourth date is March 15

```
M:87 04    03/15
HOLIDAY TABLE
```

Press **FLASH** to erase an existing Date.

```
M:87 04    /
HOLIDAY TABLE
```

Enter new Date (MM/DD).

e.g. Set date to April 25

```
M:87 04    04/25
HOLIDAY TABLE
```

Press **HOLD** to save change.

```
*:87 04    04/25
HOLIDAY TABLE
```

Move to next date. Press **MIC** to scroll backward, **TRF** to scroll forward.

e.g. Move to next date (blank)

```
M:87 05    /
HOLIDAY TABLE
```

**(Mode 88) Addition / Subtraction Table**

Each route can have a number dialed modifier to route the number through the selected telephone service. This provides for the deletion and addition of digits.

The deletion and addition of digits occur at the front of the number dialed. Up to sixteen digits can be set for addition for each route.

See (Mode 85) Route Table for how to set up the routes.

**Programming Procedure:**

Enter Mode 88

M:88 .  
ADD / SUB TABLE

Enter route (1 - 8)

e.g. route 2 has no modification set

M:88 2

Press **FLASH** to erase an existing entry.

M:88 2

Press **REDIAL** to enter the number of digits to delete.

M:88 2

Enter the number of digits to delete (1 - 9 digits).

e.g. Delete 4 digits

M:88 2  
R4

Enter new digits to be added (1 - 16 digits).

e.g. Dial access code 9584 before number

M:88 2  
R49584

Press **HOLD** to save change.

\*:88 2  
R49584

Move to next position. Press **MIC** to scroll backward, **TRF** to scroll forward.

e.g. Move to next number

M:88 3