TRUNK PROGRAMMING SECTION

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Introduction

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

Trunk Programming Section has been grouped into categories.

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

<u>Trunk Numbers</u>

Trunk Numbers are fixed in the system.

For ease of operation for the Station user, Trunk numbers are displayed as 1 - 16.

Systems can have up to 16 Trunks, Trunks 01 - O9, 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 - 16**

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 <u>or</u> **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 - 16**

> e.g. Trunk 4

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

Step 4: Press **MSG** for DTMF <u>or</u> **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 <u>or</u> **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 sett ing 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.

(Mode 22) SMDR No Print

SMDR Call Records can be programmed on a per Trunk basis. When set to "No" for a particular Trunk SMDR records for that Trunk will not be sent to the serial port. (Port 2). (**MSG** = SMDR Printout)
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 - 16**

    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 then 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 that may have 2, 3, 4, or even 5 seconds between ring cycles. 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 (KDX 60 only)

There are two music sources available to a Trunk on hold, one internal and one external. The external music source 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 - 16**

　　　e.g. Trunk 4

```
M:37 04          1
TK MUSIC SOURCE
```

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

　　　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 <u>or</u> **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 what 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- 16**

        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 <u>or</u> **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
```

TT-Trunk No.
P – Position No.
XXX- Station Port

```
M:40 TT P     XXX
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 - 16**

    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 - 16**

        e.g. Trunk 4

```
M:42 04        NO
PRIV DAY RING
```

Step 4: Press **MSG** for Ring (Yes) <u>or</u> **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 <u>or</u> **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 that 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 assessing 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 <u>or</u> **MIC** to scroll backward to previous memory position. Repeat from Step 5.

```
e.g. Move to next position
     Trunk 5 is the fifth Trunk
     In the Group.
```

```
M:50 2 05        5
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 assessing 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) <u>or</u> **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) <u>or</u> **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
```

DNIS GROUPS

(Mode 55) DNIS Ring Delay

DNIS Ring Delay is used to delay ringing to the assigned Station or Console. This will ensure all DNIS digits are received from the Telephone Company before the Station or Console answers the ringing 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 **55**

```
M:55            0
DNIS RING DELAY
```

Step 3: Enter Delay Time **1 - 9999**

       e.g. DNIS Delay is set for 2 seconds

```
M:55            2
DNIS RING DELAY
```

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

```
*:55            2
DNIS RING DELAY
```

(Mode 56) DNIS Table Assignment

DNIS Table Assignment is used to assign each individual Trunk to a DNIS Translation table (Mode 57) for proper call routing.

There are 4 programmable tables in Mode 57.

This Mode should only be set on T-1 channels.

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 **56**

```
M:56 .
DNIS TABLE ASSGN
```

Step 3: Enter Trunk No. **01 - 16**

    e.g. Trunk 09 is entered

```
M:56 09
DNIS TABLE ASSGN
```

Step 4: Enter Table Number **1 - 4**

    e.g. Trunk 09 is assigned
         to DNIS table 2

```
M:56 09        2
DNIS TABLE ASSGN
```

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

```
*:56 09        2
DNIS TABLE ASSGN
```

(Mode 57) DNIS Translation Tables

DNIS Translation Tables are used to assign DNIS digits received from the Telco to an Extension or Station Group in the KDX-500 switch.

There are 4 programmable tables each containing 96 (bins) translation entries.

The digits received from the Telco must be either 4 or 7 digits in length.

DNIS calls that go unanswered can be routed to Voice Mail. See Section 2 Modes 87 and 89.

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**

```
M:57 .
DNIS TABLES
```

Step 3: Enter Table No. **1 - 4**

    e.g. DNIS Table 1 is entered.

```
M:57 1  .
DNIS TABLES
```

Step 4: Enter Bin No. **01- 16**

    e.g. Bin 01 is entered.

```
M:57 1  01
        Port
```

Step 5: Enter DNIS digits expected **4** <u>or</u> **7** digits.

        e.g. 3446 is entered.

```
M:57 1  013446
           Port
```

Step 6: Press **HOLD** to save DNIS digits.

```
*:57 1  013446
           Port
```

Step 7: Enter Port No. **01 - 40** or Station Group **1 - 8** to ring for DNIS digits.

        e.g. Port 17 is entered.

```
M:57 1  013446
        Port 17
```

Step 8: Press **HOLD** to save Port or Station Group.

        e.g. Port 17 will ring when DNIS
           digits "3446" are received.

```
*:57 1  013446
        Port 17
```

Note: Press "**MSG**" key once to enter a Station Group No. **1 – 8**. When a DNIS call   is ringing that Group it will find the 1st available Station in that group to ring.

      If you press the "**MSG**" key twice "ALLGP" will appear. When the DNIS call   rings the group, all stations in that group will ring simultaneously.

(Mode 58) DNIS Default Station Ring Assignment

DNIS Default Station Ring Assignment is used to assign an alternate Station to ring if the Telco sends DNIS digits that are not found in the translation tables.

Each DNIS Table (1–4) can be assigned an alternate 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 **58**

```
M:58 .
DNIS DEFAULT ST
```

Step 3: Enter Table No. **1- 4**

　　　e.g. Table 1 is entered.

```
M:58 1
DNIS DEFAULT ST
```

Step 4: Enter Station Port Number **1– 40.**

```
   e.g. Station Port 34 is
        assigned for Table 1.
```

```
M:58 1         34
DNIS DEFAULT ST
```

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

```
*:58 1         34
DNIS DEFAULT ST
```

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 - 16**

    e.g. Trunk 4

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

Step 4: Press **MSG** for Ring <u>or</u> **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 <u>or</u> **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 - 16**

    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 <u>or</u> **MIC** to move backward to previous Trunk. Repeat from Step 4.

```
e.g. Move to next Trunk
     Trunk 5 has no Station Hunt
     Group set.
```

```
M:65 05          0
ST GP RING - DAY
```

(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 - 16**

  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 <u>or</u> **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 - 16**

    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 **01 - 40**

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.

<u>**Programming Procedure:**</u>

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

<u>(Mode 71) Stepped Ringing</u>

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.

<u>**Programming Procedure:**</u>

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 - 16**

    e.g. Trunk 2

```
M:71 02        NO
STEPPED RINGING
```

Step 4: Press **MSG** (Yes) for Stepped Ringing <u>or</u> **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. When 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       M:72            0
            Ringing for Flexible Ring Stations.  FLEX BUSY REMIND
```

```
 _____
|_____||
```

Step 3: Press **FLASH** to clear (an existing time).
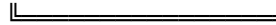
```
|M:72            0|
|FLEX BUSY REMIND|
```

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 - 16**

      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 <u>or</u> **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
```

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   `M:74 01`

Cdommon Ring Stations.

```
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 **01 - 40**

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 <u>or</u> **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 - 16**

```
e.g. Trunk 18 is not External          M:81 18        0
     Call Forwarding.                   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                M:81 19        0
     No Call Forwarding is set.        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 then 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 <u>or</u> **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
```