

Feature Package 3

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# TRIAD-S System Programming

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*STARPLUS<sup>TM</sup> Triad-S*

**System Programming Manual**

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# Contents

## 1 Customer Database Programming

Introduction .....	1-3
Program Mode Entry (Key Station) .....	1-19
Program Mode Entry (Data Terminal or PC) .....	1-19
Initialization .....	1-20
Database Programming Worksheets .....	1-20
Database Upload/Download Routine .....	1-21
Upload/Download through Remote Administration .....	1-21

## 2 System Parameters Programming

System Timers .....	2-3
System Hold Recall Timer .....	2-4
Exclusive Hold Recall Timer .....	2-5
Attendant Recall Timer .....	2-6
Transfer Recall Timer .....	2-6
Preset Forward Timer .....	2-7
Call Forward No Answer Timer .....	2-8
Pause Timer .....	2-8
Call Park Recall Timer .....	2-9
Conference / DISA Timer .....	2-9
Paging Time-Out Timer .....	2-10
CO Ring Detect Timer .....	2-11
SLT DTMF Receiver Timer .....	2-11
Message Wait Reminder Tone .....	2-12
SLT Hook Flash Timer .....	2-13
SLT Hook Flash Debounce Timer .....	2-13
SMDR Call Qualification Timer .....	2-14
Automatic Call Back Timer .....	2-15
Reminder Ring Timer .....	2-15
Inter-Digit Time-Out .....	2-16
Additional System Timers .....	2-17
Repeat Redial Timer .....	2-18
Attendant Display Timer .....	2-19
Call Coverage Ring Timer .....	2-19

---

---

Modem Answer Timer .....	2-20
Pulse Dial Inter-Digit Timer .....	2-20
DTMF On/Off Time Operation .....	2-21
System Features 1 Programming .....	2-21
Attendant Override .....	2-23
Hold Preference .....	2-23
External Night Ring .....	2-24
Executive Override Warning Tone .....	2-24
Page Warning Tone .....	2-25
Background Music .....	2-26
Least Cost Routing (LCR) .....	2-26
Account Codes - Forced .....	2-27
Group Listening .....	2-28
Idle Speaker Mode .....	2-28
Call Cost Display .....	2-29
Music-On-Hold .....	2-29
Call Qualifier Tone .....	2-30
System Features 2 Programming .....	2-31
Barge-In Warn Tone .....	2-32
CO Ring Tones .....	2-33
Verified Account Codes .....	2-34
Call Forward Display .....	2-34
External Day Ring .....	2-35
Overflow Station Forward .....	2-35
Direct Transfer Mode .....	2-36
Station ID Lock .....	2-37
LCR Call Progress .....	2-37
One-Touch Recording Warning Tone .....	2-38
Ringback on Transfer .....	2-39
ACD Agent Recall .....	2-39
911 Feature .....	2-40
Enhanced 911 (Proctor PBX-ANI-LINK Unit) .....	2-40
VMID Station Numbers .....	2-41
Programmable Flash Rates .....	2-42
Incoming CO Line Ringing .....	2-43
Incoming Intercom Ringing .....	2-44

---

---

Call Forward Button .....	2-44
Message Wait / VM Button .....	2-45
Message Callback - DSS / BLF .....	2-46
Do Not Disturb - DSS / BLF .....	2-46
Auto Callback - DSS / BLF .....	2-47
UCD Available / Unavailable - DSS / BLF .....	2-47
Transfer CO Ringing .....	2-48
Recall CO Ringing .....	2-49
Queued CO Ringing .....	2-49
Exclusive Hold .....	2-50
System Hold .....	2-50
In-Use Hold (I-Hold) .....	2-51
Camp-On Button .....	2-52
Call Back Button .....	2-52
Line Queue Button .....	2-53
Do Not Disturb Button .....	2-53
Intercom Hold Button .....	2-54
System Parameters .....	2-55
MOH Assignments .....	2-56
Attendant Station Assignment .....	2-57
System Time and Date .....	2-58
PBX Dialing Codes .....	2-59
Executive / Secretary Pairs .....	2-60
On-Board Relay Programming .....	2-61
Baud Rate Assignments .....	2-62
Networking Tables .....	2-63
Access Codes .....	2-66
DISA Access Code .....	2-66
Database Admin Password .....	2-67
Station Message Detail Recording (SMDR) .....	2-67
SMDR Enable / Disable .....	2-68
Long Distance / All Calls .....	2-69
Character Print Assignment .....	2-69
Baud Rate Display .....	2-70
SMDR Port Assignments .....	2-70
Weekly Night Mode Schedule .....	2-71

---



---

Automatic / Manual Operation .....	2-71
Day of Week Programming .....	2-72
Directory Dialing .....	2-72
Hunt Groups .....	2-76
Hunt Group Programming .....	2-76
Hunt Group .....	2-77
Station / Pilot / Pilot Ring All -- Hunting Assignments .....	2-78
Verified Account Codes / Traveling Class of Service .....	2-79
CO Line Group Queuing .....	2-81
Local Number / Name Translation Table .....	2-82

### **3 CO Line Attributes Programming**

Page A Introduction .....	3-3
DTMF / Dial Pulse Programming .....	3-4
CO / PBX Programming .....	3-5
Universal Night Answer (UNA) .....	3-5
DISA CO-to-CO .....	3-6
Privacy .....	3-7
Loop Supervision Programming .....	3-8
DISA Programming .....	3-9
CO Line Group Programming .....	3-10
Class of Service (COS) .....	3-10
CO Line Ringing Assignments .....	3-12
CO Line Identification Display .....	3-13
CO Direction .....	3-15
Display Ring Assignments .....	3-16
911 Trunk .....	3-17
Page B Introduction .....	3-18
Transmit Volume .....	3-19
Preset Call Forward Destination .....	3-20
Preset Forward Voice Mail ID .....	3-21
Universal Day Answer (UDA) .....	3-21
Music-On-Hold (per CO Line) .....	3-22
Ring Tone (per CO Line) .....	3-23
Page C Introduction .....	3-24
Flash Timer .....	3-25

Ring Delay Timer .....	3-26
Reseize Timer .....	3-27
Guard Timer .....	3-27
Preset Forward Timer .....	3-28
Miscellaneous CO Parameters .....	3-29
Dial Pulse Parameters .....	3-29
ICLID Programming .....	3-30
ICLID Ringing Assignments .....	3-30
View ICLID Ringing Assignments .....	3-32
Direct Inward Dialing (DID) Programming .....	3-34
DID Phone Number .....	3-36
Name Assigned to DID Number .....	3-36
Erasing a DID Table Entry .....	3-37

#### **4 Station Attributes Programming**

Page A Introduction .....	4-3
Paging Access .....	4-4
Do Not Disturb .....	4-5
Conference Enable / Disable (Per Station) .....	4-5
Executive Override .....	4-6
Privacy (Per Station) .....	4-7
System Speed Dial Access .....	4-8
Line Queuing .....	4-9
Preferred Line Answer .....	4-9
Off-Hook Voice Over (OHVO) .....	4-10
Call Forwarding .....	4-11
Forced Least Cost Routing (LCR) .....	4-11
ACD Supervisor Monitor with Barge-In .....	4-12
Executive Override Blocking .....	4-13
CO Line Ringing Options .....	4-14
Name / Number Display at Idle .....	4-14
Zap Tone .....	4-15
CO Loop Pool Flex .....	4-16
Administration Access .....	4-16
Page B Introduction .....	4-17
Station Identification .....	4-18
Station ID for DSS / DLS Console with Map .....	4-19

---



---

Station Day Class of Service (COS) .....	4-21
Station Night Class of Service (COS) .....	4-23
Speakerphone / Headset .....	4-24
Pickup Group(s) .....	4-24
Paging Zone(s) .....	4-25
Line Group Access - Station .....	4-26
LCR Class of Service (COS) .....	4-26
Off-Hook Preference .....	4-27
Flexible Button .....	4-28
Keyset Mode .....	4-33
Voice Mail ID Translation .....	4-33
Display Flexible Buttons .....	4-34
Cordless KTU Feature Button .....	4-36
Page C Introduction .....	4-36
Preset Call Forward .....	4-38
Speed Dial Access .....	4-40
Flexible Numbering Assignment .....	4-40

## **5 ICLID (Caller ID) Route Programming**

Introduction .....	5-3
Calling Number / Name Display .....	5-3
Incoming Number/Name for SMDR Records .....	5-4
ICLID Features .....	5-5
Enable / Disable .....	5-5
Name in Display .....	5-6
Baud Rate Display .....	5-6
Port Assignment .....	5-7

## **6 Automatic Call Distribution (ACD)**

ACD Group Programming .....	6-3
ACD Group Name .....	6-4
Alternate ACD Group Assignment .....	6-5
ACD Overflow Station Assignment .....	6-5
ACD Supervisor .....	6-6
ACD CIQ Threshold .....	6-7
ACD Auto Wrap-Up Timer .....	6-7

Primary Agents .....	6-8
Secondary Agents .....	6-9
Guaranteed RAN .....	6-9
Primary RAN .....	6-10
Secondary RAN .....	6-11
Transferred RAN .....	6-11
ACD Overflow Timer .....	6-12
Call Factor .....	6-12
ACD Timers .....	6-13
ACD Ring Timer .....	6-14
ACD Message Interval Timer .....	6-14
ACD No-Answer Recall Timer .....	6-15
ACD No-Answer Retry Timer .....	6-15
Guaranteed Message Timer .....	6-16
ACD Announcement Tables (RAN) .....	6-17
PC / ACD Interface Trace .....	6-20
Enable / Disable .....	6-20
Trace Port Assignment .....	6-21
Baud Rate Display .....	6-21

## **7 Uniform Call Distribution (UCD)**

UCD Group Programming .....	7-3
Alternate UCD Group Assignment .....	7-4
UCD Overflow Station Assignment .....	7-4
UCD Primary Agent Assignments .....	7-5
UCD Primary RAN Assignments .....	7-6
Secondary RAN .....	7-6
UCD Timers .....	7-7
UCD Ring Timer .....	7-7
UCD Message Interval Timer .....	7-8
UCD Overflow Timer .....	7-9
UCD Auto Wrap-Up Timer .....	7-9
UCD No-Answer Recall Timer .....	7-10
UCD No-Answer Retry Timer .....	7-10
UCD Announcement Tables .....	7-11

## **8 Voice Mail Groups (VM)**

---



---

Voice Mail Programming .....	8-3
Alternate Voice Mail Group .....	8-4
Leave Mail Index Entry .....	8-5
Retrieve Mail Index Entry .....	8-6
Station Assignments .....	8-6
Voice Mail Outpulsing Table .....	8-7
Voice Mail In-Band Signaling .....	8-7
Voice Mail Disconnect Table .....	8-9
Voice Mail In-Band Features .....	8-10
Voice Mail In-Band Digits .....	8-10
Voice Mail Transfer / Forward .....	8-11
Voice Mail Broker .....	8-12
Voice Mail ID Digit Length .....	8-12
Voice Mail Index Table .....	8-13
<b>9 Exception Tables</b>	
Exception Tables Programming .....	9-3
Related Items To Toll Restriction .....	9-5
CO/PBX Lines .....	9-5
Forced Account Codes .....	9-5
SLT DTMF Receivers .....	9-6
LCR Versus Toll Restriction .....	9-6
Toll Restriction .....	9-7
Entering Toll Table .....	9-7
Allow Table .....	9-9
Deny Table .....	9-11
Special Table .....	9-13
Display Toll Table Entries .....	9-15
<b>10 Least Cost Routing (LCR)</b>	
Introduction .....	10-3
LCR Tables .....	10-4
3-Digit Table .....	10-4
6-Digit Table (Office Codes) .....	10-4
Daily Start Time Tables .....	10-4
Default LCR Database .....	10-4

Exception Tables .....	10-4
Insert/Delete Tables .....	10-5
LCR Routing for Toll Information .....	10-5
Route List Tables .....	10-5
Weekly Time Tables .....	10-5
LCR Operation .....	10-7
3-Digit Area / Office Code Table .....	10-8
6-Digit Office Code Table .....	10-9
Exception Code Table .....	10-10
Route List Table .....	10-10
Insert / Delete Table .....	10-13
Daily Start Time Table .....	10-15
Weekly Schedule Table .....	10-16
LCR Routing for Toll Information .....	10-18
Default LCR Database .....	10-19

## 11 Initializing Database Parameters

Introduction .....	11-3
Initialize System Parameters .....	11-4
Initialize CO Line Attributes .....	11-9
Initialize Station Attributes .....	11-10
Initialize CO / Station Port Parameters .....	11-13
Initialize Exception Tables .....	11-13
Initialize System Speed Numbers .....	11-14
Initialize LCR Tables .....	11-15
Initialize ICLID Tables .....	11-16
Initialize Directory Dialing Table Parameters .....	11-17
Initialize Hunt Group Parameters .....	11-18
Initialize ACD / UCD Group Parameters .....	11-19
Initialize Voice Mail Group Parameters .....	11-21
Initialize Verified Account Code Table .....	11-22
System Reset .....	11-23

## 12 Printing System Database Parameters

Introduction .....	12-3
Print Database Parameters .....	12-3
Database Printing .....	12-4

---

---

Print System Parameters .....	12-4
Print CO Line Attributes .....	12-7
Print Station Attributes .....	12-9
Print CO Port Parameters .....	12-11
Print Exception Tables .....	12-12
Print System Speed Numbers .....	12-14
Print LCR Tables .....	12-15
Print Entire System Database .....	12-27
Print ICLID - DID Tables .....	12-28
Print Directory Dial Table Parameters .....	12-31
Print Hunt Group Parameters .....	12-33
Print ACD / UCD Group Parameters .....	12-34
Print Voice Mail Group Parameters .....	12-35
Print Verified Account Codes .....	12-37

## Figures

Data Terminal Program Codes Cross Reference .....	1-4
Programming Button Mapping .....	1-5
Hook Switch Activity .....	2-14
Wiring - Music Source to a CO Line .....	2-57
DID Name/Number Codes .....	3-37
LCR Flowchart .....	10-6
Daily Start Time and Weekly Schedule Tables .....	10-16
Daily and Weekly Start Time Table .....	10-18
System Parameters Printout .....	12-5
CO Line Attributes Printout .....	12-8
Station Attributes Printout .....	12-10
CO Port Attributes Printout .....	12-11
Exception Tables Printout .....	12-13
System Speed Numbers Printout .....	12-14
LCR Tables Printout .....	12-16
Three-Digit Tables Printout .....	12-18
ICLID Translation Tables Printout .....	12-29
Directory Dialing Table Printout .....	12-32
Hunt Group Parameters Printout .....	12-33
ACD Group Parameters Printout .....	12-34
Voice Mail Group Parameters Printout .....	12-36
Verified Account Codes Printout .....	12-37



---



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## Tables

Default Values .....	1-6
Database Download Settings .....	1-22
System Timer Defaults .....	2-4
Additional System Timers Defaults .....	2-18
System Features 1 Defaults .....	2-22
System Features 2 Defaults .....	2-32
CO Line Barge In Flag .....	2-33
Flash Rates .....	2-43
System Parameters Programming .....	2-56
Networking Tables .....	2-65
Dial Pad Keys .....	2-75
CO Line Conference Flag .....	3-6
CO Line Privacy Flag .....	3-8
Class of Service (COS) .....	3-11
CO Line Ringing Assignments .....	3-12
Dial Pad Keys .....	3-14
MOH Programming Codes .....	3-22
Ringing Tones .....	3-23
ICLID Ringing Assignments .....	3-31
DID & ICLID Default Table Entries .....	3-38
Station Privacy Flag .....	4-8
Class of Service (COS) .....	4-22
Flex Button Codes for Remote Programming .....	4-31
Flex Button Display Designations .....	4-35
Default Numbering Plan .....	4-43
Dial Pad Keys .....	6-4
Voice Mail RAN Announcer Options .....	6-19
Voice Mail RAN Announcer Options .....	7-14
Class of Service .....	9-3
Allow / Deny Table .....	9-4
LCR Class of Service Table .....	10-13
System Parameter Defaults .....	11-5
CO Line Attribute Defaults .....	11-9
Station Attribute Defaults .....	11-11

---

---

Exception Table Defaults .....	11-14
LCR Table Defaults .....	11-15
ICLID-DID Table Defaults .....	11-16
Directory Dialing Table Defaults .....	11-17
Hunt Group Defaults .....	11-18
UCD Group Defaults .....	11-19
ACD Group Defaults .....	11-20
Voice Mail Group Defaults .....	11-21
Verified Account Code Table Defaults .....	11-22

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# 1

# Customer Database Programming

This manual provides the information necessary to program the *Triad-S* system. The described features are based on the current software release. If any of these features do not work on your system, call your sales representative regarding upgrading your system.



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## Introduction

The *STARPLUS Triad-S* Telephone System is programmed to meet each customer's individual needs. All programming is done at any 24-Button Executive Telephone as the programming station or through an ASCII terminal or PC. The digital display model is required for programming.

When the programming mode is entered, the digital telephone being used no longer operates as a telephone but as a programming station with all of the buttons redefined. The keys on the dial pad are used to enter data fields (Program Codes) associated with system, station, and CO line features as well as specific data that requires a numeric entry. Flexible buttons toggle on or off features, or enable entry of specific data fields. LEDs and the LCD display provide a visual indication of entered data and their value.

Programming is also performed using an ASCII terminal, or a computer capable of emulating an ASCII terminal. This form of programming is done locally (on-site) by connecting the terminal directly to the RS-232C connector on the Miscellaneous Service Unit (MISU) or is performed remotely (off-site) through the use of the optional 9600 baud modem. The method and steps to program the system via a PC are identical to those used when programming from a digital key set. A button to keyboard mapping is provided (refer to [Figure 1-2: Programming Button Mapping](#)) to help minimize familiarization and training time.

The system must be initialized to load default data into memory at the time of installation. If this pre-programming is acceptable to the customer, initialization is all that is needed. Refer to [Table 1-1: Default Values](#) for a listing of all the default values.

When features are programmed, tones are provided to determine if a correct or incorrect entry has been made. A solid one second tone indicates the data was accepted. An interrupted tone means an error was made. When this occurs, re-enter the data and information. Until new data is entered and accepted, the system continues to operate under default or previously entered values.

The system database is updated on a real-time basis as new data is entered, by pressing the Hold button. The system continues to operate with the current database and is updated with any newly entered or changed data without interruption to telephone operation or call processing in progress. However, if for example a station's attributes are changed while that station is off-hook on an active call, the newly entered data does not take effect until the station goes on-hook or becomes idle.

When using a PC to program the system, the following chart presents the data terminal characters that are equivalent to the key set buttons.



*Some features must have more than one data field programmed for that feature to work. This information is stated in the instructions.*

```

adm>
REMOTE ADMIN KEY DEFINITION
Keyset   Term   Keyset   Term   Keyset   Term
-----
0         0      FLEX 1   Q      FLEX 13  D
1         1      FLEX 2   W      FLEX 14  F
2         2      FLEX 3   E      FLEX 15  G
3         3      FLEX 4   R      FLEX 16  H
4         4      FLEX 5   T      FLEX 17  J
5         5      FLEX 6   Y      FLEX 18  K
6         6      FLEX 7   U      FLEX 19  L
7         7      FLEX 8   I      FLEX 20  ;
8         8      FLEX 9   O      FLEX 21  Z
9         9      FLEX 10  P      FLEX 22  X
*         *      FLEX 11  A      FLEX 23  C
#         #      FLEX 12  S      FLEX 24  V
TRANS    B      MUTE     N      ON-OFF   M
FLASH    '      HOLD     CR
adm>

```

**Figure 1-1: Data Terminal Program Codes Cross Reference**

FLEX 1 Q	FLEX 2 W	FLEX 3 E	FLEX 4 R
FLEX 5 T	FLEX 6 Y	FLEX 7 U	FLEX 8 I
FLEX 9 O	FLEX 10 P	FLEX 11 A	FLEX 12 S
FLEX 13 D	FLEX 14 F	FLEX 15 G	FLEX 16 H
FLEX 17 J	FLEX 18 K	FLEX 19 L	FLEX 20 ;
FLEX 21 Z	FLEX 22 X	FLEX 23 C	FLEX 24 V

**Figure 1-2: Programming Button Mapping**

**Table 1-1: Default Values**

<b>Features</b>	<b>Page #</b>	<b>Program Code</b>	<b>Flex Button</b>	<b>Default Value</b>
SYSTEM PARAMETERS PROGRAMMING	2-1			
SYSTEM TIMERS	2-3	FLASH 01		
System Hold Recall Timer	2-4		1	60 sec
Exclusive Hold Recall Timer	2-5		2	180 sec
Attendant Recall Timer	2-6		3	1 min
Transfer Recall Timer	2-6		4	45 sec
Preset Forward Timer	2-7		5	10 sec
Call Forward No/Answer Timer	2-8		6	15 sec
Pause Timer	2-8		7	2 sec
Call Park Recall Timer	2-9		8	180 sec
Conference/DISA Timer	2-9		9	10 min
Paging Time-Out Timer	2-10		10	15 sec
CO Ring Detect Timer	2-11		11	3=300ms
SLT DTMF Receiver Timer	2-11		12	20 sec
Message Wait Reminder Tone	2-12		13	000=Disabled
SLT Hook Flash Timer	2-13		14	10 (1 sec)
SLT Hook Flash Debounce Timer	2-13		15	030=300ms
SMDR Call Qualification Timer	2-14		16	30 sec
Automatic Call Back Timer	2-15		17	03 sec
Reminder Ring Timer	2-15		18	00 sec
Inter-Digit Time-Out	2-16		20	5 sec
ADDITIONAL SYSTEM TIMERS	2-17	FLASH 02		
Repeat Redial Timer	2-18		1	60 sec
Attendant Display Timer	2-19		2	01 sec
Call Coverage Ring Timer	2-19		3	5 sec
Modem Answer Timer	2-20		4	25 sec
Pulse Dial Inter-Digit Timer	2-20		5	300 ms

\* Features available with Optional Software

**Table 1-1: Default Values**

<b>Features</b>	<b>Page #</b>	<b>Program Code</b>	<b>Flex Button</b>	<b>Default Value</b>
DTMF On/Off Time Operation	<a href="#">2-21</a>		6	1=100 ms
SYSTEM FEATURES 1 PROGRAMMING	<a href="#">2-21</a>	FLASH 05		
Attendant Override	<a href="#">2-23</a>		1	Disabled
Hold Preference	<a href="#">2-23</a>		2	System
External Night Ring	<a href="#">2-24</a>		3	Disabled
Executive Override Warning Tone	<a href="#">2-24</a>		4	Enabled
Page Warning Tone	<a href="#">2-25</a>		5	Enabled
Background Music	<a href="#">2-26</a>		6	Enabled
Least Cost Routing (LCR)	<a href="#">2-26</a>		7	Disabled
Account Codes – Forced	<a href="#">2-27</a>		8	Disabled
Group Listening	<a href="#">2-28</a>		9	Disabled
Idle Speaker Mode	<a href="#">2-28</a>		10	Disabled
Call Cost Display Feature	<a href="#">2-29</a>		11	Disabled
Music-On-Hold	<a href="#">2-29</a>		12	Enabled
Call Qualifier Tone Option	<a href="#">2-30</a>		13	Disabled
SYSTEM FEATURES 2 PROGRAMMING	<a href="#">2-31</a>	FLASH 06		
Barge In Warn Tone	<a href="#">2-32</a>		1	Enabled
CO Ring Tones	<a href="#">2-33</a>		2	Enabled
Verified Account Codes	<a href="#">2-34</a>		3	Disabled
Call Forward Display	<a href="#">2-34</a>		4	Enabled
External Day Ring	<a href="#">2-35</a>		5	Disabled
Overflow Station Forward	<a href="#">2-35</a>		6	Disabled
Direct Transfer Mode	<a href="#">2-36</a>		7	Enabled
Station ID Lock	<a href="#">2-37</a>		8	Disabled
LCR Call Progress	<a href="#">2-37</a>		9	Enabled
One-Touch Recording Warn Tone	<a href="#">2-38</a>		10	Enabled
Ringback on Transfer	<a href="#">2-39</a>		11	Disabled

\* Features available with Optional Software

**Table 1-1: Default Values**

<b>Features</b>	<b>Page #</b>	<b>Program Code</b>	<b>Flex Button</b>	<b>Default Value</b>
ACD Agent Recall	<a href="#">2-39</a>		12	Disabled
911 Feature	<a href="#">2-40</a>		13	Disabled
Enhanced 911	<a href="#">2-40</a>		14	Disabled
VMID Station Numbers	<a href="#">2-41</a>		15	--
FLASH RATES (Programmable)	<a href="#">2-42</a>	FLASH 07		
Incoming CO Line Ringing	<a href="#">2-43</a>		1	Red 480 ipm flutter
Incoming Intercom Ringing	<a href="#">2-44</a>		2	Red 120 ipm flutter
Call Forward Button	<a href="#">2-44</a>		3	Red Steady On
Message Wait/VM Button	<a href="#">2-45</a>		4	Red Steady On
Message CallBack – DSS/BLF	<a href="#">2-46</a>		5	Red 120 ipm flutter
Do Not Disturb – DSS/BLF	<a href="#">2-46</a>		6	Red 60 ipm Dbl Wink
Auto CallBack – DSS/BLF	<a href="#">2-47</a>		7	Red 120 ipm flash
UCD Available/Unavailable – DSS/BLF	<a href="#">2-47</a>		8	Red 60 ipm Dbl Wink
Transfer CO Ringing	<a href="#">2-48</a>		9	Red 120 ipm flash
Recall CO Ringing	<a href="#">2-49</a>		10	Red 480 ipm flutter
Queued CO Ringing	<a href="#">2-49</a>		11	Green 480 ipm flutter
Exclusive Hold	<a href="#">2-50</a>		12	Green 120 ipm flash
System Hold	<a href="#">2-50</a>		13	Red 60 ipm Dbl wink
In-Use Hold (I-Hold)	<a href="#">2-51</a>		14	Green 60 ipm flash
Camp-On Button	<a href="#">2-52</a>		15	Red 120 ipm flash
Call Back Button	<a href="#">2-52</a>		16	Red 120 ipm flash
Line Queue Button	<a href="#">2-53</a>		17	Red 480 ipm flutter
Do Not Disturb Button	<a href="#">2-53</a>		18	Red Steady On
Intercom Hold Button	<a href="#">2-54</a>		19	Red 15 ipm flash
SYSTEM PARAMETERS PROGRAMMING	<a href="#">2-55</a>	FLASH 09		
MOH Assignments (Channels 3-8)	<a href="#">2-56</a>		1-6	None
ATTENDANT STATION ASSIGNMENT	<a href="#">2-57</a>	FLASH 10		STA 100

\* Features available with Optional Software

**Table 1-1: Default Values**

Features	Page #	Program Code	Flex Button	Default Value
SYSTEM TIME AND DATE	<a href="#">2-58</a>	FLASH 11	1	MM/DD/YY, 12-hr display
PBX DIALING CODES	<a href="#">2-59</a>	FLASH 12	--	None
EXECUTIVE/SECRETARY PAIRS	<a href="#">2-60</a>	FLASH 13	1-4	None
ON-BOARD RELAY PROGRAMMING	<a href="#">2-61</a>	FLASH 14	1-2	None
BAUD RATE ASSIGNMENTS	<a href="#">2-62</a>	FLASH 15		
Port #1 (MISU)	<a href="#">2-62</a>		1	9600 Baud
Port #2 (MISU)	<a href="#">2-62</a>		2	9600 Baud
Port #3 (Modem)	<a href="#">2-62</a>		3	9600 Baud
NETWORKING TABLES	<a href="#">2-63</a>	FLASH 16		
Trunk Group	<a href="#">2-63</a>		1	00
Station Range (FROM)	<a href="#">2-63</a>		2	1000
Station Range (TO)	<a href="#">2-63</a>		3	9999
Page Up	<a href="#">2-63</a>		22	None
Page Down	<a href="#">2-63</a>		23	None
System Number	<a href="#">2-63</a>		24	None
ACCESS CODES	<a href="#">2-66</a>	FLASH 20		
DISA Access Code	<a href="#">2-66</a>		1	100
Database Admin Password	<a href="#">2-67</a>		2	3226
STATION MESSAGE DETAIL RECORDING	<a href="#">2-67</a>	FLASH 21		
SMDR Enable/Disable	<a href="#">2-68</a>		1	No
Long Distance/All Calls	<a href="#">2-69</a>		2	Long Distance
Character Print Assignment	<a href="#">2-69</a>		3	80
Baud Rate Display	<a href="#">2-70</a>		4	9600
SMDR Port Assignments	<a href="#">2-70</a>		5	Port #1
WEEKLY NIGHT MODE SCHEDULE	<a href="#">2-71</a>	FLASH 22		
Automatic/Manual Operation	<a href="#">2-71</a>		1 2-8	Manual=None Auto=M-F 08:00 17:00, Sat-Sun ###:## #:##

\* Features available with Optional Software

**Table 1-1: Default Values**

Features	Page #	Program Code	Flex Button	Default Value
Day of Week Programming	2-72			None
DIRECTORY DIALING	2-72	FLASH 23		
Bin/ICM	2-74		1	None
Name	2-75		2	None
Clear	2-75		3	None
Backspace to Correct Error	2-75		4	None
HUNT GROUPS	2-76	FLASH 30		
Hunt Group Programming	2-76		1-12	None
Station/Pilot/Pilot Ring All -- Hunting Assignments	2-78		13	Pilot
VERIFIED ACCOUNT CODES	2-79	FLASH 31		
Account Code	2-79		1	None
Class of Service	2-79		2	None
Delete Code	2-80		3	None
Erase Digits	2-80		4	None
CO LINE GROUP QUEUING	2-81	FLASH 39	1-24	Enabled
CO LINES ATTRIBUTES PROGRAMMING (Press HOLD for entire range)	3-1			
PAGE A INTRODUCTION	3-3	FLASH 40	Btn 19	
DTMF/Dial Pulse Programming	3-4	Page A	1	DTMF
CO/PBX Programming	3-5		2	CO
Universal Night Answer (UNA)	3-5		3	Enabled
DISA CO-to-CO	3-6		4	Enabled
Privacy	3-7		5	Enabled
Loop Supervision Programming	3-8		6	4=400ms
DISA Programming	3-9		7	None
Line Group Programming	3-10		8	Group 1
Class of Service (COS) Programming	3-10		9	COS 1

\* Features available with Optional Software

**Table 1-1: Default Values**

Features	Page #	Program Code	Flex Button	Default Value
CO Line Ringing Assignments	<a href="#">3-12</a>		10	(blank)
CO Line Identification Display	<a href="#">3-13</a>		11	Line XXX
CO Direction	<a href="#">3-15</a>		12	Incoming/Outgoing
Display Ring Assignments	<a href="#">3-16</a>		13	100A
911 Trunk	<a href="#">3-17</a>		15	Disabled
PAGE B INTRODUCTION	<a href="#">3-18</a>	FLASH 40	Btn 20	
Transmit Volume Option	<a href="#">3-19</a>	Page B	1	5=0 dB
Preset Call Forward Destination	<a href="#">3-20</a>		2	####
Preset Forward Voice Mail ID	<a href="#">3-21</a>		3	####
Universal Day Answer (UDA)	<a href="#">3-21</a>		4	Disabled
Music-On-Hold (per CO Line)	<a href="#">3-22</a>		5	Channel 1
Ring Tone (per CO Line)	<a href="#">3-23</a>		6	Tone # 00
PAGE C INTRODUCTION	<a href="#">3-24</a>	FLASH 40	Btn 21	
Flash Timer Programming	<a href="#">3-25</a>	Page C	1	10=1.0 sec
Ring Delay Timer	<a href="#">3-26</a>		2	00=Disabled
Reseize Timer	<a href="#">3-27</a>		3	200=200ms
Guard Timer	<a href="#">3-27</a>		4	05=.5 sec
Preset Forward Timer	<a href="#">3-28</a>		5	10 sec
MISCELLANEOUS CO PARAMETERS	<a href="#">3-29</a>	FLASH 41	Btn 1	
Dial Pulse Parameters	<a href="#">3-29</a>		1	60/40, 10PPS
ICLID PROGRAMMING	<a href="#">3-30</a>			
ICLID RINGING ASSIGNMENT(S)	<a href="#">3-30</a>	FLASH 43	1	
View ICLID Ringing Assignments	<a href="#">3-32</a>		17	
Next ICLID Route Number	<a href="#">3-33</a>		18	None
Previous ICLID Route Number	<a href="#">3-33</a>		19	
Select Route Number	<a href="#">3-33</a>		20	
DID PROGRAMMING	<a href="#">3-34</a>	FLASH 44		

\* Features available with Optional Software

**Table 1-1: Default Values**

Features	Page #	Program Code	Flex Button	Default Value
Route Number	<a href="#">3-34</a>		1	
DID Phone Number	<a href="#">3-36</a>		2	
Name Assigned to Number	<a href="#">3-36</a>		3	None
Erasing a DID Table Entry	<a href="#">3-37</a>		4	
STATION ATTRIBUTES PROGRAMMING	<a href="#">4-1</a>			
PAGE A INTRODUCTION	<a href="#">4-3</a>	FLASH 50	Btn 19	
Paging Access	<a href="#">4-4</a>	Page A	1	Enabled
Do Not Disturb	<a href="#">4-5</a>		2	Enabled
Conference Enable/Disable (Per Station)	<a href="#">4-5</a>		3	Enabled
Executive Override	<a href="#">4-6</a>		4	Disabled
Privacy (Per Station)	<a href="#">4-7</a>		5	Enabled
System Speed Dial Access	<a href="#">4-8</a>		6	Enabled
Line Queuing	<a href="#">4-9</a>		7	Enabled
Preferred Line Answer	<a href="#">4-9</a>		8	Enabled
Off-Hook Voice Over (OHVO)	<a href="#">4-10</a>		9	Disabled
Call Forwarding	<a href="#">4-11</a>		10	Enabled
Forced Least Cost Routing (LCR)	<a href="#">4-11</a>		11	Disabled
ACD Supervisor Monitor with Barge-In	<a href="#">4-12</a>		12	Disabled
Executive Override Blocking	<a href="#">4-13</a>		13	Disabled
CO Line Ringing Options	<a href="#">4-14</a>		14	Muted Ring
Name/Number Display at Idle	<a href="#">4-14</a>		15	Name (Enabled)
ACD Zap Tone	<a href="#">4-15</a>		16	Disabled
CO Loop Pool Flex	<a href="#">4-16</a>		17	Disabled
Admin Access	<a href="#">4-16</a>		18	Disabled
PAGE B INTRODUCTION	<a href="#">4-17</a>	FLASH 50	Btn 20	
Station Identification	<a href="#">4-18</a>	Page B	1	006 (24-Btn Key set) 6 (SLT w/o MWt)
Station Day Class of Service (COS)	<a href="#">4-21</a>		2	COS 1

\* Features available with Optional Software

**Table 1-1: Default Values**

Features	Page #	Program Code	Flex Button	Default Value
Station Night Class of Service (COS)	<a href="#">4-23</a>		3	COS 1
Speakerphone/Headset Programming	<a href="#">4-24</a>		4	0 (Full Speakerphone)
Pick-Up Group(s) Programming	<a href="#">4-24</a>		5	Group 1
Paging Zone(s) Programming	<a href="#">4-25</a>		6	Zone 1
Line Group Access - Station	<a href="#">4-26</a>		8	Group 1
LCR Class of Service (COS)	<a href="#">4-26</a>		9	0 (Unrestricted Access)
Off-Hook Preference Programming	<a href="#">4-27</a>		10	00 (Keypad)
Flexible Button Programming	<a href="#">4-28</a>		11	(blank)
Keypad Mode	<a href="#">4-33</a>		12	Inactive Mode
Voice Mail ID Translation	<a href="#">4-33</a>		13	XXXX (Station #)
Display Flexible Buttons	<a href="#">4-34</a>		14	None
Cordless Key (CKTU) Button	<a href="#">4-36</a>		17	00
PAGE C INTRODUCTION	<a href="#">4-36</a>	FLASH 50	Btn 21	
Internal No Answer Forward	<a href="#">4-38</a>	Page C	1	None
Internal Busy Forward	<a href="#">4-38</a>		2	None
External No Answer Forward	<a href="#">4-38</a>		3	None
External Busy Forward	<a href="#">4-39</a>		4	None
No Answer Timer	<a href="#">4-39</a>		5	10 sec
Speed Dial Access	<a href="#">4-40</a>		6	None
FLEXIBLE NUMBERING ASSIGNMENT	<a href="#">4-40</a>	FLASH 52		
Changing a Flexible Code	<a href="#">4-41</a>		1	
Erasing a Flexible Code	<a href="#">4-41</a>		2	
Selecting a Flexible Code	<a href="#">4-40</a>		21	None
Selecting a Fixed Code	<a href="#">4-40</a>		24	
LOCAL NUMBER/NAME TRANSLATION TABLE	<a href="#">2-82</a>	FLASH 55		
Route Number	<a href="#">2-82</a>		1	None

\* Features available with Optional Software

**Table 1-1: Default Values**

Features	Page #	Program Code	Flex Button	Default Value
Phone Number	2-82		2	None
Name	2-82		3	None
Clear Entry	2-82		4	None
ICLID FEATURES	5-5	FLASH 56		
Enable/Disable	5-5		1	Disabled
Name in Display	5-6		2	0=Number
Baud Rate Display	5-6			9600
Port Assignment	5-7		4	Port #1
AUTOMATIC CALL DISTRIBUTION*	6-1			
ACD GROUP PROGRAMMING*	6-3	FLASH 60		
Group Name	6-4		1	None
Alternate Group	6-5		2	None
Overflow Station	6-5		3	None
Supervisor	6-6		4	None
CIQ Threshold	6-7		5	00
Wrap-Up Timer	6-7		6	4 sec
Primary Agents	6-8		7	None
Secondary Agents	6-9		8	None
Guaranteed RAN	6-9		9	None
Primary RAN	6-10		10	None
Secondary RAN	6-11		11	None
Transferred RAN	6-11		12	None
Overflow Timer	6-12		13	60 sec
Call Factor	6-13		14	None
ACD TIMERS	6-13	FLASH 61		
ACD Ring Timer	6-14		1	60 sec
ACD Message Interval Timer	6-14		2	60 sec

\* Features available with Optional Software

**Table 1-1: Default Values**

Features	Page #	Program Code	Flex Button	Default Value
ACD No-Answer Recall Timer	6-15		5	000 sec (Disabled)
ACD No-Answer Retry Timer	6-15		6	300 sec
ACD Guaranteed Message Timer	6-16		7	5 sec
ACD RAN ANNOUNCEMENT TABLES*	6-17	FLASH 62	1-8	None
PC/ACD INTERFACE TRACE	6-20	FLASH 63		
Event Trace Disable/Enable	6-20		1	No (Disabled)
Trace Port Assignment	6-21		2	Port #1
Baud Rate Display	6-21		--	9600 Baud
UNIFORM CALL DISTRIBUTION (UCD)	7-1			
UCD GROUP PROGRAMMING	7-3	FLASH 60		
Alternate UCD Group Assignment	7-4		2	None
UCD Overflow Station Assignment	7-4		3	None
UCD Primary Agent Assignments	7-5		7	None
UCD Announcement Assignment(s)	7-5		10-11	None
UCD TIMERS	7-7	FLASH 61		
UCD Ring Timer	7-7		1	60 sec
UCD Message Interval Timer	7-8		2	60 sec
UCD Overflow Timer	7-9		3	60 sec
UCD Auto Wrap-Up Timer	7-9		4	4 sec
UCD No-Answer Recall Timer	7-10		5	000 sec (Disabled)
UCD No-Answer Retry Timer	7-10		6	300 sec
UCD ANNOUNCEMENT TABLES (RAN)	7-11	FLASH 62	1-8	None
VOICE MAIL GROUPS	8-1			
VOICE MAIL PROGRAMMING	8-3	FLASH 65		
Voice Mail Groups (440-447)	8-3		1-8	None
Alternate Voice Mail Group	8-4		9	None
Leave Mail Index Entry	8-5		10	440 = 0

\* Features available with Optional Software

**Table 1-1: Default Values**

<b>Features</b>	<b>Page #</b>	<b>Program Code</b>	<b>Flex Button</b>	<b>Default Value</b>
Retrieve Mail Index Entry	8-6		11	440 = 1
Station Assignment(s)	8-6		12	None
VOICE MAIL OUTPUTSING TABLE	8-7	FLASH 66		
Voice Mail In-Band Signaling	8-10			
(Table 0)	8-8		1	Pre=P7 Suf=None
(Table 1)	8-8		2	Pre=P7 Suf=*
(Tables 2-6)	8-8		3-7	None
(Table 7)	8-8		8	Pre=P7 Suf=2
Voice Mail Disconnect Table	8-9		9	None
VOICE MAIL IN-BAND FEATURES	8-10	FLASH 67		
Voice Mail In-Band Digits	8-10		1	Enabled
Voice Mail Transfer/Forward	8-11		2	Enabled
Voice Mail Broker	8-12		3	Enabled
VM ID Digit Length	8-12		4	3
VOICE MAIL INDEX TABLE	8-13	FLASH 68		
Voice Mail Group	8-1		1	None
Voice Mail ID Number	8-13		2	None
EXCEPTION TABLES PROGRAMMING	9-3			
TOLL RESTRICTION PROGRAMMING	9-7	FLASH 70		
Allow Table A Programming	9-9		1	None
Deny Table A Programming	9-11		2	None
Allow Table B Programming	9-9		3	None
Deny Table B Programming	9-11		4	None
Special Table 1 Programming	9-13		5	All Codes Denied
Special Table 2 Programming	9-13		6	All Codes Denied
Special Table 3 Programming	9-13		7	All Codes Denied
Special Table 4 Programming	9-13		8	Home

\* Features available with Optional Software

**Table 1-1: Default Values**

<b>Features</b>	<b>Page #</b>	<b>Program Code</b>	<b>Flex Button</b>	<b>Default Value</b>
Area Code for Special Table 1	<a href="#">9-13</a>		9	None
Area Code for Special Table 2	<a href="#">9-13</a>		10	None
Area Code for Special Table 3	<a href="#">9-13</a>		11	None
Displaying Toll Table Entries	<a href="#">9-15</a>		12	None
LEAST COST ROUTING PROGRAMMING	<a href="#">10-1</a>			
LCR TABLES PROGRAMMING	<a href="#">10-4</a>	FLASH 75		
3-Digit Area/Office Code Table	<a href="#">10-8</a>		1	See LCR Tables
6-Digit Area/Office Code Table	<a href="#">10-9</a>		2	None
Exception Code Table	<a href="#">10-10</a>		3	See LCR Tables
Route List Table	<a href="#">10-10</a>		4	
Insert/Delete Table	<a href="#">10-13</a>		5	
Daily Start Time Table	<a href="#">10-15</a>		6	
Weekly Schedule Table	<a href="#">10-16</a>		7	
LCR Routing for Toll Information	<a href="#">10-18</a>		8	00
INITIALIZE DATABASE PARAMETERS	<a href="#">11-1</a>			
INTRODUCTION	<a href="#">11-3</a>	FLASH 80		
Initialize System Parameters	<a href="#">11-4</a>		1	Default
Initialize CO Line Attributes	<a href="#">11-9</a>		2	Default
Initialize Station Attributes	<a href="#">11-10</a>		3	Default
Initialize CO/Station Port Parameters	<a href="#">11-13</a>		4	Default
Initialize Exception Tables	<a href="#">11-13</a>		5	Default
Initialize System Speed Numbers	<a href="#">11-14</a>		6	Default
Initialize LCR Tables	<a href="#">11-15</a>		7	Default
Initialize ICLID Tables	<a href="#">11-17</a>		8	Default
Initialize Directory Dialing Tbl Parameters	<a href="#">11-17</a>		9	Default
Initialize Hunt Group Parameters	<a href="#">11-18</a>		10	Default
Initialize ACD*/UCD Group Parameters	<a href="#">11-19</a>		11	Default

\* Features available with Optional Software

**Table 1-1: Default Values**

<b>Features</b>	<b>Page #</b>	<b>Program Code</b>	<b>Flex Button</b>	<b>Default Value</b>
Initialize Voice Mail* Group Parameters	<a href="#">11-21</a>		12	Default
Initialize Verified Account Code Table	<a href="#">11-22</a>		14	Default
System Reset	<a href="#">11-23</a>		20	
PRINTING SYSTEM DATABASE PARAMETERS	<a href="#">12-1</a>			
INTRODUCTION	<a href="#">12-3</a>	FLASH 85		
Printing System Parameters	<a href="#">12-4</a>		1	Default
Printing CO Line Attributes	<a href="#">12-7</a>		2	Default
Printing Station Attributes	<a href="#">12-9</a>		3	Default
Printing CO Port Parameters	<a href="#">12-11</a>		4	Default
Printing Exception Tables	<a href="#">12-12</a>		5	Default
Printing System Speed Numbers	<a href="#">12-14</a>		6	Default
Printing LCR Tables	<a href="#">12-15</a>		7	Default
Printing Entire System Database	<a href="#">12-27</a>		8	Default
Printing Directory Dial Table Parameters	<a href="#">12-31</a>		10	Default
Printing Hunt Group Parameters	<a href="#">12-33</a>		11	Default
Printing ACD*/UCD Group Parameters	<a href="#">12-34</a>		12	Default
Printing Voice Mail* Group Parameters	<a href="#">12-35</a>		13	Default
Printing Verified Account Codes	<a href="#">12-37</a>		15	Default
LOAD DATABASE ROUTINE	<a href="#">1-21</a>	FLASH 86		
Upload Database	<a href="#">1-21</a>		1	PC Only
Download Database	<a href="#">1-21</a>		2	PC Only

\* Features available with Optional Software

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## Program Mode Entry (Key Station)

Programming is performed at any 24-button Digital Display Telephone. Programming is always done at this type of station regardless of the class of service or which station has been assigned the Attendant(s).

To enter the Program Mode:

1. Press the ON/OFF button (optional). LED lights and intercom dial tone is heard.
2. On the dial pad, press [\*][\*][3][2][2][6] (default password). A confirmation tone is heard.
3. The ON/OFF button LED is lit. The system is ready to program.

---

## Program Mode Entry (Data Terminal or PC)

A PC terminal connected to the RS-232C port on the optional MISU or remotely through the optional 9600 baud modem is used for database programming. When using a data terminal (ASCII or PC capable of emulating an ASCII terminal) on-site or locally, to program the system:

1. Press <Enter> on the terminal.
2. Enter the password [default=3226VODAVI], and press <Enter> again. Proper entry of the password results in the ADM> prompt. Proceed with programming referring to [Figure 1-1: Data Terminal Program Codes Cross Reference](#) for terminal characters that represent the key set buttons. By entering [?] from the terminal, a Help screen displays.

When entering the system remotely via a PC, access to the modem is accomplished by accessing Port 499 through a direct ringing assignment or through DISA or by being transferred to Port 499.

---

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## Initialization

The system has been pre-programmed with certain features called default data (refer to [Table 1-1: Default Values](#)). These features are loaded into memory when the system is initialized.



*The system should be initialized when installed or at any time the database has been corrupted.*

Returning System Database to Default Values:

1. Place Switch #1 on the BKSU in the ON position.
2. Turn the power off and on to initialize the system database to the default.
3. Once database is initialized, place Switch #1 in the OFF position to protect the database.

---

## Database Programming Worksheets

Before attempting programming, it is strongly recommended that customer database worksheets be prepared (Refer to Appendix C in the *Product Description Manual*). These worksheets should become part of the permanent record of customer programming. Refer to the following sections when preparing the worksheets.

## Database Upload/Download Routine

The Database Upload/Download Routine (FLASH 86) provides a maintenance facility which permits the user to download the database to a PC, when a software change is made or when the system needs to be initialized and reprogrammed. In addition, the routine facilitates the programming of a database on an in-house system which is downloaded to a PC and then uploaded to a system in the field. After the system maintenance is completed, the file saved in the PC can then be uploaded to the system.



*All trace modes such as: SMDR (Flash 21), ICLID (Flash 56), and Maintenance Event Traces MUST be turned off before a download is performed!*

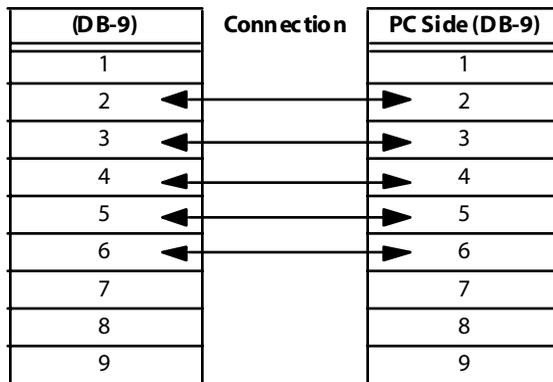
*Default telephone type = 24 button model*

### *Upload/Download through Remote Administration*

First, connect one end of an RS-232C serial cable from the RS-232C connector on the optional MISU to the desired Comm Port on the PC.



*Use a straight-through DB-9 to DB-9 (female to female) cable.*



Then load a communication software package (e.g., Procomm) into the PC and complete the following steps to reconfigure the system.

## PROCOMM -- Downloading a Database File

1. Make necessary changes to the areas shown in the following table, and save information to capture new system settings.

**Table 1-2: Database Download Settings**

System Options		Settings
<b>Parameters: a + [P]</b>		
Baud Rate		9600 Baud N for Parity 8 Bits 1 Stop Bit
<b>Setup Options: a + [S]</b>		
Item A	Echo Locally	OFF
Item D	Character Pacing	0
Item E	Line Pacing	0
Item F	Pace Character	0
Item I	CR Translation (upload)	NONE
Item J	LF Translation (upload)	NONE
Item K	CR Translation (download)	NONE
Item L	LF Translation (download)	NONE
<b>Protocol Options</b>		
Item C*	Abort xfer if CD lost	NO
* For Procomm Plus version 2.01 or higher		

2. Press <Enter> and the following screen displays:

```
Eng. Ver. 0.0e-FFFF DATE: MM/DD/YY TIME: HH:MM:SS
ENTER PASSWORD:
```

3. Type the password [default=3226VODAVI] and press <Enter>. Proper entry of the password results in the ADM> prompt.

- To select the appropriate codes for the following screen capture, refer to [Figure 1-1](#) for terminal characters that represent the key set buttons. For assistance, type a [?] to display a Help screen.

```
Eng. Ver. 0.0e-FFFF DATE: MM/DD/YY TIME: HH:MM:SS
ENTER PASSWORD:
adm>
  ADMIN PROGRAMMING
adm>,
  ENTER PROGRAM NO
adm>86 (and press Enter)
  LOAD DATABASE ROUTINE
  ENTER BUTTON NUMBER
adm>w (and press Enter)
  DOWNLOAD DATABASE
  PRESS HOLD ←
adm>
```

The HOLD button on a keyset is the same as the <Enter> key on the keyboard. Press Enter.

- Press <PgDn> to display the Download Protocol screen.

```
Download Protocols - 124811648 bytes free

X) XMODEM                A) ASCII
Z) ZMODEM                R) RAW ASCII
Y) YMODEM (Batch)       T) TELINK
G) YMODEM-G (Batch)     M) MODEM7
O) 1K-XMODEM            W) WXMODEM
E) 1K-XMODEM-G          I) IMODEM
C) COMPUSERVE B+        1) [EXT 1]
K) KERMIT                2) [EXT 2]
S) SEALINK               3) [EXT 3]

Your Selection: (press ENTER for ZMODEM)
```

- Type **X** to send the upload file to the X-Modem for tracking and correcting errors during the upload procedure.

7. When the Receive XMODEM screen displays, enter path and file name for database file, then press <Enter> to begin the download routine.



The download is complete when a confirmation tone is heard from the communications package and the ADM> prompt returns.

8. Type **M** and press <Enter>.
9. Press <Alt> + <X>.
10. To exit Procomm and return to the DOS prompt, press <Enter>.



*The Downloaded Database cannot be changed in the PC. The Upload/Download Routine is only a method to save an existing database. Database changes are made using the remote admin capabilities.*

*Baud rates on I/O ports are NOT downloaded or uploaded.*

The download file contains a series of ASCII strings with a checksum at the end of the string. The checksum is verified when the system receives the string. An error in the checksum results in rejection of the string. An error message is sent to the PC when a string is received with an error.



*The Database must be initialized prior to an upload. The system should then be reset after the upload.*

If the file uploaded from the PC contains:

- Less** information in a string than required by the system database, the system maintains default info in the area not covered by string.
- More** information in a string than required by the system database, the system ignores the additional information.

## PROCOMM -- Uploading an ASCII Database File

1. Enter the information on the following screen capture.

```
Eng. Ver. 0.0e-FFFF DATE: MM/DD/YY TIME: HH:MM:SS
ENTER PASSWORD:
adm>
  ADMIN PROGRAMMING
adm> ,
  ENTER PROGRAM NO
adm> 86 (and press Enter)
  LOAD DATABASE ROUTINE
  ENTER BUTTON NUMBER
adm> q (and press Enter)
  UPLOAD DATEBASE
  PRESS HOLD ←
adm>
```

The HOLD button on a keyset is the same as the <Enter> key on the keyboard. Press Enter.

2. Press <PgUp> to display the Upload Protocol screen.

```
Upload Protocols - 124811648 bytes free

X) XMODEM          A) ASCII
Z) ZMODEM          R) RAW ASCII
Y) YMODEM (Batch) T) TELINK
G) YMODEM-G (Batch) M) MODEM7
O) 1K-XMODEM      W) WXMODEM
E) 1K-XMODEM-G    I) IMODEM
C) COMPUSERVE B+  1) [EXT 1]
K) KERMIT          2) [EXT 2]
S) SEALINK         3) [EXT 3]

Your Selection: (press ENTER for XMODEM)
```

3. Type **X** to send the upload file to the X-Modem for tracking and correcting errors during the upload procedure.

4. When the Send XMODEM screen displays, enter a path and file name for the database file and press <Enter> to upload desired file to the system.



The upload is complete when a confirmation tone is heard and the ADM> prompt returns.

5. Type **M** and press <Enter>. The following screen displays:

```
adm> m
exiting admin...

DATE: MM/DD/YY      TIME:HH:MM:SS
exiting maintenance utility...
```

6. Press <Alt> + <X>.
7. To exit Procomm and return to the DOS prompt, press <Enter>.
8. When the upload procedure is completed, reset the system for full activation of the database programming to take effect.

## HYPER TERMINAL -- Uploading a Database File

After opening Hyper Terminal, and the New Connection screen displays, complete the following steps:

1. Type a connection name and select the appropriate icon, then click <OK>.
2. When the Phone Number screen displays, change the setting in the Connect Using box to: Direct to COM1, and then click <OK>.
3. Once the COM1 Properties screen displays, change the settings as shown, and then click <OK>.
  - Baud Rate = 9600
  - Parity = None
  - Data Bits = 8
  - Stop Bits = 1
  - Flow Control = Xon/Xoff
4. Press <Enter> and complete the following fields:

Screen Fields	Action
ENTER PASSWORD:	Type password: XXXXVODAVI (XXXX = default password for online administration)
ADM>,	Type program number.
ADM>86	Load database routine. Type button number.
ADM>Q	Upload database. Press HOLD button.
ADM>	Press <Enter> key twice.

5. On the tool bar, click <Transfer> and select Send File.
6. Change Protocol setting to XMODEM.
7. Click <Browse> to locate database file, and double-click on the filename.
8. Click <Send>. The Adm> prompt displays when the file transfer is complete.

## HYPER TERMINAL -- Downloading a Database File

After opening Hyper Terminal, and the New Connection screen displays, complete the following steps:

1. Type connection name and select appropriate icon, then click <OK>.
2. When the Phone Number screen displays, change the setting in the Connect Using box to: Direct to COM1, and then click <OK>.
3. Once the COM1 Properties screen displays, change the settings as shown, and then click <OK>.
  - Baud Rate = 9600
  - Parity = None
  - Data Bits = 8
  - Stop Bits = 1
  - Flow Control = Xon/Xoff
4. Press <Enter> and complete the following fields:

Screen Fields	Action
ENTER PASSWORD:	Type password: XXXXVODAVI (XXXX = default password for online administration)
ADM>	Type program number.
ADM>86	Load database routine. Type button number.
ADM>W	Download database. Press HOLD button.
ADM>	Press <Enter> key twice.

5. On the tool bar, click <Transfer> and select Receive File.
6. Change Receive Protocol setting to XMODEM, and click <Receive>.
7. Type database filename and click <OK>. The Adm> prompt displays when the file transfer is complete.

## ECOM -- Uploading a Database File

After opening ECOM:

1. Press < Alt> + <P> to open COM Port Options.
2. Change COM port settings as follows, and click <OK>.
  - Baud Rate = 9600
  - Parity = None
  - Data Bits = 8
  - Stop Bits = 1
  - Flow Control = no boxes checked, Xon=17, Xoff=19
3. Press <Enter> and complete the following fields:

Screen Fields	Action
ENTER PASSWORD:	Type password: XXXXVODAVI (XXXX = default password for online administration)
ADM> ,	Type program number.
ADM>86	Load database routine. Type button number.
ADM>Q	Upload database. Press HOLD button.
ADM>	Press <Enter> key twice.

4. Press <PgUp> on keyboard or locate file and select Upload.
5. Highlight XMODEM and click <OK>.
6. Type or select upload filename and click <OK>. The Adm> prompt displays when the file transfer is complete.

## ECOM -- Downloading a Database File

After opening ECOM:

1. Press <Alt> + <P> to open COM Port Options.
2. Change COM port settings as follows, and click <OK>.
  - Baud Rate = 9600
  - Parity = None
  - Data Bits = 8
  - Stop Bits = 1
  - Flow Control = no boxes checked, Xon=17, Xoff=19
3. Press <Enter> and complete the following fields:

Screen Fields	Action
ENTER PASSWORD:	Type password: XXXXVODAVI (XXXX = default password for online administration)
ADM> ,	Type program number.
ADM>86	Load database routine. Type button number.
ADM>W	Download database. Press HOLD button.
ADM>	Press <Enter> key twice.

4. Press <PgDn> on keyboard or locate file and select Download.
5. Highlight XMODEM and click <OK>.
6. Type or select download filename and click <OK>. The Adm> prompt displays when the file transfer is complete.

---

---

# 2

# System Parameters Programming

This chapter describes the procedures and steps needed to program system features for the *Triad-S* Systems.



## System Timers

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

Press **FLASH** and dial **[01]**. The following message displays:

SYSTEM TIMERS  
ENTER BUTTON NUMBER

### Description

This section describes the procedures and steps to program system timers in the System Timers programming area. The buttons on a digital telephone are shown in the following illustration:

SYSTEM HOLD RECALL * [ 1 ] Q	EXCL HOLD RECALL * [ 2 ] W	ATTENDANT RECALL * [ 3 ] E	TRANSFER RECALL * [ 4 ] R
PRESET FORWARD * [ 5 ] T	CALL FWD NO/ANSWER * [ 6 ] Y	PAUSE TIMER * [ 7 ] U	CALL PARK TIMER * [ 8 ] I
CONF/DISA TIMER * [ 9 ] O	PAGING TIMEOUT * [ 10 ] P	CO RING DETECT * [ 11 ] A	DISA/SLT RECEIVER * [ 12 ] S
MSG WAIT REMINDER * [ 13 ] D	HOOK FLASH * [ 14 ] F	HOOK FLASH DEBOUNCE * [ 15 ] G	SMDR CALL QUALIFICATION * [ 16 ] H
AUTO CALL BACK TIMER * [ 17 ] J	REMINDER RING * [ 18 ] K	* [ 19 ] L	INTER-DIGIT TIMEOUT * [ 20 ] ;
* [ 21 ] Z	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V

**Table 2-1: System Timer Defaults**

<b>Program Code</b>	<b>Flex Button</b>	<b>Feature</b>	<b>Default (after initialization)</b>
FLASH 01	1	System Hold Recall	060 seconds
	2	Exclusive Hold Recall	180 seconds
	3	Attendant Recall Timer	01 minute
	4	Transfer Recall Timer	045 seconds
	5	Preset Forward Timer	10 seconds
	6	Call Forward No/Answer	015 seconds
	7	Pause Timer	2 seconds
	8	Call Park Recall Timer	180 seconds
	9	Conference/DISA Timer	10 minutes
	10	Paging Timeout Timer	15 seconds
	11	CO Ring Detect Timer	300 ms
	12	SLT DTMF Receiver Timer	020 seconds
	13	MSG Wait Reminder Tone	000 minutes
	14	SLT Hook Flash Timer	10 (1 second)
	15	SLT Hook Flash Debounce	030=0.3 second
	16	SMDR Call Qualification Timer	30 seconds
	17	Auto Call Back Timer	03 seconds (enabled)
	18	Reminder Ring Timer	00 seconds (disabled)
	20	Inter-Digit Timeout	5 seconds

## *System Hold Recall Timer*

### **Programming Steps**

1. Press the SYSTEM HOLD RECALL TIMER flex button (**FLASH 01, Button #1**). The following message displays:

SYSTEM HOLD RECALL	000-300
060	

2. Enter a valid number on the dial pad that corresponds to 000-300 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

---

---

## Description

The System Hold Recall Timer determines the time before a call placed on System Hold recalls the station placing the hold. If unanswered by that station, the call recalls the attendant.

By default, the System Hold Recall Timer is set for 60 seconds and is variable from 000-300 seconds. An entry of 000 disables the timer and there is no recall.

### *Exclusive Hold Recall Timer*

#### Programming Steps

1. Press the EXCLUSIVE HOLD RECALL TIMER flex button (**FLASH 01, Button #2**). The following message displays:

EXC HOLD RECALL	000-300
180	

2. Enter a valid number on the dial pad that corresponds to 000-300 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### Description

The System Hold Recall Timer determines the time before a call placed on Exclusive Hold recalls the station placing the Hold. If unanswered by that station, the call recalls the attendant.

By default, the Exclusive Hold Recall Timer is set for 180 seconds and is variable from 000-300 seconds. An entry of 000 disables the timer and there is no recall.

---

---

## *Attendant Recall Timer*

### **Programming Steps**

1. Press the ATTENDANT RECALL TIMER flex button (**FLASH 01, Button #3**). The following message displays:

ATND RECALL TIMER	00-60
01	

2. Enter a valid number on the dial pad that corresponds to 00-60 minutes.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

The Attendant Recall Timer determines the time a recalling call rings at the attendant station(s) before the system releases the line. When a CO Line recalls to the Attendant station and is still unanswered, the system releases the line at the expiration of this timer and automatically places the line to an idle condition.

By default, the Attendant Recall Timer is set for 1 minute and is variable from 00–60 minutes. An entry of 00 causes the Attendant(s) to ring until answered.

## *Transfer Recall Timer*

### **Programming Steps**

1. Press the TRANSFER RECALL TIMER flex button (**FLASH 01, Button #4**). The following message displays:
2. Enter a valid number on the dial pad that corresponds to 000-300 seconds.

TRANSFER RECALL	000-300
045	

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The Transfer Recall Timer determines the time a transferred call rings at the station receiving the transfer before it recalls the station making the transfer. If unanswered by that station, the call recalls the attendant. By default, the Transfer Recall Timer is set for 45 seconds and is variable from 000-300 seconds. A 000 entry disables the timer and there is no recall.

## *Preset Forward Timer*

### Programming Steps

1. Press the PRESET FORWARD TIMER flex button (**FLASH 01, Button #5**). The following message displays:

PRESET FWD TIMER	00-99
10	

2. Enter a valid number on the dial pad that corresponds to 01-99 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The Preset Forward Timer determines the time an outside line rings before being forwarded to a predetermined station. This entry works with Preset Forward station assignments in Station Programming. More than one station can be forwarded to the same party.



*Initial incoming CO lines follow the Preset Call Forward Timer when encountering a station in the Forward/No Answer mode.*

This timer also governs the time the DISA call rings at a station before returning to intercom dial tone, if not answered. By default, the Preset Forward Timer is set at 10 seconds and is variable from 01–99 seconds. If no preset forward destination is programmed, the feature is disabled.

## Call Forward No Answer Timer

### Programming Steps

1. Press the CALL FORWARD NO ANSWER TIMER flex button (**FLASH 01, Button #6**). The following message displays:

CALL FWD NO ANS 015	000-600
------------------------	---------

2. Enter a valid number on the dial pad that corresponds to 000-600 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Call Forward No Answer Timer is used when a station in the system specifies that no answer calls be forwarded to another station. The timer determines how long an intercom or transferred call rings before it is considered a no-answer call. The call then forwards to the designated station for handling. By default, the Call Forward No Answer Timer is set for 15 seconds and is variable from 000-600 seconds.



*Initial incoming CO lines follow the Preset Call Forward Timer when encountering a station in the Forward No Answer mode.*

## Pause Timer

### Programming Steps

1. Press the PAUSE TIMER flex button (**FLASH 01, Button #7**). The following message displays:

PAUSE TIMER 2	1-9
------------------	-----

2. Enter a valid number on the dial pad that corresponds to 1-9 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

---

---

## Description

The Pause Timer determines the length of the pause when programmed for use with speed dialing and LCR Insert Tables. By default, the Pause Timer is set at 2 seconds and is variable from 1–9 seconds. There is no 0 entry. *Using this feature may affect Centrex transfers.*

## Call Park Recall Timer

### Programming Steps

1. Press the CALL PARK RECALL TIMER flex button (**FLASH 01, Button #8**). The following message displays:

CALL PARK TIMER	000-600
180	

2. Enter a valid number on the dial pad that corresponds to 001-600 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Call Park Recall Timer determines the time before a call placed in a Call Park location recalls the station placing the call in park. If unanswered by that station, the call recalls the attendant.

By default, the Call Park Recall Timer is set at 180 seconds and is variable from 000–600 seconds. A 000 entry disables the timer and there is no recall.

## Conference / DISA Timer

### Programming Steps

1. Press the CONFERENCE/DISA TIMER flex button (**FLASH 01, Button #9**). The following message displays:

CONFERENCE TIMER	00-99
10	

2. Enter a valid number on the dial pad that corresponds to 01-99 minutes.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Conference/DISA Timer determines the time an unsupervised conference can continue after the initiator of the conference has exited.

By default, the Conference/DISA Timer is set at 10 minutes and is variable from 01–99 minutes. A 00 entry disables the timer and no automatic disconnect occurs.



*The Conference Timer also allows the system administrator to control the time a DISA caller is allowed after establishing a Trunk-to-Trunk call. At the expiration of the Conference Timer, a tone is presented to both DISA parties, then one minute later the system automatically releases both trunks.*

*The Conference Timer does not affect or control a DISA-to-Station call.*

## Paging Time-Out Timer

### Programming Steps

1. Press the PAGING TIMEOUT TIMER flex button (**FLASH 01, Button #10**). The following message displays:

PAGING TIMEOUT	00-60
15	

2. Enter a valid number on the dial pad that corresponds to 01-60 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The Paging Time-Out Timer determines the maximum length of a page announcement (internal, external or all call). The system automatically disconnects the page at the end of this time unless the person making the page has already hung up.

By default, the Paging Time-out Timer is set at 15 seconds and is variable from 01–60 seconds. A 00 entry disables the timer and pages are not limited in length. *This affects the use of the Meet Me Page feature.*

## CO Ring Detect Timer

### Programming Steps

1. Press the CO RING DETECT TIMER flex button (**FLASH 01, Button #11**). The following message displays:

CO RING DETECT 3	2-9
---------------------	-----

2. Enter a valid number on the dial pad that corresponds to 2-9 (200 ms to 900 ms).
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The CO Ring Detect Timer controls the time necessary to detect an outside line ringing into the system.

By default, the CO Ring Detect Timer is set at 3 (300 ms), and is variable from 2-9 (200 ms to 900ms). There is no 0 or 1 entry.

## SLT DTMF Receiver Timer

### Programming Steps

1. Press the SLT DTMF RECEIVER TIMER flex button (**FLASH 01, Button #12**). The following message displays:

SLT RCVR TIMER 020	005-100
-----------------------	---------

2. Enter a valid number that corresponds to 005-100 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Single line telephones require the use of a DTMF receiver when going off-hook and dialing. When SMDR or toll restriction (via COS assignments) is enabled, a DTMF receiver monitors and screens the SLT digits for the duration of this timer. By adjusting this timer, the system administrator may free system DTMF receivers sooner if system SLT traffic is heavy, or provide a longer monitoring period if toll restriction becomes a problem.

Note that when LCR is enabled, the DTMF receivers are released when the expected number of digits are dialed as entered in the LCR database.

By default, the SLT DTMF Receiver Timer is set at 20 seconds and is variable from 005-100 seconds.

## *Message Wait Reminder Tone*

### Programming Steps

1. Press the MESSAGE WAIT REMINDER TONE flex button (**FLASH 01, Button #13**). The following message displays:

M / W TONE TIMER	000-104
000	

2. Enter a valid number that corresponds to 000-104 minutes.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Message Wait Reminder Timer determines the time between repeated reminder tones to a key telephone with a message waiting. Digital station users may be reminded of a message waiting on their telephone with an audible signal presented at a timed interval.

By default, the Message Wait Reminder Tone is set at 000 (disabled) and is variable from 000-104 minutes.

## SLT Hook Flash Timer

### Programming Steps

1. Press the SLT HOOK FLASH TIMER flex button (**FLASH 01, Button #14**). The following message displays:

HOOK SWITCH TIME	05-20
10	

2. Enter a valid number on the dial pad that corresponds to 0.5-2.0 seconds in 1/10 second increments.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The SLT Hook Flash Timer determines how long an SLT user presses the hook switch for it to be considered a valid on hook (disconnect) request. An on-hook shorter in duration (but longer than the Hook Switch Bounce Timer) is considered a Hook Flash (transfer) request. Refer to [Figure 2-1](#).

By default, the SLT Hook Flash Timer is set at 10 (one second) and is variable from 0.5-2.0 seconds.



*Some SLTs have a fixed or programmable Flash Timer (Flash or Tap button). This Hook Switch Timer must be set longer than the SLT Flash Timer to allow Hook Flash transfer.*

## SLT Hook Flash Debounce Timer

### Programming Steps

1. Press the SLT HOOK FLASH DEBOUNCE TIMER flex button (**FLASH 01, Button #15**). The following message displays:

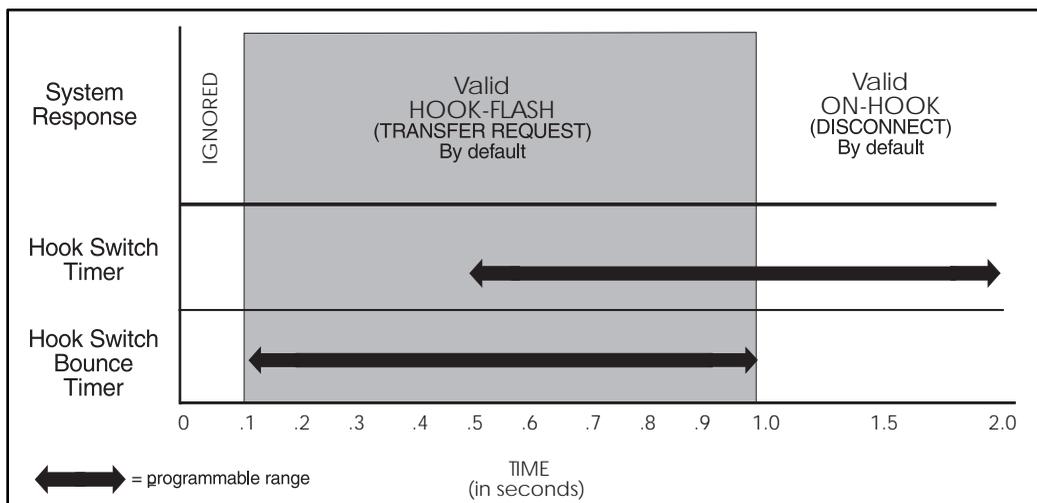
HOOK SWT BOUNCE	000-100
030	

2. Enter a valid number on the dial pad that corresponds to 0-1 seconds in 10 ms increments.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The SLT Hook Flash Debounce Timer determines the time needed to determine a valid on-hook or off-hook condition for single line telephones. On-Hook or Off-Hook signals that are shorter in duration than this timer are ignored by the system. Refer to [Figure 2-1](#).

By default, the SLT Hook Flash Debounce Timer is set to 0.30 seconds and is variable from 0-1 seconds in 10 ms increments. This is a 3-digit entry where 010 equals 0.1 seconds.



**Figure 2-1: Hook Switch Activity**

## SMDR Call Qualification Timer

### Programming Steps

1. Press the SMDR CALL QUAL TIMER flex button (**FLASH 01, Button #16**). The following message displays:

SMDR CALL QUAL	00-60
30	

2. Enter a valid number on the dial pad that corresponds to 00-60 seconds in 1-second increments.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

---

---

## Description

The SMDR Call Qualification Timer determines the time needed to determine a valid SMDR call for reporting purposes. By default, the SMDR Call Qualification Timer is set to 30 seconds and is variable from 00-60 seconds in 1-second increments.

### *Automatic Call Back Timer*

#### Programming Steps

1. Press the AUTO CALL BACK TIMER flex button (**FLASH 01, Button #17**). The following message displays:

AUTO CALL BACK	00-99
03	

2. Enter a valid number on the dial pad that corresponds to 00-99 seconds in 1-second increments.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### Description

The Automatic Call Back Timer invokes a call back anytime a user listens to busy tone for a programmable period of time. By default, the Automatic Call Back Timer is set for 03 seconds (enabled), and is variable from 00-99 seconds. A value of 00 disables this timer. An Automatic Call Back does not occur when this timer is disabled.

### *Reminder Ring Timer*

#### Programming Steps

1. Press the REMINDER RING flex button (**FLASH 01, Button #18**). The following message displays:

REMINDER RING	00-99
00	

2. Enter a valid number that corresponds to 00-99 seconds in 1 second increments. A value of 00 disables the timer, therefore the user only receives one ring burst at the beginning of the call.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

When a CO line rings at a busy station, the call rings at the station using muted ringing. The CO Line Ringing Option feature enables a user to receive a reminder ring instead of muted ring. This timer provides a reminder ring every time the timer expires, as long as the incoming CO line remains connected.

If the user continues their present conversation and the CO party does not hang up, the Reminder Ring timer expires and the user receives another ring burst. When the key set user ends the existing call, ringing for the CO call reverts to normal ringing.

By default, the Reminder Ring Timer is set to 00 second and is variable from 00-99 seconds in 1 second increments.

## *Inter-Digit Time-Out*

### Programming Steps

1. Press the INTER-DIGITTIMEOUT flex button (**FLASH01, Button #20**). The following message displays:

INTERDIGIT T / O	01-99
05	

2. Enter a valid number on the dial pad that corresponds to 01-99 seconds in 1 second increments.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Inter-Digit Time-Out feature provides inter-digit time-out programming on a system-wide basis and applies to intercom and LCR calls. DISA, DID, TIE inter-digit time-outs remain unaffected by this timer. By default, the Inter-Digit Time-out is set for 5 seconds, and is variable from 1-99 seconds.

## Additional System Timers

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

Press **FLASH** and dial **[02]**. The following message displays:

SYSTEM TIMERS  
ENTER BUTTON NUMBER

### Description

This section describes the procedures and steps necessary to program additional System Timers in the Timers programming area.

SYSTEM REDIAL TIMER * [ 1 ] Q	ATD DISPLAY TIMER * [ 2 ] W	CALL CVRG RING TIMER * [ 3 ] E	MODEM ANSWER T/O * [ 4 ] R
PULSE DIAL I/O TIMER * [ 5 ] T	DTMF TIME OPERATION * [ 6 ] Y	* [ 7 ] U	* [ 8 ] I
* [ 9 ] O	* [ 10 ] P	* [ 11 ] A	* [ 12 ] S
* [ 13 ] D	* [ 14 ] F	* [ 15 ] G	* [ 16 ] H
* [ 17 ] J	* [ 18 ] K	* [ 19 ] L	* [ 20 ] ;
* [ 21 ] Z	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V

**Table 2-2: Additional System Timers Defaults**

Program Code	Flex Button	Feature	Default (after initialization)
<b>Additional System Timers</b>			
FLASH02	1	Repeat Redial Timer	060 seconds
	2	ATD Display Timer	01 seconds
	3	Call Coverage Ring Timer	5 seconds
	4	Modem Answer Time-out	25 seconds
	5	Pulse Dial Inter-Digit Timer	300ms
	6	DTMF Time Operation	100ms ON / 100ms OFF

### *Repeat Redial Timer*

#### **Programming Steps**

1. Press the RPT REDIAL TIMER flex button (**FLASH 02, Button #1**). The following message displays

RPT REDIAL 060	006-999
-------------------	---------

2. Enter a valid number that corresponds to 006-999 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### **Description**

The Repeat Redial Timer lets a digital key station press a flexible button or dial a code and redial a busy or no-answer number at specific intervals. The user is signaled via a queue callback indication.

The Redial flexible button flashes at the callback rate of 120 ipm for 15 seconds.

- If station does not answer within 15 seconds, the callback is cancelled.
- If station is busy with an internal/external call when the Redial queue callback occurs, the callback occurs after the user goes on-hook.

By default, the Repeat Redial Timer is set for 1 minute (60) and is variable from 006-999 seconds.

---

---

## *Attendant Display Timer*

### **Programming Steps**

1. Press the ATTENDANT DISPLAY TIMER flex button (**FLASH02, Button #2**). The following message displays:

ATTENDANT DISPLAY	00-99
01	

2. Enter a valid number on the dial pad that corresponds to 00-99 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

The Attendant Display Timer modifies the way in which multiple calls ringing at the attendant station display. Currently, if two calls are ringing at an attendant station, when the station goes off hook, the first call is answered. The LCD updates to show the second call that is ringing which sometimes does not allow the station to view the current call's LCD information. This timer keeps the current call's information on the LCD for the set time period, then shows any other calls ringing in at the time.

By default, the Attendant Display Timer is set for 1 second and is variable from 00-99 seconds.

## *Call Coverage Ring Timer*

### **Programming Steps**

1. Press the CALL CVRG RING TIMER flex button (**FLASH02, Button #3**). The following message displays:

CALL COVERAGE RING	00-99
05	

2. Enter a valid number on the dial pad that corresponds to 00-99 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

A Call Coverage Ring Timer enables the user to place another station under a flex button. When that station rings with an internal or external call, the DSS button for that station rings or flashes.

By default, the Call Coverage Ring Timer is set for 5 seconds and is variable from 00-99 seconds. A value of 00 results in the LED flashing but the call coverage station does not ring.

## *Modem Answer Timer*

### Programming Steps

1. Press the MODEM ANSWER TIMER flex button (**FLASH 02, Button #4**). The following message displays:

MODEM ANSWER T/O	025-999
25	

2. Enter a valid number that corresponds to 025-999 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Modem Answer Timer determines how long the On Board modem provides a carrier tone to a distant modem. If a connection is not made at the end of this timer, the On Board modem hangs up.

By default, the Modem Answer Timer is set for 25 seconds and is variable from 025-999 seconds.

## *Pulse Dial Inter-Digit Timer*

### Programming Steps

1. Press the PULSE DIAL I/D TIMER flex button (**FLASH 02, Button #5**). The following message displays:

INT DIGIT PULSE	300-600
300	

2. Enter a valid number on the dial pad that corresponds to 300-600 ms.

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This governs the inter-digit time of the Pulse Dial Digits, rotary dial mode. By default, the Pulse Dial Ring Timer is set for 300 ms and is variable from 300-600 ms.

## *DTMF On/Off Time Operation*

### Programming Steps

1. Press the DTMF TIME OPERATION flex button (**FLASH 02, Button #6**). The following message displays:

DTMF ON/OFF TIME	1-9
1	

2. Enter a valid number (1-9) for DTMF On and Off Times (100-900 ms).
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The DTMF On/Off Time feature lets the installer select the DTMF On/Off Time on a system-wide basis. This lets the installer customize the system for certain applications that require more than the standard DTMF Time of 100ms on and 100ms off.

By default, the DTMF Time Operation is set for 100ms On and 100ms Off.

---

## System Features 1 Programming

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

Press **FLASH** and dial **[05]**. The following message displays:

SYSTEM FEATURES 1
ENTER BUTTON NUMBER

## Description

This section describes the procedures and steps necessary to program System Features in the System Features programming area. The buttons on a digital telephone are shown in the following illustration:

ATTN OVERRIDE * 1 Q	HOLD PREFERENCE * 2 W	EXTERNAL NIGHT RING * 3 E	EXECUTIVE OVERRIDE * 4 R
PAGE WARN TONE * 5 T	BACKGROUND MUSIC * 6 Y	LCR ENABLE * 7 U	ACCOUNT CODES * 8 I
GROUP LISTENING * 9 O	IDLE SPEAKER MODE * 10 P	CALL COST DISPLAY * 11 A	MUSIC ON HOLD * 12 S
CALL QUALIFIER TONE OPTION * 13 D	* 14 F	* 15 G	* 16 H
* 17 J	* 18 K	* 19 L	* 20 ;
* 21 Z	* 22 X	* 23 C	* 24 V

**Table 2-3: System Features 1 Defaults**

Program Code	Flex Button	Feature	Default (After Initialization)
FLASH 05	1	Attendant Override	Disabled
	2	Hold Preference	System
	3	External Night Ring	Disabled
	4	Executive Warning	Enabled
	5	Page Warning Tone	Enabled
	6	Background Music	Enabled
	7	Least Cost Routing	Disabled
	8	Account Code	Disabled
	9	Group Listening	Disabled
	10	Idle Speaker Mode	Disabled
	11	Call Cost Display Feature	Disabled
	12	Music On Hold	Enabled
	13	Call Qualifier Tone Option	Disabled

## *Attendant Override*

### **Programming Steps**

1. Press the ATTN OVERRIDE flex button (**FLASH 05, Button #1**).
2. Enter a 0 or 1 that corresponds with the following entries:  
[0] = Disabled  
[1] = Enabled

ATTENDANT OVERRIDE	1-0
DISABLED	

3. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

When the Attendant Override feature is enabled, it lets the attendant override a busy station or a station in DND. By default, Attendant Override is disabled.



*Attendant Override functions ONLY when the Attendant station is assigned a flex button designated as Attendant Override.*

## *Hold Preference*

### **Programming Steps**

1. Press the HOLD PEF flex button (**FLASH 05, Button #2**).
2. Enter a valid number (0 or 1) that corresponds with the following entries:  
[0] = Exclusive Hold  
[1] = System Hold

HOLD PREFERENCE	0-1
SYSTEM	

3. Press HOLD to save the entry. A confirmation tone is heard.

## Description

The system may be programmed to have Exclusive or System Hold.

- ❑ For Exclusive Hold: Press HOLD once for Exclusive Hold, and twice for System Hold.
- ❑ For System Hold: Press HOLD once for System Hold, and twice for Exclusive Hold.

Refer to *System Timers* for System and Exclusive Hold recall times. By default, Hold Preference is System Hold.

## *External Night Ring*

### Programming Steps

1. Press the EXT NIGHT RING flex button (**FLASH 05, Button #3**).
2. Enter a valid number (0 or 1) that corresponds with these entries:  
     [0] = Disabled  
     [1] = Enabled

EXTERNAL NIGHT RING	0-1
DISABLED	

3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

When External Night Ring is set to yes, it activates External Night Ring which produces a tone that is sent over all external page groups.

When outside lines are marked UNA, ringing activates a tone over external paging when an incoming call occurs on those lines during night service. By default, External Night Ring is disabled.

## *Executive Override Warning Tone*

### Programming Steps

1. Press the EXEC OVER WARN TONE flex button (**FLASH 05, Button #4**).
2. Enter a valid number (0 or 1) that corresponds with these entries:  
     [0] = Disabled  
     [1] = Enabled

EXECUTIVE WARNING ENABLED	0-1
------------------------------	-----

3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The Executive Override Warning enables Executive stations to override and barge-in on other key sets engaged in conversation on a CO line. Prior to actual cut through of the third party, a warning tone is presented to all parties notifying them of the barge-in. This warning tone, however, is a programmable option on a system-wide basis, that either enables or disables the tone. When the tone is disabled, no audible signal is presented to the parties to signal the barge-in.

By default, Executive Override Warning Tone is enabled.



*Use of this feature when the Executive Override Warning Tone is disabled may be interpreted as a violation of federal, state, or local laws, and an invasion of privacy. Check applicable laws in your area before intruding on calls using this feature.*



*A change in volume may occur on the CO line or intercom call after the barge-in occurs. This feature also affects ACD Supervisor Barge-in warning tone.*

## Page Warning Tone

### Programming Steps

1. Press the PAGE WARN TONE flex button (**FLASH 05, Button #5**).
2. Enter a valid number (0 or 1) that corresponds with these entries:  
[0] = Disabled  
[1] = Enabled

PAGE WARNING TONE ENABLED	0-1
------------------------------	-----

3. Press HOLD to save the entry. A confirmation tone is heard.

## Description

The Page Warning Tone determines whether a page warning tone sounds over the Key Telephone speakers or external paging speakers, prior to a page announcement.

By default, Page Warning Tone is enabled.

## *Background Music*

### Programming Steps

1. Press the BACKGROUND MUSIC flex button (**FLASH 05, Button #6**).
2. Enter a valid number (0 or 1) that corresponds with these entries:

[0] = Disabled

[1] = Enabled

BACKGROUND MUSIC	0-1
ENABLED	

3. Press HOLD to save the entry. A confirmation tone is heard.

## Description

The system can be programmed to let stations activate their Background Music, in addition to Music-On-Hold. A music source must be connected to the BGM/MOH connector on the MISU. By default, the Background Music channel is enabled.

## *Least Cost Routing (LCR)*

### Programming Steps

1. Press the LCR ENABLE flex button (**FLASH 05, Button #7**).
2. Enter a 0 or 1 that corresponds with these entries:

[0] = Disabled

[1] = Enabled

LEAST COST ROUTING	0-1
DISABLED	

3. Press HOLD to save the entry. A confirmation tone is heard.

## Description

When Least Cost Routing is used, it must be enabled here. Before enabling LCR, refer to the Least Cost Routing section (Flash 75) and programming tables (*Product Description Manual - Appendix C*).

When the tables are programmed, you may then enable LCR for the system. After system initialization, a default LCR database is loaded into the LCR section of memory. By default, LCR is disabled.

## *Account Codes - Forced*

### Programming Steps

1. Press ACCOUNT CODES flex button (**FLASH05, Button #8**) to determine whether the use of Account Codes is forced or optional.
2. Enter a 0 or 1 that corresponds with the following entries:
  - [0] = Disabled
  - [1] = Enabled

FORCED ACCOUNT CODE	0-1
DISABLED	

3. Press HOLD to save the entry. A confirmation tone is heard.

## Description

The system can force account codes on all restricted calls.

- When the Forced Account Code option is enabled, and the account code is entered, a station's Class of Service is upgraded to day COS1, night COS1.
- If option is disabled, a station's COS is not upgraded but the account code continues to be part of the SMDR record.

By default, using account codes is optional.

---

---

## *Group Listening*

### **Programming Steps**

1. Press the GROUP LISTENING flex button (**FLASH 05, Button #9**).
2. Enter a 0 or 1 that corresponds with the following entries:

[0] = Disabled

[1] = Enabled

GROUP LISTENING	0-1
DISABLED	

3. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

All digital key telephones have built-in speakerphones. Station users may use the speaker to monitor a call while using the handset to converse with the outside party. This enables other people in the room to listen to both parties in the conversation.

Group listening is unavailable when the station is in the headset mode. By default, Group Listening is disabled.

## *Idle Speaker Mode*

### **Programming Steps**

1. Press the IDLE SPEAKER MODE flex button (**FLASH 05, Button #10**).
2. Enter a 0 or 1 that corresponds with the following entries:

[0] = First digit dialed is Heard (Disabled)

[1] = First digit dialed is Muted (Enabled)

IDLE SPEAKER MODE	0-1
DISABLED	

3. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

The Idle Speaker Mode feature determines whether the first digit dialed is heard over the digital key telephone speaker. This feature can be enabled or disabled on a system-wide basis. By default, this mode is disabled.

---

---

## *Call Cost Display*

### **Programming Steps**

1. Press the CALL COST DISPLAY flex button (**FLASH 05, Button #11**).
2. Enter a 0 or 1 that corresponds with the following entries:  
[0] = Disabled  
[1] = Enabled

CALL COST DISPLAY	0-1
DISABLED	

3. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

The Call Cost Display feature lets a user view the approximate cost of each call made. This approximate cost also prints as part of the SMDR record. The Call Cost Display replaces the call duration display when a call is made using LCR. Cost information is programmable in LCR Flash 75. This enables the user to program four separate costs based on the time of day.

Costs entered in the tables are costs for one minute, however, costs are calculated using 1/10th of a minute value. These costs are rounded down and based on the call start time, even if the call extends into a different time period. The SMDR printout contains a cost calculated using 1/10th of a minute increment, however the station display updates approximately every 30 seconds. The user must use LCR to get the call cost display. By default, the Call Cost Display feature is disabled.

## *Music-On-Hold*

### **Programming Steps**

1. Press the MUSIC-ON-HOLD flex button (**FLASH 05, Button #12**). This feature toggles on and off each time the button is pressed; the display updates with each toggle.  
[0] = Disabled  
[1] = Enabled

MUSIC ON HOLD ENABLED	0-1
--------------------------	-----

2. Press HOLD to save the entry. A confirmation tone is heard.

### Description

When connected to the system, a music source provides music to all lines on Hold, parked calls, transferred calls and calls waiting to be answered by Automatic Call Distribution (ACD) or Uniform Call Distribution (UCD).

This feature is allowed or denied on a system-wide basis in programming. By default, Music-On-Hold is enabled.

## *Call Qualifier Tone*

### Programming Steps

1. Press the CALL QUAL TONE flex button (**FLASH 05, Button #13**).
2. Enter a 0 or 1 that corresponds with the following entries:  
[0] = Disabled  
[1] = Enabled

CALL QUALIFIER TONE DISABLED	0-1
---------------------------------	-----

3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The Call Qualifier Tone feature is associated with the ACD Call Qualifier code and determines if a confirmation tone is heard after the ACD Call Qualifier code is dialed.

If programmed, the confirmation tone is heard through the key set speaker. This feature allows:

- Up to four digits for the ACD SMDR reporting functions that are compatible with the Basic ACD software package.
- Entry of up to twelve digits.

By default, the Call Qualification Confirmation tone is disabled.

## System Features 2 Programming

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

Press **FLASH** and dial **[06]**. The following message displays:

SYSTEM FEATURES 2  
ENTER BUTTON NUMBER

### Description

This section describes the procedures and steps necessary to program System Features in System Features programming area. The buttons on the digital telephone are shown in the following illustration:

BARGE-IN WARN TONE * 1 Q	CORING TONE * 2 W	VERIFIED ACCT CODES * 3 E	CALL FWD DISPLAY STATUS * 4 R
EXT DAY RINGING * 5 T	ACD/UCD OVERFLOW STA FWD * 6 Y	DIRECT TRANSFER * 7 U	STATION ID LOCK * 8 I
LCR CALL PROGRESS * 9 O	ONE-TOUCH RCD WARNING TONE * 10 P	RINGBACK ON TRANS- FER * 11 A	ACD AGENT RECALL * 12 S
911 FEATURE * 13 D	ENHANCED 911 * 14 F	VMID STATION NUMBERS * 15 G	* 16 H
* 17 J	* 18 K	* 19 L	* 20 ;
* 21 Z	* 22 X	* 23 C	* 24 V

**Table 2-4: System Features 2 Defaults**

Program Code	Flex Button	Feature	Default (after initialization)
<b>System Features 2</b>			
FLASH 06	1	Barge-In Warn Tone	Enabled
	2	CO Ring Tone	Enabled
	3	Verified Account Codes	Disabled
	4	Call Forward Display Status	Enabled
	5	External Day Ringing	Disabled
	6	ACD/UCD Overflow Sta Fwd	Disabled
	7	Direct Transfer	Enabled
	8	Station ID Lock	Disabled
	9	LCR Call Progress	Enabled
	10	One-Touch Record Warning Tone	Enabled
	11	Ringback on Transfer	Disabled
	12	ACD Agent Recall	Disabled
	13	911 Feature	Disabled
	14	Enhanced 911	Disabled
	15	VMID Station Numbers	Station Numbers=VMID

### *Barge-In Warn Tone*

#### **Programming Steps**

1. Press the BARGE IN WARN TONE flex button (**FLASH 06, Button #1**). The following message displays:

BARGE IN WARN TONE	0-1
ENABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable the conference tone.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.



*Display stations continue to receive the CONFERENCE display regardless of the warning tone setting.*

Privacy is ensured on all communications in the system. If desired, the user may elect to disable the Barge In feature, thus allowing up to seven other stations to join existing CO Line conversations.



*Disabling of the Barge In feature may be limited by federal, state, or local law, so check the relevant laws in your area before disabling privacy.*

**Table 2-5: CO Line Barge In Flag**

Station Attempting to Access CO Line	CO Line in Use by Another Station	
	Privacy Enabled	Privacy Disabled
Privacy Enabled	Private (no cut-through)	Private (no cut-through)
Privacy Disabled	Private (no cut-through)	Privacy Release (cut-through allowed)

## CO Ring Tones

### Programming Steps

1. Press the CO RING TONE flex button (**FLASH 06, Button #2**). The following message displays:

CO RING TONES ENABLED	0-1
--------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable the tone ring signal.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The ring tone signal that notifies stations of an incoming call can be changed in administrative programming to provide distinctive ringing on a per CO line basis. A CO Ring Tone can be programmed for each CO line that rings each station. The system provides 36 different ring patterns that can be selected for CO lines in the system. By default, CO Ring Tones is enabled.

## Verified Account Codes

### Programming Steps

1. Press the VERIFIED ACCT CODES flex button (**FLASH 06, Button #3**). The following message displays:

VERIFIED ACCT TONES	0-1
DISABLED	

2. Enter 0 or 1 on the dial pad to enable/disable Verified Account Codes.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The Verified Account Code/Traveling Class of Service (COS) feature provides tracking of specific calls by entering a verified, variable length (up to 12-digits) identifier. Each account code can be assigned a day and night Class-of-Service for determining the dialing privileges allowed by that account code. This lets users override a restricted station. If the dialed account code matches the Verified Account code table, an intercom dial tone is returned, otherwise an error tone is returned. SMDR must be enabled for the account code to print as part of the SMDR record. *Triad-S* allows up to 250 12-digit account codes programmed in at FLASH 31. By default, the Verified Account Codes feature is disabled.

## Call Forward Display

### Programming Steps

1. Press the CALL FWD DISPLAY STATUS flex button (**FLASH 06, Button #4**). The following message displays:

CALL FWD DISPLAY	0-1
ENABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable Call Forward Display.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

---

---

## Description

When call forwarding is invoked, the LCD display normally indicates the call forwarding mode at all times.

This feature is enabled/disabled in administrative programming on a system-wide basis. By default, the status of the Call Forward Display is enabled.

### *External Day Ring*

#### Programming Steps

1. Press the EXT DAY RINGING flex button (**FLASH 06, Button #5**). The following message displays:

EXTERNAL DAY RING	0-1
DISABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable External Day Ring.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

## Description

The system can be programmed so CO lines marked for UDA provides ringing out of the external page ports when the system is in the Day Mode. By default, External Day Ringing is disabled.

### *Overflow Station Forward*

#### Programming Steps

1. Press the ACD/UCD OVERFLOW STA FWD flex button (**FLASH 06, Button #6**). The following message displays:

OVERFLOW STA FWD	0-1
DISABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable the use of this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The Overflow Station Forward feature allows ACD/UCD calls reaching the ACD/UCD Overflow Station to call forward to another station. This enhancement is allowed or denied on a system-wide basis. Once enabled in programming:

- An ACD/UCD Overflow station can Busy/No-Answer forward to Voice Mail Groups, ACD/UCD Groups, Hunt Groups and stations.
- If the ACD/UCD Overflow station is busy or does not answer before the no-answer call timer expires, the ACD/UCD call forwards to the destination.

By default, this feature is disabled.

## *Direct Transfer Mode*

### Programming Steps

1. Press the DIRECT TRANSFER flex button (**FLASH 06, Button #7**). The following message displays:

DIRECT XFER ENABLED	0-1
------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

When enabled, supervised transfers (screened transfers) to stations in the handset mode connect calls directly to the handset. The station user must have a direct appearance of that CO line or a Loop button. This feature is programmed on a system-wide basis. By default, the Direct Transfer Mode is enabled.

---

---

## *Station ID Lock*

### **Programming Steps**

1. Press the STATION ID LOCK flex button (**FLASH 06, Button #8**). The following message displays:

STATION LOCK DISABLED	0-1
--------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable the use of this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

The Station ID Lock feature enables the installer/programmer to lock the station ID of all extensions on the system. It also prevents the loss of station programming that results when a different station type is plugged into a port already designated as another station type. This feature is programmed on a system-wide basis. By default, the Station ID Lock feature is disabled.

The proper procedure(s) for changing the Station ID with the Station ID Lock feature enabled:

1. Enter programming mode and disable the Station ID Lock feature.
2. Plug the new device into the jack. The set is automatically identified.
3. Enter programming mode and disable the Station ID Lock feature.
4. Enter programming and perform Station ID programming. (FLASH 50, PAGE B, button #1). The set is automatically identified.

## *LCR Call Progress*

### **Programming Steps**

1. Press the LCR CALL PROGRESS flex button (**FLASH 06, Button #9**). The following message displays:

LCR CALL PROGRESS ENABLED	0-1
------------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable the use of this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The LCR CALL PROGRESS Feature enables the installer to select, on a system-wide basis, whether users hear call progress indications. By default, the LCR Call Progress feature is enabled.



*If this feature is disabled, a confirmation tone is given after the last digit is dialed. The user does not hear the line being seized or the outputting of digits to the Central Office.*

## One-Touch Recording Warning Tone

### Programming Steps

1. Press the ONE-TOUCH RCD WARNING TONE flex button (**FLASH 06, Button #10**). The following message displays:

RECORDONG WARN TONE	0-1
ENABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable the use of this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The One-Touch Recording Warning Tone feature lets the installer enable/disable the One-Touch Recording Warning Tone on a system-wide basis. By default, the Recording Warning Tone is enabled.



*Use of this feature when the One-Touch Recording Warn Tone is disabled may be interpreted as a violation of federal, state, or local laws, and an invasion of privacy. Check applicable laws in your area before recording calls using this feature.*

---

---

## *Ringback on Transfer*

### **Programming Steps**

1. Press the RINGBACK ON TRANSFER flex button (**FLASH 06, Button #11**). The following message displays:

RINGBACK ON XFER DISABLED	0-1
------------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable the use of this feature.  
[0] = Disabled (Music)  
[1] = Enabled (Ringback Tone)
3. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

The Ringback on Transfer feature provides on a system-wide basis music on hold or ringback tone to the CO caller when CO calls are transferred. Callers currently hear music. By default, the Ringback on Transfer feature is disabled.

## *ACD Agent Recall*

### **Programming Steps**

1. Press ACD AGENT RECALL button (**FLASH 06, Button #12**). The following message displays:

ACD AGENT RECALL DISABLED	0-1
------------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable the use of this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

The ACD Agent Recall allows/disallows calls that have been transferred from an ACD Agent to recall the Agent.

---

---

## 911 Feature

### Programming Steps

1. Press the 911 FEATURE flex button (**FLASH 06, Button #13**). The following message displays:

911 FEATURE DISABLED	0-1
-------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable the use of this feature.  
[0] = Disabled  
[1] = Enabled

### Description

The 911 Feature allows stations in the system to dial 911 without using an access code. 911 calls are placed on 911 marked lines. If all lines are busy, an existing call is dropped and the 911 call is placed. When feature is enabled, Trunk Group/LCR Access Code 9 is not available.

---

## Enhanced 911 (Proctor PBX-ANI-LINK Unit)

### Programming Steps

1. Press the ENHANCED 911 button (**FLASH 06, Button #14**). The following message displays:

ENHANCED 911 DISABLED	0-1
--------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable the use of this feature.  
[0] = Disabled  
[1] = Enabled

### Description

The Enhanced 911 feature enables 911 integration with the Proctor PBX-ANI-LINK product. Loop Start lines can be connected to the Proctor unit and programmed to be 911 lines (FLASH 40, PAGE A, Button 15).

---

---

When a 911 call is made from a station in the system, the system will send 911XXXX (XXXX=Station # that placed the 911 call) in DTMF format to the Proctor. If the station number is less than 4 digits, a leading 0 will automatically be added. The Proctor unit then accesses a call trunk and sends the information in the proper format to the 911 Center.

### *Conditions*

- ❑ The 911 Feature (FLASH 06, button 13) must also be enabled for the Proctor Integration to work.
- ❑ Only the lines connected to the Proctor should have the 911 Enable programmed (FLASH 40, PAGE A, Button 15).
- ❑ It is recommended to have a power failure procedure in place to ensure that 911 calls are always routed. Refer to FLASH 09, Button 7 for programming information.

---

## VMID Station Numbers

### Programming Steps

1. Press VMID STATION button (**FLASH 06, Button #15**). The following message displays:

VMID SAME AS STA #  
PRESS HOLD

2. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The VMID Station Numbers feature must be used **after** changing station numbers with the Flexible Numbering feature. Voice Mail ID numbers will be changed to match the current station number once the HOLD button is pressed.

This eliminates the need for the technician to program individual VMID numbers.



*This feature should be accomplished after the flexible numbers are assigned. Implementing this feature could cause the VM box numbers to be re-programmed.*

## Programmable Flash Rates

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

Press **FLASH** and dial **[07]**. The following message displays:

SYSTEM FLASH RATES  
ENTER BUTTON NUMBER

### Description

This section describes the procedures and steps necessary to program the Flash Rates in the Flash Rates Programming area. The buttons on the digital telephone are shown in the following illustration:

INC CO RING * [ 1 ] Q	INC ICW RING * [ 2 ] W	CALL FORWARD BTN * [ 3 ] E	MSGWAIT/VM BTN * [ 4 ] R
MSG CBCK DSS/BLF * [ 5 ] T	DND DSS/BLF * [ 6 ] Y	AUTO CBCK DSS/BLF * [ 7 ] U	UCD UNAVL DSS/BLF * [ 8 ] I
TRANSFER CO RING * [ 9 ] O	RECALL CO RING * [ 10 ] P	QUEUED CO RING * [ 11 ] A	EXCLUSIVE HOLD * [ 12 ] S
SYSTEM HOLD * [ 13 ] D	IN USE HOLD * [ 14 ] F	CAMP-ON BTN * [ 15 ] G	CALLBACK BTN * [ 16 ] H
LINE QUEUE BTN * [ 17 ] J	DND BTN * [ 18 ] K	ICM HOLD BTN * [ 19 ] L	* [ 20 ] ;
* [ 21 ] Z	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V

**Table 2-6: Flash Rates**

Red LED Flash Rates		Green LED Flash Rates	
00	Off	15	Steady On
01	Steady On	16	30 ipm Flash
02	30 ipm Flash	17	60 ipm Flash
03	60 ipm Flash	18	60 ipm Dbl Wink
04	60 ipm Dbl Wink	19	240 ipm Flash
05	240 ipm Flash	20	240 ipm Flutter
06	240 ipm Flutter	21	480 ipm Flash
07	480 ipm Flash	22	480 ipm Flutter
08	480 ipm Flutter	23	15 ipm Flash
09	15 ipm Flash	24	120 ipm Flash
10	120 ipm Flash	25	120 ipm Flutter
11	120 ipm Flutter	26	30 ipm Dbl Flash
12	30 ipm Dbl Flash	27	480 ipm Dbl Wink
13	480 ipm Dbl Wink	28	480 ipm Dbl Flash
14	480 ipm Dbl Flash		

### *Incoming CO Line Ringing*

#### **Programming Steps**

1. Press the INC CO RING flex button (**FLASH 07, Button #1**). The following message displays:



2. Enter a valid number (00-28) on the dial pad that correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates.](#))
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### **Description**

The Incoming CO Line Ringing flash rate is the rate at which an Incoming CO line or Loop Button flashes. This flash rate can be programmed to 29 different options identified in the flash rate table, which enables the programmer to customize the key system configuration to desired flash rates. By default, the Incoming CO Ringing flash rate is set for RED 480 ipm Flutter (08).

---

---

## *Incoming Intercom Ringing*

### **Programming Steps**

1. Press the INC ICM RING flex button (**FLASH 07, Button #2**). The following message displays:

INC ICM RING	00-28
RED 120 IPM FLUTTER	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. Refer to [Table 2-6: Flash Rates](#).
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

The Incoming Intercom Ringing flash rate is the rate an Incoming DSS button flashes if you have a DSS appearance for the calling station. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates.

By default, the Incoming Intercom Ringing flash rate is set for RED 120 ipm Flutter (11).

## *Call Forward Button*

### **Programming Steps**

1. Press the CALL FORWARD BTN flex button (**FLASH 07, Button #3**). The following message displays:

CALL FORWARD BTN	00-28
RED STEADY ON	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Call Forward Button flash rate is the rate at which the Call Forward button flashes when any type of forward mode is used. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Call Forward Button flash rate is set for a Red Steady On (01).

### *Message Wait / VM Button*

#### Programming Steps

1. Press the MSG WAIT/VM BTN flex button (**FLASH 07, Button #4**). The following message displays:



2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Message Wait/VM Button flash rate is the rate at which the Message Wait and VM button(s) flashes when you receive a message/voice mail message. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates.

By default, Message Wait/VM Button flash rate is set for a Red Steady On (01).



*The fixed message button should not be used as a Voice Mail button.*

## *Message Callback - DSS / BLF*

### **Programming Steps**

1. Press the MSG CBCK – DSS/BLF flex button (**FLASH 07, Button #5**). The following message displays:

MSG CBCK / DSS / BLF	00-28
RED 120 IPM FLUTTER	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

The Message Call Back DSS/BLF flash rate is the rate at which a DSS button of a station returning your message flashes. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Message Callback DSS/BLF flash rate is set for a Red 120 ipm Flutter (11).

## *Do Not Disturb - DSS / BLF*

### **Programming Steps**

1. Press the DND – DSS/BLF flex button (**FLASH 07, Button #6**). The following message displays:

DND DSS / BLF	00-28
RED 60 IPM DBL WINK	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Do Not Disturb DSS/BLF flash rate is the rate at which a DSS button of a station flashes when you are in a Do Not Disturb mode. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Do Not Disturb DSS/BLF flash rate is set for a Red 60 ipm Double Wink (04).

### *Auto Callback - DSS / BLF*

#### Programming Steps

1. Press the AUTO CBCK – DSS/BLF flex button (**FLASH 07, Button #7**). The following message displays:

AUTO CBCK DSS / BLF	00-28
RED 120 IPM FLASH	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Auto Callback DSS/BLF flash rate is the rate at which a DSS button of a station returning your call back flashes. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Auto Callback DSS/BLF flash rate is set for a Red 120 ipm Flash (10).

### *UCD Available / Unavailable - DSS / BLF*

#### Programming Steps

1. Press the UCD UNAVL – DSS/BLF flex button (**FLASH 07, Button #8**). The following message displays:

UCD UNAVL DSS / BLF	00-28
RED 60 IPM DBL WINK	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The UCD Available/Unavailable DSS/BLF flash rate is the rate at which a DSS appearance for a station in ACD/UCD Unavailable mode flashes. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, UCD Available/Unavailable DSS/BLF flash rate is set for a Red 60 ipm Double Wink (04).

## *Transfer CO Ringing*

### Programming Steps

1. Press the TRANSFER CO RING flex button (**FLASH 07, Button #9**). The following message displays:

TRANSFER CO RING	00-28
RED 120 IPM FLASH	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Transfer CO Ringing flash rate is the rate at which a CO Line button or Loop button flashes when a call is transferred to you. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Transfer CO Ringing flash rate is set for a Red 120 ipm Flash (10).

---

---

## Recall CO Ringing

### Programming Steps

1. Press the RECALL CO RING flex button (**FLASH 07, Button #10**). The following message displays:

RECALL CO RING	00-28
RED 480 IPM FLUTTER	

2. Enter a valid number on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates

### Description

The Recall CO Ringing flash rate is the rate at which a CO Line button or Loop button flashes when a call recalls to your station. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Recall CO Ringing flash rate is set for a Red 480 ipm Flutter (08).

## Queued CO Ringing

### Programming Steps

1. Press the QUEUED CO RING flex button (**FLASH 07, Button #11**). The following message displays:

QUEUED CO RING	00-28
GREEN 480 IPM FLUTTER	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The Queued CO Ringing flash rate is the rate at which a CO Line button or Loop button flashes when a queued line becomes available. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Queued CO Ringing flash rate is set for a Green 480 ipm Flutter (22).

### *Exclusive Hold*

#### Programming Steps

1. Press the EXCLUSIVE HOLD flex button (**FLASH 07, Button #12**). The following message displays:

EXCLUSIVE HOLD	00-28
GREEN 120 IPM FLASH	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The Exclusive Hold flash rate is the rate at which a CO Line button or Loop button flashes when a call is placed on Exclusive Hold. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Exclusive Hold flash rate is set for a Green 120 ipm Flash (24).

### *System Hold*

#### Programming Steps

1. Press the SYSTEM HOLD flex button (**FLASH 07, Button #13**). The following message displays:

SYSTEM HOLD	00-28
RED 60 IPM DBL WINK	



---

---

## *Camp-On Button*

### **Programming Steps**

1. Press the CAMP-ON BTN flex button (**FLASH 07, Button #15**). The following message displays:

CAMP ON BTN	00-28
RED 120 IPM FLASH	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

The Camp-On Button flash rate is the rate at which the Camp-On Button flashes when you receive a Camp-On. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Camp-On Button flash rate is set for a Red 120 ipm Flash (12).

## *Call Back Button*

### **Programming Steps**

1. Press the CALL BACK BTN flex button (**FLASH 07, Button #16**). The following message displays:

CALL BACK BTN	00-28
RED 120 IPM FLASH	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

---

---

## Description

The Call Back Button flash rate is the rate at which the Call Back Button flashes when a station at which you left a call back request becomes available. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Call Back Button flash rate is set for a Red 120 ipm Flash (10).

### *Line Queue Button*

#### Programming Steps

1. Press the LINE QUEUE BTN flex button (**FLASH 07, Button #17**). The following message displays:

LINE QUEUE BTN	00-28
RED 480 IPM FLUTTER	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The Line Queue Button flash rate is the rate at which the Line Queue Button flashes after queuing onto a busy line. This button flashes when the busy line becomes available. This flash rate can be programmed to 29 different options identified in the flash rate table which enables the programmer to customize the key system configuration to desired flash rates. By default, Line Queue Button flash rate is set for a Red 480 ipm Flutter (08).

### *Do Not Disturb Button*

#### Programming Steps

1. Press the DND BTN flex button (**FLASH 07, Button #18**). The following message displays:

DND BTN	00-28
RED STEADY ON	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Do Not Disturb Button flash rate is the rate at which your Do Not Disturb Button flashes when you place your station in a Do Not Disturb mode. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Do Not Disturb Button flash rate is set for Red Steady On (01).

## *Intercom Hold Button*

### Programming Steps

1. Press the ICM HOLD BTN flex button (**FLASH 07, Button #19**). The following message displays:

ICM HOLD BTN	00-28
RED 15 IPM FLASH	

2. Enter a valid number (00-28) on the dial pad to correspond to one of the 29 available options. (Refer to [Table 2-6: Flash Rates](#).)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Intercom Hold Button flash rate is the rate at which your Hold button flashes when you receive an intercom call and your station's intercom mode selector switch is in the *T* position. This flash rate can be programmed to 29 different options identified in the Flash Rate table. This enables the programmer to customize the key system configuration to desired flash rates.

By default, Intercom Hold Button flash rate is set for a Red 15 ipm Flash (09).

# System Parameters

## Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

Press **FLASH** and dial **[09]**. The following message displays:

SYSTEM PARAMETERS  
ENTER BUTTON NUMBER

## Description

This section describes the procedures and steps necessary to program System Parameters in the System Parameters programming area. The buttons on the digital telephone are shown in the following illustration:

MUSIC CH #3 * <input type="text" value="1"/> Q	MUSIC CH #4 * <input type="text" value="2"/> W	MUSIC CH #5 * <input type="text" value="3"/> E	MUSIC CH #6 * <input type="text" value="4"/> R
MUSIC CH #7 * <input type="text" value="5"/> T	MUSIC CH #8 * <input type="text" value="6"/> Y	* <input type="text" value="7"/> U	* <input type="text" value="8"/> I
* <input type="text" value="9"/> O	* <input type="text" value="10"/> P	* <input type="text" value="11"/> A	* <input type="text" value="12"/> S
* <input type="text" value="13"/> D	* <input type="text" value="14"/> F	* <input type="text" value="15"/> G	* <input type="text" value="16"/> H
* <input type="text" value="17"/> J	* <input type="text" value="18"/> K	* <input type="text" value="19"/> L	* <input type="text" value="20"/> ;
* <input type="text" value="21"/> Z	* <input type="text" value="22"/> X	* <input type="text" value="23"/> C	* <input type="text" value="24"/> V

**Table 2-7: System Parameters Programming**

Program Code	Flex Button	Feature	Default (after initialization)
FLASH 09	1	Music Channel #3*	###
	2	Music Channel #4*	###
	3	Music Channel #5*	###
	4	Music Channel #6*	###
	5	Music Channel #7*	###
	6	Music Channel #8*	###
* Music Channels 3-8 can only be used for Music-On-Hold functions			



The leading digit feature is removed in FP3. The leading digit feature is replaced by a networking table (FLASH 16).

## MOH Assignments

### Programming Steps

1. Press the MUSIC CH # flex button (**FLASH 09, Button #1 through #6**). The following message displays:

```
MUSIC CHANNEL X    ### , 001-012
YYY
```

X= 3-8

YYY= CO Linenumber

2. Enter a valid number (001-012) that corresponds to the CO line number desired.
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The MOH Assignments feature enables the system to assign CO line circuits as additional 6 music-on-hold inputs. This increases the capacity of music channels beyond the 2 available on the MISU board for use by MOH sources. A total of 8 channels are available for use on the system. By default, no channels are assigned.

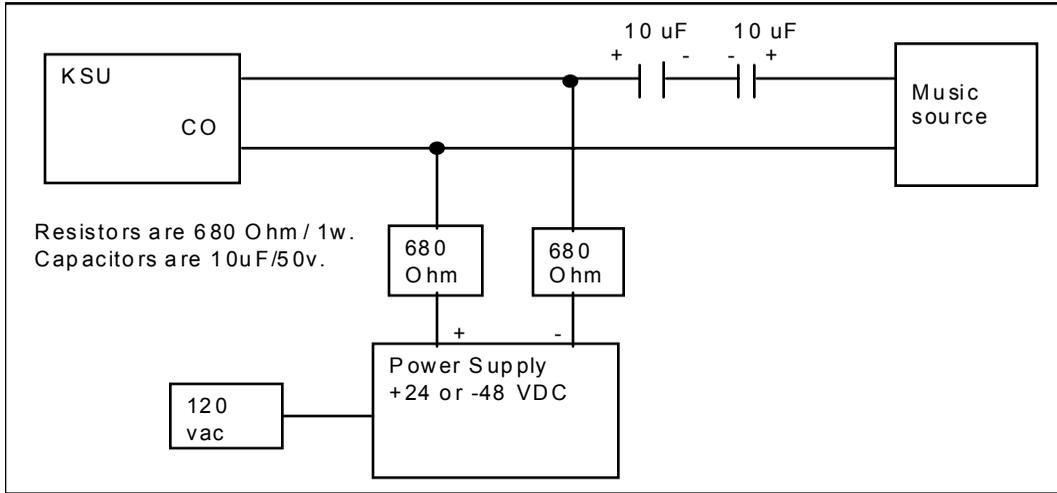


Figure 2-2: Wiring - Music Source to a CO Line

## Attendant Station Assignment

### Programming Steps

1. Press **FLASH** and dial **[10]**. The following message displays:

```
ATND STA ASSIGNMENT  
100, ###, ###
```

2. Enter a valid station number (**100-131**) on the dial pad.
3. Press **HOLD** to save the entry. A confirmation tone is heard and the display updates.

### Description

The system identifies an attendant station for the purpose of receiving recalls and activating night service. The system can have up to three attendant(s) programmed. Entering [#] three times removes that attendant assignment or different station numbers can be programmed. By default, Station 100 is assigned as the first attendant.

## System Time and Date

### Programming Steps

To set the time and date that appears on display telephones:

1. Press **FLASH** and dial **[11]**. The following message displays:

DATE AND TIME	
MMM DD YY	HH : MM am

*MMM = Month*

*DD = Day*

*YY = Year*

*HH = Hour*

*MM = Minute*

2. Choose display format by pressing the appropriate button in the flexible button field. The time can be displayed in the standard 12-hour format or the 24-hour format
3. Dial the time and date in the order shown below (2 digits for each entry, for a total of 10 digits):

Year

Month

Day

Hour

Minute



To program a pm time after selecting the 12-hour format, use 24-hour numbering, e.g., To program a time of 5:00 pm, enter 17:00.

4. Press HOLD to save the entry. A confirmation tone is heard and the display updates.



By default, the time is set for 12 hour display format. When entering the time and date, use the following data:

LED Off = 12 Hour Display

LED On = 24 Hour Display



*The Date and Time can be changed or set by the First Attendant station using dial code [692].*

---

## PBX Dialing Codes

### Programming Steps

1. Press **FLASH** and dial **[12]**. The following message displays:

PBX DIAL CODES  
##, ##, ##, ##, ##

2. Enter valid numbers (one right after the other) on the dial pad, up to ten digits. If a single digit code is required, enter code followed by [#].
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.
4. To delete a code, enter [#] [#] and press HOLD.

### Description

Five 1- or 2-digit PBX access codes can be programmed into memory. When dialed, these codes signal the system so toll restriction is applied at the next dialed digit. When a single digit code [9] is entered, it must be followed by [#] as the second digit. To delete an entry, enter [#] twice and Press HOLD. Lines must be programmed as PBX lines before these codes apply. By default, no PBX dialing codes are assigned. Programming is performed in FLASH 40, PAGE A, Button 2.



**Table 1** -- Can be set to dial [9] for Centrex 911 calls. If the CO is set to 911, enter **yes** and the unit is on Centrex. This will dial the Centrex 9 (not LCR).

## Executive / Secretary Pairs

### Programming Steps

1. Press **FLASH** and dial **[13]**. The following message displays:

```
EXEC SECY PAIRINGS
###, ###      PAIR 1
```

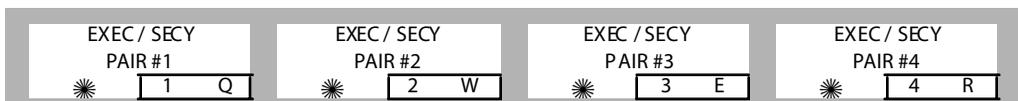
The first button is lit indicating the first pair may be programmed.

2. Enter a valid Executive station number.
3. Enter a valid Secretary station number.
4. Press HOLD to save the data. A confirmation tone is heard and the display updates.
  - To program a second pair, press the second flexible button in the flexible button field and enter station numbers as in steps 2-4.
  - To program a third pair, press the third button in the flexible button field and enter station numbers as in steps 2-4.
  - To program a fourth pair, press the fourth button in the flexible button field and enter station numbers as in steps 2-4.

### Description

There are four Executive/Secretary pairs available. When an Executive station is busy or in DND, intercom calls and transfers are automatically routed to the designated Secretary.

The assigned secretary may Camp-On to the Executive Station when the station is busy or in Do-Not-Disturb. There can be only one pairing of stations, with no duplicates. You cannot pair Executive 100 to Secretary 101, then pair Secretary 101 to Executive 100. The same Secretary station can be specified for more than one Executive station (101-105 and 102-105). Entering [#] six times removes the assignments. Individual pairs may be changed by pressing the associated flexible button. By default, no Executive / Secretary pairs are assigned.



# On-Board Relay Programming

## Programming Steps

1. Press **FLASH** and dial **[14]**. Button #1 is lit to indicate Relay #1 is selected. The following message displays:

```
RELAY X TYPE
YYYYYYYYYYYY
```

X= 1-2  
 YYYYYYYYYY = Ext Page Zone 1-2, LBC Sta XXX, Ran Start X, CO Control XX

2. Press the button that corresponds to the desired relay. That button lights. Enter one of the following sequences on the keypad:
  - [1] + [1] External Page Zones
  - [2] + [1 through 8] = RAN Start (RAN Announcement Tables 1-8)
  - [3] + STA # = Loud Bell
  - [4] + CO # = CO Line Control
  - [0] = Disables Relay
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

Each time the user presses a relay button, the LCD updates with the relay number and the function assigned to it.

## Description

The *Triad-S* has two relays on the BKSU that can be programmed to perform certain functions. These functions are loud bell, external page control, RAN Start, and CO Line control.

RELAY 1 * 1 Q	RELAY 2 * 2 W	* 3 E	* 4 R
* 5 T	* 6 Y	* 7 U	* 8 I

## Baud Rate Assignments

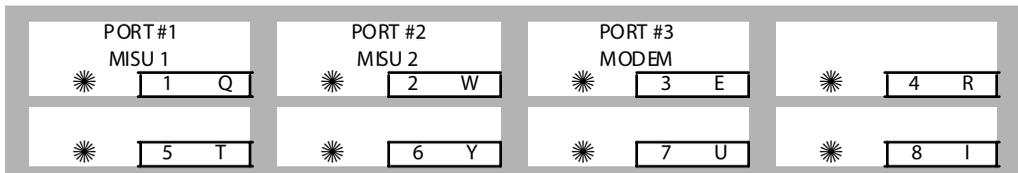
### Programming Steps

Press **FLASH** and dial **[1 5]**. The first button is lit and ready for programming Port #1. The following message displays:

PORT	BAUD
1	9600

### Description

The *Triad-S* System provides outputs such as SMDR or ICLID to the optional RS-232 connectors on the MISU.



### Port #1, #2, #3 Baud Rates

#### Programming Steps

1. Press the desired PORT # flex button (**FLASH 15, Buttons #1, #2, or #3**) to determine the port to program.
2. Enter a 1-digit number for the baud rate:
  - [1] = 150 Baud
  - [2] = 300 Baud
  - [3] = 600 Baud
  - [4] = 1200 Baud
  - [5] = 2400 Baud
  - [6] = 4800 Baud
  - [7] = 9600 Baud
  - [8] = 19.2K Baud
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

---

---

### Description

Port #1 -- First RS-232C port on the optional MISU

Port #2 -- Second RS-232 port on the optional MISU

Port #3 -- Optional Modem

By default, Port #1 (MISU RS-232C), Port #2 (MISU RS-232) and Port #3 (Modem) baud rates are set for 9600.

---

## Networking Tables

### Programming Steps

1. Press **FLASH** and dial **[16]**. The following message displays:

NETWORKING TABLES  
SELECT SYS NO

2. Press the desired button, make the necessary entry, and then press HOLD after each entry to select a trunk group, station range, and system number:

[1] = Select Trunk Group (0-23)

[2] = Station Range FROM (1000-9999)

[3] = Station Range TO (1000-9999)

[4] = Reserved for future feature

[22] = Page Up

[23] = Page Down

[24] = Select system number (1-16)

TRUNK GRP * 1 Q	STATION RANGE FROM * 2 W	STATION RANGE TO * 3 E	* 4 R
* 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	* 18 K	* 19 L	* 20 ;
* 21 Z	PAGE UP * 22 X	PAGE DOWN * 23 C	SYSTEM NO * 24 V

### Description

The Networking Table identifies the system number (1-16); the CO group (0-23); and the range of station numbers (from XXXX to XXXX).

**Table 2-8: Networking Tables**

System	CO Group	Station Range	
		From	To
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
<b>Button 24</b>	<b>Button 1</b>	<b>Button 2</b>	<b>Button 3</b>



*Only 4-digit extensions will work with Network Tables.*

*The numbers entered in the station range cannot conflict with the Flexible Numbering Plan.*

*When systems are tied together, each system has to have access to 911 through local lines.*

## Conditions

- With Flexible Numbering enabled/used, the call forwarding feature changes.
- Feature access codes cannot conflict with station numbering.
- CO line numbers are fixed and cannot be changed other than the current FLASH 42 re-assignment.
- The VMID digits need to be programmed separately.

- The SMDR will output up to 4-digit numbers in the station field. If less than 4 digits are selected in the numbering plan, leading spaces will be added in place of numbers. The 3-4 digit SMDR programming area is removed from programming in FP3. Call Accounting devices need to be configured to accept 4 digits.

---

## Access Codes

### Programming Steps

If the system is in the programming mode, continue using program codes. If starting to program here, enter the programming mode.

Press **FLASH** and dial **[20]**. The following message displays:

ACCESS CODES  
ENTER BUTTON NUMBER

### Description

This section describes the procedures and steps necessary to program Access codes.



### *DISA Access Code*

#### Programming Steps

1. Press the DISA ACCESS CODE flex button (**FLASH 20, Button #1**). The following message displays:

DISA ACCESS CODE  
100

2. Enter a valid number (000–999) for the DISA access code.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The DISA Access Code feature permits assigning a 3-digit access code to the system. Anyone calling on a DISA line must use this code to gain access to system features. To disable the DISA access code, enter (#) three times. By default, 100 is the assigned access code. Use of this feature with or without access code can be abused by callers.

## *Database Admin Password*

### Programming Steps

1. Press the ADMIN PASSWORD flex button (**FLASH 20, Button #2**). The following message displays:

ADMIN PASSWORD 3226
------------------------

2. Enter a valid number that corresponds with 0000-9999.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The password used to enter customer database programming can be customized by the programmer. This lets the system administrator block unauthorized personnel from entering database admin.



*Care should be taken when changing the programming password so authorized personnel are not locked out, which could prevent or delay them from making necessary programming changes.*

## Station Message Detail Recording (SMDR)

### Programming Steps

1. Press **FLASH** and dial **[21]**. The following message displays:

SDR TPE PNT BAUD PORT
NO LD 80 9600 1

2. To program SMDR features, use the flexible button(s) as defined in the following procedures.
3. The ENABLE/DISABLE, TYPE, and PRINT features toggle on and off each time the button is pressed. The display updates with each toggle.
4. After all entries are made, press HOLD to save the entry. A confirmation tone is heard.

### Description

The *Triad-S* System can provide SMDR output to the optional RS-232C connectors on the MISU. When SMDR is desired, the following system-wide parameters determine how SMDR information is reported.

ENABLE / DISABLE ☼ 1 Q	CALL TYPE ☼ 2 W	PRINTFORMAT ☼ 3 E	BAUD RATE ☼ 4 R
SMDR PORT ASSIGNMENTS ☼ 5 T	☼ 6 Y	☼ 7 U	☼ 8 I

### *SMDR Enable / Disable*

#### Programming Steps

1. Press the ENABLE/DISABLE flex button (**FLASH 21, Button #1**). This feature toggles on and off each time the button is pressed. The display updates with each toggle.  
LED ON = SMDR is enabled  
LED OFF = SMDR is disabled
2. Press HOLD to save the entry. A confirmation tone is heard.

### Description

A call accounting device can be installed allowing the system to track calls by outside line number, number dialed, time of day, date, station that placed or received the call, and duration of the call. By default, SMDR is disabled.

---

---

## *Long Distance / All Calls*

### **Programming Steps**

1. Press the CALL TYPE flex button (**FLASH 21, Button #2**) to determine the type of calls to record. This feature toggles on and off each time the button is pressed. The display updates with each toggle.  
LED ON = Long Distance is enabled  
LED OFF = All Calls is enabled
2. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

The system can be set to record all outgoing calls or only outgoing long distance calls. Long Distance calls are defined as beginning with a 1 or 0, or containing eight or more digits. Incoming calls are only recorded if TYPE is set for all calls. By default, the system records long distance (LD) calls only.

## *Character Print Assignment*

### **Programming Steps**

1. Press PRINT FORMAT flex button (**FLASH 21, Button #3**) to determine the print format of SMDR records. This feature toggles on and off each time the button is pressed. The display updates with each toggle.  
LED On = 80-Character is enabled  
LED Off = 30-Character is enabled
2. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

The system can be programmed to print individual SMDR records in either a 1-line 80-character format or a 3-line 30-character format. By default, the 1-line 80-character format is selected.

## *Baud Rate Display*

### **Programming Steps**

The SMDR Baud Rate is programmed using Flash 15, Baud Rate Assignments. **FLASH 21, Button #4** returns an error tone when pressed. The LCD displays the current baud rate based on which port is assigned to the SMDR Port number.

### **Description**

The *Triad-S* System provides SMDR output to the standard RS-232C connector on the optional MISU. The baud rate is displayed as 150, 300, 600, 1200, 2400, 4800, or 9600 baud.

## *SMDR Port Assignments*

### **Programming Steps**

1. Press the PORT flex button (**FLASH 21, Button #5**) to determine which port to use for SMDR information.
2. Enter a valid number for the SMDR Port number:  
[1]= Port #1 (MISU On-Board RS-232C)  
[2]= Port #2 (MISU On-Board RS-232C)

The LCD displays the current baud rate based on which Port number is assigned to the SMDR Port number.

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

Port #1 -- Refers to the RS-232C connector on the optional MISU.

Port #2 -- Refers to the RS-232C connector on the optional MISU.

By default, Port #1 is used for SMDR.

## Weekly Night Mode Schedule

### Programming Steps

Press **FLASH** and dial **[22]**. The following message displays:

DAY	END	START	AUTO
MON	0800	1700	NO

### Description

The *Triad-S* System can be programmed so it is automatically placed into and out of night mode. A programmable weekly time schedule lets the system administrator preset the time the system goes into night mode, and the time night mode is removed on a daily basis, including weekend operation.

AUTO / MANUAL ☀️ 1 Q	MONDAY ☀️ 2 W	TUESDAY ☀️ 3 E	WEDNESDAY ☀️ 4 R
THURSDAY ☀️ 5 T	FRIDAY ☀️ 6 Y	SATURDAY ☀️ 7 U	SUNDAY ☀️ 8 I

### *Automatic / Manual Operation*

#### Programming Steps

1. Press the AUTO/MANUAL flex button (**FLASH 22, Button #1**). This feature toggles on and off each time the button is pressed. The display updates with each toggle.  
LED On = Automatic Night Mode  
LED Off = Manual operation
2. If no other changes must be made, press HOLD to save the entry. A confirmation tone is heard.



*Once enabled, this feature addresses the entire week.*



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---

### *Selecting a Directory List Entry*

1. Press Flexible button #20 for a directory list entry.
2. Dial a valid directory list entry number (000–199).
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### Scrolling Through the Directory List:

- Press the NEXT flex button (**FLASH 23, Button #18**) to scroll up (next entry).
- Press the PREV flex button (**FLASH 23, Button #19**) to scroll back (previous entry).

### **Description**

Directory Dialing enables station users obtain a directory of station users and have the system dial the extension currently displayed. The *Triad-S* System provides locations for up to 200 names (000-199). Directory dialing also lets users program a name with a speed dial bin for use in later locating a speed dial number. When prompted, the system displays the name associated with a speed dial number so when the desired name is shown, the user may then have the system dial the number.

Directory Dialing also lets users associate a name with an entry in the local number/name translation table. When prompted, the system displays the name associated with the table so when the desired name is shown, the user may then have the system dial the number. The *Triad-S* System provides locations for up to 200 names.

The Directory Dialing list may be programmed and maintained at the first assigned attendant station in one of two ways. However, this admin routine lets the directory list be maintained by the system programmer locally (at Station 100) or remotely via modem access.

BIN / ICM	NAME	CLEAR	BACKSPACE
* 1 Q	* 2 W	* 3 E	* 4 R
* 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
	NEXT ENTRY	PREV ENTRY	NEW ENTRY
* 17 J	* 18 K	* 19 L	* 20 ;
* 21 Z	* 22 X	* 23 C	* 24 V

### ***Associating a Number to: Intercom Number or System Speed Dial Bin***

1. Press the BIN/ICM flex button (**FLASH 23, Button #1**).
2. Enter one of the following: a Station Intercom number, a System Speed Dial number, or a Local Number/name Translation Table number.

100-131 = *Triad-S* Extension Numbers

1020–1999 = System Speed Numbers (with expanded memory)

600-799 = Local Number/Name Table

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

**BIN/ICM** – Each entry in the directory dialing list must be associated to a system speed dial bin (for calling a destination outside of the system) or to an intercom station (for calling internal station including CO line transfers).

### ***Entering/Changing Current Name Shown on the Display***

1. Press the NAME flex button (**FLASH 23, Button #2**).
2. Enter the name (up to 24-characters may be entered) by using keys on the dial pad as illustrated on the following page:

3. If an error is made while entering the name, press the BACK SPACE flex button (**FLASH 23, Button #4**). This button backspaces one character at a time.

**Table 2-9: Dial Pad Keys**

<table border="1"> <tr> <td>1</td> <td>A-21 B-22 C-23</td> <td>D-31 E-32 F-33</td> </tr> <tr> <td>G-41 H-42 I-43</td> <td>J-51 K-52 L-53</td> <td>M-61 N-62 O-63</td> </tr> <tr> <td>P-71 R-72 S-73 Q-74</td> <td>T-81 U-82 V-83</td> <td>W-91 X-92 Y-93 Z-94</td> </tr> <tr> <td>*</td> <td>OPER 0</td> <td>#</td> </tr> </table>			1	A-21 B-22 C-23	D-31 E-32 F-33	G-41 H-42 I-43	J-51 K-52 L-53	M-61 N-62 O-63	P-71 R-72 S-73 Q-74	T-81 U-82 V-83	W-91 X-92 Y-93 Z-94	*	OPER 0	#	<b>Other Codes</b>			
			1	A-21 B-22 C-23	D-31 E-32 F-33													
			G-41 H-42 I-43	J-51 K-52 L-53	M-61 N-62 O-63													
			P-71 R-72 S-73 Q-74	T-81 U-82 V-83	W-91 X-92 Y-93 Z-94													
			*	OPER 0	#													
			1 = 1#	8 = 8#	= 01	* = *#												
			2 = 2#	9 = 9#	, = 02	( = #1												
3 = 3#	0 = 0#	? = 03	) = #2															
4 = 4#	Space = 11	/ = 04	+ = #3															
5 = 5#	: = 12	! = *1	= = #4															
6 = 6#	- = 13	\$ = *2	# = ##															
7 = 7#	' = 14	& = *4	. = 24															

4. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

**Name** – A name up to 24-characters may be entered into each directory dial list entry. The names display alphabetically when accessed by a station user. It is possible to have multiple entries that are associated to the same station number or system speed dial bin. This lets the same name be entered into the list several times.

For example, by last name and by first name, pointed to a station number and a speed dial bin (home, or mobile phone number). Or, several different names associated to the same speed dial bin.

**Clearing an Entry**

1. Press the CLEAR flex button (**FLASH 23, Button #3**).
2. Press HOLD to save the entry. A confirmation tone is heard and the display updates. The entry is erased (both the BIN/ICM assignment and the programmed name).

**Clear** – Table entries may be erased and cleared from the table to allow placement of another entry into the list. When a system speed dial bin is deleted/changed, the name associated to the bin must also be erased. When a multiple table listing is associated to one system speed dial bin it may be necessary to clear more than one entry.

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# Hunt Groups

## *Hunt Group Programming*

### Programming Steps

1. Press **FLASH** and dial **[30]**. The following message displays:

HUNT 450 PLT ONE ###, ###  
###, ###, ###, ###, ###, ###

The top left button in the flexible button field is lit for programming Hunt Group 1 (450).

2. To change Hunt Groups or enter a different Hunt Group, press the appropriate flexible button 1-12 (450-461) and perform the following procedures.
3. Enter a valid three digit station number, or station numbers up to eight stations per group. Hunt groups are joined together by entering another Hunt Group Pilot Number as the last entry of the group.
4. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The system can be programmed for up to 12 Hunt Groups. Each Hunt Group can contain up to 8 stations each. Each Hunt Group can be independently arranged to use a pilot hunting or station hunting technique. If a station is in DND or is forwarded to another station, it is considered busy.

HUNT GRP 450 * 1 Q	HUNT GRP 451 * 2 W	HUNT GRP 452 * 3 E	HUNT GRP 453 * 4 R
HUNT GRP 454 * 5 T	HUNT GRP 455 * 6 Y	HUNT GRP 456 * 7 U	HUNT GRP 457 * 8 I
HUNT GRP 458 * 9 O	HUNT GRP 459 * 10 P	HUNT GRP 460 * 11 A	HUNT GRP 461 * 12 S
STATION / PILOT * 13 D	* 14 F	* 15 G	* 16 H

## Hunt Group

### Programming Steps

1. Press **FLASH** and dial **[30]**.
2. To select the desired Hunt Group, press **Buttons 1-12**.
3. Enter the station number(s) (up to 24 digits and 8 stations). Hunt Groups are joined together by entering another Hunt Group Pilot number as the last entry of the group.

```
HUNT450 AAA BBB XXX XXX
XXX XXX XXX XXX XXX XXX
```

4. Press **HOLD** to save the entry.

### Removing Stations from a Hunt Group

1. Enter **[#]** three times on the dial pad.
2. Press **HOLD**. A confirmation tone is heard and the display updates. This removes all stations previously programmed in that group.

### Description

The Hunt Group feature is used to add and delete stations from a specified Hunt Group.

---



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## *Station / Pilot / Pilot Ring All -- Hunting Assignments*

### **Programming Steps**

1. Press the STATION/PILOT flex button (**FLASH 30, Button # 13**) to indicate Station Hunting, Pilot, or Pilot Ring All Hunting.
2. Dial a valid number (0-2):
  - [0] = Pilot (Default; shown on LCD as PLT ONE)
  - [1] = Pilot Ring All Hunting (Shown on LCD as PLT ALL)
  - [2] = Station Hunting (Shown on LCD as CIR)



*458-461 are ONLY for RAN applications.*

### **Description**

**Pilot Hunting**-- Incoming CO, transferred CO, and intercom calls can be directed to a pilot number of a hunt group. The system searches sequentially (in the order the extensions were entered in the database programming) for an idle station in the group and rings that station. Calls directly to stations (by calling the extension number) within the hunt group do not hunt but receive call progress tones from the extension.

**Pilot All Ring Hunting** – rings all idle stations in a particular Hunt group at one time.



*“All Ring” hunt groups cannot be chained together.*

**Station (Circular) Hunting**-- Transferred CO, and intercom calls that are presented to a busy, or DND station, that are members of a Station Hunt Group, search sequentially (in the order the extensions were entered in database programming) for an idle station in the group and rings that station. Direct ringing CO Line calls to the station number ring at the station. If station hunting is desired on a direct ringing call, program the station hunting pilot number in the CO Line ring assignment list. This lets the member of the hunt group to receive private/hunt group calls.

---



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## Verified Account Codes / Traveling Class of Service

### Programming Steps

1. Press **FLASH** and dial **[31]**. The following message displays:

ACCT	COS
XXXXXXXXXXXX	##

*ACCT = Up to 12-digit account code*

*COS = Class of Service for account codes*

2. Press the ACCT CODE flex button (**FLASH 31, Button #1**). Enter up to 12 digits (0-9, \*, #). [\*] represents a do not care digit. The system ignores all digits after this digit when entering an account code. The [#] represents a single do not care digit.
3. Press the CLASS OF SERVICE flex Button (**FLASH 31, Button #2**). Enter a 2-digit Class of Service Number (1-7) that corresponds to Class of Service 1-7. The first digit represents Day COS and the second digit represents Night COS.
4. Press HOLD to complete the entry. A confirmation tone is heard.

### Description

The Verified Account Code/Traveling Class of Service (COS) feature provides tracking of specific calls by entering a verified, variable length (up to 12 digits) identifier. Each account code can be assigned a day and night Class of Service for determining the dialing privileges allowed by that account code. This provides a means for users to override a restricted station.

If the dialed account code matches the Verified Account code table, an intercom dial tone is returned, otherwise an error tone is returned. The use of forced Account Codes is optional, offered on a system-wide basis. SMDR must be enabled for the account code to print as part of the SMDR record. The *Triad-S* System allows up to 250 12-digit account codes and must be enabled in Flash 06, Button 3.

By default, no Account Codes are assigned.

ACCT CODE	CLASS OF SERVICE	DELETE ACCT CODE	ERASE DIGITS
* 1 Q	* 2 W	* 3 E	* 4 R
* 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	NEXT * 18 K	PREV * 19 L	* 20 ;
* 21 Z	* 22 X	* 23 C	* 24 V

### *Deleting the Currently Displayed Account Code*

1. Press the DELETE CODE flex button (**FLASH 31, Button #3**) to delete the entire account code entry.
2. To display the next account code on the LCD, press the NEXT flex button (**FLASH 31, Button #18**).
3. To display the previous account code on the LCD, press the PREVIOUS flex button (**FLASH 31, Button #19**).

Re-enter the correct digits and press HOLD to complete the entry. A confirmation tone is heard.

### *Erasing Previously Entered Digits*

1. Press the ERASE DIGITS flex button (**FLASH 31, Button #4**).
2. Each press of the button erases one digit. Continue until all desired digits are erased.
3. Re-enter the correct digits and press HOLD to complete the entry. A confirmation tone is heard.

## CO Line Group Queuing

### Programming Steps

1. Press **FLASH** and dial **[39]**. The following message displays:

```
CO LINE GROUP QUEUING
ENTER BUTTON NUMBER
```

2. Press button 1-24 to select desired CO Group. This message displays:

```
GROUP 1                0-1
ENABLED
```

3. Dial a 0 or 1 to enable/disable this feature.

[0] = Disabled

[1] = Enabled

4. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The CO Line Group Queuing feature allows trunk group queuing to be turned on (enabled) or turned off (disabled) on a per group basis.

GROUP 0 * 1 Q	GROUP 1 * 2 W	GROUP 2 * 3 E	GROUP 3 * 4 R
GROUP 4 * 5 T	GROUP 5 * 6 Y	GROUP 6 * 7 U	GROUP 7 * 8 I
GROUP 8 * 9 O	GROUP 9 * 10 P	GROUP 10 * 11 A	GROUP 11 * 12 S
GROUP 12 * 13 D	GROUP 13 * 14 F	GROUP 14 * 15 G	GROUP 15 * 16 H
GROUP 16 * 17 J	GROUP 17 * 18 K	GROUP 18 * 19 L	GROUP 19 * 20 ;
GROUP 20 * 21 Z	GROUP 21 * 22 X	GROUP 22 * 23 C	GROUP 23 * 24 V

## Local Number / Name Translation Table

### Programming Steps

1. Press **FLASH** and dial **[55]**. The following message displays:

S - XXX ### ,

*XXX = Table Number 600-799*

*### = Route Number 000-499*

The Route Number LED (Button #1) is lit.

2. Enter a Route Number (000-499) from what was entered in program code, **FLASH [43]**.

### *Programming a Phone Number into the Translation Table*

1. Press the PHONE NUMBER flex button (**FLASH 55, Button #2**) to enter the desired phone number into the translation table. Maximum length of a phone number is 14 digits, including hyphens. Phone numbers must be in the following format: 1-480-XXX-XXXX.
2. Press HOLD to update the database. The BACK SPACE flex button (**FLASH 55, button #5**) erases current number for error correction.

### *Programming a Name into the Translation Table*

1. Press the NAME flex button (**FLASH 55, Button #3**) to enter the desired name into the translation table. Maximum length is 24 characters. (Refer to [Table 2-9: Dial Pad Keys](#) for dial pad keys.)
2. Press HOLD to update the database. The BACK SPACE flex button (**FLASH 55, Button #5**) erases the current letter for error correction.

### *Erasing a Current Phone Number/Name Entry*

- Press the CLEAR ENTRY flex button (**FLASH 55, Button #4**) to clear an entire phone number and name from the current index.
- Press the NEXT TABLE flex button (**FLASH 55, Button #18**) to advance to the next index and continue entering information into the translation table.
- Press the PREV TABLE flex button (**FLASH 55, Button #19**) to return to a previous index that is already programmed.

### Locating an Existing Index for Editing

1. Press the TABLE NUMBER flex button (**FLASH 55, Button #20**). The following message displays:

ENTER TABLE NUMBER

2. Enter a valid number that corresponds to the table numbers 600-799.
3. Press HOLD to complete the entry.

### Description

An administrable table in the KSU provides a local translation from a received calling number to a name. This is administrable by the customer from the attendant console position. This table is also shared by the ICLID features. In cases of conflict between the name delivered from the CO and that in the local translation table, the local translation table rules. 200 entries are provided in this table for the *Triad-S* System.

An option was added to the Local Number/Name translation table to route an ICLID or Caller Entered ID Digits, based on a partial compare with the number entered in the translation table.

ROUTE NUMBER * 1 Q	PHONE NUMBER * 2 W	NAME * 3 E	CLEAR ENTRY * 4 R
BACKSPACE * 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	NEXT TABLE * 18 K	PREV TABLE * 19 L	TABLE NUMBER * 20 ;
* 21 Z	* 22 X	* 23 C	* 24 V



*If a match is found between a number in the translation table and an incoming call record, the translated name is displayed and/or stored in the unanswered call table.*



---

---

# 3

## CO Line Attributes Programming

This chapter describes the procedures and steps necessary to program CO Line attributes. If the system is in the programming mode, continue using the program codes. If starting to program here, you must first enter the programming mode. Refer to [Figure 1-2: Programming Button Mapping](#) in chapter 1.



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## Page A Introduction

### Programming Steps

1. Press **FLASH** and dial **[40]**. The following message displays:

CO LINE ATTRIBUTES  
SELECT A CO LINE RANGE

2. Enter a valid number for the range of lines being programmed. If only one line is being programmed, enter that number twice (001 001).



*If HOLD is pressed without entering a CO range, ALL CO lines (001-012) are selected.*

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates. Flexible Button #19 (Page A) is lit. The following message displays to indicate current programming of that line or group of lines:

XXX - XXX PAGE A  
ENTER BUTTON NUMBER

*XXX-XXX = CO LineRange (001-012)*

### Description

When entering the CO Line attributes portion of the database, the programmer may decide to enter information for a range of CO lines or one specific CO Line.

Range programming lets the programmer change a specific parameter or a few parameters for an entire range of CO Lines leaving intact the remaining data fields that do not require change. Those data fields continue to operate with the previously programmed data.

By default, Page A is shown.

DTMF / DP * [ 1 ] Q	CO / PBX * [ 2 ] W	UNA * [ 3 ] E	DISA CO TO CO * [ 4 ] R
PRMACY * [ 5 ] T	LOOP SUPV * [ 6 ] Y	DISA * [ 7 ] U	CO GROUP * [ 8 ] I
COS * [ 9 ] O	RING ASSIGN * [ 10 ] P	CO LINE ID * [ 11 ] A	CO DIRECTION * [ 12 ] S
DISPLAY RING * [ 13 ] D	* [ 14 ] F	911 TRUNK * [ 15 ] G	* [ 16 ] H
* [ 17 ] J	* [ 18 ] K	PAGE A * [ 19 ] L	PAGE B * [ 20 ] ;
PAGE C * [ 21 ] Z	NEXT (FWD) * [ 22 ] X	NEXT (BACK) * [ 23 ] C	NEW RANGE * [ 24 ] V

## DTMF / Dial Pulse Programming

### Programming Steps

1. Press the DTMF/DIAL PULSE flexible button (**FLASH 40, Page A, Button #1**).
2. Enter a 0 or 1 that corresponds with the following entries:  
[0] = Dial Pulse  
[1] = DTMF

PULSE / DTMF	0-1
DTMF	

3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

Each individual outside line can be programmed to be DTMF (tone) or dial pulse. By default, all lines are set for DTMF.

---

---

## CO / PBX Programming

### Programming Steps

1. Press the CO/PBX flexible button (**FLASH 40, Page A, Button #2**).
2. Enter a 0 or 1 which corresponds with the following entries:

[0] = PBX

[1] = CO

PBX / CO	0-1
CO	

3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

Each individual outside line connected to the system may be programmed as a CO or PBX line. Use the PBX mark when identifying Centrex lines. By default, all lines are assigned as CO lines.

## Universal Night Answer (UNA)

### Programming Steps

1. Press the UNA flexible button (**FLASH 40, Page A, Button #3**).
2. Enter a 0 or 1 on the dial pad to enable/disable this feature.

[0] = Disabled

[1] = Enabled

UNA	0-1
ENABLED	

3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

If a line is marked UNA, this activates night service answering of incoming calls on this line by stations not normally assigned access to the line(s). This station must have a direct CO appearance or an available loop key assigned to do this. Lines marked as UNA also activate Night Ringing over External Page when in the night mode if External Night Ringing is set to Yes. By default, UNA is enabled.

## *DISA CO-to-CO*

### Programming Steps

1. Press the DISA CO-TO-CO flexible button (**FLASH 40, Page A, Button #4**).
2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled

DISA CO-TO-CO ENABLED	0-1
--------------------------	-----

3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The DISA CO-to-CO (or Conference) mark on the CO line governs a DISA caller's ability to access other outside lines. CO lines must have DISA CO-to-CO enabled to allow a DISA caller to establish an outgoing CO-to-CO connection. This allows for specific CO line access restriction on DISA calls. A station with Conference enabled can initiate a conference on CO lines regardless of the CO line conference marking. By default, DISA CO-to-CO is enabled for all CO lines.

The CO line conference flag affects a DISA caller's ability to access outgoing CO lines as shown in the following table:

**Table 3-1: CO Line Conference Flag**

Incoming DISA CO	DISA Caller Attempts to Access	
	CO-to-CO Enabled	CO-to-CO Disabled
CO-to-CO Enabled	Call Allowed	Call Denied
CO-to-CO Disabled	Call Denied	Call Denied

---

---

## Privacy

### Programming Steps

1. Press the PRIVACY flexible button (**FLASH 40, Page A, Button #5**).
2. Enter a 0 or 1 on the dial pad to enable/disable this feature.

[0] = Disabled

[1] = Enabled

PRIVACY ENABLED	0-1
--------------------	-----

3. Press HOLD to save the entry. A confirmation tone is heard.



*Disabling the privacy feature may be limited by federal, state or local law, so check the relevant laws in your area before disabling privacy.*

### Disabling Privacy Function

The system can be programmed to eliminate CO Line Privacy, which allows another station to join existing outside line conversations as follows:

- Stations must have a direct CO line appearance to join CO line conversations in progress.
- A station must also have Privacy disabled before the system allows that station to enter an existing conversation.
- A programmed warning tone is presented to both parties prior to actual cut-through (Flash 06, Button 1).
- Up to seven other stations may join an existing conversation.
- The station joining the call receives a solid red LED indication.

By default, Privacy is enabled for all CO Lines.

**Table 3-2: CO Line Privacy Flag**

Station Attempting to Access CO Line	CO Line in Use by Another Station	
	Privacy Enabled	Privacy Disabled
Privacy Enabled	Private (no cut-through)	Private (no cut-through)
Privacy Disabled	Private (no cut-through)	Privacy Release (cut-through allowed)

## *Loop Supervision Programming*

### **Programming Steps**

1. Press the LOOP SUPV flexible button (**FLASH 40, Page A, Button #6**).
2. Enter a valid number (1-9) on the dial pad which corresponds to 100-900 ms. (0 = disabled).

LOOP SUPERVISION	0-9
4	

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

Loop Supervision is used primarily with DISA, Voice Mail/Auto Attendant and with unsupervised conference applications. It lets the system detect when loop current is broken and an outside line is no longer being used. To determine timer value for loop supervision, consult your local central office for type and duration of loop supervision signal. By default, Loop Supervision is set for 400 ms for all CO Lines.

---

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## *DISA Programming*

### **Programming Steps**

1. Press the DISA flexible button (**FLASH 40, Page A, Button #7**).
2. Enter a valid number (0-5) on the dial pad to indicate type of DISA desired.

[0] = No DISA

[1] = 24-Hour DISA

[2] = Night DISA

[3] = 24-Hour DISA with forwarding

[4] = Night DISA with forwarding

[5] = Telecenter 24-Hour DISA with forwarding

DISA TYPE	0-5
NONE	

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

Each CO can be assigned as a DISA line using 1 of the 5 DISA types available.

- DISA can be programmed using Range programming.
- DISA callers are subject to the Class of Service placed on the line accessed for out dialing.
- The system administrator can control the call duration after establishing a Trunk-to-Trunk call.
- After expiration of the Conference Timer, a tone is presented to both DISA parties, then one minute later the system automatically releases both trunks.
- The Conference Timer does not affect or control a DISA-to-Station call. By default, there are no outside lines assigned as DISA lines.

## CO Line Group Programming

### Programming Steps

1. Press the CO LINE GROUP flexible button (**FLASH 40, Button #8**).
2. Enter a valid number on the dial pad (0-23) which corresponds to Groups 0-23.

LINE GROUP	0-23
1	

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Twenty four line groups are available for CO line assignment. Groups should be assigned according to type (local, FX, WATS, etc.). All unassigned CO lines should be programmed into a different group so they are not accessed by Line Queuing, Pooled Group access (Pool Buttons), Speed Dial, or LCR features. Line Group 0 is for programming a line(s) as a private. CO Lines assigned to Line Group 0 can only be accessed by stations with a direct CO appearance (button) on their phone. All unused COs should be placed in Line Group 0. By default, all lines are placed in Line Group 1.



*When tiering multiple systems together, use the Networking Table (FLASH 16).*

## Class of Service (COS)

### Programming Steps

1. Press the LINE COS flexible button (**FLASH 40, Page A, Button #9**).
2. Enter a valid number on the dial pad (1-5) which corresponds to five possible class-of-service to which a line may be assigned:
  - COS1 = No restrictions
  - COS2 = Table A governs, Station COS 2 and 4 are monitored
  - COS3 = Table B governs, Station COS 3 and 4 are monitored

COS4 = Restricts [0], [1], [\*], [#] dialed as first-digit and places a 7-digit dialing limitation. Allowed are: 1-800, 1-888, 1-866, 1-877, 1-911, and 1-611. Denied are: 411, 976, and 555.

COS5 = Overrides Station COS 2, 3, 4, 5 and allows unrestricted dialing.

CLASS OF SERVICE	1-5
1	

- Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Through assignments of a CO Class of Service, the assigned CO line interacts with a station Class of Service, provides a canned restriction, or provides unrestricted dialing capabilities. (When a CO line is marked PBX, COS restrictions apply to the station only if one of five PBX codes are dialed first.)

**Table 3-3: Class of Service (COS)**

		CO LINE CLASS OF SERVICE				
		1	2	3	4	5
S T A T I O N  C O S	1	Unrestricted	Unrestricted	Unrestricted	Canned Restricted*	Unrestricted
	2	Table A	Table A	Unrestricted	Canned Restricted*	Unrestricted
	3	Table B	Unrestricted	Table B	Canned Restricted*	Unrestricted
	4	Table A and B	Table A	Table B	Canned Restricted*	Unrestricted
	5	Canned Restricted*	Canned Restricted*	Canned Restricted*	Canned Restricted*	Unrestricted
	6	Intercom Only	Intercom Only	Intercom Only	Intercom Only	Intercom Only

\*Canned Restriction: No [0], [1], [#], [\*] as first dialed digit, and 7-digit dialing limitation; plus 1-800, 1-888, 1-866, 1-877, 1-911, 1-611 are allowed, and 411, 976, and 555 numbers are denied.

## CO Line Ringing Assignments

### Programming Steps

1. Press the RING ASSIGNMENT flexible button (**FLASH 40, Page A, Button #10**). The display shows the following information:

RING ASSIGNMENTS ENTER DDDR
--------------------------------

2. Enter a valid Destination (DDD) and Ring type (R) followed by the HOLD button. A confirmation tone is heard and the display updates.

**Table 3-4: CO Line Ringing Assignments**

Valid 3-Digit Destinations (DDD)	Valid Ring Types (R)
[020-999] = System Speed Bins 1 020–1999, for Off-Net Ringing <sup>a</sup>	[0] = No Ring; unassigned; or to delete a station
[100-131] = <i>Triad-S</i> Extension Numbers	[1] = Day Ring [D]
[440-447] = Voice Mail Groups 1–8	[2] = Night Ring [N]
[450-457] = Hunt Groups 1–8	[3] = Day/Night Ring [DN]
[499] = Direct Ringing to Modem	[4] = Special Only [S]
[550-565] = ACD Groups 1–16	[5] = Day/Special [DS]
[550-557] = UCD Groups 1–8	[6] = Night/Special [NS]
	[7] = All Modes [Day/Night/Special [A]

- a. Expanded Speed Dial Bins require Expanded Memory.

### *Adding Multiple Stations*

Enter: DDDR HOLD DDDR HOLD DDDR HOLD...etc.

(Example: 1073 HOLD, 1083 HOLD, 1093 HOLD)

### *Deleting a Single Station*

Enter: DDD0 HOLD

(Example: 1080 HOLD)

### *Deleting Multiple Stations*

Enter: DDD0 HOLD DDD0 HOLD...etc.

(Example: 1080 HOLD, 1090 HOLD)

---

---

## Description

Each CO Line may be assigned to ring any station in the system; UCD, Voice Mail or Hunt Group, or Off-Net (via speed dial). CO Line ringing is programmed on a per CO Line destination basis. Each destination may be designated to ring during the day, during the night, or receive both Day and Night ringing. Stations that are assigned for initial ring-in **must have** a LOOP button(s) to answer calls if a direct CO appearance is unavailable.

An incoming CO line may be programmed to any number of stations but it cannot be programmed to ring a mixture of stations and groups in the same time period. Incoming calls directed Off-Net are connected to an outgoing system speed bin. CO lines assigned to ring multiple stations do not follow any station's forwarding. By default, all CO lines ring at the Attendant, Station 100 during Day and Night Modes.

## *CO Line Identification Display*

### Programming Steps

Each CO line in the system can be programmed to have a name associated to it in database programming.

1. Press the CO LINE IDENTIFICATION flexible button (**FLASH 40, Page A, Button # 11**). The following message displays:

LINE ID LINE 001
---------------------

2. Enter the name by using keys on the dial pad as follows. Valid alphanumeric characters are: [A-Z], [0-9], [\*], [#], [-] [spaces] and other ASCII characters as listed in [Table 3-5](#).

The name may be entered in any combination up to 12-characters (this represents 24-digits entered).

**Table 3-5: Dial Pad Keys**

<table border="1"> <tr> <td>1</td> <td>A-21 B-22 C-23</td> <td>D-31 E-32 F-33</td> </tr> <tr> <td>G-41 H-42 I-43</td> <td>J-51 K-52 L-53</td> <td>M-61 N-62 O-63</td> </tr> <tr> <td>P-71 R-72 S-73 Q-74</td> <td>T-81 U-82 V-83</td> <td>W-91 X-92 Y-93 Z-94</td> </tr> <tr> <td>*</td> <td>OPER 0</td> <td>#</td> </tr> </table>			1	A-21 B-22 C-23	D-31 E-32 F-33	G-41 H-42 I-43	J-51 K-52 L-53	M-61 N-62 O-63	P-71 R-72 S-73 Q-74	T-81 U-82 V-83	W-91 X-92 Y-93 Z-94	*	OPER 0	#	<b>Other Codes</b>			
1	A-21 B-22 C-23	D-31 E-32 F-33																
G-41 H-42 I-43	J-51 K-52 L-53	M-61 N-62 O-63																
P-71 R-72 S-73 Q-74	T-81 U-82 V-83	W-91 X-92 Y-93 Z-94																
*	OPER 0	#																
1 = 1#	8 = 8#	= 01	* = *#															
2 = 2#	9 = 9#	, = 02	( = #1															
3 = 3#	0 = 0#	? = 03	) = #2															
4 = 4#	Space = 11	/ = 04	+ = #3															
5 = 5#	: = 12	! = *1	= = #4															
6 = 6#	- = 13	\$ = *2	# = ##															
7 = 7#	' = 14	& = *4	. = 24															

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Co Line Identification Display feature allows the entry of a name for each line (trunk) connected to the system. Once entered into the database, LCD phones, including the Attendant stations, receive the programmed line name in place of the default LINE XXX message. This applies to all line call processing conditions where the current LINE XXX message displays.

SMDR continues to print out the line number in place of the programmed name. If the line name was not programmed, the current LINE XXX display is the default. A programmable data field is available for each line in the system. Line names may be assigned using the range programming.

A message similar to the following display is used for all CO Line displays when a name is programmed for a CO Line.

LINE RINGING nnnnnnnnnnnn	HH:MM am
------------------------------	----------



Entries can be made using a keyboard by following the same outlined procedures using [Figure 1-1](#).

## CO Direction

### Programming Steps

1. Press the TRUNK DIRECTION flexible button. (**FLASH 40, Page A, Button #12**). The following message displays:

CO DIRECTION INCOMING - OUTGOING	0-3
-------------------------------------	-----

2. Enter a valid number (0-3) on the dial pad which corresponds to the desired CO type:
  - [0] = Out-of-Service (OOS)
  - [1] = Incoming Only
  - [2] = Outgoing Only
  - [3] = Both Incoming and Outgoing
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

CO Lines can be programmed on a per CO Line basis for the type of CO Line desired: Incoming, Outgoing, or Incoming and Outgoing.

#### *Incoming*

- Incoming restricts the CO Line for incoming calls only.
- Users can place call on hold, park the call, and other stations can pick-up the call.

### *Outgoing*

- ❑ Outgoing restricts the CO Line to outgoing calls only.
- ❑ Users can place call on hold, park the call, and other stations can pick-up the call.

### *Incoming and Outgoing*

- ❑ Incoming and outgoing type allow calls to be received or dialed out.
- ❑ By default, all CO Lines default to both incoming and outgoing type.

## *Display Ring Assignments*

### **Programming Steps**

1. Press **FLASH 40, Page A, Button #13** to display ring assignments. Assignments are displayed in sets of 8, up to the number programmed. The following format displays the assignments.

DDRR	DDRR	DDRR	DDRR
DDRR	DDRR	DDRR	DDRR

*DDD = Destination*

*RR:*

*[0] = No Ring*

*1 [D] = Day Ring*

*2 [N] = Night Ring*

*3 [DN] = Day/Night Ring*

*4 [S] = Special Only*

*5 [DS] = Day/Special*

*6 [NS] = Night/Special*

*7 [A] = All Modes (Day/Night/Special)*

2. Press **FLASH 40, Page A, Button #13** additional times to cycle to the next group of eight ring assignments. Ring assignments are displayed in numerical order, from the lowest to the highest number.

---

---

## 911 Trunk

### Programming Steps

1. Press **FLASH 40, Page A, Button #15** to designate the line for 911 use. The following message displays:

911 TRUNK DISABLED	0-1
-----------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

When the 911 system feature is enabled (FLASH 06), this identifies which CO lines are to be used for placing 911 calls. The Attendant is alerted via the display and flexible button as to the time, date, and station number(s) that placed the 911 call.



*Lines must be programmed for 911 to enable the 911 Feature.*

*Failure to program lines for 911 disables the 911 Feature.*

---

## Page B Introduction

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode. If Page B CO Line features must be changed:

1. Press **FLASH** and dial **[40]**. The following message displays:

CO LINE ATTRIBUTES  
SELECT A CO LINE RANGE

2. Enter a valid number for the range of lines being programmed. If only one line is being programmed, enter that number twice (001 001).



*If HOLD is pressed without entering a CO range, ALL CO lines (001-012) are selected.*

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates. Flexible Button #19 (Page A) is lit.
4. Press the PAGE B flexible button (Button #20). The following message displays:

XXX - XXX PAGE B  
ENTER BUTTON NUMBER

*XXX-XXX = CO Line Range*

*001-012 = Triad-S*

### Description

This section describes the procedures and steps necessary to program CO Line attributes. When entering the CO Line attributes portion of the database, the programmer may decide to enter information for a range of CO lines or one specific CO Line. Range programming lets the programmer change a specific parameter or a few parameters for an entire range of CO Lines leaving intact the remaining data fields that do not require change. Those data fields continue to operate with the previously programmed data.

When programming the Page B features, the flexible buttons are mapped as follows:

XMT VOLUME * [ 1 Q	P FWD DEST * [ 2 W	P FWD VMID * [ 3 E	UDA * [ 4 R
MOH PER CO * [ 5 T	RING TONE * [ 6 Y	* [ 7 U	* [ 8 I
* [ 9 O	* [ 10 P	* [ 11 A	* [ 12 S
* [ 13 D	* [ 14 F	* [ 15 G	* [ 16 H
* [ 17 J	* [ 18 K	PAGE A * [ 19 L	PAGE B * [ 20 ;
PAGE C * [ 21 Z	NEXT (FWD) * [ 22 X	NEXT (BACK) * [ 23 C	NEW RANGE * [ 24 V

## Transmit Volume

### Programming Steps

1. Press the TRANSMIT VOLUME flexible button (**FLASH 40, Page B, Button #1**). The following message displays:

TRANSMIT VOLUME	0-9
0 DB	

2. Enter a valid number (0-9) for the desired volume level.

[0] -15 dB	[5] 0 dB
[1] -12 dB	[6] +3 dB
[2] -9 dB	[7] +6 dB
[3] -6 dB	[8] +7.5 dB
[4] -3 dB	[9] +9 dB

3. When the desired level is selected, press HOLD to complete the entry. A confirmation tone is heard and the display updates.

## Description

Up to ten volume levels are available for each CO Line in the system. By default, all CO lines are programmed for level 5 (0 dB).



*Do NOT adjust this option without consulting Technical Support first. The default settings were set to apply to most applications. Have the dB readings on all CO lines available when calling Technical Support.*

## Preset Call Forward Destination

### Programming Steps

1. Press the PRESET FWD DESTINATION flexible button (**FLASH 40, Page B, Button #2**). The following message displays:

PRESET FORWARD DEST  
###

2. Enter a valid forward destination on the dial pad.
  - [1020-1999] = System Speed Bins
  - [100-131] = *Triad-S* Station Extensions
  - [440-447] = Voice Mail Groups 1-8
  - [450-457] = Hunt Groups 1-8
  - [499] = System Modem
  - [550-557] = UCD Groups 1-8
  - [550-565] = ACD Groups 1-6
3. A confirmation tone is heard and the LCD display updates.

### Description

The Preset Call Forward Destination feature enables a CO line to initially ring at multiple stations and forward to a pre-determined destination. The destination can be a station (EKT-SLT) or Hunt group. Each CO line has a Preset Forward Timer. Each CO line also has a VMID field to allow sending of specific VM digits when a CO line forwards to a VM group. Calls ringing into ACD/UCD Groups or Voice Mail Groups continue to ring the group. The CO line does not forward when ringing one of these types of groups. By default, no destinations are assigned.

---

---

## *Preset Forward Voice Mail ID*

### **Programming Steps**

1. Press the PRESET FWD VMID flexible button (**FLASH 40, Page B, Button #3**). The following message displays:

PRESET FORWARD VMID    0000-9999 ###
---

2. Enter a valid number on the dial pad that corresponds to 0000-9999 for Voice Mail ID digits.
3. Press HOLD to complete the entry. A confirmation tone is heard and the display updates.

### *Deleting Numbers Currently Entered*

1. Press [#] button four times.
2. Press the HOLD button to update. (All information is erased.)

### **Description**

The Preset Forward Voice Mail ID feature allows a programmer to assign which digits are sent to voice mail when a CO line is programmed to Preset Forward. By default, no digits are sent.

## *Universal Day Answer (UDA)*

### **Programming Steps**

1. Press the UNIV. DAY ANSWER flexible button (**FLASH 40, Page B, Button #4**). The following message displays:

UNIVERSAL DAY ANSWER    0-1 DISABLED
---

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

UDA-assigned CO lines can signal over external page port(s). External Day ringing is programmed on a system-wide basis in administrative programming. Stations that do not have access to a line during the day can answer that line while the System is in the day mode by dialing a UDA code [#5]. To use this feature, a LOOP button or an appearance of the trunk must be present on the station. By default, the Universal Day Answer feature is disabled.

### *Music-On-Hold (per CO Line)*

#### Programming Steps

1. Press the MUSIC-ON-HOLD flexible button (**FLASH 40, Page B, Button #5**). The following message displays:

MOH CHANNEL	0-8
1	

2. Enter a valid number on the dial pad to change this feature.
  - [0] = No Music-On-Hold
  - [1] = Channel 1
  - : : : : :
  - [8] = Channel 8
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

**Table 3-6: MOH Programming Codes**

Program Code	Flex Button	Feature	Default (after initialization)
FLASH09	1	Music Channel #3*	##
	2	Music Channel #4*	##
	3	Music Channel #5*	##
	4	Music Channel #6*	##
	5	Music Channel #7*	##
	6	Music Channel #8*	##
* Music Channels 3-8 can only be used for Music-On-Hold functions			

## Description

The Music-On-HOLD feature allows a user to select the Music-On-Hold channel for each CO line. This feature lets the system assign CO line circuits as additional music inputs. This increases the capacity of music channels beyond the two available on the MISU to be used for MOH sources. A total of eight channels are available for use on the system. The CO line can be assigned to NOT PLAY music for callers on hold. By default, Channel 1 is used for Music-On-Hold.

### *Ring Tone (per CO Line)*

#### Programming Steps

1. Press the RING TONE flexible button (**FLASH 40, Page B, Button #6**). The following message displays:

RING TONE	00-36
00	

2. Enter a valid number on the dial pad to change this feature.

**Table 3-7: Ringing Tones**

Tone#	Freq	Tone#	Freq	Tone#	Freq	Tone #	Freq
00	697/770	10	770/1209	20	852/0	30	1336/1477
01	697/852	11	770/1336	21	941/1209	31	1336/1633
02	697/941	12	770/1477	22	941/1336	32	1336/0
03	697/1209	13	770/1633	23	941/1477	33	1477/1633
04	697/1336	14	770/0	24	941/1633	34	1477/0
05	697/1477	15	852/941	25	941/0	35	1633/0
06	697/1633	16	852/1209	26	1209/1336	36	No Ring
07	697/0	17	852/1336	27	1209/1477		
08	770/852	18	852/1477	28	1209/1633		
09	770/941	19	852/1633	29	1209/0		

*Tone Duration = 50 ms/50 ms*

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The ring tone signal used to notify stations of an incoming call can be changed in administrative programming to provide distinctive ringing on a per CO line basis. A distinctive ring tone can be programmed for each CO line that rings each station. The system provides 36 different ring patterns that can be selected for each CO line in the system. By default, Ring Tone is set for 00 (697/770).



*CO Ring Tone overrides station distinctive ringing.*

---

## Page C Introduction

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode first.

1. Press **FLASH** and dial **[40]**. The following message displays:

CO LINE ATTRIBUTES  
SELECT A CO LINE RANGE

2. Enter a valid number for the range of lines being programmed. If only one line is being programmed, enter that number twice (001 001).



*If HOLD is pressed without entering a CO range, ALL CO lines (001-012) are selected.*

3. Press Button #21 to select Page C. The display updates. The following message displays to indicate current programming of that line or group of lines:

XXX - XXX PAGE C  
ENTER BUTTON NUMBER

*XXX-XXX = CO LineRange 001-012*

## Description

When entering the CO Line attributes portion of the database, the programmer may decide to enter information for a range of CO lines or one specific CO Line. Range programming lets the programmer change a specific parameter or a few parameters for an entire range of CO lines, leaving intact the remaining data fields that do not require change. Those data fields continue to operate with the previously programmed data. (By default, Page A is shown.)

When programming the Page C features, the flexible buttons are mapped as follows:

FLASH TIMER * 1 Q	RING DELAY * 2 W	RESEIZE TIMER * 3 E	GUARD TIMER * 4 R
PRESET FWD TIMER * 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	* 18 K	PAGE A * 19 L	PAGE B * 20 ;
PAGE C * 21 Z	NEXT (FWD) * 22 X	NEXT (BACK) * 23 C	NEW RANGE * 24 V

## Flash Timer

### Programming Steps

1. Press the FLASH TIMER flexible button (**FLASH 40, Page C, Button #1**).
2. Enter a valid number on the dial pad (01–20) which corresponds to 10ms to 2 seconds.

FLASH TIMER	01-20
10	

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

---

---

## Description

Flash is a programmable opening on a line for signaling. When using an outside line, flash lets a user obtain a new dial tone without losing the line. This is particularly useful behind a PBX or Centrex. Each CO line can be programmed for a flash time. By default, the Flash Timer is set for 10 (1.0 seconds) and is variable from 01-20 (100ms to 2 seconds).

## *Ring Delay Timer*

### Programming Steps

1. Press the RING DELAY TIMER flexible button (**FLASH 40, Page C, Button #2**). The following message displays:

RING DELAY TIMER	00-20
00	

2. Enter a valid number on the dial pad (00–20) which corresponds to 00-20 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Ring Delay timer was added to accommodate ICLID in interface requirements. The Ring Delay timer is started whenever a CO Line detects incoming ringing. When the timer expires, CO line ringing is detected by digital telephones and SLTs.

The purpose of this timer is to wait until after the first ring cycle to be detected by the digital system so the ICLID information is passed down the CO line prior to being answered. In some cases, it may be necessary to set the Ring Delay Timer to four seconds so all the ICLID information is received from the Central Office. By default, the Ring Delay Timer is set at 00 (disabled) and is variable from 00-20 seconds.

---

---

## *Reseize Timer*

### **Programming Steps**

1. Press the RESEIZE TIMER Button (**FLASH 40, Page C, Button #3**) in the flexible button field. The following message displays:

RESEIZE TIMER	000-255
200	

2. Enter a valid number on the dial pad that corresponds to 000–255 (0ms to 2.55 seconds).
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

The Reseize Timer option lets the user adjust the Reseize Timer on a per CO Line basis. The Reseize Timer can be used on any trunk type. This timer sets the time period that a trunk is held disconnected after receiving a disconnect before being reseized when a device is queued for a member of the trunk group. By default, the Reseize Timer is set for two seconds.

## *Guard Timer*

### **Programming Steps**

1. Press the GUARD TIMER button (**FLASH 40, Page C, Button #4**) in the flexible button field. The following message displays:

GUARD TIMER	1-60
05	

2. Enter a valid number on the dial pad which corresponds to 1–60 (100ms to 6 seconds).
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

---

---

## Description

The outgoing Guard Timer is used to set the length of time a CO is held busy to outgoing seizure after a valid release is detected. If a user attempts to access a CO line before the Guard Timer expires, their LED illuminates to indicate that the line is seized, however the CO line is not actually seized until the timer expires. The user gets a busy tone, and may receive a delayed CO dial tone if the timer is set to a large value. By default, the Guard Timer is set for .5 seconds.

### *Preset Forward Timer*

#### Programming Steps

1. Press the PRESET FWD TIMER flexible button (**FLASH 40, Page C, Button #5**). The following message displays:

PRESET FWD TIMER	00-99
10	

2. Enter valid number on dial pad which corresponds to 00–99 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### Description

The Preset Forward Timer determines the time an outside line rings before being forwarded to a predetermined destination. If a forward destination is programmed in the CO line field, the CO calls forward to that destination after the CO preset forward timer expires. This forward occurs regardless of how many stations the line is ringing.

The digits entered for the CO line are sent in the station field. This feature applies to initial CO ringing lines only and works with Preset Forward CO Line assignments. By default, the CO Line Preset Forward Timer is set at 10 seconds and is variable from 00–99 seconds. A [00] entry disables the timer and the feature is disabled.

## Miscellaneous CO Parameters

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode first.

1. Press **FLASH** and dial **[41]**. The following message displays:

CO FEATURES  
ENTER BUTTON NUMBER

2. Select any feature by pressing the appropriate flexible button(s) in the flexible field.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

When entering the Miscellaneous CO Parameters programming area the buttons on the digital telephone are defined as shown below:

DIAL PULSE	*	1	Q	*	2	W	*	3	E	*	4	R
*	5	T	*	6	Y	*	7	U	*	8	I	

### *Dial Pulse Parameters*

### Programming Steps

1. Press the DIAL PULSE flexible button (**FLASH 41, button #1**). The following message displays:

DIAL PULSE  
60 / 40 10 PPS

2. Enter a valid number (0–3) which corresponds with the following entries:
  - [0] = 60/40 (RATIO), 10 pps (SPEED)
  - [1] = 66/33 (RATIO), 10 pps (SPEED)
  - [2] = 60/40 (RATIO), 20 pps (SPEED)
  - [3] = 66/33 (RATIO), 20 pps (SPEED)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Dial Pulse option lets the installer adjust the dial pulse ratio and speed when using dial pulse (rotary) type signaling. By default, all lines are DTMF (tone) signaling. If pulse dialing is required, the individual outside line must be programmed for Dial Pulse (DP).

When Dial Pulse is selected, this system-wide parameter must be set to determine the break/make ratio and the dial speed of the dial pulse signal.



*This program code is only used when an outside (CO) line is programmed for Dial Pulse.*

## ICLID Programming

### *ICLID Ringing Assignments*

#### Programming Steps

1. Press **FLASH** and dial **[43]**. The following message displays:

ROUTE 000 XXXXY

*000 = Route Number (000–499)*

*XXX = Ringing Destination*

*Y = Ringing Type*

2. Press the RING ASSIGNMENT flexible button (**FLASH 43, Button #1**). LED #1 is lit indicating Route 000 is ready for programming.
3. Enter a valid Destination (XXX) and Ring type (Y) followed by HOLD. A confirmation tone is heard and the display updates.

**Table 3-8: ICLID Ringing Assignments**

Valid 3-Digit Destinations (XXX)	Valid Ring Types (Y)
[020-999] = System Speed Bins 1020–1999, for Off-Net Ringing	[0] = No Ring; unassigned; or to delete a station
[100-131] = Extension Numbers	[1] = Day Ring [D]
[440-447] = Voice Mail Groups 1–8	[2] = Night Ring [N]
[450-457] = Hunt Groups 1–8	[3] = Day/Night Ring [DN]
[499] = Direct Ringing to Modem	[4] = Special Only [S]
[550-565] = ACD Groups 1–16	[5] = Day/Special [DS]
[550-557] = ACD Groups 1–8	[6] = Night/Special [NS]
	[7] = All Modes [Day/Night/Special] [A]

## Description

ICLID Ringing Assignments let you change the ring assignment based on the incoming number received. This feature permits you to select from 500 ringing routes for each entry in the name to number translation table and DID table (Flash 55). For example, this feature could be used to reroute selected customers to a specific ACD or UCD group and bypass the general Attendant. The Direct Inward Dialing (DID) feature permits one-way direct inward dialing access to stations on specific DID lines from the public telephone network, without going through an Attendant answering position. DID capabilities refer to incoming calls only. The system accepts 3-7 digits from the Central Office. This lets the name and number field of the LCD display on a DID call be presented to the ICLID port. Calls are identified in the SMDR field as answered (I) or Unanswered (U) followed by a DID number. At least one DTMF receiver must be installed.



*All previously programmed routes will be lost when upgrading from FP2 to FP3.*

RINGING ASSIGNMENTS * 1 Q	* 2 W	* 3 E	* 4 R
* 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
DISPLAY RINGING ASSIGNMENTS * 17 J	NEXT ROUTE NUMBER * 18 K	PREVIOUS ROUTE NUMBER * 19 L	SELECT ROUTE NUMBER * 20 ;
* 21 Z	* 22 X	* 23 C	* 24 V

## View ICLID Ringing Assignments

### Programming Steps

1. Press FLASH 43, Button #17 to display ring assignments. Assignments are displayed in sets of six, up to the number programmed. Press FLASH 43, Button #17 additional times to cycle to the next group of six ring assignments.

```
ROUTE 000 DDDRR DDDR
DDDR DDDR DDDR DDDR
```

*DDD = Destination*

*RR:*

*[0] = No Ring*

*[D] = Day Ring*

*[N] = Night Ring*

*[DN] = Day/Night Ring*

*[S] = Special Only*

*[DS] = Day/Special*

*[NS] = Night/Special*

*[A] = All Modes (Day/Night/Special)*

Multiple station assignments are accomplished by assigning an other destination with ring status, DDDR, and pressing HOLD. This can be done for up to the maximum number of stations on the system.

Ring assignments are continuous and display in order of the destination number from 020-557. A maximum of eight stations display. Additional stations and ringing assignments are displayed using Button #17.

#### *Advancing to the Next Route*

Press the NEXT flexible button (**FLASH 43, Button #18**) to advance to the next ICLID Route number.

#### *Returning to a Previous Route*

Press the PREVIOUS flexible button (**FLASH 43, Button #19**) to return to the previous ICLID Route number.

#### *Selecting a Different Route*

1. Press the SELECT ROUTE NUMBER flexible button (**FLASH 43, Button #20**) to select the desired route number.
2. Enter a valid ICLID route number (000–252).
3. Press HOLD to change to the different route entered. A confirmation tone is heard.

### **Description**

Keysets designated to ring on an incoming CO line but not designated to ring on the ICLID ring, may receive a ring cycle before the call is moved. The same ringing restrictions applied to CO line ringing are applied to ICLID ringing. By default, no destinations or ringing assignments exist.

## Direct Inward Dialing (DID) Programming

### Programming Steps

Press **FLASH** and dial **[44]**. The following message displays:

DID RRR XXXXXXXX  
n.....n

*[RRR] = RouteNumber (000-499)*

*[###] = DID Number (Directory # from Central Office)*

*[n...n] = Name Assigned to DID Number*

The top left button (ROUTE) in the flexible button field is lit for programming the Route number. The LEDs for the UP Button (**FLASH 44, Button #18**), the DOWN Button (**FLASH 44, Button #19**) is also lit.

### *Changing to a Different DID Route Number*

1. Press either the UP Button (**FLASH 44, Button #18**),

-or-

Press the DOWN Button (**FLASH 44, Button #19**).

2. Enter a valid Route Number (000-499) to be associated with the DID Number.

This Route Number is the same Route Number in the ICLID Ringing Assignments Table (**FLASH 43**) and determines the destination of the DID number associated with this Route Number. The display shows the route number as it is entered.

3. Press HOLD button to save the entry. A confirmation tone is heard.

## Description

DID calls are treated as an incoming call and follow the same rules established for CO lines. DID information transferred from the network is captured and translated to direct a specific DID number to a specific station, ACD or Hunt group of stations, or Voice Mail group. The DID call appears at the destination station under an assigned LOOP or CO button.

When receiving a DID call, the destination station hears the CO line ringing and the assigned CO or LOOP button flashes at the incoming CO line flash rate. The destination station then presses the flashing CO or LOOP button, is connected to the incoming DID call, and CO line ringing stops and the LED for the CO or LOOP button lights steady.

If the outside caller disconnects from a two-party conversation, the Central Office opens the loop and returns the line to idle state. The system detects the disconnect signal, release the line, and provides a busy tone to the keyset/SLT (unless the SLT is a VM port), and disconnects from the DID line. If the extension called hangs up the phone, the central office detects disconnects, and returns the line to the idle state.

The buttons on the digital telephone are defined as shown when entering the DID Table programming area:

ROUTE NUMBER * 1 Q	PHONE NUMBER * 2 W	NAME * 3 E	CLEAR ENTRY * 4 R
BACK SPACE * 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	UP * 18 K	DOWN * 19 L	* 20 ;
* 21 Z	* 22 X	* 23 C	* 24 V

By default, all entries in the DID Table (000-999) have phone numbers assigned. Refer to [Figure 3-9](#) for additional information.

## *DID Phone Number*

### **Programming Steps**

1. Press the PHONE NUMBER flexible button (**FLASH 44, Button #2**) to program the DID Number.
2. Enter the DID Number to be associated with a valid Route Number (000–499). Up to 7 digits can be entered.

By default, only the last three digits are used for routing which is determined in Flash 45.

3. Use the BACK SPACE flexible button (**FLASH 44, Button #5**) to erase the current number or to correct for errors.
4. Press HOLD to save the entry. A confirmation tone is heard.

If the DID number is already in the DID Translation Table, the Route Number associated with the DID number displays.



*By default, the DID Table is filled with numbers. If error tone is received when the HOLD button is pressed, the DID Table is full and an entry needs to be deleted to make room for this new phone number.*

## *Name Assigned to DID Number*

### **Programming Steps**

1. Press the NAME flexible button (**FLASH 44, Button #3**) to enter the desired name for the DID trunk. Maximum length is 8-characters.
2. Press the HOLD button to update the database. A confirmation tone is heard.
3. Use the BACK SPACE flexible button (**FLASH 44, Button #5**) to erase the current letter to correct for errors.

### *DID Name and Number Codes*

The display shows the DID name or number as it is entered.

			Other Codes			
1	A-21 B-22 C-23	D-31 E-32 F-33	1 = 1#	8 = 8#	" = 01	* = *#
G-41 H-42 I-43	J-51 K-52 L-53	M-61 N-62 O-63	2 = 2#	9 = 9#	, = 02	( = #1
P-71 R-72 S-73 Q-74	T-81 U-82 V-83	W-91 X-92 Y-93 Z-94	3 = 3#	0 = 0#	? = 03	) = #2
*	OPER 0	#	4 = 4#	Space = 11	/ = 04	+ = #3
			5 = 5#	: = 12	! = *1	= = #4
			6 = 6#	- = 13	\$ = *2	# = ##
			7 = 7#	' = 14	& = *4	. = 24

**Figure 3-1: DIDName/Number Codes**

## *Erasing a DID Table Entry*

### **Programming Steps**

#### *Clearing Entries from DID Table*

1. Press the CLEAR ENTRY Button (**FLASH 44, Button #4**) to clear an entire Phone Number, Name and Route from the DID Table.
2. Press the HOLD button to save the entry. A confirmation tone is heard.

#### *Changing to a Different DID Route*

Press the UP button (**FLASH 44, Button #18**) to advance to the DID Route Number,

-or-

Press the DOWN button (**FLASH 44, Button #19**) to return to a previous DID Route Number.

## Description

By default, all entries in the DID Table (000–999) have phone numbers assigned.

The following table shows the default configuration for the DID Table entries and the ICLID Ringing assignments.

**Table 3-9: DID & ICLID Default Table Entries**

DID Translation Table		ICLID Translation Table	
DID Table Entry	Default Route(s)	ICLID Table Entry	Default Destination
000-098	100-198	100-198	100A-198A
099	199	199	499A
100-198	100-198	100-198	100A-198A
199	199	199	499A
200-298	100-198	100-198	100A-198A
299	199	199	499A
300-398	100-198	100-198	100A-198A
399	199	199	499A
400-498	100-198	100-198	100A-198A
499	199	199	499A
500-598	100-198	100-198	100A-198A
599	199	199	499A
600-698	100-198	100-198	100A-198A
699	199	199	499A
700-798	100-198	100-198	100A-198A
799	199	199	499A
800-898	100-198	100-198	100A-198A
899	199	199	499A
900-998	100-198	100-198	100A-198A
999	199	199	499A

**Route 000** in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table follow Route 000. If Route 000 is defaulted to None, the call follows Route 001.

**Route 001** is used as the Busy DID Route. DO NOT program any entries in this Route if you intend to provide a busy tone to callers dialing a busy DID/DVIS number.

---

---

# 4

# Station Attributes Programming

This chapter describes the steps and procedures necessary to program station attributes.



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## Page A Introduction

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

1. Press **FLASH** and dial **[50]**. Flexible button #24 (New Range) is lit and the following message displays:

STATION ATTRIBUTES  
SELECT A STATION RANGE

2. Enter a valid number for the station range being programmed. If one station is being programmed, enter that number twice (100100).



*If HOLD is pressed without entering a station range, ALL stations (100-131) are selected.*

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates. Flexible button #19 is lit and the display updates to current programming for Page A:

XXX - XXX PAGE A  
ENTER BUTTON NUMBER

*XXX-XXX = Station Range (100-131)*

### Description

Range programming enables the programmer to change a specific parameter or a few parameters for a range of stations, leaving intact the remaining data fields not requiring changes. Those data fields continue to operate with the previously programmed data. By default, Page A is shown.

When programming the Page A features, the flexible buttons are mapped as follows:

PAGE ACCESS * [ 1 ] Q	DO NOT DISTURB * [ 2 ] W	CONFERENCE * [ 3 ] E	EXECUTIVE OVERRIDE * [ 4 ] R
PRVACY * [ 5 ] T	SYSTEM SPEED * [ 6 ] Y	LINE QUEUING * [ 7 ] U	PREF LINE ANSWER * [ 8 ] I
OHVO * [ 9 ] O	CALL FORWARD * [ 10 ] P	FORCED LCR * [ 11 ] A	ACD SUPV BARGE-IN * [ 12 ] S
EXEC OVRD BLOCKING * [ 13 ] D	CO LINE RING OPTIONS * [ 14 ] F	NAME / NUMBER DISPLAY * [ 15 ] G	ZAP TONE * [ 16 ] H
CO, LOOP, POOL FLEX * [ 17 ] J	* [ 18 ] K	PAGE A * [ 19 ] L	PAGE B * [ 20 ] ;
PAGE C * [ 21 ] Z	NEXT (FWD) * [ 22 ] X	NEXT (BACK) * [ 23 ] C	NEW RANGE * [ 24 ] V

## Paging Access

### Programming Steps

1. Press the PAGE ACCESS flexible button (**FLASH 50, Page A, Button #1**). The following message displays:

PAGE ACCESS	0-1
ENABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

---

---

## Description

Stations can individually be allowed or denied the ability to make pages. This applies to all internal and external zone paging. A station denied access to paging may still answer a meet-me page announcement. (Station COS 6 does not deny a station the ability to make a page.) By default, Paging is enabled at all stations.

### *Do Not Disturb*

#### Programming Steps

1. Press the DO NOT DISTURB flexible button (**FLASH 50, Page A, Button #2**). The following message displays:

DO NOT DISTURB ENABLED	0-1
---------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

#### Description

Stations can be individually allowed or denied the ability to place their telephone in Do Not Disturb. By default, Do Not Disturb is enabled at all stations. The first programmed Attendant cannot utilize DND.

### *Conference Enable / Disable (Per Station)*

#### Programming Steps

1. Press the CONFERENCE flexible button (**FLASH 50, Page A, Button #3**). The following message displays:

CONFERENCE ENABLED	0-1
-----------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The Conference Enable/Disable feature lets the system be programmed on a per Station basis for the ability to initiate a conference.

## Executive Override

### Programming Steps

1. Press the EXECUTIVE OVERRIDE flexible button (**FLASH 50, Page A, Button #4**). The following message displays:

EXEC OVERRIDE	0-1
DISABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.



*Use of this feature when the Executive Override Warning Tone is disabled may be interpreted as a violation of federal, state, or local laws, and an invasion of privacy. Check applicable laws in your area before intruding on calls using this feature.*



*A change in volume may occur on the CO line or intercom call after the barge-in occurs.*

### Description

The Executive Override feature lets certain stations be designated as Executive stations with the ability to override and barge-in on other key sets engaged in a CO line or intercom conversation. If Supervisor Monitor with barge-in function is denied, this feature **MUST** be disabled. An optional warning tone is programmed on a system-wide basis to enable or disable the tone.

This tone is presented to all parties prior to actual cut through of the third party.



*The Executive Override Blocking feature (Flash 50, Page A, Button #13) allows or disallows an Executive to override an extension. This prevents an extension with override capability from overriding designated stations.*

By default, Executive Override is disabled for all stations. Supervisor Barge-In can be programmed in [FLASH 50] [Button 12].

## Privacy (Per Station)

### Programming Steps

1. Press the PRIVACY flexible button (**FLASH 50, Page A, Button #5**). The following message displays:

PRIVACY ENABLED	0-1
--------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.



*Disabling the privacy feature may be limited by federal, state, and local law, so check the relevant laws in your area before disabling privacy.*

### For Single Line Telephones:

1. Enter a 0 or 1 on the dial pad to enable/disable the Camp-On feature.  
[0] = No Camp-On is allowed  
[1] = Camp On is allowed
2. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The system provides privacy on all communications in the system which prevents other stations from accidentally entering an existing conversation. However, the system provides the ability for a station to join an existing outside CO line conversation (on a per station basis).

Each station can be granted the privilege to join an existing CO line conversation by simply pressing the CO line button of a CO line in use.

Privacy on an SLT can be useful in situations where a modem is using the SLT port for data transmission.

Disabling this feature lets data transfer proceed without being interrupted with a Camp On tone. Both the station and the CO Line must have Privacy disabled before the system allows cut-through.

- If Privacy is disabled and a station joins an existing call, a programmable warning tone is presented to both parties prior to actual cut-through.
- If Privacy is disabled, up to eight other stations may join in on an existing conversation.

Privacy is enabled for all stations in default.

**Table 4-1: Station Privacy Flag**

Station Attempting to Access CO Line	CO Line in Use by Another Station	
	Privacy Enabled	Privacy Disabled
Privacy Enabled	Private (No Cut-through)	Private (No Cut-through)
Privacy Disabled	Private (No Cut-through)	Privacy Released (Cut-through Allowed)

## *System Speed Dial Access*

### **Programming Steps**

1. Press the SPEED flexible button (**FLASH 50, Page A, Button #6**). The following message displays:

SYSTEM SPEED ENABLED	0-1
-------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.
  - [0] = Disabled
  - [1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

## Description

Stations can be individually allowed or denied the ability to use system speed dial (100–999) numbers. (*System speed numbers 060–099 are not monitored by toll restriction.*) Stations cannot be prevented from using station speed dial. By default, System Speed Dialing is enabled at all stations.



*When upgrading from FP2 to FP3, all previously programmed speed dial buttons will be lost.*

## Line Queuing

### Programming Steps

1. Press the QUEUING flexible button (**FLASH 50, Page A, Button #7**). The following message displays:

LINE QUEUING	0-1
ENABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

Stations can be allowed or denied the ability to manually queue for a busy group of CO lines. Even when disabled, stations have automatic LCR queuing privileges. By default, CO Line Queuing is enabled at all stations.

## Preferred Line Answer

### Programming Steps

1. Press the PREF LINE ANSWER flexible button (**FLASH 50, Page A, Button #8**). The following message displays:

PREF LINE ANSWER	0-1
ENABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

Stations can be given the ability to answer a call by simply going off-hook. By default, Preferred Line Answer is enabled on all stations.

## *Off-Hook Voice Over (OHVO)*

### Programming Steps

1. Press the OHVO flexible button (**FLASH 50, Page A, Button #9**). The following message displays:

OFF HOOK VOICE OVER	0-1
DISABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

When enabled, the Off-Hook Voice Over feature allows a digital station to receive OHVO while on a call. A station can be denied the ability to receive OHVO calls by disabling this feature. By default, Off-Hook Voice Over is disabled for all stations. The station must be in H or P mode to enable this feature.

---

---

## *Call Forwarding*

### **Programming Steps**

1. Press the CALL FORWARD flexible button (**FLASH 50, Page A, Button #10**). The following message displays:

CALL FORWARD ENABLED	0-1
-------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

Stations can be allowed or denied the ability to forward incoming CO calls, intercom calls, or transferred outside lines to another station or group. By default, Call Forwarding is enabled at all stations.

## *Forced Least Cost Routing (LCR)*

### **Programming Steps**

1. Press the FORCED LCR flexible button (**FLASH 50, Page A, Button #11**). The following message displays:

FORCE LCR DISABLED	0-1
-----------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

---

---

## Description

Stations may be forced to place outgoing CO calls by use of LCR (dial [9]) to access an outside line. This lets the system administrator control dialing patterns and lines used for outgoing CO calls. This can be enabled/disabled on a per-station basis for additional flexibility and control. Forced LCR is optional (disabled) for all stations, and eliminates access to all other line groups.

### *ACD Supervisor Monitor with Barge-In*

#### Programming Steps

1. Press the SUPV BARGE-IN flexible button (**FLASH 50, Page A, Button #12**). The following message displays:

ACD SUPV BARGE IN	0-1
DISABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.



*The use of Supervisor Monitor with Barge-In is limited by federal law and may also be limited or prohibited by state or local law, so check the relevant laws in your area before employing these features.*

*A change in volume may occur on the CO line or intercom call after the barge-in occurs.*

## Description

*This feature is available with optional software.* The ACD Supervisor Monitor with Barge-In feature provides a means for an ACD Supervisor to monitor an agents call in progress to coach sales techniques or customer relations skills. When used, a supervisor may intrude into an agent's call in a listen-only mode or in a true conference mode. Prior to barge-in, a supervisor must log into the agent's group using the supervisor log-in code 576XXX. This feature is available with or without a warning tone. By default, the Supervisor Monitor with Barge-In feature is disabled.



*Executive Override is a system feature and, therefore, takes precedence over this feature. If Supervisor Monitor with Barge-In is used properly, Executive Override MUST be disabled. Otherwise, the barge-in is performed with the MUTE button OFF.*

## Executive Override Blocking

### Programming Steps

1. Press the EXECUTIVE OVERRIDE BLOCKING flexible button (**FLASH 50, Page A, Button # 13**). The following message displays:

EXEC OVERRIDE BLOCK	0-1
DISABLED	

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.
  - [0] = Disabled
  - [1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The Executive Override Blocking feature allows or disallows override of an extension. This prevents an extension with override capability from overriding a station. By default, Executive Override is disabled at all stations.



*The Executive Override Blocking feature also blocks an ACD Supervisor Monitor with Barge-In.*

## *CO Line Ringing Options*

### **Programming Steps**

1. Press the RINGING OPTIONS flexible button (**FLASH 50, Page A, Button #14**). The following message displays:

CO RING OPTIONS	0-1
MUTED RING	

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Reminder Ring  
[1] = Muted Ring
3. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

When a CO call rings at a busy station, the call rings at the station using a muted ring signal. This option lets a user receive a reminder ring at his station, instead of muted ring. In addition, a reminder ring timer has also been added to the system to provide the reminder ring every time the timer expires, for as long as the incoming CO line has not been disconnected. By default, Muted Ringing is allowed at all stations.

## *Name / Number Display at Idle*

### **Programming Steps**

1. Press the NAME/NUMBER DISPLAY flexible button (**FLASH 50, Page A, Button # 15**). The following message displays:

NAME AT IDLE LCD	0-1
NAME	

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Extension number  
[1] = Name
3. Press HOLD to save the entry. A confirmation tone is heard.

---

---

## Description

The Name/Number Display feature displays the standard idle LCD showing the programmed 7-digit name and station number together. This option is programmable on a per station basis, however, the feature must be enabled / disabled in admin programming.

If a station has this feature enabled but has not programmed a name, the name portion of the LCD is blank. The idle display priority is UCD/ACD, Hunt, Station/Name, or Station. By default, the Name displays on the LCD.

## *Zap Tone*

### Programming Steps

1. Press the Zap Tone flexible button (**FLASH 50, Page A, Button #16**). The following message displays:

ACD ZAP TONE DISABLED	0-1
--------------------------	-----

2. Enter a valid number (0 or 1) on the dial pad.  
[0] = Disable feature  
[1] = Enable feature
3. Press HOLD to save the entry. A confirmation tone is heard.

### Description

The Zap Tone feature enables ACD agents in the headset mode, to have ACD calls connected to them automatically. The feature removes the requirement for the agent to press the ON/OFF button to answer ACD calls. ACD calls are connected when the agent is logged into any group and is available. By default, this feature is disabled.

---

---

## *CO Loop Pool Flex*

### **Programming Steps**

1. Press the CO LOOP POOL flexible button (**FLASH 50, Page A, Button #17**). The following message displays:

CO LOOP POOL FLEX DISABLED	0-1
-------------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disable  
[1] = Enable
3. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

The CO Loop Pool feature enables the station user to program CO Line, Loop, and Pool Keys using flexible button programming. By default, this feature is disabled.

## *Administration Access*

### **Programming Steps**

1. Press the ADMIN ACCESS flexible button (**FLASH 50, Page A, Button #18**). The following message displays:
1. Press the ADMIN ACCESS flexible button (**FLASH 50, Page A, Button #18**). The following message displays:

ADMIN ACCESS DISABLED	0-1
--------------------------	-----

2. Enter a 0 or 1 on the dial pad to enable/disable this feature.  
[0] = Disable  
[1] = Enable
3. Press HOLD to save the entry. A confirmation tone is heard.

## Description

The Administration Access feature allows a station to access Database Administration. Each station can be enabled/disabled for system programming. By default, feature is disabled.



*Station 100 always has programming access regardless of this setting.*

---

## Page B Introduction

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

1. Press **FLASH** and dial **[50]**. Flexible button #24 (New Range) is lit and the following message displays:

STATION ATTRIBUTES  
SELECT A STATION RANGE

2. Enter a valid number for the station range being programmed. If one station is being programmed, enter that number twice, e.g., [ 100100].



*If HOLD is pressed without entering a station range, all stations (100-131) are selected.*

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates. Flexible button #19 (Page A) is lit.
4. Press button #20. The display updates to reflect programming for Page B.

XXX - XXX PAGE B  
ENTER BUTTON NUMBER

*XXX = Station Range (100-131)*

## Description

Range programming enables the programmer to change a specific parameter or a few parameters for a range of stations, leaving intact the remaining data fields not requiring changes. Those data fields continue to operate with the previously programmed data.

When programming the Page B features, the flexible buttons are mapped as follows:

STATION ID * 1 Q	DAY CLASS OF SERVICE * 2 W	NIGHT CLASS OF SERVICE * 3 E	SPEAKERPHONE * 4 R
GROUP PICKUP * 5 T	PAGING ZONES * 6 Y	* 7 U	CO LINE GROUP ACCESS * 8 I
LCR CLASS OF SERVICE * 9 O	OFF-HOOK PREFERENCE * 10 P	BUTTON ASSIGN * 11 A	KEY SET MODE * 12 S
VMID TRANSLATION * 13 D	DISPLAY BUTTONS * 14 F	* 15 G	* 16 H
CKTU * 17 J	* 18 K	PAGE A * 19 L	PAGE B * 20 ;
PAGE C * 21 Z	NEXT (FWD) * 22 X	NEXT BACK) * 23 C	NEW RANGE * 24 V

## Station Identification

### Programming Steps

1. Press the STATION ID flexible button (**FLASH 50, Page B, Button #1**).

STATION ID KEYSET - SP24BTN	0-8
--------------------------------	-----

2. Enter a valid number on the dial pad to identify type of telephone:
  - [1]=DSS Console (Refer to [“Station ID for DSS / DLS Console with Map”](#) for details)
  - [6]=SLT without Message Wait
  - [7]=SLT with Message Wait (90 Vdc)
  - [006]= 24-Button Telephone
  - [007]=12-Button Telephone
  - [008]=8-Button Telephone
  - [009]=16-Button Telephone
  - [015]=SLA
  - [016]=Large Display 30-Button Telephone
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Each system port must be programmed to identify the type of station that operate on that port. Each station type must be identified. By default, all Key Telephone Boards (DTIB) default to ID 006 (24-Button Digital Telephone), all Single Line Boards (SLIB) default to ID 6.



*When identifying a station as a DSS/DLS console, you must also enter the station number of the key telephone to which the DSS/DLS console is associated. To associate a DSS console with Station 100, the entry would be 1100[HOLD].*

## Station ID for DSS / DLS Console with Map

### Programming Steps

1. Dial [1] on the dial pad.
2. Enter a station number to which the DSS/DLS Console is associated.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

STATION ID <span style="float: right;">0-8</span> DSS MAP X ASSOC XXX
--

*X=1*

*XXX = Station Range (100-131)*

**MAP #1** by default has all 12 CO Lines and all 32 Stations, 100–131. This provides a default layout for a 12x32 configuration. Station/Feature buttons are flexible and can be changed by the station user. CO Line buttons are NOT changeable.

CO1	CO2	CO3	CO4
CO5	CO6	CO7	CO8
CO9	CO10	CO11	CO12
100	101	102	103
104	105	106	107
108	109	110	111
112	113	114	115
116	117	118	119
120	121	122	123
124	125	126	127
128	129	130	131
Call Park 430	Call Park 431	Ext Page	RLS

**MAP #2** by default has 32 Stations, 100–131. All buttons are flexible and can be changed by the station user. This map can be duplicated on another DSS/DLS console and assigned to the same station.

100	101	102	103
104	105	106	107
108	109	110	111
112	113	114	115
116	117	118	119
120	121	122	123
124	125	126	127
128	129	130	131

### *Station Day Class of Service (COS)*

#### **Programming Steps**

1. Press the DAY COS flexible button (**FLASH 50, Page B, Button #2**).

DAY COS	1-7
1	

The seven classes of service are:

COS 1 = No restrictions

COS 2 = Table A governs

COS 3 = Table B governs

COS 4 = Table A and B govern

COS 5 = Restricts [0], [1], [\*], [#] dialed as first-digit and places a 7-digit maximum

COS 6 = Intercom Only

(no CO line access - results in a 911 block unless 911 Feature is active)

COS 7 = Restricts [0], [1], [\*], [#] dialed as first-digit with a 10-digit maximum

2. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Each station must be assigned a certain COS for Day and Night Mode operation. Class of Service (COS) determines the station's dialing privileges. By default, all stations are assigned a COS 1 for Day Mode.

**Table 4-2: Class of Service (COS)**

		CO Line Class of Service				
		1	2	3	4	5
S T A T I O N  C O S	1	Unrestricted	Unrestricted	Unrestricted	Canned Restricted*	Unrestricted
	2	Table A	Table A	Unrestricted	Canned Restricted*	Unrestricted
	3	Table B	Unrestricted	Table B	Canned Restricted*	Unrestricted
	4	Table A&B	Table A	Table B	Canned Restricted*	Unrestricted
	5	Canned Restricted*	Canned Restricted*	Canned Restricted*	Canned Restricted*	Unrestricted
	6	Intercom Only	Intercom Only	Intercom Only	Intercom Only	Intercom Only
	7	Canned Restricted*	Canned Restricted*	Canned Restricted*	Canned Restricted*	Unrestricted

\* Canned Restriction: No [0], [1], [#], [\*] as first dialed digit, and 7-digit dialing limitation; plus 1-800, 1-866, 1-877, 1-888, 1-911, 1-611 are allowed, and 411, 976, and 555 numbers are denied. COS 7 allows 10-digit dialing maximum.

---

---

## *Station Night Class of Service (COS)*

### **Programming Steps**

1. Press the NIGHT COS flexible button (**FLASH 50, Page B, Button #3**).

NIGHT COS	1-7
1	

The seven classes of service are:

COS 1 = No restrictions

COS 2 = Table A governs

COS 3 = Table B governs

COS 4 = Table A and B govern

COS 5 = Restricts [0], [1], [\*], [#] dialed as first-digit and places a 7-digit maximum

COS 6 = Intercom Only

(no CO line access - results in a 911 block unless 911 Feature is active)

COS 7 = Restricts [0], [1], [\*], [#] dialed as first-digit with a 10-digit maximum

2. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

Each station must be assigned a COS for Night Mode operation. The Night COS goes into affect when the system is manually or automatically placed into Night Mode. This prevents misuse of phones after hours. Class of Service (COS) determines the station's dialing privileges. By default, all stations are assigned a COS 1 for Night Mode.

## *Speakerphone / Headset*

### **Programming Steps**

1. Press the SPEAKERPHONE flexible button (**FLASH 50, Page B, Button #4**). The following message displays:

SPEAKERPHONE	0-4
FULL SPEAKERPHONE	

2. Enter a valid number (0-4) on the dial pad to identify the speakerphone operation.
  - [0]= Works as normal speakerphone. Full speakerphone capabilities on CO lines and Intercom.
  - [1]= Speakerphone enabled for intercom calls only. Speakerphone capabilities disabled for outgoing CO line calls (monitoring and on-hook dialing are still permitted).
  - [2]= Permits toggling of speakerphone and headset operation via the [634] Headset code.
  - [3]= Forces the telephone to always ring in the tone intercom mode.
  - [4]= Forces the telephone to the hand-free intercom mode always.
3. Press HOLD to save the entry. A confirmation tone is heard.

### **Description**

Speakerphones are programmable. By default, all stations are assigned an ID of 0 (Full Speakerphone).

## *Pickup Group(s)*

### **Programming Steps**

1. Press the GROUP PICKUP flexible button (**FLASH 50, Page B, Button #5**). The following message displays:

PICKUP GROUPS	0-8
1	

2. Enter a valid number (1-8) to program pickup groups.

[0] = No Group	[5] = Group 5
[1] = Group 1	[6] = Group 6
[2] = Group 2	[7] = Group 7
[3] = Group 3	[8] = Group 8
[4] = Group 4	

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Stations are assigned to pick-up groups. Stations can be in any combination of the eight groups or in no group at all. By default, all stations are in Group 1.

## *Paging Zone(s)*

### Programming Steps

1. Press the PAGING ZONES flexible button (**FLASH 50, Page B, Button #6**). The following message displays:

PAGE ZONE	0-8
1	

2. Enter a valid number (1-8) to program paging zone(s).

[0] = No Zone	[5] = Zone 5
[1] = Zone 1	[6] = Zone 6
[2] = Zone 2	[7] = Zone 7
[3] = Zone 3	[8] = Zone 8
[4] = Zone 4	

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Stations are assigned to Page Zones. At least one station must be assigned to a Zone for that Zone to be active. Stations can be in any combination of the eight zones or in none of the zones. By default, all stations are in Zone 1.

## Line Group Access - Station

### Programming Steps

1. Press the CO LINE GROUP ACCESS flexible button (**FLASH 50, Page B, Button #8**). The following message displays:

LINE GROUP ACCESS	1-23
1	

2. To add a Line Group, enter a valid number (00, or 01–23) to designate the outside line groups that the station can access, press 1, and then press HOLD to save the entry. A confirmation tone is heard and the display updates.



*00+1+HOLD = No Access (911 calls are blocked unless 911 Feature is active).*

*01+1+HOLD = Access to Group 1 by dialing Code 9 or 801 (Code 800 if 911 Feature is active).*

*Users access Line Groups 2-23 by dialing 802-823, respectively.*

3. To delete a Line Group, enter a valid number (00, or 01-23), press 0, and then press HOLD. A confirmation tone is heard and the display updates.

### Description

A station can access any combination of outside line groups, or a station may not be allowed access to outside lines. CO line groups are used primarily by single line telephones or for flexible buttons assigned as pooled group buttons on a Key Telephone. By default, stations are allowed access to Group 1.

## LCR Class of Service (COS)

### Programming Steps

1. Press the LCR COS flexible button (**FLASH 50, Page B, Button #9**). The following message displays:

LCR CLASS OF SERVICE	0-6
0	

2. Enter a valid number (0–6) to correspond to the LCR Class of Service desired.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Stations can be given a class of service assignment for Least Cost Routing. The range is between 0-6, with 0 being unrestricted and 6 the most restricted. A station can use LCR routes with a priority number equal to or higher than the stations LCR COS assignment. Stations are given unrestricted access (0).

## *Off-Hook Preference*

### Programming Steps

1. Press the OFF-HOOK PEF flexible button (**FLASH 50, Page B, Button #10**). The following message displays:

OFF HOOK PEFENCE BTN	XXY
00 DISABLED	

2. Enter a valid number (01–24) or (00) to indicate no specific button is preferred. (SLTs use [01] to enable or [00] to disable.)
3. Enter one of the following:
  - [0]= Disables programmable preference so users may not change the off-hook preference as set in programming. Also use for SLT stations.
  - [1]= Enables programmable preference to key station users so that they may change the off-hook preference through a user dial code.
4. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Off-Hook Preference feature lets a key station user automatically have a flex button selected when going off-hook or when pressing the ON/OFF button. An SLT user may have a particular CO line or a CO line group selected automatically when going off-hook.

---

---

This may be established in programming so that key station users can select and/or change their off-hook preference through the use of a dial code [691]+BB (01-24). Dialing [691]+00 disables Off-Hook Preference. This user programmable preference may be allowed or denied in programming. When establishing an off-hook preference for SLT stations, it is necessary to program the SLTs CO line, or line group, to access when going off-hook, using a flex button programming procedure. By default, all digital telephones can change their preference but no button is assigned (00). SLT stations cannot use this feature.

## *Flexible Button*

### **Programming Steps**

1. Press the BUTTON ASSIGN flexible button (**FLASH 50, Page B, Button #11**). The following message displays:

FLEX BUTTON PROG  
ENTER BUTTON DATA

2. Enter a valid button number [01-24] to program, followed by the desired button function:
  - [0] = Flexible/user changeable
  - [1] = CO line
  - [2] = Loop button/all-purpose CO appearance
  - [3] = Pool for specific groups
  - [4] = Direct feature programmable
  - [#] = Locks button

### **Description**

Each digital telephone has 8, 12 or 24 flexible buttons that can be programmed. One of the following five operations can be selected in programming for each button.

#### ***Assigning a Flexible Button (user programmable)***

Enter: [BB], [0], [HOLD]

When a button is assigned as a flexible button [0], the user can program any features or functions on the buttons to which they have access.

**Assigning a CO Line Button:**

Enter: [BB], [1], [LLL], [HOLD]

*LLL = CO Line 001-012**Example:*

01	1	001	HOLD
02	1	002	
03	1	003	
Button	CO	CO	
Number	Code	Line	

Buttons assigned as specific CO lines provide direct access and appearance of the CO line at a station. The station receives call status indications such as LED flash rates for incoming ringing when the line is placed on HOLD, etc. CO Line ringing is programmed in CO Line Attribute programming.

**Assigning a Loop Button:**

Enter: [BB], [2], [HOLD]

*Example:*

05	2	HOLD
Button	Loop	
Number	Code	

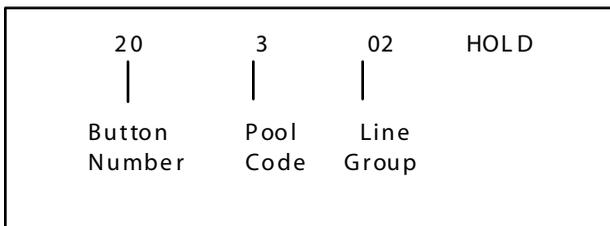
Used for a station without direct CO line appearance to answer the line ringing in or transferred to the station. It is recommended that all stations be given a loop button so they can receive a transferred call on a line for which they have no button access.

**Assigning a Pool Group Button:**

Enter: [BB], [3], [GG], [HOLD]

*GG = Line Group Number (00-23)*

*Example:*



Some or all outside CO lines may be grouped together and accessed via a POOL button for the purpose of placing an outgoing CO call. Pressing this button accesses the highest numbered unused CO line in that CO line group.



*When upgrading software from FP2 to FP3, which supports this feature, all previously programmed trunk groups will be lost.*

### ***Assigning a Feature Button (admin programmable):***

Enter: [BB], [4], [XXX], [HOLD]

This feature enables flexible buttons to be programmed from a remote location. Range programming can be used to assign these buttons to multiple stations. When a button is assigned as a feature button [4], the programmer can program any features on the buttons.

### ***Unassigning (lock out) a Button:***

Enter: [BB], [#], [HOLD]

If SLT stations must be programmed for off-hook preference, program the desired CO line, or CO line group the SLT must access when going off-hook.

### ***Assigning a CO Line for an SLT (with off-hook preference):***

Enter: [01], [1], [LLL], [HOLD]

*LLL = CO Lines (001-012)*

### ***Assigning a CO Line Group for an SLT (with off-hook preference):***

Enter: [01], [3], [GG], [HOLD]

*GG = Line Group Number (00-23)*

**Table 4-3: Flex Button Codes for Remote Programming**

Account Code	627	Disable CO Outgoing	602
ACD Call Qualifier	570+[XXX]	Do Not Disturb	631
ACD Calls in Queue Display	579+[XXX]	Executive Override	625
ACD Login (Primary Grp)	572+[XXX]	Group Pickup	771
ACD Login (Secondary Grp)	582+[XXX]	Headset Mode	634
ACD Member Status	573	Hunt Groups	450-457
ACD Secondary Grp Logout	581	ICLID Answered Call	659
ACD Supervisor Help	574	ICLID Unanswered Call	635
ACD Supervisor Login	576+[XXX]	Intercom Button	645
ACD Supervisor Logout	575+[XXX]	Page - All Call	700
ACD Supervisor Status	577+[XXX]	Page - External	761-762
ACD/UCD Avail/Unavail	566	Page - Internal All Call	709
ACD/UCD Calls in Queue	567	Page - Internal Zone	701-708
Answering Mach. Emulation	654+[0, 1]	Page - Meet Me	770
Attendant Avail/Unavail	607	LCR	773
Attendant Override	601	LCR Queue Cancel	626
Background Music	632	Line Queue	621
Call Back	622	Mailbox Button (IDX = 001-255)	644+[IDX]
Call Coverage (Non-Ringing)	647+[XXX]	Night Service	604
Call Coverage (Ringing)	646+[XXX]	OHVO	628
Call Factor	580+[5XX]+F	One-Touch Record (VM 440-447)	649+[44V]
Call Forward	640	Overflow Avail / Unavail	578
Call Park (Personal)	438	Personalized Message	633+[XX]
Call Park (Station)	439	Primary ACD Group Logout	571+[XXX]
Call Park (System)	430-437	Release Key	641
Caller ID Name/Nbr Toggle	653	Repeat Redial	643
CO Line Direct Access	88+[LLL]	Ring Tone	695+[01-35]
CO Off-Net Forward	603	Station Speed Bins	000-019
Conference	624	System Speed Bins	020-999
Custom Message	694	<i>Triad-S DSS</i>	<i>100-131</i>
Dial by Name	772	Universal Day / Night Answer	774
Directory Dial	680	VM Pilot Groups	440-447

### Digital Keystets

Specific buttons may be assigned as unused or locked out. When a button is programmed as unused, the button may not be programmed by the station user using flex button programming procedures.

#### 24-Button Default

STA 100 * 1 Q	STA 101 * 2 W	STA 102 * 3 E	STA 103 * 4 R
STA 104 * 5 I	STA 105 * 6 Y	STA 106 * 7 U	STA 107 * 8 T
STA 108 * 9 O	STA 109 * 10 P	STA 110 * 11 A	STA 111 * 12 S
CO 1 * 13 D	CO 2 * 14 F	CO 3 * 15 G	CO 4 * 16 H
CO 5 * 17 J	CO 6 * 18 K	LOOP * 19 L	POOL * 20 ;
CALL BACK * 21 Z	PICKUP * 22 X	DND * 23 C	LINE QUEUE * 24 V

#### 12-Button Default

STA 100 * 1 Q	STA 101 * 2 W	STA 102 * 3 E	STA 103 * 4 R
CO 1 * 5 T	CO 2 * 6 Y	LOOP * 7 U	POOL * 8 I
CALL BACK * 9 O	PICKUP * 10 P	DND * 11 A	LINE QUEUE * 12 S

#### 8-Button Default

STA 100 * 17 J	STA 101 * 18 K	LOOP * 19 L	POOL * 20 ;
CALL BACK * 21 Z	PICKUP * 22 X	DND * 23 C	LINE QUEUE * 24 V

## Keyset Mode

### Programming Steps

1. Press the KEYSSET MODE flexible button (**FLASH 50, Page B, Button #12**). The following message displays:

KEYSET MODE	0-5
INACTIVE MODE	

2. Enter a valid number (0-4) to change the mode of a digital telephone:  
[0] = Inactive Mode (normal mode without CTI box)  
[1] = PC Phone (Discovery Desktop) Mode at 4800 baud  
[2] = ATD Command Mode at 4800 baud  
[3] = ATH Command Mode at 4800 baud  
[4] = CKTU Mode at 4800 baud  
[5] = SPI Mode at 4800 baud
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Keyset Mode feature lets the station user determine the mode in which the Digital Telephone with CTI Box (optional) operates. The 5 modes are: Inactive, PC Phone (Discovery Desktop), ATD Command, ATH Command and CKTU. Through the use of a dial code, the station user can also determine the baud rate for each mode selected. This setting is stored in back-up memory in the event of a power outage or system reset. By default, Keyset is set for Inactive Mode.

## Voice Mail ID Translation

### Programming Steps

1. Press the VMID TRANSLATION flexible button (**FLASH 50, Page B, Button #13**). The following message displays:

VOICEMAIL ID	0000-9999
0100	

2. Enter a VMID number which corresponds to 0000 to 9999.

3. Press HOLD to update the table. A confirmation tone is heard and the display updates.

### Description

The Voice Mail ID Translation feature enables programming of the station number sent to the Voice Mail via In-Band integration. By default, the station number is sent to the Voice Mail system. In station programming, there is a field to insert a 4-digit entry (0000-9999) which can be sent to the Voice Mail system in place of the station number. By default, Station Numbers are assigned as VMID Digits. (Refer to [Chapter 8, Voice Mail ID Digit Length](#).)

## Display Flexible Buttons

### Programming Steps

Press the DISPLAY BUTTONS flexible button (**FLASH 50, Page B, Button #14**) to display programming assignments. The following message displays:

```
BUTTONS XXX - YYY 01D100
02D101 03D103 04D104
```

*XXX = Station Number*

*BB = Button Number*

*YYY = Button Function (Refer to [Table 4-4](#).)*

### Description

Each time the DISPLAY BUTTONS flexible button is subsequently pressed, the next four buttons display starting with the lowest button number.

- When a button is assigned as Flex Button [0], the user can program any features or functions on the buttons to which they have access.
- When the buttons are programmed with user programmed functions, the display shows the function assigned to the button.

**Table 4-4: Flex Button Display Designations**

<b>Flex Button</b>	<b>Designation</b>	<b>Flex Button</b>	<b>Designation</b>
A[AAA]	ACD Group with Pilot Number	MMP	Meet Me Page
ACC	Account Code Enter	MUL	Flexible Button
ACP	All Call Page	MUS	Background Music
ALI	Agent Login	NTS	Night Service
ALO	Agent Logout	OFD	ACD Overflow Station Avail/Unavail
AMD	Agent Member Display	OHP	Off-Hook Preference
ANS	Answering Mach. Emulation Mode	OHV	Off-Hook Voice Over
AOR	Attendant Override (attn)	P[CCC]	Call Park with Park Location
AVL	ACD or UCD Avail/Unavail	PKU	Pickup
CBK	Call Back	PL[GG]	Pool with CO Line Group Number
CID	Caller ID Name / Number Toggle	PPK	Personal Park
CIQ	ACD or UCD Calls in Queue	S[YY]	Speed Dial Button with Bin Number
CO[LLL]	CO Line Button (CO Line [LLL])	SCP	Station Call Park
CQD	ACD Calls in Queue Display	SLI	Supervisor Login
D[XXX]	Station DSS / BLF	SLO	Supervisor Logout
DND	Do Not Disturb	SNR	Save Number Redial
DRG	Distinctive Ringing	STS	Supervisor Status Display
DUA	Display Unanswered Calls	U[UUU]	UCD Group with Pilot Number
EAC	External All Call	UNA	Universal Night Answer
EOR	Executive Override	V[VVV]	VM Group with Pilot Number
EP[N]	External Page with Zone	<p>----- LEGEND -----</p> <p>[AAA] ACD Group Pilot Number</p> <p>[CCC] Call Park Location</p> <p>[GG] Pool or CO Line Group Number</p> <p>[HHH] Hunt Group Number</p> <p>[LLL] CO Line Number</p> <p>[N] Page Zone Number</p> <p>[UUU] UCD Group Pilot Number</p> <p>[VVV] Voice Mail Group Number</p> <p>[XXX] Station Number</p> <p>[YY] Speed Dial Bin</p> <p>[ZZ] Personalized Message Number</p>	
FFW	Incoming Transfer CO Line		
H[HHH]	Hunt Group with Pilot Number		
HLP	Agent Help		
HST	Headset Mode		
IAC	Internal All Call Page		
IP[N]	Internal Page with Zone		
LCR	LCR Access		
LP	Loop		
IAC	Internal All Call Page		
LNR	Last Number Redial		
LQU	Line Queue		
M[ZZ]	Personalized Message w/ Msg Nbr		

## *Cordless KTU Feature Button*

### Programming Steps

Press the CORDLESS KEY flexible button (**Flash 50, Page B, Button #17**) to assign the FEAT Buttons. The following message displays:

CORDLESS KEY BTN	00-30
XX	

*XX = Assigned FEAT Button*

*00 = None*

*01-24 = Button 1-24 (01-30 for Large Screen Display telephone)*

### Description

If a CKTU is associated with the station, the FEAT Button on the CKTU may be assigned to function as any one (1) of the 24 Flexible Buttons on the telephone. This programming area defines which Flexible Button on the telephone will be applied to the CKTU FEAT Button. Not all features are available to be assigned to the CKTU FEAT Button. By default, no button (00) is assigned to the FEAT.

## Page C Introduction

### Programming Steps

1. Press **FLASH** and dial **[50]**. Flexible Button #24 (New Range) is lit and the following message displays:

STATION ATTRIBUTES SELECT A STATION RANGE
--

2. Enter a valid number for the station range to be programmed. To program one station, enter the number twice (100100).



*If the HOLD button is pressed without entering a station range, ALL stations are selected.*

When programming the Page C features, the flexible buttons are mapped as follows:

INTERNAL NO ANSWER FWD * 1 Q	INTERNAL BUSY FWD * 2 W	EXTERNAL NO ANSWER FWD * 3 E	EXTERNAL BUSY FWD * 4 R
NO ANSWER TIMER * 5 T	SPEED DIAL ACCESS * 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	* 18 K	PAGE A * 19 L	PAGE B * 20 ;
PAGE C * 21 Z	NEXT (FWD) * 22 X	NEXT (BACK) * 23 C	NEW RANGE * 24 V

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates. Flexible Button #19 (Page A) is lit.
4. Press Button #21. The display updates to reflect current programming for Page C.

XXX-XXX PAGE C  
ENTER BUTTON NUMBER

*XXX-XXX = Station Range (100-131)*

## Description

Range programming enables the programmer to change a specific parameter or a few parameters for a range of stations, leaving intact the remaining data fields not requiring changes. Those data fields continue to operate with the previously programmed data.

---

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## *Preset Call Forward*

### **Programming Steps**

To program internal and external calls with separate Busy and No Answer destinations, perform the following steps.



*Valid destination entries are:*

*1020-1999 = Speed bins.*

*100-131 = Station numbers.*

*440-447 = Voice mail groups.*

*450-457 = Hunt groups.*

*550-565 = ACD groups.*

### ***Internal No Answer Destination***

1. Press **FLASH 50, Page C, Button #1**. The following message displays:

```
INTERNAL NO ANSWER FWD
###
```

2. Enter a valid number and press HOLD.
3. To delete the entry, press the [#] key and then press HOLD.

### ***Internal Busy Destination***

1. Press **FLASH 50, Page C, Button #2**. The following message displays:

```
INTERNAL BUSY FWD
###
```

2. Enter a valid number and press HOLD.
3. To delete the entry, press the [#] key and then press HOLD.

### ***External No Answer Destination***

1. Press **FLASH 50, Page C, Button #3**. The following message displays:

```
EXTERNAL NO ANSWER FWD
###
```

2. Enter a valid number and press HOLD.
3. To delete the entry, press the [#] key and then press HOLD.

---

---

### *External Busy Destination*

1. Press **FLASH 50, Page C, Button #4**. The following message displays:

EXTERNAL BUSY FWD ###
--------------------------

2. Enter a valid number and press HOLD.
3. To delete the entry, press the [#] key and then press HOLD.

### *No Answer Timer*

1. Press **FLASH 50, Page C, Button #5**. The following message displays:

NO ANSWER TIMER	00-99
10	

2. Enter a valid number (00-99) and press HOLD (00=disable).

### **Description**

The Preset Call Forward feature provides separate Busy and No Answer destinations for internal and external calls with a No Answer Timer associated to each station. External calls ringing that particular station, transferred calls, and internal calls follow this Preset Forward feature. By default, the Timer is set at 10 seconds.

### *Conditions*

Station Forwarding overrides the Preset Forward settings.

## *Speed Dial Access*

### **Programming Steps**

1. Press the SPEED DIAL ACCESS button (**FLASH 50, PAGE C, Button #6**). The following message displays:

SYS SPEED BIN	100-999
### - ###	

2. Enter a range of speed bins to be allowed (100-999).
3. Press HOLD to save the entry.

### **Description**

The System Speed Dial Access feature has 900 entries available (with expanded memory). A station can be allowed or denied access to bins 100-999. Stations may be granted the ability to dial all Speed Dial Numbers within the range.

## *Flexible Numbering Assignment*

### **Programming Steps**

Press **FLASH** and dial **[52]**. The following message displays:

FIX: 100	FLEX: 100
NAME: STATION 100	

### ***Selecting a Fixed or Flexible Code***

1. Press Button 24 (Fixed) or Button 21 (Flex).
2. Enter the desired code to change.
3. Press HOLD. The Fixed and Flex Number as well as a description of the code displays on the LCD.



*You can scroll through Fixed Codes by using the PREVIOUS button (23) or the NEXT button (22).*

### ***Changing a Flexible Code***

1. Select the desired code.
2. Press Button 1. The red LED illuminates.
3. Delete the Flex Number by pressing Button 2 and then pressing HOLD. The Flex number field will be blank
4. Enter the new code (2-4 digits).
5. Press HOLD.



*Station/Pilot numbers can only contain 0-9.*

*Feature codes can contain 0-9, \*, #.*

### ***Erasing a Flexible Code***

1. Select the desired code, then press Button 1 (must be lit).
2. Press Button 2, then press HOLD.

### **Description**

The Flexible Numbering feature allows the system numbering plan to be modified from its default value to accommodate specific customer requirements. Station, Pilot, and Feature Access Code numbers may be changed with this feature. The length of these numbers may also be modified to meet specific customer applications. The buttons on the key telephone are defined as shown when entering the Flexible Numbering Assignment feature programming area:

CHANGE FLEXIBLE CODE * 1 Q	ERASE FLEXIBLE CODE * 2 W	* 3 E	* 4 R
* 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	* 18 K	* 19 L	* 20 ;
NEW FLEXIBLE CODE ENTRY * 21 Z	NEXT FIXED CODE ENTRY * 22 X	PREVIOUS FIXED CODE ENTRY * 23 C	NEW FIXED CODE ENTRY * 24 V

***Conditions***

- ❑ Feature access codes cannot conflict with station numbering.
- ❑ CO line numbers are fixed and cannot be changed.
- ❑ If no VM ID digits are programmed in the station field, the flexible number assigned to the station will be sent to the VM unit.
- ❑ The SMDR will output 4-digit numbers in the station field. If less than 4 digits is selected in the numbering plan, leading spaces will be added in place of the numbers. The 3-4 digit SMDR programming area will be removed from programming.
- ❑ The Discovery ACD event trace source and destination fields will be 4 digits. Station numbers less than 4 digits will be prefixed with leading zeros.
- ❑ The programming will print out as part of the CO-STA port programming area. The flexible numbering can be initialized in the CO-STA initialization area.
- ❑ If programming with a telephone – All programming will be done using Fixed Codes, regardless of the flexible codes.  
EXAMPLE: If a station has been renumbered from 4500-4531, in programming they are still referred to as 100-131.
- ❑ The leading digit feature is removed in FP3. The leading digit feature is replaced by networking feature (FLASH 16).

Table 4-5: Default Numbering Plan

Function	Code	Function	Code	Function	Code
911 Atnd Alert Clear	608	Call Park - Station	439	Name In Display	690
Account Code	627	Call Park P/U - Station	#6	Night Service	604
ACD Call Factor	580	Camp On	620	Off-Hook Preference Prog	691
ACD Call Qualifier	570	Cancel LCR Queue	626	OHVO	628
ACD Group 1-16	550-565	Clear Fwd, DND, Msg	662	One Touch Record	649
ACD CIQ Display Btn	579	Clear VM Alarm	656	Page - All Call	700
ACD CIQ Status Disp	567	CO Line Direct Access	88	Page - Ext Zone All, 1, 2	760-762
ACD Help	574	CO Line Group 0-23	800-823	Page - Int Zone 1-8, All	701-709
ACD Member Display	573	CO Line Queue	621	Page - Meet Me (Ans)	770
ACD Overflow Avail/Unav	578	Conference	624	Pause/Resume Rec	655
ACD PRI Login	572	Custom Msg	694	Personalized Msgs	633
ACD PRI Logout	571	Dial By Name	6*	Pickup Park Group 1-8	#430-#437
ACD Sec Login	582	Directory Dial	680	Pool All	824
ACD Sec Logout	581	Dir List Pgm Code	693	Release	641
ACD Supv Disp	577	Distinctive Ring	695	Repeat Redial	643
ACD Supv Login	576	Do Not Disturb	631	Save Number Redial	[SPEED]+[*]
ACD Supv Logout	575	DTMF Receiver Test	657	Set Clock	692
ACD/UCD Avail/Unav	566	Executive Override	625	SLT Directed Call P/U	#1
Ans Machine Ring	6540	Flash	660	SLT Message Wait Return	663
Ans Machine Spkr	6541	Group Call Pickup	#0	SLT Conference Park	664
Atnd Clear T-1 Alarm	606	Headset Mode	634	SLT Speed Dial	668
Atnd Disable CO Line	602	HPT	667	SLT Speed Prog	661
Atnd Off-Net Forward	603	Hunt Group 1-8	450-457	Station 100-131	100-131
Atnd Override	601	ICLID Ans Call	659	Station Relocate	636
Atnd Unans CO Call Xfer	639	ICLID Name/Number	653	Stop Trace	658
Atnd Unavailable	607	ICLID Unans Call	635	Telecenter Adm	652
Attendant	0	Intercom Button	645	Telecenter Ext	650
Background Music	632	Keyset Mode	648	Tone Ring	6#
Call Back	622	Last Number Redial	[SPEED]+[#]	UNA/UDA	#5
Call Coverage	647	LCR	800	VM Group 1-8	440-447
Call Coverage Ring	646	Loop Key (Reqs Btn)	89	VM Msg Cancel	421
Call Forward	640	Mailbox Button	644	VM Msg Set	420
Call Forward Override	5#	Modem	499	VM Msg Set W/Count	422
Call Forward - Remote	642	MPB Version	605	Volume	638
Call Park - Group 1-8	430-437	Msg Wait	623		
Call Park - Personal	438	Mute	629		



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# 5 ICLID (Caller ID) Route Programming

This chapter provides the functional and implementation definitions for adding the ICLID features to the *STARPLUS Triad-S* System.



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## Introduction

ICLID, or Caller ID, is a service provided from the telephone company. Usually this service provides the number and name (not available in some cases) of the calling party for identification prior to answering the call. Calling party number and name are delivered in between this first and second ring using FSK (Frequency Shift Key) format.

For this feature to operate properly, it must be activated from the Central Office so the numbers or name, if available, of the calling party are delivered over the individual tip and ring of the CO lines during the first silent interval between ringing.

### *Calling Number / Name Display*

Whenever an incoming call is received at the system, the number received with the ringing signal is stored in the line control tables and used during the call processing.



*If two lines are ringing at the same time, the display shows the oldest line information. After one of the lines is answered, the display shows the information on the unanswered lines.*

The *Triad-S* System can use the Caller ID information to display the number and/or name of the calling party on the system telephone display. By default, the system displays the telephone number of the caller. The system can be changed to display the name (if provided) in place of the telephone number.

The system also offers a Number/Name Translation Table. This allows numbers to be matched to names in a system table. If a name/number from the telephone company matches an entry in the table, the name programming in the table is presented in place of the name provided from the telephone company.

00000000111111112222
123456789012345678901234

---

---

bbbbbNNNNNNNNNNNNNNNNNNNNbbbb

OR

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

If no name is available, supplied from the Central Office or internally from the translation table, the delivered number is positioned centered in the display as shown above for the 14 Ns.

An option was added to the Local Number/Name Translation Table to route ICLID or Caller Entered ID Digits based on a partial compare with the number entered in the translation table.

### *Incoming Number/Name for SMDR Records*

When the Incoming Number/Name feature is implemented, the system operates normally in the absence of ICLID information or the failure of the ICLID equipment. If the information is present at the time that an SMDR record is generated for a call, it alters the content and format of the SMDR output record.

- If the calling number is available, the number is output in the SMDR record in the same location as the dialed number is located in the outgoing call record.
- If the calling name is present, an additional line is output in the SMDR identifying the name. This record immediately follows the normal SMDR record. The normal SMDR record includes an indicator that states the following record with name identification is present.

Unanswered calls are recorded in the SMDR record for incoming calls with a U indicator to provide caller identification for statistical and callback purposes.

## ICLID Features

### Programming Steps

1. Press **FLASH** and dial **[56]**. The following message displays:

ICLID	NAME	BAUD	PORT
NO	YES	9600	1

2. To program ICLID features, use the flexible button(s) as defined in the following procedures.

Button # 1 = Disable/Enable

Button # 2 = Name In Display

Button # 3 = Baud Rate Display

Button # 4 = Port Assignment

3. After all entries are made, press HOLD to accept the data.

### Description

The *Triad-S* System provides ICLID input on the RS-232C connector on the optional MISU. When ICLID is desired, the following system-wide parameters determine how the ICLID information is distributed. When entering the ICLID features programming area the buttons on the digital telephone are defined as shown below:

ENABLE / DISABLE ☼ [ 1 ] Q	NAME ☼ [ 2 ] W	BAUD RATE ☼ [ 3 ] E	PORT ☼ [ 4 ] R
----------------------------------	-------------------	---------------------------	-------------------

### *Enable / Disable*

#### Programming Steps

1. Press the DISABLE/ENABLE flexible button (**FLASH 56, Button #1**).
2. Enter a valid number (0 or 1) on the dial pad to enable/disable this feature.
  - [0] = Disabled
  - [1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard.

---

---

## Description

The ICLID (Incoming Calling Line Identification) feature was added to the *Triad-S* System, and are unavailable unless the Basic ICLID Software package was purchased separately. For this feature to operate properly, it must be activated from the Central Office so the numbers of the calling party are delivered over the individual tip and ring of the CO lines during the first silent interval between ringing. By default, ICLID is disabled.

### *Name in Display*

#### Programming Steps

1. Press the NAME flexible button (**FLASH 56, Button #2**) to determine whether the name shows in the LCD display instead of the incoming telephone number.
2. Enter a 0 or 1 on the dial pad.  
[0] = Telephone number in display  
[1] = Name in display
3. Press HOLD to save the entry. A confirmation tone is heard.

#### Description

The system can be set to display the incoming telephone number or the person's name on the LCD display. By default, the system shows the telephone number on the LCD display.

### *Baud Rate Display*

#### Programming Steps

The ICLID baud rate is programmed using **FLASH 15** Baud Rate assignments. The LCD displays the current baud rate based on which number is assigned to the ICLID Port number.



*When FLASH 56, Button #3 is pressed, an error tone is received.*

#### Description

The *Triad-S* System can provide ICLID input on the standard RS-232C on the optional MISU. The baud rate is displayed as 150, 300, 600, 1200, 2400, 4800, or 9600 baud. The default is 9600 baud.

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## *Port Assignment*

### **Programming Steps**

1. Press the PORT flexible button (**FLASH 56, Button #4**) to determine which port to use for ICLID information.
2. Enter a valid number for one of the ICLID Ports:
  - [1] = Port # 1 (RS-232C on optional MISU)
  - [2] = Port # 2 (RS-232C on optional MISU)
  - [3] = Port # 3 (Optional modem)

ICLID	NAME	BAUD	PORT
NO	YES	9600	1

(LCD displays current baud rate assigned to the ICLID Port number.)

3. Press HOLD to accept the data. A confirmation tone is heard and the display updates.

By default, the On-Board Modem baud rate is 2400 Baud.



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# 6

## **Automatic Call Distribution (ACD)**

The ACD Group feature is available with optional software.



# ACD Group Programming

## Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

1. Press **FLASH** and dial **[60]**.
2. Enter the group number (550-565) on the dial pad.
3. Press **HOLD** to save the entry. A confirmation tone is heard and the display updates.

## Description

There can be 16 ACD groups of up to 252 stations each. The ACD groups use a pilot hunting technique. If the pilot number is dialed, the assigned stations in that ACD group are searched for the station in an idle condition for the longest period of time. Each ACD Group may have an assigned Alternate ACD Group, an Overflow Station, and up to 252 stations as ACD members. The eight system RAN ports (tables) may also be referenced on a per ACD group basis. By default, ACD Group Tables are empty.

The buttons on the digital telephone are defined as shown:

GROUP NAME * 1 Q	ALTERNATE GROUP * 2 W	OVERFLOW STATION * 3 E	SUPERVISOR * 4 R
CIQ THRESHOLD * 5 T	WRAP-UP TIMER * 6 Y	PRIMARY AGENTS * 7 U	SECONDARY AGENTS * 8 I
GUARANTEED RAN * 9 O	PRIMARY RAN * 10 P	SECONDARY RAN * 11 A	TRANSFERRED RAN * 12 S
OVERFLOW TIMER * 13 D	CALL FACTOR * 14 F	* 15 G	* 16 H
* 17 J	* 18 K	* 19 L	* 20 ;
* 21 Z	PREVIOUS GROUP * 22 X	NEXT GROUP * 23 C	NEW RANGE * 24 V

## ACD Group Name

### Programming Steps

1. Press the GROUP NAME flexible button (**FLASH 60, Button #1**). The following message displays:

ACD5XX NAME  
ACD5XX

2. Enter the desired name using the dial pad (up to eight characters).

**Table 6-1: Dial Pad Keys**

			Other Codes			
1	A-21 B-22 C-23	D-31 E-32 F-33	1 = 1#	8 = 8#	= 01	* = *#
G-41 H-42 I-43	J-51 K-52 L-53	M-61 N-62 O-63	2 = 2#	9 = 9#	, = 02	( = #1
P-71 R-72 S-73 Q-74	T-81 U-82 V-83	W-91 X-92 Y-93 Z-94	3 = 3#	0 = 0#	? = 03	) = #2
*	OPER 0	#	4 = 4#	Space = 11	/ = 04	+ = #3
			5 = 5#	: = 12	! = *1	== #4
			6 = 6#	- = 13	\$ = *2	# = ##
			7 = 7#	' = 14	& = *4	. = 24

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

A Group Name can be assigned to each of the 16 ACD groups to provide each with a unique identification. A Group Name only appears during a ringing ACD call. A Group Name is not presented on an idle display.

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## *Alternate ACD Group Assignment*

### **Programming Steps**

1. Press the ALTERNATE GROUP flexible button (**FLASH 60, Button #2**).  
The following message displays:

ACD5XX ALTERNATE GROUP  
XXX

2. Enter desired pilot number (550 to 565) of the alternate ACD group.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### *Deleting an Alternate ACD Group*

1. Press [#] three times.
2. Then press the HOLD button.

### **Description**

An Alternate ACD Group can be programmed so if no station in a group is available, the alternate group is checked for an available station. This provides a way to chain or link ACD groups together.

## *ACD Overflow Station Assignment*

### **Programming Steps**

1. Press the OVERFLOW ASSIGN flexible button (**FLASH 60, Button #3**).
2. Enter a valid station number to designate the ACD Group's overflow station.

ACD5XX OVERFLOW STATION  
XXX

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### *Deleting an ACD Overflow Station*

1. Press [#] three times.
2. Then press the HOLD button.

## Description

When an overflow station is assigned, callers that remain in queue for a specified amount of time are routed to the assigned overflow station. The overflow station may not be one of the ACD group stations. Only CO calls transferred to a ACD group overflow to the overflow station when RAN tables are assigned.

## *ACD Supervisor*

### Programming Steps

1. Press the ACD SUPV flexible button (**FLASH 60, Button #4**).
2. Enter a valid station number of the desired ACD Supervisor station.

ACD5XX SUPERVISOR STA  
XXX

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### *Deleting an ACD Supervisor Station*

1. Press [#] three times.
2. Then press the HOLD button.

## Description

The ACD Supervisor Station assignment feature provides a means to assign each ACD group a supervisor. This Supervisor Station can receive the calls in queue display in real time, receives No Answer/Out of Service conditions, HELP displays from the groups to which the supervisor is assigned, and can barge-in on active calls in their ACD Group or groups.

A supervisor can be assigned in ADMIN to a group or groups to receive the help request and out of service (OOS) messages. If a supervisor station is assigned in ADMIN, it is considered logged in. A supervisor can dial a supervisor login code [576] followed by the ACD group that the supervisor is logging into and their 4-digit Agent ID number.

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## *ACD CIQ Threshold*

### **Programming Steps**

1. Press the CIQ THRESHOLD flexible button (**FLASH 60, Button #5**).  
The following message displays:

ACD5XX CIQ THRS HOLD	00-99
00	

2. Enter a valid value on the dial pad that corresponds to 00–99 calls.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

The ACD CIQ Threshold feature determines how many calls appear in queue before the LED flashes at 240 ipm flutter. Once the number of calls in queue falls below the CIQ threshold, the LED extinguishes. By default, this feature is disabled.

### **Conditions**

- Any ACD station can have a button assigned to view the calls in queue of any ACD group.
- The CIQ flexible button (579+5XX) must be assigned on the telephone(s).

## *ACD Auto Wrap-Up Timer*

### **Programming Steps**

1. Press the WRAP-UP TIMER flexible button (**FLASH 60, Button #6**).  
The following message displays:

ACD5XX WRAP-UP	000-999
004	

2. Enter a valid number on the dial pad which corresponds to 000–999 seconds (000=disable).
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

After completion of a ACD call (on-hook) the agent is not subjected to another ACD call for the duration of the Auto Wrap-Up Timer allowing the agent to finish call related work or access other facilities. This lets agents remove themselves from the group (e.g., DND, Call Forward) or originate another call. By default, the ACD Auto Wrap-Up Timer is set for 4 seconds and is variable from 000-999 seconds.

## Primary Agents

### Programming Steps

1. Press the PRIMARY AGENT flexible button (**FLASH 60, Button #7**). The following message displays:

ACD5XX PRIMARY AGENTS  
END

2. To **add** a station as a primary agent of the ACD group:
  - Enter SSS 1 (SSS = station).
  - Press the HOLD button.
3. To **delete** a station from being a primary agent of the ACD group:
  - Enter SSS 0 (SSS = station).
  - Press HOLD to save the entry. A confirmation tone is heard and the display updates.
4. To **view** primary agents in the ACD group, press button #7. (Each depression toggles through seven agents at a time.)

## Description

The Primary Agent Assignment feature allows the stations serving as primary agents to be entered into the ACD group. Agents can login to both a primary and secondary group. A primary agent's ACD calls from their primary group are always presented ahead of any ACD calls in their secondary group.



*Overflow Station Forward (Flash 06, Button #6) allows/disallows excess calls to be forwarded to another station.*

*ACD Agent Recall (Flash 06, Button #12) allows/disallows calls that have been transferred from an ACD Agent to recall the Agent.*

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## *Secondary Agents*

### **Programming Steps**

1. Press the SECONDARY AGENT flexible button (**FLASH 60, Button #8**).  
The following message displays:

ACD5XX SECONDARY AGENTS  
END

2. To **add** a station as a secondary agent of the ACD group, use the dial pad as follows:
  - Enter SSS 1 (SSS = station).
  - Press HOLD.
3. To **delete** a station from being a secondary agent of the ACD group, use the dial pad as follows:
  - Enter SSS 0 (SSS = station).
  - Press HOLD to save the entry. A confirmation tone is heard and the display updates.
4. To **view** secondary agents in the ACD group, press button #7. (Each depression toggles through seven agents at a time.)

### **Description**

The Secondary Agent Assignment feature allows the stations serving as secondary agents to be entered into the ACD group. Agents can login to both a primary and secondary group. A primary agent's ACD calls from their primary group are always presented ahead of any ACD calls in their secondary group.

## *Guaranteed RAN*

### **Programming Steps**

1. Press the GUARANTEED RAN flexible button (**FLASH 60, Button #9**).  
The following message displays:

ACD5XX GUARANTEED RAN      1-8  
X

2. Enter a valid number (1-8 for) the desired RAN Announcement Table or a (#) to remove the entry.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

A Guaranteed Message announcement may be assigned to the group to force callers to listen to the announcement prior to entering the queue or ringing an agent.

Callers listening to this type of announcement may dial digits (up to 14) using their dial pad. These digits can then be compared against the Local Number/Name Translation Table and routed to destinations based on table overrides. These digits (or a translation table entry's digit/name) then show on an agent's display as calling number identification digits.

This RAN function is only used for incoming CO calls to ACD Groups.

## *Primary RAN*

### Programming Steps

1. Press the PRIMARY RAN flexible button (**FLASH 60, Button #10**). The following message displays:

ACD5XX PRIMARY RAN	1-8
X	

2. Enter a valid number (1-8) for the desired RAN Announcement Table or a (#) to remove the entry.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

A Primary Message Announcement may be assigned to the group. This message is the first one presented to the caller, if the guaranteed message has not been enabled and the call has been transferred to the ACD Group.

This message plays after the Message Interval Timer expires and no agents are available.

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## *Secondary RAN*

### **Programming Steps**

1. Press the SECONDARY RAN flexible button (**FLASH 60, Button #11**). The following message displays:

ACD5XX	SECONDARY RAN	1-8
X		

2. Enter a valid number (1-8) for the desired RAN Announcement Table or a (#) to remove the entry.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

A Secondary Message Announcement may be assigned to the group. This announcement can be used for follow-up information after the Primary messages.

## *Transferred RAN*

### **Programming Steps**

1. Press the TRANSFERRED RAN flexible button (**FLASH 60, Button #12**). The following message displays:

ACD5XX	XFER RAN	1-8
X		

2. Enter a valid number (1-8) for the desired RAN Announcement Table or a (#) to remove the entry.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

The Transferred RAN Message is for CO callers who are transferred to an ACD group. This forces callers transferred to an ACD Group to listen to the announcement prior to entering the queue or ringing an agent.

## *ACD Overflow Timer*

### **Programming Steps**

1. Press the OVERFLOW TIMER flexible button (**FLASH 60, Button #13**). The following message displays:

ACD5XX OVERFLOW 060	000-600
------------------------	---------

2. Enter a valid number on the dial pad which corresponds to 000–600 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

The ACD Overflow Timer determines the total length of time a caller remains in queue for a particular ACD group. When the timer expires, the caller is routed to the designated overflow station.

The timer starts when an incoming call is answered and presented to the first recorded announcement. Transferred CO callers overflow at the expiration of the Overflow Timer.

By default, the ACD Overflow Timer is set for 60 seconds and is variable from 000–600 seconds.

## *Call Factor*

### **Programming Steps**

1. Press the CALL FACTOR flexible button (**FLASH 60, Button #14**). The following message displays:

ACD5XX CALL FACTOR XXX	0-999
---------------------------	-------

2. Enter a valid number (0-999 minutes) for the desired call factor time. (0 disables this function.)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Call Factor feature is used exclusively with the digital voice mail to provide the average call duration to the caller. This feature can be activated from administration or the ACD supervisor can use a flexible button [580]+5XX (ACD Group number)+XXX (Call Factor) to enter the factor (average call duration).

The following formula is used to calculate the average call duration:

$$\frac{\text{Place in Queue} \times \text{Call Factor}}{\text{Number of Agents Logged into Group}}$$

## ACD Timers

### Programming Steps

Press **FLASH** and dial **[6 1]**. The following message displays:

ACD TIMERS  
ENTER BUTTON NUMBER

### Description

Six timers for ACD operation are programmable on a system-wide basis. The ACD timers include: A Ring Timer, Message Interval Timer, an Overflow Timer (Flash 60, Button #13), a No/Answer Recall Timer, a No/Answer Retry Timer, and a Guaranteed Message Timer. Each timer is described in the following section.

The buttons on the digital telephone are defined as shown when entering the ACD Timers programming area:

RING TIMER * <input type="text" value="1"/> <input type="text" value="Q"/>	MIT TIMER * <input type="text" value="2"/> <input type="text" value="W"/>	* <input type="text" value="3"/> <input type="text" value="E"/>	* <input type="text" value="4"/> <input type="text" value="R"/>
NO-ANSWER RECALL * <input type="text" value="5"/> <input type="text" value="T"/>	NO-ANSWER RETRY * <input type="text" value="6"/> <input type="text" value="Y"/>	GUARANTEED MSGTIMER * <input type="text" value="7"/> <input type="text" value="U"/>	* <input type="text" value="8"/> <input type="text" value="I"/>

## ACD Ring Timer

### Programming Steps

1. Press the RING TIMER flexible button (**FLASH 61, Button #1**). The following message displays:

RING	000-300
060	

2. Enter a valid number on the dial pad which corresponds to 000-300 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The ACD Ring Timer determines how long a call rings into a busy ACD group before being presented to the first recorded announcement. By default, the ACD Ring Timer is set for 60 seconds, and is variable from 000–300 seconds.



*A RAN Table must be specified in ACD programming. If a RAN Table is NOT specified, incoming CO callers are not answered but continue to receive ringback.*

## ACD Message Interval Timer

### Programming Steps

1. Press the MIT TIMER flexible button (**FLASH 61, Button #2**). The following message displays:

MESSAGE INTERVAL	000-600
060	

2. Enter a valid number on the dial pad which corresponds to 000-600 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.



*The ACD Ring and Message Interval timers only apply when RAN ports are specified. If RAN ports are not specified, incoming callers continue to receive a ringback tone.*

## Description

The ACD Message Interval Timer (MIT) determines the length of time a caller remains in queue (listening to MOH, if provided) between recorded announcements. By default, the ACD Message Interval Timer is set for 60 seconds and is variable from 000-600 seconds.

### *ACD No-Answer Recall Timer*

#### Programming Steps

1. Press the NO-ANSWER RECALL TIMER flexible button (**FLASH 61, Button #5**). The following message displays:

NO - ANS RECALL	000-300
000	

2. Enter a valid number on the dial pad which corresponds to 000-300 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

If a call routed to a station via ACD is not answered by the ACD Agent/Station before the No-Answer Recall Timer expires, the call is returned to ACD Queue with the highest priority. In addition, the station that failed to answer the ringing ACD call is placed into an out-of-service (OOS) state. By default, the ACD No-Answer Timer is at 000 (disabled) and is variable from 000–300 seconds.

### *ACD No-Answer Retry Timer*

#### Programming Steps

1. Press the NO-ANSWER RETRY TIMER flexible button (**FLASH 61, Button #6**). The following message displays:

NO ANSWER RETRY	000-999
300	

2. Enter a valid number on the dial pad which corresponds to 000-999 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

When the No-Answer Recall Timer expires, a station that failed to answer the ringing ACD call is placed into an out-of-service (OOS) state. The station that was taken out-of-service (OOS) is placed back in service if the agent presses the available flex button or dials the available flex code. The agent is placed back in service if the No-Answer Retry Timer expires. If the agent does not answer their next ACD call, they are taken out-of-service. This cycle continues until the station answers calls, logs out, or goes unavailable.

By default, the ACD No-Answer Retry Timer is set for 300 seconds and is variable from 000–999 seconds.

## *Guaranteed Message Timer*

### Programming Steps

1. Press the GUARANTEED MESSAGE TIMER flexible button (**FLASH 61, Button #7**). The following message displays:

GUARANTEED MSG 005	000-300
-----------------------	---------

2. Enter a valid number on the dial pad which corresponds to 000-300 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Guaranteed Message Timer determines how long a call rings before being answered by Guaranteed Message RAN when the Guaranteed Message RAN feature is added to an ACD Group.

By default, the Guaranteed Message Timer is set for 5 seconds and is variable from 000-300 seconds.

## ACD Announcement Tables (RAN)

### Programming Steps

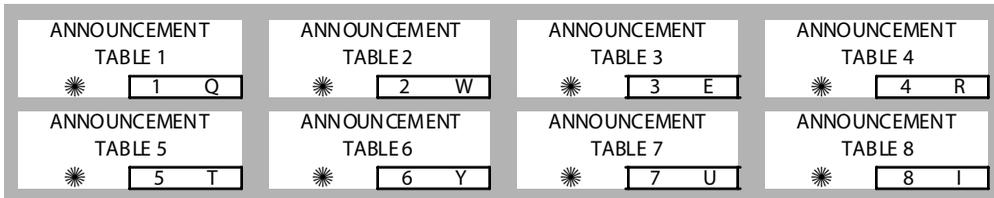
If Recorded Announcement (RAN) devices are installed to operate with ACD, these tables must be programmed.

1. Press **FLASH** and dial **[62]**. The following message displays:

```
ANNOUNCEMENT TABLE 1
TYPE #   INDX ###   TIME ###
```

The top left button in the flexible button field is lit for programming ACD RAN Announcement Table #1.

2. To change to another ACD RAN Announcement Table, press **FLASH 62** and a flexible button 2-8 for Tables 2-8 respectively.



#### *To program a table for a CO line port:*

1. Press the TABLE X flexible button (1-8).
2. Dial [1] for CO Port Interface.
3. Dial [**001-012**] for CO Lines used.
4. Enter message duration (000-300 seconds).
5. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### *To program a table for an SLT port:*

1. Press the TABLE X flexible button (1-8).
2. Dial [2] for SLT Port Interface.
3. Dial [**100-131**] for *Triad-S* SLT stations used.
4. Enter message duration (000-300 seconds).
5. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

***To program a table for a RAN Hunt Group port:***

1. Press the TABLE X flexible button (1-8).
2. Dial [3] for RAN Hunt Group.
3. Dial [458-461] for RAN Hunt Group used.
4. Enter message duration (000-300 seconds).
5. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

***To program a table for Digital Voice Mail:***

1. Press the TABLE X flexible button (1-8).
2. Dial [4] for the Digital Voice Mail function.
3. Dial [44X] (X=0-7) for the Voice Mail Group.
4. Dial a three-digit menu number [000-999].
5. Dial [0-9].
  - 0 = No DTMF Detection, No Messages Played. (Default)
  - 1 = DTMF Detection, No Message.
  - 2 = No DTMF, Place In Queue Message.
  - 3 = DTMF Detection, Place In Queue Message.
  - 4 = No DTMF, Hold Time Message.
  - 5 = DTMF Detection, Hold Time Message.
  - 6 = No DTMF, Both Messages.
  - 7 = DTMF Detection, Both Messages.
  - 8 = Not used at this time.
  - 9 = Not used at this time.
6. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

***Clearing Entries***

1. Press the [#] button.
2. Then press HOLD.

**Description**

Determines the type, index (port) number and message length for the eight available Recorded Announcements (RAN). There are eight RAN Tables that can be programmed. Table 1 can be the answer port for unanswered incoming calls to an ACD group.

The type can be either a CO line port, an SLT port, Digital Voice Mail, or a RAN Hunt Group port. The index number specifies which circuit for the type of interface. The message length is used to match the maximum length of the message to the device that is used.

**Digital Voice Mail** can be used as a RAN Announcer for ACD Groups. A menu is provided to play the announcement, as well as collect DTMF digits and route the caller to an alternate destination. In addition, a place in queue and an average hold time message can be played to the caller. The ability to detect DTMF, play average hold time, and place in queue are all programmable in this area.

When using the Digital Voice Mail as a RAN Announcer, the following options are available:

**Table 6-2: Voice Mail RAN Announcer Options**

Option	Action
0	Do NOT take a menu action on any DTMF dialed by the caller; DO NOT play Place in Queue or Hold Time message. (Default)
1	Take menu action only on DTMF dialed by the caller; DO NOT play Place in Queue or Hold Time message.
2	DO NOT take menu action on any DTFM dialed by user; play the Place in Queue message only.
3	Take menu action on DTMF; play the Place in Queue message.
4	DO NOT take menu action on any DTFM dialed by user; play the Hold Time Message only.
5	Take menu action on DTMF; play Hold Time message.
6	DO NOT take menu action on any DTFM dialed by user; play the Place in Queue and Hold Time message. (No Message Duration for type [4] entries is required.)
7	Take menu action on DTMF; play the Place in Queue and Hold Time message.
8-9	Not used at this time



*DVM software version must be 2.89 or greater to have RAN functionality.*

## PC / ACD Interface Trace

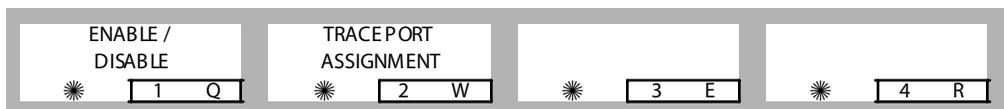
### Programming Steps

Press FLASH and dial [63]. The following message displays:

ACD _ EVT _ TRACE	I/O	BAUD
NO	1	9600

### Description

The PC/ACD Interface Trace feature is available with optional software. The PC/ACD Interface Trace feature provides an event trace output which is compatible with Discovery ACD Reporting package. The buttons on the digital telephone are defined as shown when entering the PC/ACD Event Trace feature programming area:



### Enable / Disable

#### Programming Steps

1. Press the DISABLE/ENABLE flexible button (**FLASH 63, Button #1**). The following message displays:

ACD _ EVT _ TRACE	I/O	BAUD
YES	1	9600

2. Press the ENABLE/DISABLE flexible button.  
LED On = YES (Enabled)  
LED Off = NO (Disabled)
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The PC/ACD Interface Trace provides a series of events trace output which is compatible with the Discovery ACD Reporting package. By default, the PC/ACD Event Trace is disabled (NO).

### Trace Port Assignment

#### Programming Steps

1. Press the TRACE PORT ASSIGNMENT flexible button (**FLASH 63, Button #2**) to determine the port to use for PC/ACD Interface Trace.
2. Enter a valid number for the PC/ACD Event Trace Port number:
  - [1] = Port #1 (MPB On-Board RS-232-C)
  - [2] = Port #2 (On-Board Modem)
  - [3] = Port #3 Serial Interface Unit (SIU2)
  - [4] = Port #4 Serial Interface Unit (SIU2)

The LCD displays the current baud rate based on which Port number is assigned to the ACD SMDR Port number (default is Port #1).

ACD _ EVT _ TRACE	I/O	BAUD
NO	1	9600

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

By default, the trace port assignment is set to 1.

### Baud Rate Display

#### Programming Steps

The PC/ACD Port Baud Rate is programmed using **FLASH 15** baud rate assignments. The LCD displays the current baud rate based on which Port number is assigned to the ACD SMDR Port number. The following message displays:

PORT	BAUD
1	9600

### **Description**

The system can provide PC/ACD Reporting output to the standard RS232C I/O ports on the MPB or the optional SIU2 module connector(s). The baud rate is displayed as 300, 1200, 2400, 4800, or 9600 baud. By default, the PC/ACD baud rate is set to 9600.

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# 7

# Uniform Call Distribution (UCD)

This chapter provides the functional steps necessary to use the UCD features with the *STARPLUS Triad-S* System. To implement the call coverage desired, you must first enter the Programming Mode.



# UCD Group Programming

## Programming Steps

1. Press **FLASH** and dial **[60]**. The following message displays:

UCD ATTRIBUTES  
SELECT A GROUP

2. Enter the group number (550-557), then press HOLD.

## Description

There can be eight UCD Groups of no more than eight stations each. The UCD Groups use a pilot hunting technique. If the pilot number is dialed, the assigned stations in that UCD Group are searched for the station which has been in an idle condition for the longest time period.

Each UCD Group may have an assigned Alternate UCD Group, an Overflow Station, and up to eight stations as UCD members. The two system RAN ports (tables) may also be referenced on a per UCD Group basis. By default, UCD Group Tables are empty. The buttons on the digital telephone are defined as shown when entering the UCD Group(s) programming area:

*	ALTERNATE UCD GROUP	UCD OVERFLOW ASSIGN	
1	2	3	4
Q	W	E	R
*		PRIMARY AGENTS	
5	6	7	8
T	Y	U	I
*	PRIMARY RAN	SECONDARY RAN	
9	10	11	12
O	P	A	S
*			
13	14	15	16
D	F	G	H
*	PREVIOUS GROUP	NEXT GROUP	NEW RANGE
17	18	19	20
J	K	L	;
*			
21	22	23	24
Z	X	C	V

## *Alternate UCD Group Assignment*

### **Programming Steps**

1. Press the ALTERNATE UCD GROUP flexible button (**FLASH 60, Button #2**).
2. Enter the pilot number (550 to 557) for desired Alternate UCD Group.

UCD5XX ALTERNATE GROUP  
XXX

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### *Deleting an Alternate UCD Group*

1. Press [#] three times.
2. Then press the HOLD button.

### **Description**

An Alternate UCD Group can be programmed so if no station in a group is available, the alternate group is checked for an available station. This provides a way to chain or link UCD Groups together.

## *UCD Overflow Station Assignment*

### **Programming Steps**

1. Press the OVERFLOW ASSIGN flexible button (**FLASH 60, Button #3**).
2. Enter a station number to designate the UCD Groups Overflow Station.

UCD5XX OVERFLOW STATION  
XXX

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### *Deleting an UCD Overflow Station*

1. Press [#] three times.
2. Then press the HOLD button.

---

---

## Description

When an Overflow Station is assigned, callers that remain in queue for a specified amount of time are routed to the assigned Overflow Station. The Overflow Station MAY NOT be one of the UCD Group stations. Only CO calls transferred to a UCD Group, overflow to the Overflow Station when RAN Tables are assigned.

## *UCD Primary Agent Assignments*

### Programming Steps

1. Press the PRIMARY AGENT flexible button (**FLASH 60, Button #7**). The following message displays:

UCD5XX PRIMARY AGENTS  
XXX XXX XXX XXX XXX XXX

2. To **add** a station as a primary agent of the UCD group, use the dial pad as follows:
  - Enter SSS 1 (SSS = station).
  - Press the HOLD button.
3. To **delete** a station from being a primary agent of the UCD group, use the dial pad as follows:
  - Enter SSS 0 (SSS = station).
  - Press HOLD to save the entry. A confirmation tone is heard and the display updates.
4. To **view** primary agents in the UCD group, press button #7.

## Description

The Primary Agent Assignment feature allows the stations serving as primary agents to be entered into the UCD group. Up to 8 UCD Agents can be entered into a Group.

---

---

## *UCD Primary RAN Assignments*

### **Programming Steps**

1. Press the PRIMARY RAN flexible button (**FLASH 60, Button #10**).

UCD5XX PRIMARY RAN	1-8
X	

2. Enter a valid number (1-8) for the desired RAN Announcement Table or a (#) to remove the entry.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

A Primary Message Announcement may be assigned to the group. This message is the first one presented to the caller.

## *Secondary RAN*

### **Programming Steps**

1. Press the SECONDARY RAN flexible button (**FLASH 60, Button #11**). The following message displays:

UCD5XX SECONDARY RAN	1-8
X	

2. Enter a valid number (1-8) for the desired RAN Announcement Table or a (#) to remove the entry.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

A Secondary Message Announcement may be assigned to the group. This announcement can be used for follow-up information after the Primary message.



## Description

The UCD Ring Timer determines how long a call rings into a busy UCD group before being presented to the first recorded announcement. By default, the UCD Ring Timer is set for 60 seconds, and is variable from 000–300 seconds.



*A RAN Table must be specified in UCD programming. If a RAN Table is NOT specified, incoming CO callers are not answered but continue to receive ringback.*

## UCD Message Interval Timer

### Programming Steps

1. Press the MIT TIMER flexible button (**FLASH 61, Button #2**). The following message displays:

MESSAGE INTERVAL	000-600
060	

2. Enter a valid number on the dial pad which corresponds to 000-600 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.



*The UCD Ring and Message Interval Timers only apply when RAN ports are specified. If RAN ports are not specified, incoming callers continue to receive a ringback tone.*

## Description

The UCD Message Interval Timer (MIT) determines the length of time a caller remains in queue (listening to MOH, if provided) between recorded announcements. By default, the UCD Message Interval Timer is set for 60 seconds and is variable from 000 to 600 seconds.

---

---

## *UCD Overflow Timer*

### **Programming Steps**

1. Press the OVERFLOW TIMER flexible button (**FLASH 61, Button #3**).  
The following message displays:

OVERFLOW	000-600
060	

2. Enter a valid number on the dial pad which corresponds to 000-600 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### **Description**

The UCD Overflow Timer determines the total length of time a caller remains in queue for a particular UCD group. When the timer expires, the caller is routed to the designated overflow station.

The timer starts when an incoming call is answered and presented to the first recorded announcement. Transferred CO callers overflow at the expiration of the Overflow Timer. By default, the UCD Overflow Timer is set for 60 seconds and is variable from 000–600 seconds.

## *UCD Auto Wrap-Up Timer*

### **Programming Steps**

1. Press the AUTO-WRAP TIMER flexible button (**FLASH 61, Button #4**).  
The following message displays:

UCD5XXA WRAP-UP	000-999
004	

2. Enter a valid number on the dial pad which corresponds to 000-999 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

After completion of a UCD call (on-hook) the agent is not be subjected to another UCD call for the duration of the Auto Wrap-Up Timer allowing the agent to finish call related work or access other facilities. This lets agents remove themselves from the group (e.g., DND, Call Forward) or originate another call. By default, the UCD Auto Wrap-Up Timer is set for 4 seconds and is variable from 000 to 999 seconds.

### *UCD No-Answer Recall Timer*

#### Programming Steps

1. Press the NO-ANSWER RECALL TIMER flexible button (**FLASH 61, Button #5**). The following message displays:

NO - ANS RECALL	000-300
000	

2. Enter a valid number on the dial pad which corresponds to 000-300 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

If a call routed to a station via UCD is not answered by the UCD Agent/Station before the No-Answer Recall Timer expires, the call is returned to UCD Queue with the highest priority. In addition, the station that failed to answer the ringing UCD call is placed into an out-of-service (OOS) state. By default, the UCD No-Answer Timer is at 000 (disabled) and is variable from 000–300 seconds.

### *UCD No-Answer Retry Timer*

#### Programming Steps

1. Press the NO-ANSWER RETRY TIMER flexible button (**FLASH 61, Button #6**). The following message displays:

NO - ANSWER RETRY	000-999
300	

2. Enter a valid number on the dial pad which corresponds to 000-999 seconds.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

When the No-Answer Recall Timer expires, a station that failed to answer the ringing UCD call is placed into an Out-Of-Service (OOS) state.

The **station** that was taken out-of-service is placed back in service if the agent hits their available flex button or dials the available flex code.

The **agent** is placed back in service if the No-Answer Retry Timer expires. If the agent does not answer their next UCD call, they are taken out-of-service again. This cycle continues until the station: answers calls, logs out, or goes unavailable. By default, the UCD No-Answer Retry Timer is set for 300 seconds and is variable from 000–999 seconds.

## UCD Announcement Tables

### Programming Steps

If Recorded Announcement (RAN) devices are installed to operate with UCD, these tables must be programmed.

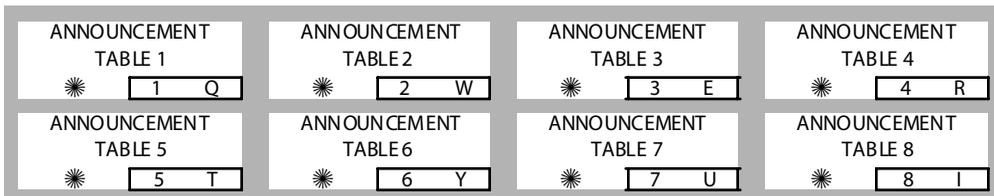
1. Press **FLASH** and dial **[62]**. The following message displays:

```

ANNOUNCEMENT TABLE 1
TYPE #   INDX ###   TIME ###
    
```

The top left button in the flexible button field is lit for programming UCD RAN Announcement Table #1.

2. To change to another UCD RAN Announcement Table, press **FLASH 62** and a flexible button 2-8 for Tables 2-8 respectively.



***To program a table for a CO line port:***

1. Press the TABLE X flexible button (1-8).
2. Dial [1] for CO Port Interface.
3. Dial [001-012] for CO Lines used.
4. Enter message duration (000-300 seconds).
5. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

***To program a table for an SLT port:***

1. Press the TABLE X flexible button (1-8).
2. Dial [2] for SLT Port Interface.
3. Dial [100-131] for SLT stations used.
4. Enter message duration (000-300 seconds).
5. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

***To program a table for a RAN Hunt Group port:***

1. Press the TABLE X flexible button (1-8).
2. Dial [3] for RAN Hunt Group.
3. Dial [458-461] for RAN Hunt Group used.
4. Enter message duration (000-300 seconds).
5. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

***To program a table for Digital Voice Mail:***

1. Press the TABLE X flexible button (1-8).
2. Dial [4] for the Digital Voice Mail function.
3. Dial [44X] (X=0-7) for the Voice Mail Group.
4. Dial a three-digit menu number [000-999].

- 
- 
5. Dial [0-9].
    - 0 = No DTMF Detection, No Messages Played. (Default)
    - 1 = DTMF Detection, No Message.
    - 2 = No DTMF, Place In Queue Message.
    - 3 = DTMF Detection, Place In Queue Message.
    - 4 = No DTMF, Hold Time Message.
    - 5 = DTMF Detection, Hold Time Message.
    - 6 = No DTMF, Both Messages.
    - 7 = DTMF Detection, Both Messages.
    - 8 = Not used at this time.
    - 9 = Not used at this time.
  6. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### *Clearing Entries*

1. Press the [#] button.
2. Then press HOLD.

### **Description**

Determines the type, index (port) number and message length for the eight available Recorded Announcements (RAN). There are eight RAN Tables that can be programmed. Table 1 can be the answer port for unanswered incoming calls to a UCD group.

The type can be either a CO line port, an SLT port, Digital Voice Mail, or a RAN Hunt Group port. The index number specifies which circuit for the type of interface. The message length is used to match the maximum length of the message to the device that is used.

**Digital Voice Mail** can be used as a RAN Announcer for UCD Groups. A menu is provided to play the announcement, as well as collect DTMF digits and route the caller to an alternate destination. In addition, a place in queue and an average hold time message can be played to the caller. The ability to detect DTMF, play average hold time, and place in queue are all programmable in this area.

When using the Digital Voice Mail as a RAN Announcer, the following options are available:

**Table 7-1: Voice Mail RAN Announcer Options**

Option	Action
0	Do NOT take a menu action on any DTMF dialed by the caller; DO NOT play Place in Queue or Hold Time message. (Default)
1	Take menu action only on DTMF dialed by the caller; DO NOT play Place in Queue or Hold Time message.
2	DO NOT take menu action on any DTFM dialed by user; play the Place in Queue message only.
3	Take menu action on DTMF; play the Place in Queue message.
4	DO NOT take menu action on any DTFM dialed by user; play the Hold Time Message only.
5	Take menu action on DTMF; play Hold Time message.
6	DO NOT take menu action on any DTFM dialed by user; play the Place in Queue and Hold Time message. (No Message Duration for type [4] entries is required.)
7	Take menu action on DTMF; play the Place in Queue and Hold Time message.
8-9	Not used at this time



*DVM software version must be 2.89 or greater to have RAN functionality.*

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# 8 Voice Mail Groups (VM)

This chapter provides the functional steps necessary to use the Voice Mail features with the *STARPLUS Triad-S* System. To implement the voice mail options desired, you must first enter the Programming Mode.



---

## Voice Mail Programming

### Programming Steps

1. Press FLASH and dial [65]. The following message displays.

```
VM 44G AAA LLL R XXX, XXX,
XXX, XXX, XXX, XXX, XXX, XXX
```

[G] = Voice Mail Group Number (0-7)

[AAA] = Alternate Group (440-447)

[LLL] = Leave Mail Index

[R] = Retrieve Mail Index from outpulsing table for retrieving messages (0-7)

[XXX] = Voice Mail Station Numbers (ports) up to 24 stations maximum

The top left button in the flexible button field is lit for programming Voice Mail Group 440.

2. To change Voice Mail groups or enter further voice mail groups, press the appropriate flexible button, 1-8 (440-447) and perform the following procedures.



*If installing a STARPLUS Voice Mail system, skip directly to Button 12 and enter voice mail ports.*

*Certain programming is required in the Voice Mail system connected to the Triad-S System for proper operation.*

*Tone Mode Calling option (6#) must be programmed as leading digits in transfer sequence(s) of Voice Mail system to force tone ringing to key telephones in the hands-free mode.*

### Description

Up to 8 Voice Mail groups can be configured in the **STARPLUS Triad-S** System. Each group can contain up to 24 Voice Mail designated ports, each of which interfaces with a port on an SLT card (or DIDB if using a Digital Voice Mail). An externally provided Voice Mail system or Auto Attendant must be connected to the **Triad-S** System for Voice Mail or Auto Attendant operation. Voice Mail automatically handles unanswered calls. Station user can then retrieve messages left at their stations.

Auto Attendants can handle incoming calls and route callers to station users without intervention from the systems Attendant. Direct incoming ring to Voice Mail/Auto Attendant groups can be done directly through CO Line Ringing Assignments. By default, all Voice Mail stations are assigned to Pick-Up Group 1. The buttons on the digital telephone are defined as shown when entering the Voice Mail programming area:

VM GROUP 440 * 1 Q	VM GROUP 441 * 2 W	VM GROUP 442 * 3 E	VM GROUP 443 * 4 R
VM GROUP 444 * 5 T	VM GROUP 445 * 6 Y	VM GROUP 446 * 7 U	VM GROUP 447 * 8 I
ALTERNATIVE VM GROUP * 9 O	LEAVE * 10 P	RETRIEVE * 11 A	STATION ASSIGN * 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	* 18 K	* 19 L	* 20 ;
* 21 Z	* 22 X	* 23 C	* 24 V

## *Alternate Voice Mail Group*

### **Programming Steps**

1. Press the ALTERNATE VM GROUP flexible button (**FLASH 65, Button #9**).
2. Enter the pilot number (440 to 447) of the desired group.

```
VM 44G AAA LLL R XXX, XXX,
XXX, XXX, XXX, XXX, XXX, XXX
```

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### *Deleting an Alternate Voice Mail Group Assignment*

1. Press [#] three times.
2. Then press the HOLD button.

---

---

## Description

An Alternate Voice Mail Group may be programmed so that if all voice mail ports are in use, the call can be routed to an alternate group. This is useful when more than eight ports are required for voice mail traffic.

### *Leave Mail Index Entry*

#### Programming Steps

1. Press the LEAVE flexible button (**FLASH 65, Button #10**).
2. Enter a valid Leave Mail Index number on the dial pad:
  - First Digit = Standard Leave Table number (0-7).
  - Second Digit = Leave Table to utilize when station is forwarded to VM in a No-Answer condition.
  - Third Digit = Leave Table to utilize when station is forwarded to VM in a Busy condition.

VM 44G AAA LLL R XXX, XXX, XXX, XXX, XXX, XXX, XXX, XXX
--

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### *Deleting a Leave Mail Index Entry*

1. Press [#] in the desired location on the keypad.
2. Then press the HOLD button.  
*EXAMPLE* -- Tables 1,2,3 entered, to delete only Table 2, enter [1],[#],[3] and press HOLD).

## Description

The Leave Mail Index specifies the outpulsing Table where the in-band digits required to connect a caller, forwarded into voice mail, to the called stations mail box are stored. By default, Voice Mail Group 1 (440) Leave Mail Index is set to zero (0).

---

---

## *Retrieve Mail Index Entry*

### **Programming Steps**

1. Press the RETRIEVE flexible button (**FLASH 65, Button #11**).
2. Enter a valid outpulsing table number (0-7) on the dial pad.

VM 44G AAA LLL R XXX, XXX, XXX, XXX, XXX, XXX, XXX, XXX
--

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### ***Deleting a Retrieve Mail Index Entry***

1. Press the pound key once [#].
2. Then press the HOLD button.

### **Description**

The Retrieve Mail Index specifies the outpulsing table where the In-Band digits required to connect a station user to their own mailbox are stored. By default, Voice Mail Group 1 (440) Retrieve Mail Index is set to 1.

## *Station Assignments*

### **Programming Steps**

1. Press the STATION ASSIGN flexible button (**FLASH 65, Button #12**).
2. Enter **SSS 1** to add a station.

-or-

Enter **SSS 0** to delete a station. (SSS = station number)

VM 44G AAA LLL R XXX, XXX, XXX, XXX, XXX, XXX, XXX, XXX
--

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

Up to twenty-four (24) extension numbers may be programmed into a voice mail group. A flexible button may be programmed with a voice mail group pilot number (440-447). This button then acts as a DSS for that voice mail group when pressed and also serves as the message waiting indication for that VM group.

# Voice Mail Outpulsing Table

## *Voice Mail In-Band Signaling*

### Programming Steps

1. Press FLASH and dial [66]. The following message displays:

VOICE	PRE	XXXXXXXXXXXXXE
MAIL Y	SUF	XXXXXXXXXXXXXE

*Y = Table Index (0-7)*

*X = Entered Digits (0-9, #, \*, Pauses)*

2. The TABLE 00 flexible button (Button #1) led is lit. To change tables, press the appropriate flexible button (Buttons 2-8) and perform the following procedures.
3. Dial one of the following, when required:
  - [0] = If a prefix is required
  - [1] = If a suffix is required
  - [#] = If entry is to be deleted
4. Enter up to 12 digits, including [\*] and [#], TRANS button = pause.
5. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### *Clearing Entries in a Table*

Press the pound key once [#], followed by HOLD.

## Description

Entries in one of the eight Voice Mail Outpulsing Tables determine the In-Band signaling required for:

- Retrieving messages (allows stations to pick up mail).
- Leaving messages (allows stations to leave messages in voice mail).

TABLE 0 * [ 1 Q ]	TABLE 1 * [ 2 W ]	TABLE 2 * [ 3 E ]	TABLE 3 * [ 4 R ]
TABLE 4 * [ 5 T ]	TABLE 5 * [ 6 Y ]	TABLE 6 * [ 7 U ]	TABLE 7 * [ 8 I ]
DISCONNECT TABLE 8 * [ 9 O ]	* [ 10 P ]	* [ 11 A ]	* [ 12 S ]
* [ 13 D ]	* [ 14 F ]	* [ 15 G ]	* [ 16 H ]
* [ 17 J ]	* [ 18 K ]	* [ 19 L ]	* [ 20 ; ]
* [ 21 Z ]	* [ 22 X ]	* [ 23 C ]	* [ 24 V ]

### *Suggested Uses:*

- Build a table (0 for example) for any additional digits other than the station extension number (e.g., Voice Mail Box number) needed for a caller to leave a message in a station's mailbox (Leave).
- Build another table (1 for example) for any additional digits needed for a mailbox holder to retrieve a message (Retrieve).

By Default:

**Table 0** Prefix = P7 (Pause+7) Suffix = None

**Table 1** Prefix = P7 (Pause+7) Suffix = \*

**Table 7** Prefix = P7 (Pause+7) Suffix = 2



*Entries are not required in the Outpulsing Table. However, a table must be referenced when setting up the Voice Mail groups.*

---

---

## Voice Mail Disconnect Table

### Programming Steps

1. Press the DISCONNECT TABLE 8 flexible button (**FLASH 66, Button #9**). This table number is used for the voice mail disconnect signal.
2. Enter up to 12 digits used for the disconnect signal, including [\*] and [#], TRANS button = pause.

VOICE DIS E MAIL
---------------------

3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

A disconnect signal can be programmed into the *Triad-S* System to notify the VM system that a call has been abandoned. This is accomplished through in-band signaling. If a CO or Intercom disconnect signal is detected, the *Triad-S* System sends a series of DTMF digits programmed in the voice mail disconnect table to the voice mail port. This can be any digit stream up to 12 digits including [\*] and [#].

This table serves all eight voice mail groups. When no digits are programmed in the disconnect table, silence is provided to the voice mail port followed by busy tone to aid the voice mail system to recognize that the caller has abandoned the call.

The *Triad-S* System provides Loop Supervision monitoring while a CO call is connected to a port designated as voice mail.



*Loop Supervision must be enabled on the CO lines (in CO Line programming) for the VM Disconnect feature to operate.*

By default, there are no entries in the Disconnect Table (Table #8).

## Voice Mail In-Band Features

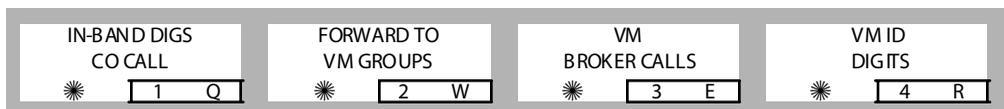
### Programming Steps

Press **FLASH** and dial **[67]**. The following message displays:

VM FEATURES  
ENTER BUTTON NUMBER

### Description

Entries into the Voice Mail In-Band Features determines the in-band signaling required for ICID Incoming ID Digits (forwards incoming CO callers directly to a Station's Voice Mail Box), and Forward to VM Groups (lets voice mail calls, upon reaching a forwarded to VM station, forward back into the voice mail system).



### *Voice Mail In-Band Digits*

#### Programming Steps

1. Press the IN-BAND DIGS CO CALL flexible button (**FLASH 67, Button #1**). The following message displays.

IN-BAND DIGS CO CALL                      0-1  
ENABLED

2. Enter a 0 or 1 to Enable/Disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

---

---

## Description

The Voice Mail In-Band Digits feature enables and disables station in-band signaling. Incoming CO callers can be Station Call Forwarded into voice mail only when the ringing CO line is programmed to ring at one station. CO lines programmed to ring at an Attendant station, call forward into the voice mail system (if programmed to ring only at one Attendant station). Callers are presented to the main greeting (not the Attendant stations' mail box) even when ID digits are enabled. By default, ID digits for incoming CO calls is enabled.

## *Voice Mail Transfer / Forward*

### Programming Steps

1. Press the FORWARD TO VM GROUPS flexible button (**FLASH 67, Button #2**). The following message displays:

FORWARD TO VM GROUPS	0-1
ENABLED	

2. Enter a 0 or 1 to Enable/Disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Voice Mail Transfer/Forward feature forwards voice mail calls, upon reaching a forwarded to VM station, back into the voice mail unit. It is useful when VM ports are being used as both Auto Attendant and VM ports. This feature can be enabled/disabled for all VM groups. By default, the VM Transfer/Forward feature is enabled.

---

---

## *Voice Mail Broker*

### Programming Steps

1. Press the VM BROKER CALLS flexible button (**FLASH 67, Button #3**). The following message displays:

VM BROKER CALLS ENABLED	0-1
----------------------------	-----

2. Enter a 0 or 1 to Enable/Disable this feature.  
[0] = Disabled  
[1] = Enabled
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Voice Mail Broker Calls feature modifies the operation of voice mail ports when disabled. Broker operation is unavailable when using supervised transfers to stations. When enabled, the current broker mode operation during supervised transfers remains in effect. This means the call to the station remains as the second party in a broker mode. If disabled, the VM port disconnects the call to a station and returns to the original party. By default, the VM Broker feature is enabled.

## *Voice Mail ID Digit Length*

### Programming Steps

1. Press the VM ID DIGITS flexible button (**FLASH 67, Button #4**). The following message displays:

VM ID DIGITS 3	2-4
-------------------	-----

2. Enter a valid number (2, 3, or 4) that corresponds to the number of digits to be dialed.
3. Press HOLD to save the entry. A confirmation tone is heard.

---

---

## Description

The Voice Mail ID Digit Length feature modifies the station and CO voice mail identification fields such that the maximum length of these fields is four digits.

---

## Voice Mail Index Table

### Programming Steps

To add Mailbox buttons, or change VM groups and ID numbers:

Press **FLASH** and dial **[68]**. The following message displays:

MAILBOX TBL: XXX	
VM GROUP: YYY	VMID ZZZZ

The top left button in the flexible button field (**FLASH 68, Button #1**) is lit for programming VM Group 1 (440).

### *Changing VM Groups*

1. Enter the VM Group number (440–447).
2. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### *Changing the VMID Number*

1. Press the VMID NUMBER flexible button (**FLASH 68, Button #2**).
2. Enter the VMID number which corresponds to 0000–9999. A value of 0000 disables this table entry. In this case, no VM digits are sent.
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### *Advancing to the Next VM Index Number*

Press the NEXT flexible button (**FLASH 68, Button #18**). The Mailbox Table number increments by 1.

### *Returning to a Previous VM Index Number*

Press the PREV flexible button (**FLASH 68, Button #19**). The Mailbox Table number decrements by 1.

### *Changing to a Different VM Index Number*

1. Press the SELECT flexible button (**FLASH 68, Button #20**).
2. Enter a Mailbox Table number (001–255).
3. Press HOLD to save the entry. A confirmation tone is heard and the display updates and shows the new Mailbox Table number.

### **Description**

The Voice Mail Index feature provides an Attendant or station user a way to transfer a caller directly into a voice mail box. Station identification digits can be entered by the transferring party.

Using this feature, a caller can be transferred to a voice mail box when:

- A station user on the system is not forwarded to VM, or
- The destination voice mail box owner is not a station user.

CO trunks and internal calls may be transferred into voice mail using this feature. If no voice mail ID digits are dialed by the transferring station, the ID digits of the transferring station are sent to voice mail. This feature permits dialing digits 0000–9999 when using the VM with ID feature. On a per station basis, the ID number that is sent to voice mail can be flexible. By default, the station number is sent to the voice mail system. In administrative programming, there is a field to insert from 0–4 digits (0000–9999) which can be sent to the voice mail system in place of the station number. This is useful when a station user manually transfers a caller to a mailbox. By default, no mailbox buttons are assigned at key stations.

VM GROUP * 1 Q	VMID NUMBER * 2 W	* 3 E	* 4 R
* 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	NEXT * 18 K	PREVIOUS * 19 L	SELECT * 20 ;
* 21 Z	* 22 X	* 23 C	* 24 V

---

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# 9

# Exception Tables

This chapter provides the functional steps necessary to use the Exception Tables with the *STARPLUS Triad-S* System. To implement the toll restriction options desired, you must first enter the Programming Mode.



## Exception Tables Programming

The *STARPLUS Triad-S* System offer a flexible means of applying toll restriction to stations or individuals. Dialing privileges (or toll restriction) is determined through assignment of station and CO line Class Of Service (COS). Several types of restriction can be derived simply by programming COS assignments and CO line access to stations. This may, in some cases, be all that is necessary. However, when a more complex or specific type of restriction is desired the system offers two Allow and two Deny tables along with four special tables. These tables can be programmed in a variety of ways to handle applications that are straight forward or applications that require a more complex arrangement. The Allow and Deny tables are assigned to stations based on their station Class of Service (COS) assignment. The Station (COS) interacts with CO Line COS assignments to provide several different types of dialing privileges.

**Table 9-1: Class of Service**

		CO LINE CLASS OF SERVICE				
		1	2	3	4	5
S T A T I O N	1	Unrestricted	Unrestricted	Unrestricted	Canned Restricted*	Unrestricted
	2	Table A	Table A	Unrestricted	Canned Restricted*	Unrestricted
	3	Table B	Unrestricted	Table B	Canned Restricted*	Unrestricted
	4	Table A&B	Table A	Table B	Canned Restricted*	Unrestricted
C O S	5	Canned Restricted*	Canned Restricted*	Canned Restricted*	Canned Restricted*	Unrestricted
	6	Intercom Only	Intercom Only	Intercom Only	Intercom Only	Intercom Only
	7	Canned Restricted*	Canned Restricted*	Canned Restricted*	Canned Restricted*	Unrestricted

\* Canned Restriction: No [0], [1], [#], [S] as first dialed digit, and 7-digit dialing limitation; plus 1-800, 1-888, 1-911, 1-611 are allowed, and 411, 976, and 555 numbers are denied. COS 7 allows all COS 5 and 10-digit local dialing.

The Allow and Deny tables enable entries of either general or specific allow and deny codes such as allowing all [1-800] type calls, and/or denying all [1]+ or [0]+ calls. The Allow and Deny tables allow a maximum of 8 digits to be entered as allow or deny digits. This enables entry of certain area codes or office codes that can specifically be allowed or denied. For example, the code [1-555-1212] may be entered in the Deny Table to deny local toll information calls. Each Allow Table contains 20 bins for entry of allow codes. Each Deny Table contains 10 bins for entry of deny codes.

***Rules for Setting Up Allow/Deny Tables***

Rule 1— If both tables have no entries, no restriction is applied.

Rule 2— If entries are made in the Allow Table and only there, then only those numbers are allowed. All other dialing is denied.

Rule 3— If entries are made in the Deny Table and only there, then only those numbers are denied. All other dialing is allowed.

Rule 4— If there are entries in both Allow and Deny tables, the Allow Table is searched first, and if a match is found, it is allowed. If a match is not found, the Deny Table is searched; if a match is found, the call is denied. If number does not match an entry in either table, it is allowed.

**Table 9-2: Allow / Deny Table**

	Allow Table	Deny Table	Conditions and Results			
			Dialed No.	A/D	Dialed No.	A/D
<b>RULE 1</b>	No Entries	No Entries	Allow			
<b>RULE 2</b>	Entries	No Entries	Found	A		
			Not Found	D		
<b>RULE 3</b>	No Entries	Entries			Found	D
					Not Found	A
<b>RULE 4</b>	Entries	Entries	Found	A		
			Not Found			
					Not Found	A

A special Do Not Care character (D) may be entered to allow or deny any digit dialed in that digit sequence.

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### *Special Reference Tables*

The *Triad-S* System also offers four special tables (found in the *Product Description Manual*) that can be referenced from within the two Allow Tables.

- Three of the special tables can be assigned to specific area codes that require further toll restriction definition.
- The fourth Special Table is reserved for use as a home area code table (numbers within the same area code as the site where the system is installed). This provides expanded ability to apply toll restriction on numbers that are dialed within an area code.
- Each Special Table allows up to 800 entries (200–999). This offers the ability to allow every office code on an individual basis.

---

## **Related Items To Toll Restriction**

### *CO/PBX Lines*

When CO lines are marked as PBX lines the system first checks the PBX code table for a valid match. If the first digits dialed do not match the entries in the PBX code table the call is considered an attempt to call another PBX extension and no toll restriction is applied. If the first digits dialed are found in the PBX code table (FLASH 12), toll restriction starts with the next dialed digit.

### *Forced Account Codes*

The system can be programmed to force the use of account codes on all restricted calls. When forced account codes are enabled an account code must be entered to place a call that is otherwise restricted through toll restriction. By entering an account code, the station class of service becomes unrestricted.

When account codes are forced on a system wide basis selected users may be instructed on how to enter account codes from any station and be allowed to dial unrestricted from a station that may otherwise be restricted. Use of account codes in this manner, as a traveling class of service, is however, not controlled by the system. Any station user with knowledge of how to enter account codes to override a stations toll restriction can do so.

## *SLT DTMF Receivers*

When Single Line Telephones are connected to the *Triad-S* System and toll restriction is enabled, the DTMF receivers located in the system monitors the call for a programmed time period. While the DTMF receiver is monitoring the digits being dialed by a single line telephone, it is considered busy and not available for monitoring another SLT attempting to dial. When all DTMF receivers are busy, an SLT attempting to go off-hook does not receive dial tone until a receiver is available.

The *Triad-S* System allows up to 5 DTMF receivers for monitoring SLT dialing. If a system has heavy SLT usage, then toll restriction may inhibit dialing by SLT stations.

Two (2) options are available to help alleviate this problem:

1. Shorten the SLT receiver timer [FLASH 01] [Button 12]. This frees up DTMF receivers faster, but may not provide the desired toll restriction for SLT stations.
2. Enable LCR and force LCR on SLT stations.

When the LCR database is set up, the 3-digit table allows entry of the number of digits to expect. When a SLT dials the appropriate number of digits, LCR releases the DTMF receiver and then be available for another SLT call.

## *LCR Versus Toll Restriction*

LCR is not an alternative to toll restriction nor is toll restriction an alternate to LCR. They work best when programmed together. Toll restriction specifies station dialing privileges, and LCR provides call routing to appropriate lines.

LCR can enhance toll restriction by providing Store and Forward operation to analyze digits being dialed before a trunk is seized. This prevents users from by-passing toll restriction by taking advantage of the time required for a central office line to provide dial tone. LCR is recommended when toll restriction is enabled.

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## Toll Restriction

### *Entering Toll Table*

#### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

1. Press **FLASH** and dial **[70]**. The following message displays:

EX TABLES  
ENTER BUTTON NUMBER

2. To program Allow/Deny tables, press the appropriate Table button and enter information as outlined in the following procedures.
3. To program Special Tables 1-3, it is necessary to associate an area code to the table. This is done by pressing the appropriate AREA CODE TABLE button and assign the area code.



*Special Table 4 is reserved for the home area code and does not require an area code entry.*

4. To display entries in any of the tables, press the DISPLAY TABLES button (**FLASH 70, Button #12**). Entries in the Allow/Deny tables display two at a time. Entries in the Special tables display six at a time in ascending order.

## Description

All toll tables have been conveniently placed under one program code to allow entry of all toll restriction data.

The buttons on the digital terminal are defined as shown below when entering the Toll Restriction programming area:

ALLOW TABLE A * [ 1 Q ]	DENY TABLE A * [ 2 W ]	ALLOW TABLE B * [ 3 E ]	DENY TABLE B * [ 4 R ]
SPECIAL TABLE 1 * [ 5 T ]	SPECIAL TABLE 2 * [ 6 Y ]	SPECIAL TABLE 3 * [ 7 U ]	SPECIAL TABLE 4 * [ 8 I ]
AREA CODE TABLE 1 * [ 9 O ]	AREA CODE TABLE 2 * [ 10 P ]	AREA CODE TABLE 3 * [ 11 A ]	DISPLAY TABLES * [ 12 S ]
* [ 13 D ]	* [ 14 F ]	* [ 15 G ]	* [ 16 H ]
* [ 17 J ]	* [ 18 K ]	* [ 19 L ]	* [ 20 ; ]
* [ 21 Z ]	* [ 22 X ]	* [ 23 C ]	* [ 24 V ]

When the system searches the Allow and Deny tables, the entries are checked starting with Bin 01 and proceeding sequentially through the table to the last bin. In addition the Allow Table is always searched before looking at the Deny Table. Therefore, the entry order is important. Entries that are specific (e.g., [1716]) are placed ahead of entries that are more general (usually include Do Not Care digits; e.g., [1 D 1]).

Once a match is found in the Allow Table that references a Special Table, the number dialed are checked for an allowed code in the Special Table. If a match is not found in the Special Table, the system continues to check for a match in the next Allow or Deny Table to check. The system does not return to the table that sent the call to the Special Table.

---

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## *Allow Table*

### **Programming Steps**

1. Press the ALLOW TABLE A or ALLOW TABLE B flexible button (**FLASH 70, Button #1 or #3**). The following message is shown on the display telephone:

ALLOW TABLE A	
01 E	02 E

The first two bin locations display.

2. Enter a valid bin number (01–20) of the bin to be programmed.  
It is recommended that:
  - Bin 17 be reserved for an entry that references SPECIAL TABLE 1
  - Bin 18 be reserved for an entry that references SPECIAL TABLE 2
  - Bin 19 be reserved for an entry that references SPECIAL TABLE 3
  - Bin 20 be reserved for an entry that references the Home Area Code Table, SPECIAL TABLE 4.
3. Enter the Allow Code.  
*[0–9], [\*], [#] = Corresponding allow digits (numbers)*  
*MUTE = Do Not Care digit (D)*  
*TRANS = Search Special Table (S)*
4. Press the HOLD button to save the entry. A confirmation tone is heard and the display now updates.
5. When all entries for one table are complete, press the flexible button for the next table.

### ***Erasing a Bin Number***

1. Enter a valid bin number.
2. Press the HOLD button.

---

---

## Description

Each Allow Table contains 20 bin numbers. Each bin number may be up to 8 digits, including Do Not Care digits and Search Special Table commands. Entries into the Allow Table represent exceptions to numbers or codes that are to be allowed only if they would otherwise be restricted by an entry in the Deny Table.

### *Example*

If [1 555 1212] is allowed but [1+] numbers are denied, by an entry into the Deny Table, [1 555 1212] is entered into the Allow Table as an allowed number.

- Allow Table A is referenced and searched first (before Deny Table A) when Station COS is 2 and CO Line COS is either 1 or 2.
- Allow Table B is referenced and looked at first (before Deny Table B) when Station COS is 3 and CO Line COS is either 1 or 3.
- When Station COS is 4 and CO Line COS is 1 both allow tables are looked at first (Allow Table A first, then Allow Table B) then both deny tables (Deny Table A first, then Deny Table B).

**Do Not Care** digits specify that the system should consider any digit dialed in that position as a match. Do Not Care digits should not be entered as the last digit in an entry, as this would be an unnecessary or meaningless command.

**Search Special Table** commands must be entered in a specific manner and should always be the last entries in the Allow Table. It is recommended that the last four bins (17–20) in the Allow Table be reserved for referencing the four special tables with the reference to the home area code (Special Table 4) always being located in bin number 20. Search Special table commands can only be entered into the allow tables.



*Remember to enable 911 for all Classes of Service*

### *Rules for Entries that Reference Special Tables*

For entries referencing the first three special tables a specific area code must be identified (one for each table needed). Then make note as to how the numbers are dialed when dialing numbers to this area code (e.g., with a leading digit [1] or no leading digit [1]).

The entry into the Allow Table would be entered as follows:

- Leading Digit [1]: Enter [BB] [1] [XXX] [DDD] [S] or,
- Non-Leading [1]: Enter [BB] [XXX] [DDD] [S]

*BB = Bin Number (Bins 17-19)*

*XXX = Area Code (must match AREA-X entry)*

*DDD = Do Not Care digit (three entries, DND button)*

*[S] = Search Special Table Command (TRANS button)*

For an entry that references the Home Area Code table (Special Table 4) the entry may also be entered to expect or not expect a leading digit [1]. In fact, in some cases it may be desirable to enter both of the following entries:

- Leading Digit [1] – Enter [BB] [1] [DDD] {S}
- and/or,
- Non-Leading [1] – Enter [BB] [DDD] {S}

*BB = Bin number (Bin 20)*

*DDD = Do Not Care digit (three entries, MUTE button)*

*{S} = Search Special Table Command (TRANS button)*



*If both leading digit [1] and non-leading digit [1] entries are made to reference the same table, it is necessary to place the leading digit [1] entry ahead of the non-leading digit [1] entry in the Allow Table.*

## *Deny Table*

### **Programming Steps**

1. Press the DENY TABLE A or DENY TABLE B flexible button (**FLASH 70, Button #2 or #4**). The following message displays:

DENY TABLE A	
01 E	

	02 E
--	------

2. When the first two bin locations are displayed, enter the 2-digit bin number (01–10) of the bin to be programmed.
3. Enter the deny code:  
*[0–9], [\*], [#] = Corresponding deny digits numbers*  
*MUTE = Do Not Care digit*
4. Press the HOLD button to save the entry. A confirmation tone is heard and the display now updates.
5. When all entries for one table are complete, press the flexible button for the next table.

### ***Erasing a Bin Number***

1. Enter a valid bin number.
2. Press the HOLD button.

### **Description**

Each Deny Table contains ten bin numbers. Each bin number may be up to eight-digits including {Do Not Care} digits. Entries in the Deny Table represent numbers or codes that are to be denied or restricted. Common entries would be [1] for restricting all [1+] type of calls. Exceptions to this restriction would be entered into the Allow Table.

- Deny Table A is referenced and searched only after the Allow Table A is checked when Station COS is 2 and CO Line COS is either 1 or 2.
- Deny Table B is referenced and searched only after the Allow Table B is checked when Station COS is 3 and CO Line COS is either 1 or 3.
- When Station COS is 4 and CO Line COS is 1, both allow tables are looked at first (Allow Table A first, then Allow Table B) then both deny tables (Deny Table A first, then Deny Table B).
  - Do Not Care digits specify that the system should consider any digit dialed in that position as a match. Do Not Care digits should not be entered as the last digit in an entry.
  - Search Special Table commands cannot be entered into the Deny tables.

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## *Special Table*

### **Programming Steps**

To program a Special Table, it is first necessary to assign an area code to the table (except for the home area code).

1. Press the appropriate AREA CODE TABLE (#1 to #3) flexible button (**FLASH 70, Buttons #9 to #11**). The following message displays:

SPECIAL TABLE 1	AC
-----------------	----

2. Enter a valid area code.
3. Press the HOLD button to save the entry. A confirmation tone is heard and the display updates.

### ***Entering Office Codes in a Special Table***

1. Press the SPECIAL TABLE (#1 to #4) flexible button (**FLASH 70, Buttons #5 to #8**) that corresponds to the area code programmed above. The following message displays:

SPECIAL TABLE 1	AC XXX
-----------------	--------

*XXX = Area Code*

2. Enter the office codes that are to be allowed or removed as follows:  
XXX [1] = Allow Code  
XXX [0] = Remove Code from the list  
(XXX = An office code from 200 to 999)
3. Press HOLD after every code entered. A confirmation tone is heard and the display updates. Multiple codes may be entered in a row. The display updates showing the first six codes in ascending order.

### Description

The Special Tables provide greater flexibility in designing a toll plan for a particular site.

- ❑ Each Special Table allows entry of up to 800 office codes (200–999).
- ❑ Three of these tables must be assigned an area code by which they are referenced. The fourth table is reserved for the home area code and requires no area code entry.
- ❑ The Special Tables are referenced through entries in the allow tables. Four area codes, including the home area code, can be referenced to these special tables for further definition. When a Special Table is referenced, entries must be made in the Special Table specifying what office codes are allowed.
- ❑ Codes can be added to the allow list or removed from the list. When a Special Table is checked for a match to a 3-digit code and not found, the system continues to search the next Allow/Deny Table to be checked. The system does not return to the Allow Table which routed the call to the Special Table. By default, no codes are on the allow list.

ALLOW TABLE A * 1 Q	DENY TABLE A * 2 W	ALLOW TABLE B * 3 E	DENY TABLE B * 4 R
SPECIAL TABLE 1 * 5 T	SPECIAL TABLE 2 * 6 Y	SPECIAL TABLE 3 * 7 U	SPECIAL TABLE 4 * 8 I
AREA CODE TABLE 1 * 9 O	AREA CODE TABLE 2 * 10 P	AREA CODE TABLE 3 * 11 A	DISPLAY TABLES * 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	* 18 K	* 19 L	* 20 ;
* 21 Z	* 22 X	* 23 C	* 24 V

## Display Toll Table Entries

### Programming Steps

Press the DISPLAY TABLES flexible button (**FLASH 70, Button #12**) while entering information into a table.

### Viewing Entries in an Allow or Deny Table

Two entries at a time are displayed on the bottom line of the display.

1. Press the DISPLAY TABLES button again, the next higher bins displays.
2. When the last entries are displayed, press the DISPLAY TABLES button again to show the first two entries.

```
ALLOW TABLE A
01 XXXXXXXXE      02 XXXXXXXXX
```

*X = Allow or Deny Code*

*E = End of Entry*

### Viewing Entries in a Special Table

Six 3-digit codes allowed display in ascending order starting with the lowest entry.

Press the DISPLAY TABLES button again, the next 6 entries display. This continues until all codes are displayed.

```
SPECIAL TABLE 1      AC XXX
YYY YYY YYY YYY YYY YYY
```

*XXX = Area Code*

*YYY = Allowed Office Code*

### Description

To view all entries in the toll tables using the display on the Executive telephone, press, the DISPLAY TABLES flexible button (**FLASH 70, Button #12**) multiple times to scroll through the entries.



*It is recommended to view all entries in the Allow and Deny Table before leaving programming. Entries can be entered near the bottom of the list for searching the special tables or entries made in error. Viewing the entire Allow Table ensures proper entry and operation.*



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# 10

## Least Cost Routing (LCR)

This chapter provides the functional steps necessary to use the LCR features with the *STARPLUS Triad-S* System. To implement the most economical routes for an outside call, you must first enter the Programming Mode.



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## Introduction

Least Cost Routing (LCR) was designed to select the most economical programmed route for an outgoing call. When a station user dials an outside number, the LCR feature analyzes the number and then automatically chooses an outside line from the group that has been programmed as most economical.

The LCR feature puts the responsibility of choosing the least expensive route for each area code and exchange code on the system administrator, not on the station user. In order to make a routing decision, the LCR feature is programmed in the system database. The successful operation of this feature is completely dependent on the accuracy of the programming.

There are eight (8) different tables which are set up to monitor the dialing of digits of a station and to select the best route programmed for the call.

1. 3-Digit Area/Office Code Routing Table
2. 6-Digit Office Code Routing Table
3. Exception Table
4. Route List Table
5. Insert/Delete Table
6. Daily Start Time Table
7. Weekday (Weekly) Schedule
8. Toll Information Table

## LCR Tables

### *3-Digit Table*

The 3-Digit Table is divided into two sections: Leading 1 (1 is dialed before the number) and Non-Leading 1 (no 1 is dialed before the number). This gives the system the ability to handle call routing in areas that require a 1 before a long distance number as well as in areas that do not require the 1.

### *6-Digit Table (Office Codes)*

The 6-Digit Table can accommodate 20 indexes. Each index is associated with an area code and can be programmed to route up to 800 office codes using 1 of the 16 possible routes. Several indexes can be used with the same area code to provide routing flexibility.

### *Daily Start Time Tables*

The Daily Start Time Tables allow the user to match the Time Periods discount structure to the carriers rate schedule.

### *Default LCR Database*

In an effort to decrease installation and set-up time usually associated with LCR, a default LCR Database has been incorporated. The default LCR Database provides basic routing for all local and long distance dialing.

### *Exception Tables*

The Exception Table is used to route operator assisted calls and any other calls which would use a one or two-digit number rather than a three-digit area code.

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## *Insert/Delete Tables*

There are 20 Insert/Delete Tables. Up to 20-digits, including pauses, can be inserted and up to 16-digits deleted. To insure that a pause is inserted in LCR at default, the database programming has been changed to add a pause in each of the 20 LCR Insert and Delete Tables and Insert Table 0 in each of the route tables.

## *LCR Routing for Toll Information*

The LCR Routing for Toll Information feature adds provisions to the LCR call processing which allows common call routing for all toll information calls. 1-(XXX)555-1212, (XXX)555-1212, 1-555-1212, and 555-1212 calls are intercepted and sent to a selected route in the Route List Table. Numbers dialed are integrated and if it is a toll information call, preceded with or without an area code or a leading digit 1, the call is sent to the route designated in programming.

## *Route List Tables*

Up to 16 different routes can be programmed. Each route can contain up to four route lists, one for each of the four time periods. Up to seven CO line groups (routing choices) and their corresponding Insert/Delete Tables may be programmed within each route list.

## *Weekly Time Tables*

The least costly route for a particular dialed number may not be the same at different times of the day or on different days of the week. For these situation, there are two Time-of-Day tables: a Daily Start Time Table and a Weekly Schedule Table. The Weekly Time Table determines which one of the four Routes LCR to use based on the Time-of-Day and Day-of-the-Week.

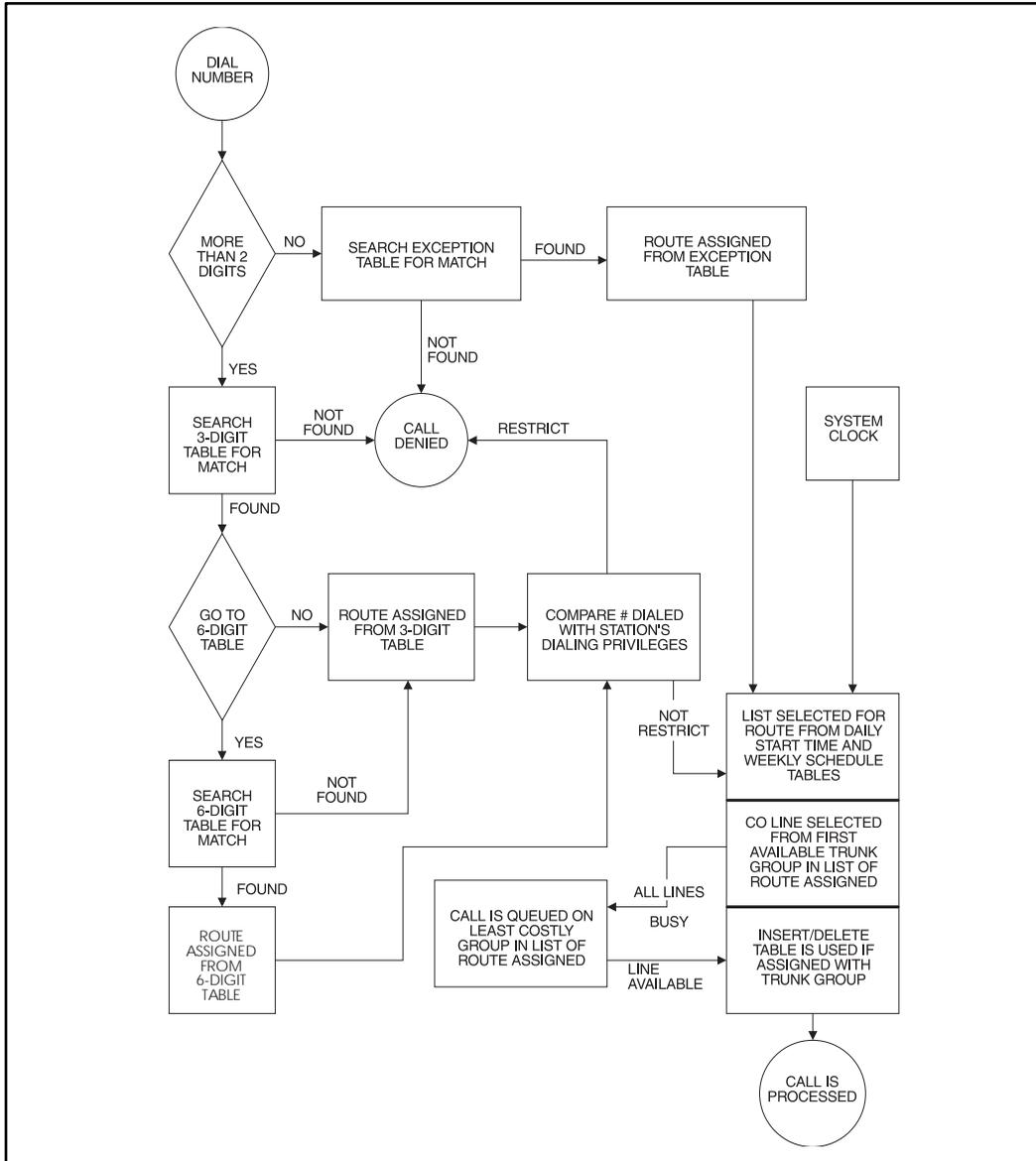


Figure 10-1: LCR Flowchart

# LCR Operation

## Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

1. Press **FLASH** and dial **[75]**. The following message displays:

LCR TABLES  
ENTER BUTTON NUMBER

2. There are eight tables which can be programmed here for LCR (you must also program LCR Class of Service in Station Programming). Use the procedures listed below to program these LCR tables.



*It is extremely important that the worksheets be completed before programming the LCR tables.*

## Description

The Least Cost Routing (LCR) feature allows automatic selection of the most economical trunk according to the number dialed and the time of the day and day of the week. There are eight (8) different tables set up to monitor the dialing of digits of a station and to select the best route programmed for the call.



*Flash 05, button #7 must be used to enable the Least Cost Routing feature.*

The buttons on the digital telephone are defined as shown when entering the LCR Tables Programming area:

3-DIGIT TABLE * [ 1 ] Q	6-DIGIT TABLE * [ 2 ] W	EXCEPTION TABLES * [ 3 ] E	ROUTE LIST TABLE * [ 4 ] R
INSERT / DELETETABLE * [ 5 ] T	DAILY TIME TABLE * [ 6 ] Y	WEEKLY TIME TABLE * [ 7 ] U	TOLL INFORMATION * [ 8 ] I

---

---

## 3-Digit Area / Office Code Table

### Programming Steps

1. Press the 3-DIGIT TABLE flexible button (**FLASH 75, Button #1**). The following message displays:

3 DIGIT ROUTING TABLE  
ENTER L NNN RRY PP HOLD

*L = [0] for Non-Leading 1 (1 not dialed), [1] for Leading 1 (1 is dialed)*

*NNN = Area/Office Code*

*RR = Route List Number 00-15*

*Y = [0] Do not go to 6-digit table, [1] Go to 6-digit table*

*PP = Number of digits expected to be dialed.*

2. Press the HOLD button to save the entry. A confirmation tone is heard and the display updates.

### Description

Both Leading 1 and Non-Leading 1 tables include all area codes (NPAs), and office codes (NXXs), from 000 to 999, including such numbers as 911, 411, etc. A complete entry into these tables include a route list table to be used, if the 6-digit table is to be checked and the number of digits likely to be dialed (Example: 7 or 10 digits). All local office codes must be entered in this table even if they do not require long distance calling.

The number of digits to expect entry aids the system in identifying when the last digit is dialed and to begin routing the call. This also helps to free SLT DTMF receivers if SLT traffic in the system is heavy.

For international calls, use 00 as number of digits to expect. This causes the system to wait five seconds (or inter-digit time-out) after user dials last digit before the system accesses a CO Line and dials out.

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## 6-Digit Office Code Table

### Programming Steps

1. Press the 6-DIGIT TABLE flexible button (**FLASH 75, Button #2**). The following message displays:

6 DIGIT ROUTING TABLE  
ENTER \* AAA RR NNN HOLD

\* = [0] to remove codes, [1] to add codes

AAA = Area Code

RR = Route Number 00-15

NNN = Office Code

2. Press the HOLD button to save the entry. A confirmation tone is heard and the display updates.
3. Enter additional office codes to be programmed into the same Area Code/Route Table, pressing HOLD after each office code entry.
4. Press a flexible button to program a different table.

### *Deleting All Entries in an Area Code/Route Table*

Enter [0 AAA RR ###].

### Description

The 6-Digit Office Code Table determines a route for one or a group of individual office codes within an area code. Certain office codes within an area code can be given unique or special routing. If the office code dialed is not found in the 6-digit Office Code Table, the call is then routed according to the route list table as was entered in the 3-digit table.

The system allows twenty 6-digit Area/Office code tables that may be used to route specific office codes within an area code. Each table routes calls for a common area code to a specified route. All entries made to a table route those office codes to the specified route list table. An area code may be entered into more than one 6-digit table with different routes specified.

## Exception Code Table

### Programming Steps

1. Press EXCEPTION TABLES flexible button (**FLASH 75, Button #3**). The following message displays:

```
EXCEPTION CODE TABLE
ENTER * XX RR HOLD
```

\* = [0] to remove code from table, [1] to add code to table

XX = Exception codes for single digit codes, press MUTE button as 2nd digit.  
(The [\*] may be entered as the 1st digit only.)

RR = Route Table Number 00–15

2. Press the HOLD button to save the entry. A confirmation tone is heard and the display updates.
3. Press **FLASH 75, Button #3** again for further entries. Up to 20 Exception Codes may be programmed in this table.

### Description

The Exception Code Table is used for operator calls and any other calls that use a one- or two-digit entry, rather than a three-digit area code.

## Route List Table

### Programming Steps

1. Press the ROUTE LIST TABLE flexible button (**FLASH 75, Button #4**). The following message displays:

```
ROUTE LIST TABLE
RR T GG DD L
```

RR = Route List Table Number 00–15

T = Time Period Route List 1–4

GG = CO Line Group 00–23

DD = Insert/Delete Table reference 00–19 (## for none)

L = LCR Class of Service (LCOS)

2. To create an entry, dial:
  - a. [RR]
  - b. [T]
  - c. [GG]
  - d. [DD]
  - e. [L]
3. Press [HOLD] to save the entry. A confirmation tone is heard and the display updates.
4. To enter additional CO Line groups in the same Time Period Route List number:
  - a. Dial [GG]
  - b. Dial [DD]
  - c. Dial [L]
  - d. Press [HOLD]

#### *Entering Data for a Different Time Period Route List*

1. Press program **FLASH 75, Button #4** and enter all data (RR T GG DD L).
2. Repeat the above to program a new Route Number 00 to 15 or press a flexible button to program other LCR information.
3. To advance to the next entry, use Button #18.
4. To return to a previous entry, use Button #19.

When **Call Cost** feature is enabled in FLASH 05, Button #11, the following message displays.

ROUTE LIST TABLE RR T CCC GG DD L
--------------------------------------

*RR = RouteList Table Number 00-15*

*T = Time Period Route List 1-4*

*CCC = Cost for one minute (\$ 0.00– \$ 9.99)*

*GG = CO Line Group 00-23*

*DD = Insert/Delete Table reference 00-19 (## for none)*

*L = LCR Class of Service (LCOS)*

---

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## Description

Each of the 16 Route List Tables available contains four Time Period Routing Lists, one for each of the 4 daily start time periods. Within each Time Period Route List up to 7 CO (outside) line groups and their corresponding Insert/Delete table, if any, and LCR Class Of Service Priority are programmed on a per line group basis.

When routing a CO call through LCR, CO Line groups are accessed in sequence so that the first line group entered represents the least costly (and first selected) and the last line group entered represents the most costly (and last selected).

The Route List Table references many other tables when processing a call for routing. First, the Daily Start Time Table is referenced to determine what start time entry should be checked in the Weekly Schedule Table. The corresponding entry in the weekly schedule table depending on the day of the week then determines which Time Period Route List should be used within the Route List Table.

The system then begins to check for idle lines in the first entered CO line group and proceeds until an idle line is found. While it is searching for an idle CO line the Station LCR COS is checked against the entries for LCR COS Priority of the specific CO line groups (see *LCR COS Priority* explanation).

- When an idle CO Line is found with a LCR priority equal to or higher than the stations LCR COS, then a final check is made to determine if an Insert/Delete Table should be referenced.
- When all of the tables and entries are checked the system then processes the call on the outside CO line.



*Make sure you made entries into all Time Period Route Lists referenced in the weekly schedule table.*

### ***LCR COS Priority***

A station should be assigned a class of service for LCR. The LCR COS can be between 0 and 6, with 0 being unrestricted and 6 being the most restrictive. Within the time period route List table, line groups are given an LCR COS Priority assignment between 0 and 6.

A station using LCR is able to use only those CO (outside) line groups with a priority assignment of equal or higher value than the station's LCR Class of Service (e.g., a station with LCOS 3 can use line groups with a priority between 3 and 6).

**Table 10-1: LCR Class of Service Table**

Allow Access To Route		LCR CO Line Group Priority						
		0	1	2	3	4	5	6
<b>S T A  L C R  C O S</b>	0	Y	Y	Y	Y	Y	Y	Y
	1	N	Y	Y	Y	Y	Y	Y
	2	N	N	Y	Y	Y	Y	Y
	3	N	N	N	Y	Y	Y	Y
	4	N	N	N	N	Y	Y	Y
	5	N	N	N	N	N	Y	Y
	6	N	N	N	N	N	N	Y

N= Cannot Use Line Group  
Y= Has Access to Line Group

### *Insert / Delete Table*

#### **Programming Steps**

1. Press INSERT/DELETE TABLE flexible button (**FLASH 75, Button #5**).  
The following message displays:

DIGIT INSERT / DELETE  
ENTER TT X DDD HOLD

2. Enter the table information as follows:
  - TT = Insert/Delete Table Number 00–19
  - X = [0] Pre-Delete numbers (first digits dialed in the number),  
-or-  
[1] Pre-Insert numbers (insert digits in front of number dialed,  
-or-  
[2] Post-Insert numbers (insert digits behind number dialed).  
DDD = Digits (up to 16-digits may be deleted from the beginning  
of the number dialed and up to 40 digits can be inserted  
(20 pre and 20 post).
3. Press the HOLD button to save the entry. A confirmation tone is heard and the display updates.

### ***Adding and Deleting Numbers in the Same Table***

1. Enter the different Insertion/Deletion tables in step 1.
2. Enter as separate entries using the same table number.
3. In the Insert Tables for LCR Programming, press the TRANS button for a pause.
  - The [\*] and [#] digits are allowed as valid digits for inserting digits dialed over the network.
  - The [\*] and [#] are valid entries for adding digits in both the pre (in front of) or post (behind the number) tables.
  - The [\*] and [#] cannot be used as delete characters in the Delete tables.

### ***Deleting a Table***

Enter a valid table number and press the HOLD button.

### **Description**

Digits can be either added or deleted when dialing a number. For instance, if a user dials a long distance call that should be placed on a foreign exchange (FX) line, the digit [1] and the three-digit area code (NPA) dialed by the user must be deleted before the call can be placed on that FX line. An Insert/Delete table can be programmed to do this. Digits can also be added to a number that has been dialed by the user.

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For instance, Other Common Carrier (OCC) access codes and authorization (ID) codes can be automatically inserted by the system either in front of, and/or behind the number dialed. There are twenty Insert/Delete Tables and each allows entries in a delete table and a pre-and post insert table. Up to 40 digits (including pauses) can be inserted (20 pre and 20 post) and up to 16 digits can be deleted. Digits can be inserted before or after the number dialed, but can be deleted only from the start of the number dialed. To ensure that a pause is inserted in LCR at default, the database programming adds a pause in each of the 20 LCR Insert and Delete Tables and insert table 0 in each of the route tables.

## *Daily Start Time Table*

### **Programming Steps**

1. Press the DAILY START flexible button (**FLASH 75, Button #6**). The following message displays:

DAILY START TIME TABLE HHMM HHMM HHMM HHMM HOLD
--

2. Enter times in military format (2400 hours) in succession.
3. Press the HOLD button to save the entry. A confirmation tone is heard and the display updates.
  - Default times are 0800, 1700, 2300 (8 AM, 5 PM, and 11 PM), and the fourth time is disabled (####).
  - To change a Start Time, all times must be re-entered. Four pound signs [####] are displayed if nothing is entered for a specific time.

### **Description**

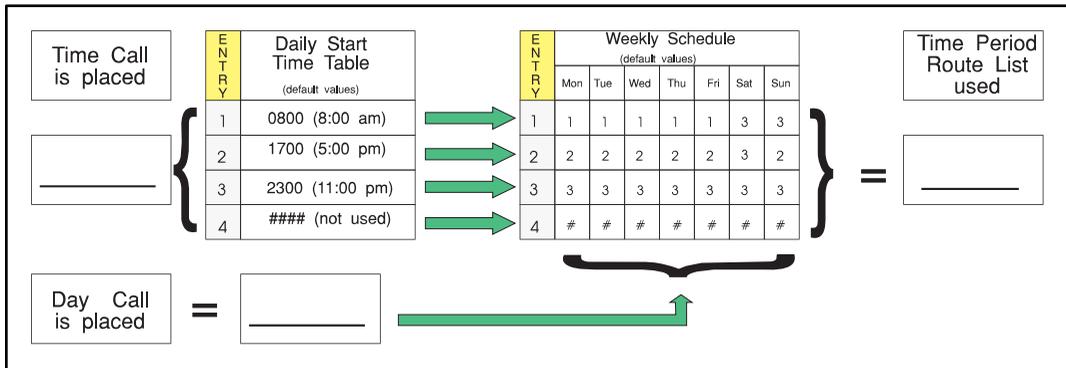
The Daily Start Time Table correlates the LCR Routing Table to the time sensitive discount structure offered by the customers carrier.

**Example** -- In the most common situation:

- The most expensive rate period is between 8:00 am and 5:00 pm, often called the day rate.
- The first discount period usually starts at 5:00 pm and runs until 11:00 pm, often called Evening Rates.
- The remaining time (from 11:00 pm until 8:00 am) is referred to as night time rates which usually have the biggest discount.

**Weekly Time Table** – With the wide selection of Common Carriers, the least costly route for a particular area code may be different at different times of the day. To accommodate this situation, this table and the Weekly Time Table work together, dividing the day into four possible time periods. By default these tables are set at the standard divisions of 8AM, 5PM, and 11PM. However, these times can be changed.

Entries in the Daily Start Time table are used to select the time period to reference in the weekly schedule. Based on the time a call is placed, the daily start time table selects the time period to choose in the weekly schedule. The weekly schedule is then used to determine the time period route list in the Route List Table to use for routing the call for a particular day of the week. Times are entered in the 24 hour format.



**Figure 10-2: Daily Start Time and Weekly Schedule Tables**

### Weekly Schedule Table

#### Programming Steps

1. Press the WEEKLY SCHED flexible button (**FLASH 75, Button #7**). The following message displays:

```

WEEKLY SCHEDULE TABLE
ENTER D T T T T HOLD
    
```

D = Day of the Week:

[0] = Monday

[1] = Tuesday

---

---

[2] = Wednesday

[3] = Thursday

[4] = Friday

[5] = Saturday

[6] = Sunday

**T** = Time Period Route List (1-4) to use for the time-of-day (based on the Daily Start Time table). Enter values for all time periods specified in the Daily Start Time table for that day.

**First T** = Time Period Route List for the FIRST Daily Start Time (applies to all Route List tables).

**Second T** = Time Period Route List for the SECOND Daily Start Time (applies to all Route List tables).

**Third T** = Time Period Route List for the THIRD Daily Start Time (applies to all Route List tables).

**Fourth T** = Time Period Route List for the FOURTH Daily Start Time (applies to all Route List tables).

2. Press the HOLD button after each complete daily entry. A confirmation tone is heard and the display updates.

## Description

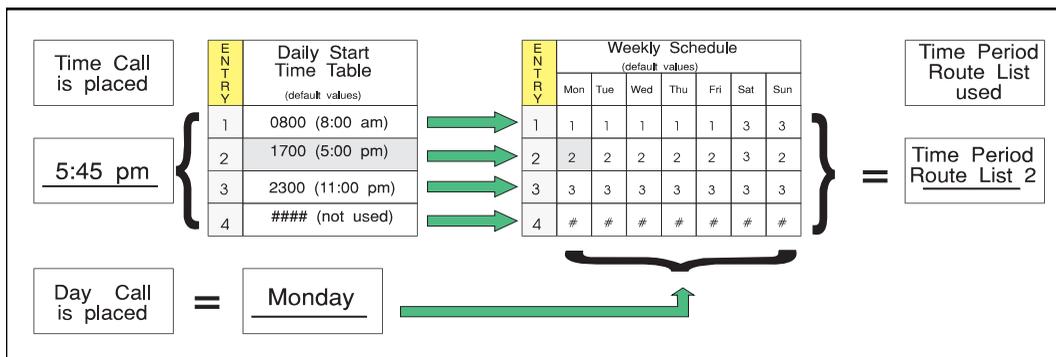
The Weekly Schedule Table determines what Time Period Route List to use within the Route List Table. When a call is placed and ultimately sent to a route list (call is not denied) based on the time of day the call is placed, the Daily Start Time Table selects the time period to reference in the Weekly Schedule Table.

The Time Period Route entered for the specified time period, as determined in the Daily Start Time Table and based on the day of week, is then selected and the call is routed according to the specified Time Period Route List.

### Example

If a call is placed at 5:45 pm on a Monday, then according to the Daily Start Time Table (using default values) the entry for time period two of the weekly schedule is checked. Because it is Monday the entry for time period two on Monday is used and the result is that the Time Period Route List number two (again using default values) is used for all routes.

Thus, the call is routed according to the entries in Time Period Two Route List no matter what route (00–15) is selected.



**Figure 10-3: Daily and Weekly Start Time Table**

## LCR Routing for Toll Information

### Programming Steps

1. Press the TOLL INFO flexible button (**FLASH 75, Button #8**). The following message displays:

```
LCR ROUTE FOR 555 - 1212
ENTER ROUTE
```

2. Enter a valid Route List number (00–15) for the Route to be referenced in the Route List table.
3. Press the HOLD button after programming the Route number. A confirmation tone is heard and the display updates.
4. Enable LCR at this point.

## **Description**

The LCR Routing for Toll Information feature adds provisions to the LCR call processing which allows common call routing for all toll information calls. 1-(XXX) 555-1212, (XXX) 555-1212, 1-555-1212, and 555-1212 calls are intercepted and sent to a selected route in the Route List Table. Numbers dialed are integrated and if it is determined to be a toll information call, either preceded with an area code or without or with a leading digit 1 or not, the call is sent to the route designated in programming.

By default, Toll Information Calls are sent to Route List Table Zero (0) which allows toll information calls to be placed on the system at default. A Toll Information route is chosen over a 3-digit or 6-digit route assignment if both are assigned. Entering the pound key twice [##] denies all Toll Information Calls.

## *Default LCR Database*

### **Programming Steps**

In an effort to decrease installation and set up time usually associated with LCR, a default LCR database was incorporated.

### **Description**

The default LCR database provides basic routing for local and long distance dialing. Default entries have been made in the 3-Digit Table for local office codes (NNXs) and all area codes (NPAs). Six routes have been established with the default database for routing of all calls under default.



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# **11**      **Initializing Database Parameters**

This chapter describes the procedures and steps necessary to initialize the system database, returning any programmed data to its original or default value.



## Introduction

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode to initialize Database Parameters.

Press FLASH and dial [80]. The following message displays:

INITIALIZE DATABASE  
ENTER BUTTON NUMBER

### Description

This section lets portions of the database be initialized individually. The only way to initialize the entire database is to move switch #1 on the BKSU board to the ON position and reset or power off/on the system. A System Reset (button #20) command is also included in this section for clearing meantime errors without initializing the database.

The buttons on the key telephone are defined as shown:

SYSTEM PARAMETERS * [ 1 ] Q	CO LINE ATTRIBUTES * [ 2 ] W	STATION ATTRIBUTES * [ 3 ] E	PORT - STA/CO * [ 4 ] R
EXCEPTION TABLES * [ 5 ] T	SYSTEM SPEED NUMBERS * [ 6 ] Y	LCR TABLES * [ 7 ] U	ICLID/DID TABLES * [ 8 ] I
DIRECTORY DIAL TABLE * [ 9 ] O	HUNT GROUPS * [ 10 ] P	ACD* OR U CD GROUPS * [ 11 ] A	VOICE MAIL GROUPS * [ 12 ] S
DID-TIE PARAMETERS * [ 13 ] D	VERIFIED ACCT CODES * [ 14 ] F	ISDN PARAMETERS * [ 15 ] G	* [ 16 ] H
* [ 17 ] J	* [ 18 ] K	* [ 19 ] L	SYSTEM RESET * [ 20 ] ;
* [ 21 ] Z	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V

## *Initialize System Parameters*

### **Programming Steps**

1. Press the SYSTEM PARAMETERS flexible button (**FLASH 80, Button #1**). The following message displays:

INITIALIZE SYS PARAM  
PRESS HOLD

2. Press the HOLD button. A confirmation tone is heard.

### **Description**

The System Parameters may be initialized setting all data fields to their original, default values. The following data fields are returned to their default values upon initializing the System Parameters.

**Table 11-1: System Parameter Defaults**

<b>Program Code</b>	<b>Flex Button</b>	<b>Features</b>	<b>Default Value (after initialization)</b>
FLASH 01	SYSTEM TIMERS		
	1	System Hold Recall Timer	060 sec
	2	Exclusive Hold Recall Timer	180 sec
	3	Attendant Recall Timer	01 min
	4	Transfer Recall Timer	045 sec
	5	Preset Forward Timer	10 sec
	6	Call Forward No/Answer Timer	15 sec
	7	Pause Timer	2 sec
	8	Call Park Recall Timer	180 sec
	9	Conference/DISA Timer	10 min
	10	Paging Time-out Timer	15 sec
	11	CO Ring Detect Timer	3=300 ms
	12	SLT DTMF Receiver Timer	20 sec
	13	Message Wait Reminder Tone	000 min=Disabled
	14	SLT Hook Flash Timer	10=1 sec
	15	SLT Hook Flash Debounce Timer	300 ms
	16	SMDR Call Qualification Timer	30 sec
	17	Automatic Call Back Timer	03 sec
	18	Reminder Ring Timer	00 sec
20	Flexible Inter-Digit Timeout	5 sec	
FLASH 02	ADDITIONAL SYSTEM TIMERS		
	1	Repeat Redial Timer	60 sec
	2	Attendant Display Timer	01 sec
	3	Call Coverage Ring Timer	5 sec
	4	Modem Answer T / O	25 sec
	5	Pulse Dial Inter-Digit Timer	300 ms
6	Programmable DTMF Time Operation	1=100ms	

**Table 11-1: System Parameter Defaults**

<b>Program Code</b>	<b>Flex Button</b>	<b>Features</b>	<b>Default Value (after initialization)</b>
FLASH 05	SYSTEM FEATURES 1		
	1	Attendant Override	Disabled
	2	Hold Preference	System
	3	External Night Ring	Disabled
	4	Executive Override Warning Tone	Enabled
	5	Page Warning Tone	Enabled
	6	Background Music Channel	Enabled
	7	Least Cost Routing	Disabled
	8	Account Codes - Forced	Disabled
	9	Group Listening	Disabled
	10	Idle Speaker Mode	Disabled
	11	Call Cost Display Feature	Disabled
	12	Music-On-Hold	Enabled
13	Call Qualifier Tone Option	Disabled	
FLASH 06	SYSTEM FEATURES 2		
	1	Barge-In Tone	Enabled
	2	CO Ring Tones	Enabled
	3	Verified Account Codes	Disabled
	4	Call Forward Display	Enabled
	5	External Day Ring	Disabled
	6	Overflow Station Forward	Disabled
	7	Direct Transfer Mode	Enabled
	8	Station ID Lock	Disabled
	9	LCR Call Progress	Enabled
	10	One-Touch Recording Warning Tone	Enabled
	11	Ringback on Transfer	Disabled
	12	ACD Agent Recall	Disabled
	13	911 Feature	Disabled
	14	Enhanced 911	Disabled
15	VMID Station Numbers	STA Numbers = VMID	

**Table 11-1: System Parameter Defaults**

<b>Program Code</b>	<b>Flex Button</b>	<b>Features</b>	<b>Default Value (after initialization)</b>
FLASH 07	FLASH RATES		
	1	Incoming CO Line Ringing	Red 480 ipm flutter
	2	Incoming Intercom Ringing	Red 120 ipm flutter
	3	Call Forward Button	Red Steady On
	4	Message Wait/VM Button	Red Steady On
	5	Message CallBack – DSS/BLF	Red 120 ipm flutter
	6	Do Not Disturb – DSS/BLF	Red 60 ipm Dbl Wink
	7	Auto CallBack – DSS/BLF	Red 120 ipm flash
	8	UCD Available/Unavailable – DSS/BLF	Red 60 ipm Dbl Wink
	9	Transfer CO Ringing	Red 120 ipm flash
	10	Recall CO Ringing	Red 480 ipm flutter
	11	Queued CO Ringing	Green 480 ipm flutter
	12	Exclusive Hold	Green 120 ipm flash
	13	System Hold	Red 60 ipm Dbl Wink
	14	In Use Hold (I-Hold)	Green 60 ipm flash
	15	Camp-On Button	Red 120 ipm flash
	16	Call Back Button	Red 120 ipm flash
	17	Line Queue Button	Red 480 ipm flutter
	18	Do Not Disturb Button	Red Steady On
19	Intercom Hold Button	Red 15 ipm flash	
FLASH 09	1-6	MOH Assignments	None
FLASH 10	--	Attendant Station Assignment	STA 100
FLASH 11	1-4	System Time And Date	MMM/DD/YY, 12-hr display
FLASH 12	--	PBX Dialing Codes	None
FLASH 13	1-4	Executive/Secretary Pairs	None
FLASH 14	1-6	On-Board Relay	None

**Table 11-1: System Parameter Defaults**

<b>Program Code</b>	<b>Flex Button</b>	<b>Features</b>	<b>Default Value (after initialization)</b>
FLASH 15	BAUD RATE ASSIGNMENTS		
	1	Port #1 (1st RS-232C port on Optional MISU)	9600 Baud
	2	Port #2 (2nd RS-232C port on Optional MISU)	9600 Baud
	3	Port #3 (Optional Modem)	9600 Baud
FLASH 16	1-3	Networking Tables	None
FLASH 20	1	DISA Access Code	100
	2	Database Admin Password	3226
FLASH 21	1	SMDR Enable/Disable	No
	2	Long Distance/Local Assignment	Long Distance
	3	Character Print Assignment	80
	4	Baud Rate Display	9600
	5	SMDR Port Assignments	Port #1
FLASH 22	1	Automatic/Manual Operation	Manual
	2-8	Day of Week Programming	Manual=None; Auto= M-F 08:00 17:00 Sat-Sun ##:## #:##
FLASH 23	1-4	Directory Dialing Table	None
FLASH 30	1-12	Hunt Group	None
	13	Station/Pilot/Pilot Ring All--Hunting Assignments	Pilot
FLASH 31	1	Verified Account Code Entry	None
	2	COS	None
FLASH 39	1-24	CO Group Queuing	Enabled
FLASH 41	1	Dial Pulse Parameters	60/40, 10 pps

## Initialize CO Line Attributes

### Programming Steps

1. Press the CO LINE ATTRIBUTES flexible button (**FLASH 80, Button #2**). The following message displays:

<p>INITIALIZE CO LINES PRESS HOLD</p>
---

2. Press the HOLD button. A confirmation tone is heard.

### Description

The CO Line Parameters may be initialized setting all data fields to their original, default values. The following data fields are returned to their default value upon initializing the CO Line Attributes.

**Table 11-2: CO Line Attribute Defaults**

Program Code	Flex Button	Features	Default Value (after initialization)
FLASH 40  PAGE A	1	DTMF/Dial Pulse Programming	DTMF
	2	CO/PBX Programming	CO
	3	UNA Programming	Enabled
	4	DISA CO-to-CO	Enabled
	5	Privacy	Enabled
	6	Loop Supervision Programming	4=400 ms
	7	DISA Programming	None
	8	CO Line Group Programming	Group 1
	9	Class of Service (COS) Programming	COS 1
	10	CO Line Ringing Assignments	(blank)
	11	CO Line Identification Display	Line XXX
	12	Trunk Direction	Bothway
	13	Display Ring Assignments	None
	14	DID/TIE Signal Type	Wink
	15	911 Trunk	Disabled

**Table 11-2: CO Line Attribute Defaults**

<b>Program Code</b>	<b>Flex Button</b>	<b>Features</b>	<b>Default Value (after initialization)</b>
FLASH 40 PAGE B	1	Transmit Volume Option	5 (0 db)
	2	Preset Call Forward Destination	####
	3	Preset Forward Voice Mail	####
	4	Universal Day Answer	Disabled
	5	Music-On-Hold per CO Line	Channel 1
	6	Ring Tone	00
FLASH 40 PAGE C	1	Flash Timer Programming	10
	2	Ring Delay Timer	10
	3	Reseize Timer	200 ms
	4	Guard Timer	05 sec
	5	Preset Forward Timer	10 sec

### *Initialize Station Attributes*

#### **Programming Steps**

1. Press the STATION ATTRIBUTES flexible button (**FLASH 80, Button #3**). The following message displays:

INITIALIZE STATIONS  
PRESS HOLD

2. To initialize the Station Attributes, press the HOLD button. A confirmation tone is heard.

#### **Description**

The Station Parameters may be initialized setting all data fields to their original, default values. The following data fields are returned to their default value upon initializing the Station Attributes.

**Table 11-3: Station Attribute Defaults**

<b>Program Code</b>	<b>Flex Button</b>	<b>Features</b>	<b>Default Value (after initialization)</b>
FLASH 50 PAGE A	1	Paging Access	Enabled
	2	Do Not Disturb	Enabled
	3	Conference Enable/Disable (Per Station)	Enabled
	4	Executive Override	Disabled
	5	Privacy (Per Station)	Enabled
	6	System Speed Dial Access	Enabled
	7	Line Queuing	Enabled
	8	Preferred Line Answer	Enabled
	9	Off-Hook Voice Over (OHVO)	Disabled
	10	Call Forwarding	Enabled
	11	Forced Least Cost Routing (LCR)	Disabled
	12	ACD Supervisor Monitor w/Barge-In	Disabled
	13	Executive Override Block	Disabled
FLASH 50 PAGE A	14	CO Line Ringing	Disabled
	15	Name/Number Display at Idle	Name (Enabled)
	16	ACD Zap Tone	Disabled
	17	CO Loop Pool Flex	Disabled
	18	Administration Access	Disabled

**Table 11-3: Station Attribute Defaults**

<b>Program Code</b>	<b>Flex Button</b>	<b>Features</b>	<b>Default Value (after initialization)</b>
FLASH 50 PAGE B	1	Station Identification	006 (24-Btn Keypad) 6 (SLT w/o MWT)
	2	Station Day Class of Service	1
	3	Station Night Class of Service	1
	4	Speakerphone/Headset Programming	0=Full Speakerphone
	5	Pick-Up Group(s) Programming	1
	6	Paging Zone(s) Programming	1
	8	CO Line Group Access	1
	9	LCR Class of Service (COS)	0
	10	Off-Hook Preference Programming	00 (Keypad)
	11	Flexible Button Programming	(blank)
	12	Keypad Mode	Inactive Mode
	13	Voice Mail ID Translation	XXXX(Station #)
	14	Display Flexible Buttons	None
	17	Cordless Key Button	00
FLASH 50 PAGE C	1	Internal No Answer Destination	None
	2	Internal Busy Destination	None
	3	External No Answer Destination	None
	4	External Busy Destination	None
	5	No Answer Timer	10 sec
	6	Speed Dial Access	None

---

---

## *Initialize CO / Station Port Parameters*

### **Programming Steps**

1. Press the PORT-STA/CO flexible button (**FLASH 80, Button #4**). The following message displays:

```
INITIALIZE PORT - STA / CO
PRESS HOLD
```

2. To initialize the Station/CO Port Parameters, press the HOLD button. A confirmation tone is heard.

### **Description**

Station numbers can be initialized and reset to their original default values after the user has performed the Station Relocation Feature (636).

## *Initialize Exception Tables*

### **Programming Steps**

1. Press the EXCEPTION TABLES flexible button (**FLASH 80, Button #5**). The following message displays:

```
INITIALIZE EX TABLES
PRESS HOLD
```

2. To initialize the Exception Tables, press the HOLD button. A confirmation tone is heard.

### **Description**

The Exception Tables Parameters, including the Allow/Deny Tables and the Special Tables, may be initialized setting all tables to their original, default values.

The following Tables are cleared returning to their default value upon initializing the Exception Tables parameters:

**Table 11-4: Exception Table Defaults**

Program Code	Flex Button	Features	Default Value (after initialization)
FLASH 70	TOLL RESTRICTION		
	1	Allow Table A	Table Cleared (No Entries)
	2	Deny Table A	
	3	Allow Table B	
	4	Deny Table B	
	5	Special Table 1	Table Cleared (No Entries allowed, No Area Code specified)
	6	Special Table 2	
	7	Special Table 3	
	8	Special Table 4 (Home Area Code)	Table Cleared (No Entries allowed)
	9	Area Code for Special Table 1	
	10	Area Code for Special Table 2	
	11	Area Code for Special Table 3	
12	Displaying Toll Table Entries		

## *Initialize System Speed Numbers*

### Programming Steps

1. Press the SYSTEM SPEED NUMBERS flexible button (**FLASH 80, Button #6**). The following message displays:

INITIALIZE SYS SPEED NO  
PRESS HOLD

2. To initialize the System Speed bins, press the HOLD button. A confirmation tone is heard.

### Description

Numbers entered in the System Speed Dial Table may be initialized by clearing all bins to their original default value. Bins 020-999 are returned to their default value (empty) upon initializing the Speed Dial Table.



*When upgrading software from FP2 to FP3, all previously programmed speed dial buttons will be lost.*

## Initialize LCR Tables

### Programming Steps

1. Press the LCR TABLES flexible button (**FLASH 80, Button #7**). The following message displays:

INITIALIZE LCR TABLES PRESS HOLD
-------------------------------------

2. To initialize the LCR Tables, press the HOLD button. A confirmation tone is heard.

### Description

The LCR Tables may be initialized setting all tables to their original, default values. The following tables are reset to their original default value after initialization of the LCR Tables:

**Table 11-5: LCR Table Defaults**

Program Code	Flex Button	Features	Default Value (after initialization)
FLASH 75	LCR TABLES		
	1	3-Digit Area/Office Code Table	Default values assigned
	2	6-Digit Area/Office Code Table	
	3	Exception Code Table	
	4	Route List Table	
	5	Insert/Delete Table	
	6	Daily Start Time Table	
	7	Weekly Schedule Table	
	8	LCR Routing for Toll Information	

## Initialize ICLID Tables

### Programming Steps

1. Press the ICLID TABLES flexible button (**FLASH 80, Button #8**). The following message displays:

<p>INITIALIZE ICLID PRESS HOLD</p>
--

2. To initialize the ICLID Tables, press the HOLD button. A confirmation tone is heard.

### Description

ICLID Table Parameters may be initialized, setting all data fields to their original default values.

**Table 11-6: ICLID-DID Table Defaults**

Program Code	Flex Button	Features	Default Value (after initialization)
FLASH 43	ICLID-DID TABLES		
	1	ICLID Ringing Assignments	None
	18	Next ICLID Route Number	--
	19	Previous ICLID Route Number	--
	20	Select Route Number	--
FLASH 55	LOCAL NUMBER/NAME TRANSLATION		
	1	Route Number	None
	2	Phone Number	None
	3	Name	None
	4	Clear Entry	None
FLASH 56	1	ICLID Disable/Enable	Disabled
	2	ICLID Name in Display	Telephone Number
	3	ICLID Baud Rate Display	9600
	4	ICLID Port Assignment	Port #1

## *Initialize Directory Dialing Table Parameters*

### Programming Steps

1. Press the DIRECTORY DIAL TABLE flexible button (**FLASH 80, Button #9**). The following message displays:

INITIALIZE DIR - DIAL PRESS HOLD
-------------------------------------

2. To initialize the Directory Dialing Table Parameters, press the HOLD button. A confirmation tone is heard.

### Description

The Directory Dialing Table Parameters may be initialized setting all data fields to their original default values.

**Table 11-7: Directory Dialing Table Defaults**

Program Code	Flex Button	Features	Default Value (after initialization)
FLASH 23	DIRECTORY DIALING TABLE		
	1	Bin/ICM	None
	2	Name	
	3	Clear	

---



---

## *Initialize Hunt Group Parameters*

### Programming Steps

1. Press the HUNT GROUPS flexible button (**FLASH 80, Button #10**).  
The following message displays:

<p>INITIALIZE HUNT GROUP PRESS HOLD</p>
---

2. To initialize the Hunt Group Parameters, press the HOLD button. A confirmation tone is heard.

### Description

Hunt Group Parameters may be initialized setting all data fields to their original, default value

**Table 11-8: Hunt Group Defaults**

Program Code	Flex Button	Features	Default Value (after initialization)
FLASH 30	HUNT GROUPS		
	1-12	Hunt Group Programming	None
	13	Station/Pilot Hunting Assignment	Pilot

## Initialize ACD / UCD Group Parameters

### Programming Steps

1. Press the ACD\* or UCD GROUPS flexible button (**FLASH 80, Button #11**). The following message displays:

INITIALIZE ACD GROUP PRESS HOLD
------------------------------------

2. To initialize the ACD\* or UCD Group Parameters, press the HOLD button. A confirmation tone is heard.

### Description

ACD\* or UCD Group Parameters may be initialized setting all data fields to their original default values.

**Table 11-9: UCD Group Defaults**

Program Code	Flex Button	Features	Default Value (after initialization)
FLASH 60	UCD GROUPS 550-557		
	2	Alternate Group Assignment	None
	3	Overflow Station Assignment	None
	7	UCD Primary Agent Assignment	None
	10-11	Recorded UCD Announcement Assignment(s)	None
FLASH 61	UCD TIMERS		
	1	UCD Ring Timer	60 sec
	2	UCD Message Interval Timer	60 sec
	3	UCD Overflow Timer	60 sec
	4	UCD Auto Wrap-Up Timer	04 sec
	5	UCD No-Answer Recall Timer	000=Disabled
	6	UCD No-Answer Retry Timer	300 sec
FLASH 62	1-8	UCD Announcement Tables (RAN)	None

**Table 11-10: ACD Group Defaults**

<b>Program Code</b>	<b>Flex Button</b>	<b>Features</b>	<b>Default Value (after initialization)</b>
FLASH 60	ACD GROUPS 550-565		
	1	Group Name	None
	2	Alternate Group Assignment	None
	3	Overflow Station Assignment	None
	4	Supervisor Programming	None
	5	CIQ Threshold	Disabled
	6	Auto Wrap-Up Timer (Per Group)	04 sec
	7	Primary Agents	None
	8	Secondary Agents	None
	9	Guaranteed RAN	None
	10	Primary RAN	None
	11	Secondary RAN	None
	12	Transferred RAN	None
	13	Overflow Timer	60 sec
14	Call Factor	None	
FLASH 61	ACD TIMERS		
	1	ACD*/UCD Ring Timer	60 sec
	2	ACD*/UCD Message Interval Timer	60 sec
	5	ACD*/UCD No-Answer Recall Timer	000=Disabled
	6	ACD*/UCD No-Answer Retry Timer	300 sec
7	ACD* Guaranteed Message Timer	05 sec	
FLASH 62	1-8	ACD* Ran Announcement Tables	None
FLASH 63	1	Event Trace Disable/Enable	Disabled
	2	Trace Port Assignment	Port #1
	--	Baud Rate Display	9600 Baud

\* Features available with optional software

## Initialize Voice Mail Group Parameters

### Programming Steps

1. Press the VOICE MAIL GROUPS flexible button (**FLASH 80, Button #12**). The following message displays:

INITIALIZE VM GROUP PRESS HOLD
-----------------------------------

2. Press the HOLD button. A confirmation tone is heard.

### Description

VM Group Parameters may be initialized, setting all data fields to their original default values.

**Table 11-11: Voice Mail Group Defaults**

Program Code	Flex Button	Features	Default Value (after initialization)
FLASH 65	VOICE MAIL GROUPS		
	1-8	Voice Mail Groups(440-447)	None
	9	Alternate Voice Mail Group	None
	10	Leave Mail Index Entry	440=0
	11	Retrieve Mail Index Entry	440=1
	12	Station Assignments	None
FLASH 66	1-8	Voice Mail In-Band Signaling	Table 0: Pre=P7, Suf=None Table 1: Pre=P7, Suf=✱ Tables 2-6: None Table 7: Pre=P7, Suf=2
	9	Voice Mail Disconnect Table	None
FLASH 67	1	Voice Mail In-Band Digits	Enabled
	2	Voice Mail Transfer/Forward	Enabled
	3	Voice Mail Broker	Enabled
	4	VM ID Digits	3
FLASH 68	1	Voice Mail Group	None
	2	Voice Mail ID Number	None

## *Initialize Verified Account Code Table*

### Programming Steps

1. Press the VERIFIED ACCT CODES flexible button (**FLASH 80, Button #14**). The following message displays:

<p>INITIALIZE ACCT CODES PRESS HOLD</p>
---

2. To initialize the Verified Account Code Table, press the HOLD button. A confirmation tone is heard.

### Description

The Verified Account Code Table may be initialized setting all data fields to their original, default values.

**Table 11-12: Verified Account Code Table Defaults**

Program Code	Flex Button	Features	Default Value (after initialization)
FLASH 31	VERIFIED ACCOUNT CODES		
	1	Account Code	None
	2	Class of Service (COS)	None
	3	Delete Account Code	None
	4	Erase Digits	None

## *System Reset*

### **Programming Steps**

If the System must be reset but not initialized:

1. Press the RESET flexible button (**FLASH 80, Button #20**). The following message displays:

RESET SYSTEM  
PRESS HOLD

2. To reset the system without initializing the database, press the HOLD button. No confirmation tone is heard and the system resets.

### **Description**

The System Reset feature provides a hard system reset from the keyset instead of the KSU. This is useful in cases where miscellaneous data errors have occurred and the system needs to be reset without initializing the entire database.



---

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# **12** **Printing System Database Parameters**

This chapter describes the procedures and steps necessary to print the system database parameters and various portions of the system.



## Introduction

### *Print Database Parameters*

#### Programming Steps

Press **FLASH** and dial **[85]**. The following message displays:

PRINT DATABASE  
ENTER BUTTON NUMBER

#### Description

The buttons on the key telephone are defined as shown in the following table when entering the Print Database Parameters programming area:

SYSTEM PARAMETERS * 1 Q	CO LINE ATTRIBUTES * 2 W	STATION ATTRIBUTES * 3 E	PORT - STA/CO * 4 R
EXCEPTION TABLES * 5 T	SYSTEM SPEED NUMBERS * 6 Y	LCR TABLES * 7 U	ENTIRE SYSTEM * 8 I
ICLID-DID TABLES * 9 O	DIRECTORY DIAL TABLE * 10 P	HUNT GROUPS * 11 A	ACD* OR UCD GROUPS * 12 S
VOICE MAIL GROUPS * 13 D	* 14 F	VERIFIED ACCTCODES * 15 G	* 16 H
* 17 J	* 18 K	* 19 L	* 20 ;
* 21 Z	* 22 X	* 23 C	* 24 V

\* Features available with optional software.

The Print Database Parameters command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

Refer to the following figures for examples of the database printouts. Also refer to the following paragraphs for instructions on printing portions of the database.

---

---

## Database Printing

### *Print System Parameters*

#### Programming Steps

1. Press the SYSTEM PARAMETERS flexible button (**FLASH 85, Button #1**). The following message displays:

```
PRINT SYS PARAM  
PRESS HOLD
```

2. To print the System Parameters database, press the HOLD button. The following message displays:

```
PRINT SYS PARAM
```

When the system finishes sending the information to the printer, a confirmation tone is heard.

#### Description

The currently stored customer database can be printed or uploaded into a file. This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. When printing the System Parameters the following data prints:

- All System Timers
- All System Wide Options (External Night Ringing, Hold Preference)
- Attendant Station(s) Programming
- Other System Assignments (Page/Relay Assign, Exec/Sec, SMDR)
- Weekly Night Mode Schedule

```

----- SYSTEM PARAMETERS -----
SYS HOLD RECALL          60
EXC HOLD RECALL         180
ATND RECALL TIMER       1
TRANSFER RECALL         45
PRESET FWD TIMER        10
CALL FWD NO ANS         15
PAUSE TIMER             2
CALL PARK TIMER         180
CONFERENCE TIMER        10
PAGING TIMEOUT          15
CO RING DETECT          3
SLT RCVR TIMER          20
M/W TONE TIMER          0
HOOK SWITCH TIME        10
HOOK SWT BOUNCE         10
SMDR CALL QUAL          30
AUTO CALL BACK          3
REMINDER RING           0
RELEASE GUARD           3
INTERDIGIT T/O          5
RPT REDIAL              60
ATTENDANT DISPLAY       1
CALL COVERAGE RING     5
MODEM ANSWER T/O       25
INT DIGIT PULSE         300
DTMF ON/OFF TIME       1

----- SYSTEM FEATURES -----
CO RING TONES           ENABLED
VERIFIED ACCT CODES    DISABLED
CALL FWD DISPLAY        ENABLED
EXTERNAL DAY RING       DISABLED
OVERFLOW STA FWD        DISABLED
DIRECT XFER             ENABLED
STATION LOCK            DISABLED
LCR CALL PROGRESS       ENABLED
RECORDING WARN TONE    ENABLED
MAINTENANCE             DISABLED
RINGBACK ON XFER        DISABLED
911 FEATURE             DISABLED

-----SYSTEM LED FLASH RATES -----
INC CO RING             RED           480 IPM FLUTTER
INC ICM RING            RED           120 IPM FLUTTER
CALL FORWARD BTN        RED           STEADY ON
MSG WAIT VM BTN         RED           STEADY ON
MSG CBCK DSS/BLF        RED           120 IPM FLUTTER
DND DSS/BLF             RED           60 IPM DBL WINK OFF
AUTO CBCK DSS/BLF       RED           120 IPM FLASH
UCD UNAVL DSS/BLF       RED           60 IPM DBL WINK OFF
TRANSFER CO RING        RED           120 IPM FLASH
RECALL CO RING          RED           480 IPM FLUTTER
EXCLUSIVE HOLD          GREEN          120 IPM FLASH
QUEUED CO RING          GREEN          480 IPM FLUTTER
SYSTEM HOLD             RED           60 IPM DBL WINK OFF
IN USE HOLD             GREEN          60 IPM FLASH
CAMP ON BTN             RED           120 IPM FLASH
CALL BACK BTN           RED           120 IPM FLASH
LINE QUEUE BTN          RED           480 IPM FLUTTER
DND BTN                 RED           STEADY ON
ICM HOLD BTN            RED           15 IPM FLASH
LEADING DIGIT 1         LEADING      DIGIT
LEADING DIGIT 2         NONE
LEADING DIGIT 3         NONE
LEADING DIGIT 4         NONE
LEADING DIGIT 5         NONE
LEADING DIGIT 6         NONE
LEADING DIGIT 7         NONE
LEADING DIGIT OPTION    DISABLED
CENTREX DIGITS          4
VM ID DIGITS            3

-- SYSTEM FEATURES -----
ATTENDANT OVERRIDE      DISABLED
HOLD PREFERENCE          SYSTEM
EXTERNAL NIGHT RING     DISABLED
EXECUTIVE WARNING       ENABLED
PAGE WARNING TONE       ENABLED
BACKGROUND MUSIC        ENABLED
LEAST COST ROUTING      DISABLED
FORCED ACCOUNT CODE     DISABLED
GROUP LISTENING         DISABLED
IDLE SPEAKER MODE       DISABLED
CALL COST DISPLAY       DISABLED
MUSIC ON HOLD           ENABLED
CALL QUALIFIER TONE     DISABLED
BARGE IN WARN TONE     ENABLED

```

Figure 12-1: System Parameters Printout

MUSIC CHANNEL [3..8]	CABINET	SLOT	TYPE		
CO - ## ##### ## ## ##	----	----	----		
	0	0	LCOB		
ATTENDANT STATIONS	0	1	DTIB		
100 ## ## ## ## ## ## ##	0	2	LCOB		
	0	3	DTIB		
DATE & TIME FORMAT	0	4	LCOB		
MM/DD/YY, 12 HOURS	0	5	DTIB		
	0	6	LCOB		
PBX DIALING CODES	0	7	DTIB		
## ## ## ## ##					
EXECUTIVE/SECRETARY PAIRINGS					
1 =	###	###			
2 =	###	###			
3 =	###	###			
4 =	###	###			
POWER SUPPLY TYPES					
-----					
ON BOARD RELAY ASSIGNMENTS	10 AMPS	10 AMPS	10 AMPS	10 AMPS	
NONE	NONE				
	ALARM DESC.	ALARM	PERIOD	THRESHOLD	ATTENDANT
				MINOR MAJOR	
I/O BAUD RATE	CARRIER LOSS	Y	5	15 30	Y
-----	BLUE ALARM	Y	5	15 30	Y
Port 1 = 9600	YELLOW ALARM	Y	5	15 30	Y
Port 2 = 9600	RED ALARM	Y	5	15 30	Y
Port 3 = 9600	BIPOLAR VAR.	Y	5	15 30	Y
Port 4 = 9600	SLIP ALARM	Y	5	15 30	Y
	DATA ERRORS	Y	5	15 30	Y
AUTO NIGHT MODE	N				
COLINE GROUP QUEUING					
-----					
WEEKLY NIGHT MODE SCHEDULE					
-----					
	END	START	GROUP 0 ENABLED		
			GROUP 1 ENABLED		
DAY	TIME	TIME	GROUP 2 ENABLED		
M	0	0800 1700	GROUP 3 ENABLED		
T	1	0800 1700	GROUP 4 ENABLED		
W	2	0800 1700	GROUP 5 ENABLED		
T	3	0800 1700	GROUP 6 ENABLED		
F	4	0800 1700	GROUP 7 ENABLED		
S	5	####			
S	6	####			
DIAL PULSE - 60/40 10 PPS					

Figure 12-1: System Parameters Printout

---

---

## *Print CO Line Attributes*

### **Programming Steps**

1. Press the CO LINE ATTRIBUTES flexible button (**FLASH 85, Button #2**). The following message displays:

PRINT CO LINES  
PRESS HOLD

2. To print data for:
  - ALL CO Lines, press the HOLD button.
  - A specified CO Line Range, enter 6 digits (3 digits for the first line and 3 digits for the last line in the range)
  - One CO Line, enter that line twice: [001001]
3. Then press the HOLD button. The following message displays and the CO Line data prints:

PRINTING CO LINES

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### **Description**

The Print CO Line Attributes command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

When printing the CO Line attributes the following data prints:

- All CO Line parameters within the specified range.
- CO Line ringing assignments within the specified range.
- Dial Pulse Ratio and Speed settings

```

CO LINE ATTRIBUTES
-----
CO 01                                CO 02
-----                                -----
DIAL PULSE/DTMF - DTMF                DIAL PULSE/DTMF - DTMF
PBX/CO - CO                            PBX/CO - CO
UNIVERSAL NIGHT ANS - ENABLED          UNIVERSAL NIGHT ANS - ENABLED
DISA TRK TO TRK - ENABLED              DISA TRK TO TRK - ENABLED
PRIVACY - ENABLED                      PRIVACY - ENABLED
LOOP SUPERVISION - 4                   LOOP SUPERVISION - 4
DISA TYPE - NONE                       DISA TYPE - NONE
LINE GROUP - 1                         LINE GROUP - 1
CLASS OF SERVICE - 1                  CLASS OF SERVICE - 1
LINE IDENTIFICATION - LINE 01          LINE IDENTIFICATION - LINE 02
CO DIRECTION - INCOMING-OUTGOING       CO DIRECTION - INCOMING-OUTGOING
RING ASSIGNMENTS                       RING ASSIGNMENTS
                                     100A
TRANSMIT VOLUME - 0DB                  TRANSMIT VOLUME - 0DB
PRESET FORWARD DEST - NONE             PRESET FORWARD DEST - NONE
PRESET FWD VMID - NONE                 PRESET FWD VMID - NONE
UNIVERSAL DAY ANSWER - DISABLED        UNIVERSAL DAY ANSWER - DISABLED
MOH CHANNEL - 1                        MOH CHANNEL - 1
RING TONE - 0                          RING TONE - 0
911 TRUNK - DISABLED                   911 TRUNK - DISABLED
FLASH TIMER - 10                       FLASH TIMER - 10
RING DELAY TIMER - 0                   RING DELAY TIMER - 0
WINK TIMER - 140                       WINK TIMER - 140
RELEASE TIMER - 20                     RELEASE TIMER - 20
RESEIZE TIMER - 200                    RESEIZE TIMER - 200
GUARD TIMER - 50                       GUARD TIMER - 50
SEIZE TIMER - 10                       SEIZE TIMER - 10
PRESET FWD TIMER - 100                 PRESET FWD TIMER - 100

                                     .. and so on through CO lines 012

```

**Figure 12-2: CO Line Attributes Printout**

---

---

## *Print Station Attributes*

### **Programming Steps**

1. Press the STATION ATTRIBUTES flexible button (**FLASH 85, Button #3**). The following message displays:

PRINT STATIONS  
PRESS HOLD

2. To print data for:
  - All stations, press the HOLD button.
  - A specified Station Range, enter six digits to specify the Station range (three digits for the first station and three digits for the last station in the range):  
[100-131] = *Triad-S*
  - One station, enter that station twice: [101101]
3. Then press the HOLD button. The following message displays and the requested information prints:

PRINTING STATIONS

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### **Description**

The Print Station Attributes command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

When printing the Station attributes the following data prints:

>>> *All Current Station Parameters*

STATION ATTRIBUTES			STA 101		
STA 100			STA 101		
PAGE ACCESS	ENABLED		PAGE ACCESS	ENABLED	
DO NOT DISTURB	ENABLED		DO NOT DISTURB	ENABLED	
CONFERENCE	ENABLED		CONFERENCE	ENABLED	
EXEC OVERRIDE	DISABLED		EXEC OVERRIDE	DISABLED	
PRIVACY	ENABLED		PRIVACY	ENABLED	
SYSTEM SPEED	ENABLED		SYSTEM SPEED	ENABLED	
LINE QUEUING	ENABLED		LINE QUEUING	ENABLED	
PREF LINE ANSWER	DISABLED		PREF LINE ANSWER	DISABLED	
OFF HOOK VOICE OVER	DISABLED		OFF HOOK VOICE OVER	DISABLED	
CALL FORWARD	ENABLED		CALL FORWARD	ENABLED	
FORCE LCR	DISABLED		FORCE LCR	DISABLED	
ACD SUPV BARGE IN	DISABLED		ACD SUPV BARGE IN	DISABLED	
EXEC OVERRIDE BLOCK	DISABLED		EXEC OVERRIDE BLOCK	DISABLED	
CO RING OPTIONS	MUTED RING		CO RING OPTIONS	MUTED RING	
NAME AT IDLE LCD	EXT NUMBER		NAME AT IDLE LCD	EXT NUMBER	
ACD ZAP TONE	DISABLED		ACD ZAP TONE	DISABLED	
STATION ID	KEYSET - SP 24BTN		STATION ID	KEYSET - SP 24BTN	
CO LOOP POOL FLEX	DISABLED		CO LOOP POOL FLEX	DISABLED	
DAY COS	1		DAY COS	1	
NIGHT COS	1		NIGHT COS	1	
SPEAKERPHONE	FULL SPEAKERPHONE		SPEAKERPHONE	FULL SPEAKERPHONE	
PICKUP GROUPS	1		PICKUP GROUPS	1	
PAGE ZONE	1		PAGE ZONE	1	
INTERNAL NO ANSWER	###		INTERNAL NO ANSWER	###	
INTERNAL BUSY	###		INTERNAL BUSY	###	
EXTERNAL NO ANSWER	###		EXTERNAL NO ANSWER	###	
EXTERNAL BUSY	###		EXTERNAL BUSY	###	
NO ANSWER TIMER	10		NO ANSWER TIMER	10	
LINE GROUP ACCESS	1		LINE GROUP ACCESS	1	
LCR CLASS OF SERVICE	0		LCR CLASS OF SERVICE	0	
OFFHOOK PREFERENCE BTN	00 ENABLED		OFFHOOK PREFERENCE BTN	00 ENABLED	
KEYSET MODE	INACTIVE MODE 2400		KEYSET MODE	INACTIVE MODE 2400	
VOICE MAIL ID	100		VOICE MAIL ID	101	
CORDLESS KEY BTN 00			LIGHT CONTROL	NONE	
BUTTONS:			DISPLAY LCD MSG	NONE	
01D100 02D101 03D102			CORDLESS KEY BTN 00		
04D103 05D104 06D105			BUTTONS:		
07D106 08D107 09D108			01100 02D101 03D102		
10D109 11D110 12D111			04D10 05C001 06C002		
13L001 14C002 15L003			07LP 08PL1 09CBK		
16L004 17L005 18L006			10PKU 11DND 12LQU		
19LP 20PL1 21CBK			13L001 14C002 15L003		
22PKU 23DND 24LQU			16L004 17L005 18L006		
25FLA 26XFR 27SPD			19LP 20PL1 21CBK		
28CNF 29MSG 30FWD			22PKU 23DND 24LQU		
31MUT 32CPO 33MON					
34HLD 35VOL 36VOL					
			...	and so on through stations: 131	

**NOTE:** The button printout for the 8-button keyset displays all flexible AND fixed buttons, the same as the 24-button keyset.

**Figure 12-3: Station Attributes Printout**

---

---

## *Print CO Port Parameters*

### **Programming Steps**

1. Press the CO PORT flexible button (**FLASH85, Button #4**). The following message displays:

```
PRINT CO PORTS/CODES
PRESS HOLD
```

2. To print the CO Port parameters, press the HOLD button. The following message displays:

```
PRINTING CO PORT
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### **Description**

The Print CO Port command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

```
CO PORT NUMBERS
 01      02      03      04
 05      06      07      08
 09      10      11      12
```

**Figure 12-4: CO Port Attributes Printout**

---

---

## *Print Exception Tables*

### **Programming Steps**

1. Press the EXCEPT TABLES flexible button (**FLASH 85, Button #5**). The following message displays:

PRINT EX TABLES  
PRESS HOLD

2. To print the Except Tables, press the HOLD button. The following message displays:

PRINTING EX TABLES

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### **Description**

The Print Exception Tables command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

When printing information from the Exception Tables, the following data prints:

- Allow Table A
- Deny Table A
- Allow Table B
- Deny Table B
- Special Table 1
- Special Table 2
- Special Table 3
- Special Table 4

ALLOW TABLE A		SPECIAL TABLE 1 AREA CODE
-----		-----
01	11	ALLOWED OFFICE CODES
02	12	
03	13	
04	14	
05	15	SPECIAL TABLE 2 AREA CODE
06	16	-----
07	17	ALLOWED OFFICE CODES
08	18	
09	19	
10	20	
		SPECIAL TABLE 3 AREA CODE
DENY TABLE A		-----
-----		ALLOWED OFFICE CODES
01	06	
02	07	
03	08	
04	09	SPECIAL TABLE 4 HOME AREA CODE
05	10	-----
		ALLOWED OFFICE CODES
ALLOW TABLE B		
-----		
01	11	
02	12	
03	13	
04	14	
05	15	
06	16	
07	17	
08	18	
09	19	
10	20	
DENY TABLE B		
-----		
01	06	
02	07	
03	08	
04	09	
05	10	

**Figure 12-5: Exception Tables Printout**

---

---

## *Print System Speed Numbers*

### **Programming Steps**

1. Press the SYSTEM SPEED flexible button (**FLASH 85, Button #6**). The following message displays:

```
PRINT SYS SPEED NO  
PRESS HOLD
```

2. To print the System Speed bins, press the HOLD button. The following message displays:

```
PRINTING SYS SPEED NO
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### **Description**

The System Speed Numbers command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

```
SYSTEM SPEED NUMBERS  
020 037  
021 038  
022 039  
023 040  
024 041  
025 042  
026 043  
027 044  
028 045  
029 046  
030 047  
031 048  
032 049  
033 050  
034 051  
035 052  
036 ... and so on through Speed Number 999  
(with expanded memory)
```

**Figure 12-6: System Speed Numbers Printout**

---

---

## *Print LCR Tables*

### **Programming Steps**

1. Press the LCR TABLES flexible button (**FLASH 85, Button #7**). The following message displays:

PRINT LCR TABLES  
PRESS HOLD

2. To print the LCR Tables, press the HOLD button. The following message displays:

PRINTING LCR TABLES

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### **Description**

The Print LCR Tables command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

When printing information from the LCR Tables, the following data prints:

- Exception Table
- Route List Table
- Insert/Delete Table
- Daily Time Table
- Weekly Time Table
- Toll Tables
- 6-Digit Table
- 3-Digit Table

EXCEPTION CODE TABLE								DIGIT INS/DEL TABLE		
-----								-----		
CODE		ROUTE NO						TABLE	DIGITS	
-----								-----		
ROUTE LIST TABLE								0	PRE	P
-----								1	PRE	
RT	TIME	COST	CO	GRP	INS/DEL	GRP	PR	2	PRE	P
0	1	026	1		0		1	3	PRE	P
	2	026	1		0		1	4	PRE	P
	3	026	1		0		1	5	PRE	P
	4	026	1		0		1	6	PRE	P
1	1	000	1		0		1	7	PRE	P
	2	000	1		0		1	8	PRE	P
	3	000	1		0		1	9	PRE	P
	4	000	1		0		1	10	PRE	P
2	1	010	1		0		1	11	PRE	P
	2	010	1		0		1	12	PRE	P
	3	010	1		0		1	13	PRE	P
	4	010	1		0		1	14	PRE	P
3	1	072	1		0		1	15	PRE	P
	2	072	1		0		1	16	PRE	P
	3	072	1		0		1	17	PRE	P
	4	072	1		0		1	18	PRE	P
4	1	171	1		0		1	19	PRE	P
	2	171	1		0		1			
	3	171	1		0		1			
	4	171	1		0		1			
5	1	106	1		0		1			
	2	106	1		0		1			
	3	106	1		0		1			
	4	106	1		0		1			
6	1	277	1		0		1	1	800	
	2	277	1		0		1	2	1700	
	3	277	1		0		1	3	2300	
	4	277	1		0		1	4	####	

Figure 12-7: LCR Tables Printout

---

---

```
WEEKLY SCHEDULE TABLE
-----
START
TIME           M   T   W   T   F   S   S
-----
800             1   1   1   1   1   3   3
1700            2   2   2   2   2   3   2
2300            3   3   3   3   3   3   3
####           3   3   3   3   3   3   3

LCR ROUTE FOR 555-1212
-----
0

6 DIGIT TABLE
-----
AREA           OFFICE
ROUTE          CODES
CODE
NO
```

**Figure 12-7: LCR Tables Printout**

3 DIGIT TABLE											
CODE LEADING 1				NON-LEADING 1							
RR	PP	6		RR	PP	6					
11	##	##	N	6	##	N		597	2	8 N	1 7 N
200	0	11	N	1	7	N		598	2	8 N	1 7 N
201	0	11	N	1	7	N		599	2	8 N	1 7 N
202	0	11	N	1	7	N		600	0	11 N	1 7 N
203	0	11	N	1	7	N		601	0	11 N	1 7 N
204	3	11	N	1	7	N		602	0	11 N	1 7 N
205	0	11	N	1	7	N		603	0	11 N	1 7 N
206	0	11	N	1	7	N		604	0	11 N	1 7 N
207	0	11	N	1	7	N		605	0	11 N	1 7 N
208	0	11	N	1	7	N		606	0	11 N	1 7 N
209	0	11	N	1	7	N		607	0	11 N	1 7 N
210	0	11	N	1	7	N		608	0	11 N	1 7 N
211	##	##	N	1	7	N		609	0	11 N	1 7 N
212	0	11	N	1	7	N		610	0	11 N	1 7 N
213	0	11	N	1	7	N		611	##	## N	1 7 N
214	0	11	N	1	7	N		612	0	11 N	1 7 N
215	0	11	N	1	7	N		613	3	11 N	1 7 N
216	0	11	N	1	7	N		614	0	11 N	1 7 N
217	0	11	N	1	7	N		615	0	11 N	1 7 N
218	0	11	N	1	7	N		616	0	11 N	1 7 N
219	0	11	N	1	7	N		617	0	11 N	1 7 N
220	2	8	N	1	7	N		618	0	11 N	1 7 N
221	2	8	N	1	7	N		619	0	11 N	1 7 N
222	2	8	N	1	7	N		620	2	8 N	1 7 N
223	2	8	N	1	7	N		621	2	8 N	1 7 N
224	2	8	N	1	7	N		622	2	8 N	1 7 N
225	2	8	N	1	7	N		623	2	8 N	1 7 N
226	2	8	N	1	7	N		624	2	8 N	1 7 N
227	2	8	N	1	7	N		625	2	8 N	1 7 N
228	0	11	N	1	7	N		626	0	11 N	1 7 N
229	2	8	N	1	7	N		627	2	8 N	1 7 N
230	2	8	N	1	7	N		628	2	8 N	1 7 N
231	2	8	N	1	7	N		629	2	8 N	1 7 N
232	2	8	N	1	7	N		630	0	11 N	1 7 N
233	2	8	N	1	7	N		631	2	8 N	1 7 N
234	2	8	N	1	7	N		632	2	8 N	1 7 N
235	2	8	N	1	7	N		633	2	8 N	1 7 N
236	2	8	N	1	7	N		634	2	8 N	1 7 N
237	2	8	N	1	7	N		635	2	8 N	1 7 N
238	2	8	N	1	7	N		636	2	8 N	1 7 N
239	2	8	N	1	7	N		637	2	8 N	1 7 N
								638	2	8 N	1 7 N
								639	2	8 N	1 7 N
								640	2	8 N	1 7 N
								641	2	8 N	1 7 N
								642	2	8 N	1 7 N

Figure 12-8: Three-Digit Tables Printout

240	0	11	N	1	7	N	643	2	8	N	1	7	N
241	2	8	N	1	7	N	644	2	8	N	1	7	N
242	2	8	N	1	7	N	645	2	8	N	1	7	N
243	2	8	N	1	7	N	646	2	8	N	1	7	N
244	2	8	N	1	7	N	647	2	8	N	1	7	N
245	2	8	N	1	7	N	648	2	8	N	1	7	N
246	2	8	N	1	7	N	649	2	8	N	1	7	N
247	2	8	N	1	7	N	650	0	11	N	1	7	N
248	0	11	N	1	7	N	651	2	8	N	1	7	N
249	2	8	N	1	7	N	652	2	8	N	1	7	N
250	2	8	N	1	7	N	653	2	8	N	1	7	N
251	2	8	N	1	7	N	654	2	8	N	1	7	N
252	2	8	N	1	7	N	655	2	8	N	1	7	N
253	0	11	N	1	7	N	656	2	8	N	1	7	N
254	0	11	N	1	7	N	657	2	8	N	1	7	N
255	2	8	N	1	7	N	658	2	8	N	1	7	N
256	2	8	N	1	7	N	659	2	8	N	1	7	N
257	2	8	N	1	7	N	660	0	11	N	1	7	N
258	2	8	N	1	7	N	661	2	8	N	1	7	N
259	2	8	N	1	7	N	662	2	8	N	1	7	N
260	2	8	N	1	7	N	663	2	8	N	1	7	N
261	2	8	N	1	7	N	664	2	8	N	1	7	N
282	2	8	N	1	7	N	665	2	8	N	1	7	N
283	2	8	N	1	7	N	666	2	8	N	1	7	N
264	2	8	N	1	7	N	667	2	8	N	1	7	N
265	2	8	N	1	7	N	668	2	8	N	1	7	N
266	2	8	N	1	7	N	669	2	8	N	1	7	N
267	2	8	N	1	7	N	670	2	8	N	1	7	N
268	2	8	N	1	7	N	671	2	8	N	1	7	N
269	2	8	N	1	7	N	672	2	8	N	1	7	N
270	2	8	N	1	7	N	673	2	8	N	1	7	N
271	2	8	N	1	7	N	674	2	8	N	1	7	N
272	2	8	N	1	7	N	675	2	8	N	1	7	N
273	2	8	N	1	7	N	676	2	8	N	1	7	N
274	2	8	N	1	7	N	677	2	8	N	1	7	N
275	2	8	N	1	7	N	678	2	8	N	1	7	N
276	2	8	N	1	7	N	679	2	8	N	1	7	N
277	2	8	N	1	7	N	680	2	8	N	1	7	N
278	2	8	N	1	7	N	681	2	8	N	1	7	N
279	2	8	N	1	7	N	682	2	8	N	1	7	N
280	2	8	N	1	7	N	683	2	8	N	1	7	N
281	0	11	N	1	7	N	684	2	8	N	1	7	N
282	2	8	N	1	7	N	685	2	8	N	1	7	N
283	2	8	N	1	7	N	686	2	8	N	1	7	N
284	2	8	N	1	7	N	687	2	8	N	1	7	N
285	2	8	N	1	7	N	688	2	8	N	1	7	N
286	2	8	N	1	7	N	689	2	8	N	1	7	N

Figure 12-8: Three-Digit Tables Printout

287	2	8	N	1	7	N	690	2	8	N	1	7	N
288	2	8	N	1	7	N	691	2	8	N	1	7	N
289	2	8	N	1	7	N	692	2	8	N	1	7	N
290	2	8	N	1	7	N	693	2	8	N	1	7	N
291	2	8	N	1	7	N	694	2	8	N	1	7	N
292	2	8	N	1	7	N	695	2	8	N	1	7	N
293	2	8	N	1	7	N	696	2	8	N	1	7	N
294	2	8	N	1	7	N	697	2	8	N	1	7	N
295	2	8	N	1	7	N	698	2	8	N	1	7	N
296	2	8	N	1	7	N	699	2	8	N	1	7	N
297	2	8	N	1	7	N	700	0	11	N	1	7	N
298	2	8	N	1	7	N	701	0	11	N	1	7	N
299	2	8	N	1	7	N	702	0	11	N	1	7	N
300	0	11	N	1	7	N	703	0	11	N	1	7	N
301	0	11	N	1	7	N	704	0	11	N	1	7	N
302	0	11	N	1	7	N	705	3	11	N	1	7	N
303	0	11	N	1	7	N	706	4	11	N	1	7	N
304	0	11	N	1	7	N	707	0	11	N	1	7	N
305	0	11	N	1	7	N	708	0	11	N	1	7	N
306	3	11	N	1	7	N	709	3	11	N	1	7	N
307	0	11	N	1	7	N	710	0	11	N	1	7	N
308	0	11	N	1	7	N	711	##	##	N	1	7	N
309	0	11	N	1	7	N	712	0	11	N	1	7	N
310	0	11	N	1	7	N	713	0	11	N	1	7	N
311	##	##	N	1	7	N	714	0	11	N	1	7	N
312	0	11	N	1	7	N	715	0	11	N	1	7	N
313	0	11	N	1	7	N	716	0	11	N	1	7	N
314	0	11	N	1	7	N	717	0	11	N	1	7	N
315	0	11	N	1	7	N	718	0	11	N	1	7	N
316	0	11	N	1	7	N	719	0	11	N	1	7	N
317	0	11	N	1	7	N	720	2	8	N	1	7	N
318	0	11	N	1	7	N	721	2	8	N	1	7	N
319	0	11	N	1	7	N	722	2	8	N	1	7	N
320	0	11	N	1	7	N	723	2	8	N	1	7	N
321	2	8	N	1	7	N	724	0	11	N	1	7	N
322	2	8	N	1	7	N	725	2	8	N	1	7	N
323	0	11	N	1	7	N	726	2	8	N	1	7	N
324	2	8	N	1	7	N	727	2	8	N	1	7	N
325	2	8	N	1	7	N	728	2	8	N	1	7	N
326	2	8	N	1	7	N	729	2	8	N	1	7	N
327	2	8	N	1	7	N	730	2	8	N	1	7	N
328	2	8	N	1	7	N	731	2	8	N	1	7	N
329	2	8	N	1	7	N	732	0	11	N	1	7	N
330	0	11	N	1	7	N	733	2	8	N	1	7	N
331	2	8	N	1	7	N	734	0	11	N	1	7	N
332	2	8	N	1	7	N	735	2	8	N	1	7	N
333	2	8	N	1	7	N	736	2	8	N	1	7	N

Figure 12-8: Three-Digit Tables Printout

334	0	11	N	1	7	N	737	2	8	N	1	7	N
335	2	8	N	1	7	N	738	2	8	N	1	7	N
336	2	8	N	1	7	N	739	2	8	N	1	7	N
337	2	8	N	1	7	N	740	0	11	N	1	7	N
338	2	8	N	1	7	N	741	2	8	N	1	7	N
339	2	8	N	1	7	N	742	2	8	N	1	7	N
340	2	8	N	1	7	N	743	2	8	N	1	7	N
341	2	8	N	1	7	N	744	2	8	N	1	7	N
342	2	8	N	1	7	N	745	2	8	N	1	7	N
343	2	8	N	1	7	N	746	2	8	N	1	7	N
344	2	8	N	1	7	N	747	2	8	N	1	7	N
345	2	8	N	1	7	N	748	2	8	N	1	7	N
346	2	8	N	1	7	N	749	2	8	N	1	7	N
347	2	8	N	1	7	N	750	2	8	N	1	7	N
348	2	8	N	1	7	N	751	2	8	N	1	7	N
349	2	8	N	1	7	N	752	2	8	N	1	7	N
350	2	8	N	1	7	N	753	2	8	N	1	7	N
351	2	8	N	1	7	N	754	2	8	N	1	7	N
352	0	11	N	1	7	N	755	2	8	N	1	7	N
353	2	8	N	1	7	N	756	2	8	N	1	7	N
354	2	8	N	1	7	N	757	0	11	N	1	7	N
355	2	8	N	1	7	N	758	2	8	N	1	7	N
356	2	8	N	1	7	N	759	2	8	N	1	7	N
357	2	8	N	1	7	N	760	0	11	N	1	7	N
358	2	8	N	1	7	N	761	2	8	N	1	7	N
359	2	8	N	1	7	N	762	2	8	N	1	7	N
360	0	11	N	1	7	N	763	2	8	N	1	7	N
361	2	8	N	1	7	N	764	2	8	N	1	7	N
362	2	8	N	1	7	N	765	0	11	N	1	7	N
363	2	8	N	1	7	N	766	2	8	N	1	7	N
364	2	8	N	1	7	N	767	2	8	N	1	7	N
365	2	8	N	1	7	N	768	2	8	N	1	7	N
366	2	8	N	1	7	N	769	2	8	N	1	7	N
367	2	8	N	1	7	N	770	0	11	N	1	7	N
368	2	8	N	1	7	N	771	2	8	N	1	7	N
369	2	8	N	1	7	N	772	2	8	N	1	7	N
370	2	8	N	1	7	N	773	0	11	N	1	7	N
371	2	8	N	1	7	N	774	2	8	N	1	7	N
372	2	8	N	1	7	N	775	2	8	N	1	7	N
373	2	8	N	1	7	N	776	2	8	N	1	7	N
374	2	8	N	1	7	N	777	2	8	N	1	7	N
375	2	8	N	1	7	N	778	2	8	N	1	7	N
376	2	8	N	1	7	N	779	2	8	N	1	7	N
377	2	8	N	1	7	N	780	2	8	N	1	7	N
378	2	8	N	1	7	N	781	0	11	N	1	7	N
379	2	8	N	1	7	N	782	2	8	N	1	7	N
380	2	8	N	1	7	N	783	2	8	N	1	7	N

Figure 12-8: Three-Digit Tables Printout

381	2	8	N	1	7	N	784	2	8	N	1	7	N
382	2	8	N	1	7	N	785	0	11	N	1	7	N
383	2	8	N	1	7	N	786	2	8	N	1	7	N
384	2	8	N	1	7	N	787	2	8	N	1	7	N
385	2	8	N	1	7	N	788	2	8	N	1	7	N
386	2	8	N	1	7	N	789	2	8	N	1	7	N
387	2	8	N	1	7	N	790	2	8	N	1	7	N
388	2	8	N	1	7	N	791	2	8	N	1	7	N
389	2	8	N	1	7	N	792	2	8	N	1	7	N
390	2	8	N	1	7	N	793	2	8	N	1	7	N
391	2	8	N	1	7	N	794	2	8	N	1	7	N
392	2	8	N	1	7	N	795	2	8	N	1	7	N
393	2	8	N	1	7	N	796	2	8	N	1	7	N
394	2	8	N	1	7	N	797	2	8	N	1	7	N
395	2	8	N	1	7	N	798	2	8	N	1	7	N
396	2	8	N	1	7	N	799	2	8	N	1	7	N
397	2	8	N	1	7	N	800	0	11	N	1	7	N
398	2	8	N	1	7	N	801	0	11	N	1	7	N
399	2	8	N	1	7	N	802	0	11	N	1	7	N
400	0	11	N	1	7	N	803	0	11	N	1	7	N
401	0	11	N	1	7	N	804	0	11	N	1	7	N
402	0	11	N	1	7	N	805	0	11	N	1	7	N
403	3	11	N	1	7	N	806	0	11	N	1	7	N
404	0	11	N	1	7	N	807	3	11	N	1	7	N
405	0	11	N	1	7	N	808	0	11	N	1	7	N
406	0	11	N	1	7	N	809	5	11	N	1	7	N
407	0	11	N	1	7	N	810	0	11	N	1	7	N
408	0	11	N	1	7	N	811	##	##	N	1	7	N
409	0	11	N	1	7	N	812	0	11	N	1	7	N
410	0	11	N	1	7	N	813	0	11	N	1	7	N
411	1	4	N	1	3	N	814	0	11	N	1	7	N
412	0	11	N	1	7	N	815	0	11	N	1	7	N
413	0	11	N	1	7	N	816	0	11	N	1	7	N
414	0	11	N	1	7	N	817	0	11	N	1	7	N
415	0	11	N	1	7	N	818	0	11	N	1	7	N
416	3	11	N	1	7	N	819	0	11	N	1	7	N
417	0	11	N	1	7	N	820	2	8	N	1	7	N
418	3	11	N	1	7	N	821	2	8	N	1	7	N
419	0	11	N	1	7	N	822	2	8	N	1	7	N
420	2	8	N	1	7	N	823	2	8	N	1	7	N
421	2	8	N	1	7	N	824	2	8	N	1	7	N
422	2	8	N	1	7	N	825	2	8	N	1	7	N
423	0	11	N	1	7	N	826	2	8	N	1	7	N
424	2	8	N	1	7	N	827	2	8	N	1	7	N
425	0	11	N	1	7	N	828	2	8	N	1	7	N
426	2	8	N	1	7	N	829	2	8	N	1	7	N
427	2	8	N	1	7	N	830	0	11	N	1	7	N

Figure 12-8: Three-Digit Tables Printout

428	2	8	N	1	7	N	831	0	11	N	1	7	N
429	2	8	N	1	7	N	832	2	8	N	1	7	N
430	2	8	N	1	7	N	833	2	8	N	1	7	N
431	2	8	N	1	7	N	834	2	8	N	1	7	N
432	2	8	N	1	7	N	835	2	8	N	1	7	N
433	2	8	N	1	7	N	836	2	8	N	1	7	N
434	2	8	N	1	7	N	837	2	8	N	1	7	N
435	0	11	N	1	7	N	838	2	8	N	1	7	N
436	2	8	N	1	7	N	839	2	8	N	1	7	N
437	2	8	N	1	7	N	840	2	8	N	1	7	N
438	2	8	N	1	7	N	841	2	8	N	1	7	N
439	2	8	N	1	7	N	842	2	8	N	1	7	N
440	0	11	N	1	7	N	843	0	11	N	1	7	N
441	5	11	N	1	7	N	844	2	8	N	1	7	N
442	2	8	N	1	7	N	845	2	8	N	1	7	N
443	0	11	N	1	7	N	846	2	8	N	1	7	N
444	2	8	N	1	7	N	847	0	11	N	1	7	N
445	2	8	N	1	7	N	848	2	8	N	1	7	N
446	2	8	N	1	7	N	849	2	8	N	1	7	N
447	2	8	N	1	7	N	850	0	11	N	1	7	N
448	2	8	N	1	7	N	851	2	8	N	1	7	N
449	2	8	N	1	7	N	852	2	8	N	1	7	N
450	2	8	N	1	7	N	853	2	8	N	1	7	N
451	2	8	N	1	7	N	854	2	8	N	1	7	N
452	2	8	N	1	7	N	855	2	8	N	1	7	N
453	2	8	N	1	7	N	856	2	8	N	1	7	N
454	2	8	N	1	7	N	857	2	8	N	1	7	N
455	2	8	N	1	7	N	858	2	8	N	1	7	N
456	2	8	N	1	7	N	859	2	8	N	1	7	N
457	2	8	N	1	7	N	860	0	11	N	1	7	N
458	2	8	N	1	7	N	861	2	8	N	1	7	N
459	2	8	N	1	7	N	862	2	8	N	1	7	N
460	2	8	N	1	7	N	863	2	8	N	1	7	N
461	2	8	N	1	7	N	864	0	11	N	1	7	N
462	2	8	N	1	7	N	865	2	8	N	1	7	N
463	2	8	N	1	7	N	866	2	8	N	1	7	N
464	2	8	N	1	7	N	867	2	8	N	1	7	N
465	2	8	N	1	7	N	868	2	8	N	1	7	N
466	2	8	N	1	7	N	869	2	8	N	1	7	N
467	2	8	N	1	7	N	870	0	11	N	1	7	N
468	2	8	N	1	7	N	871	2	8	N	1	7	N
469	2	8	N	1	7	N	872	2	8	N	1	7	N
470	2	8	N	1	7	N	873	2	8	N	1	7	N
471	2	8	N	1	7	N	874	0	11	N	1	7	N
472	2	8	N	1	7	N	875	2	8	N	1	7	N
473	2	8	N	1	7	N	876	2	8	N	1	7	N
474	2	8	N	1	7	N	877	2	8	N	1	7	N

Figure 12-8: Three-Digit Tables Printout

475	2	8	N	1	7	N	878	2	8	N	1	7	N
476	2	8	N	1	7	N	879	2	8	N	1	7	N
477	2	8	N	1	7	N	880	2	8	N	1	7	N
478	2	8	N	1	7	N	881	2	8	N	1	7	N
479	2	8	N	1	7	N	882	2	8	N	1	7	N
480	2	8	N	1	7	N	883	2	8	N	1	7	N
481	2	8	N	1	7	N	884	2	8	N	1	7	N
482	2	8	N	1	7	N	885	2	8	N	1	7	N
483	2	8	N	1	7	N	886	2	8	N	1	7	N
484	2	8	N	1	7	N	887	2	8	N	1	7	N
485	2	8	N	1	7	N	888	2	8	N	1	7	N
486	2	8	N	1	7	N	889	2	8	N	1	7	N
487	2	8	N	1	7	N	890	2	8	N	1	7	N
488	2	8	N	1	7	N	891	2	8	N	1	7	N
489	2	8	N	1	7	N	892	2	8	N	1	7	N
490	2	8	N	1	7	N	893	2	8	N	1	7	N
491	2	8	N	1	7	N	894	2	8	N	1	7	N
492	2	8	N	1	7	N	895	2	8	N	1	7	N
493	2	8	N	1	7	N	896	2	8	N	1	7	N
494	2	8	N	1	7	N	897	2	8	N	1	7	N
495	2	8	N	1	7	N	898	2	8	N	1	7	N
496	2	8	N	1	7	N	899	2	8	N	1	7	N
497	2	8	N	1	7	N	900	0	11	N	1	7	N
498	2	8	N	1	7	N	901	0	11	N	1	7	N
499	2	8	N	1	7	N	902	3	11	N	1	7	N
500	0	11	N	1	7	N	903	0	11	N	1	7	N
501	0	11	N	1	7	N	904	0	11	N	1	7	N
502	0	11	N	1	7	N	905	4	11	N	1	7	N
503	0	11	N	1	7	N	906	0	11	N	1	7	N
504	0	11	N	1	7	N	907	0	11	N	1	7	N
505	0	11	N	1	7	N	908	0	11	N	1	7	N
506	3	11	N	1	7	N	909	0	11	N	1	7	N
507	0	11	N	1	7	N	910	0	11	N	1	7	N
508	0	11	N	1	7	N	911	1	4	N	1	3	N
509	0	11	N	1	7	N	912	0	11	N	1	7	N
510	0	11	N	1	7	N	913	0	11	N	1	7	N
511	##	##	N	1	7	N	914	0	11	N	1	7	N
512	0	11	N	1	7	N	915	0	11	N	1	7	N
513	0	11	N	1	7	N	916	0	11	N	1	7	N
514	3	11	N	1	7	N	917	0	11	N	1	7	N
515	0	11	N	1	7	N	918	0	11	N	1	7	N
516	0	11	N	1	7	N	919	0	11	N	1	7	N
517	0	11	N	1	7	N	920	0	11	N	1	7	N
518	0	11	N	1	7	N	921	2	8	N	1	7	N
519	3	11	N	1	7	N	922	2	8	N	1	7	N
520	0	11	N	1	7	N	923	2	8	N	1	7	N
521	2	8	N	1	7	N	924	2	8	N	1	7	N

Figure 12-8: Three-Digit Tables Printout

522	2	8	N	1	7	N	925	0	11	N	1	7	N
523	2	8	N	1	7	N	926	2	8	N	1	7	N
524	2	8	N	1	7	N	927	2	8	N	1	7	N
525	2	8	N	1	7	N	928	2	8	N	1	7	N
526	2	8	N	1	7	N	929	2	8	N	1	7	N
527	2	8	N	1	7	N	930	2	8	N	1	7	N
528	2	8	N	1	7	N	931	0	11	N	1	7	N
529	2	8	N	1	7	N	932	2	8	N	1	7	N
530	0	11	N	1	7	N	933	2	8	N	1	7	N
531	2	8	N	1	7	N	934	2	8	N	1	7	N
532	2	8	N	1	7	N	935	2	8	N	1	7	N
533	2	8	N	1	7	N	936	2	8	N	1	7	N
534	2	8	N	1	7	N	937	0	11	N	1	7	N
535	2	8	N	1	7	N	938	2	8	N	1	7	N
536	2	8	N	1	7	N	939	2	8	N	1	7	N
537	2	8	N	1	7	N	940	0	11	N	1	7	N
538	2	8	N	1	7	N	941	0	11	N	1	7	N
539	2	8	N	1	7	N	942	2	8	N	1	7	N
540	0	11	N	1	7	N	943	2	8	N	1	7	N
541	0	11	N	1	7	N	944	2	8	N	1	7	N
542	2	8	N	1	7	N	945	2	8	N	1	7	N
543	2	8	N	1	7	N	946	2	8	N	1	7	N
544	2	8	N	1	7	N	947	2	8	N	1	7	N
545	2	8	N	1	7	N	948	2	8	N	1	7	N
546	2	8	N	1	7	N	949	0	11	N	1	7	N
547	2	8	N	1	7	N	950	2	8	N	1	7	N
548	2	8	N	1	7	N	951	2	8	N	1	7	N
549	2	8	N	1	7	N	952	2	8	N	1	7	N
550	2	8	N	1	7	N	953	2	8	N	1	7	N
551	2	8	N	1	7	N	954	0	11	N	1	7	N
552	2	8	N	1	7	N	955	2	8	N	1	7	N
553	2	8	N	1	7	N	956	0	11	N	1	7	N
554	2	8	N	1	7	N	957	2	8	N	1	7	N
555	2	8	N	1	7	N	958	2	8	N	1	7	N
556	2	8	N	1	7	N	959	2	8	N	1	7	N
557	2	8	N	1	7	N	960	2	8	N	1	7	N
558	2	8	N	1	7	N	961	2	8	N	1	7	N
559	2	8	N	1	7	N	962	2	8	N	1	7	N
560	2	8	N	1	7	N	963	2	8	N	1	7	N
561	0	11	N	1	7	N	964	2	8	N	1	7	N
562	0	11	N	1	7	N	965	2	8	N	1	7	N
563	2	8	N	1	7	N	966	2	8	N	1	7	N
564	2	8	N	1	7	N	967	2	8	N	1	7	N
565	2	8	N	1	7	N	968	2	8	N	1	7	N
566	2	8	N	1	7	N	969	2	8	N	1	7	N
567	2	8	N	1	7	N	970	0	11	N	1	7	N
568	2	8	N	1	7	N	971	2	8	N	1	7	N

Figure 12-8: Three-Digit Tables Printout

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569	2	8	N	1	7	N	972	0	11	N	1	7	N
570	2	8	N	1	7	N	973	0	11	N	1	7	N
571	2	8	N	1	7	N	974	2	8	N	1	7	N
572	2	8	N	1	7	N	975	2	8	N	1	7	N
573	0	11	N	1	7	N	976	2	8	N	1	7	N
574	2	8	N	1	7	N	977	2	8	N	1	7	N
575	2	8	N	1	7	N	978	0	11	N	1	7	N
576	2	8	N	1	7	N	979	2	8	N	1	7	N
577	2	8	N	1	7	N	980	2	8	N	1	7	N
578	2	8	N	1	7	N	981	2	8	N	1	7	N
579	2	8	N	1	7	N	982	2	8	N	1	7	N
580	0	11	N	1	7	N	983	2	8	N	1	7	N
581	2	8	N	1	7	N	984	2	8	N	1	7	N
582	2	8	N	1	7	N	985	2	8	N	1	7	N
583	2	8	N	1	7	N	986	2	8	N	1	7	N
584	2	8	N	1	7	N	987	2	8	N	1	7	N
585	2	8	N	1	7	N	988	2	8	N	1	7	N
586	2	8	N	1	7	N	989	2	8	N	1	7	N
587	2	8	N	1	7	N	990	2	8	N	1	7	N
588	2	8	N	1	7	N	991	2	8	N	1	7	N
589	2	8	N	1	7	N	992	2	8	N	1	7	N
590	2	8	N	1	7	N	993	2	8	N	1	7	N
591	2	8	N	1	7	N	994	2	8	N	1	7	N
592	2	8	N	1	7	N	995	2	8	N	1	7	N
593	2	8	N	1	7	N	996	2	8	N	1	7	N
594	2	8	N	1	7	N	997	2	8	N	1	7	N
595	2	8	N	1	7	N	998	2	8	N	1	7	N
596	2	8	N	1	7	N	999	2	8	N	1	7	N

**Figure 12-8: Three-Digit Tables Printout**

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## *Print Entire System Database*

### **Programming Steps**

1. Press the ENTIRE SYSTEM flexible button (**FLASH 85, Button #8**). The following message displays:

PRINT DATABASE  
PRESS HOLD

2. To print the entire database, press the HOLD button. The display updates to indicate what portion of the database is printing.
3. When the system finishes sending the database to the printer, a confirmation tone is heard.

### **Description**

The Print System Database command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. Printing the entire database takes a while to print. The database is printed in the following order:

1. All System Parameters
2. All CO Line Programming
3. All CO Ports
4. All Station Attributes
5. All Station Ports
6. Exception Tables (Allow/Deny/Special)
7. System Speed Dial Numbers
8. ICLID Ringing Assignment Table
9. Directory Dialing Table
10. Hunt Group Parameters (Bins 020–999)
11. LCR Tables
12. ICLID Parameters and Table(s)
13. ACD\* or UCD Group Parameters
14. Voice Mail Group Parameters
15. DID Translation Table
16. DID-TIE Timers
17. Verified Account Codes Table

*\*This feature is available with optional software.*

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## *Print ICLID - DID Tables*

### **Programming Steps**

1. Press the ICLID-DID TABLES flexible button (**FLASH 85, Button #9**).  
The following message displays:

```
PRINT ICLID-DID
PRESS HOLD
```

2. To print the ICLID-DID Table(s), press the HOLD button. The following messages display:

```
PRINTING ICLID-DID
```

```
PRINTING ROUTE
```

```
PRINTING ICLID TRANS NO
```

3. When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### **Description**

The Print ICLID-DID Tables command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. When printing the ICLID-DID Table(s), the following data prints:

- ICLID Features
- ICLID Translation Table
- ICLID Unanswered Call Table
- ICLID Answered Call Table
- ICLID Ringing Assignments Table
- DID Translation Table

ICLID	NAME	BAUD	PORT	ICLID UNANSWERED CALL TABLE
N	Y	9600	1	NONE
ICLID TRANSLATION TABLE				ICLID ANSWERED CALL TABLE
-----				-----
ENTRY	ROUTE	NAME	NUMBER	NONE
				ROUTE RING ASSIGNMENTS
				-----
600	##	.	.	
601	##	.	.	00
602	##	.	.	NONE
603	##	.	.	
604	##	.	.	01
605	##	.	.	NONE
606	##	.	.	
607	##	.	.	02
608	##	.	.	NONE
609	##	.	.	
610	##	.	.	03
611	##	.	.	NONE
612	##	.	.	
613	##	.	.	04
614	##	.	.	NONE
615	##	.	.	
616	##	.	.	05
617	##	.	.	NONE
618	##	.	.	
619	##	.	.	06
620	##	.	.	NONE
621	##	.	.	
622	##	.	.	07
623	##	.	.	NONE
624	##	.	.	
625	##	.	.	08
626	##	.	.	NONE
627	##	.	.	
628	##	.	.	09
629	##	.	.	NONE
630	##	.	.	
631	##	.	.	10
632	##	.	.	NONE
633	##	.	.	
634	##	.	.	11
635	##	.	.	NONE
636	##	.	.	
637	##	.	.	12
638	##	.	.	NONE
... and so on through 799				

**Figure 12-9: ICLID Translation Tables Printout**

---

---

13	NONE	106	106A
14	NONE	107	107A
15	NONE	108	108A
16	NONE	109	109A
17	NONE	110	110A
18	NONE	...	...
19	NONE	130	130A
20	NONE	...	...
21	NONE	150	150A
...	and so on through 99	...	...
100	100A	170	170A
101	101A	...	...
102	102A	190	190A
103	103A	...	...
104	104A	210	210A
105	105A	...	and so on through 252

**Figure 12-9: ICLID Translation Tables Printout**

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## *Print Directory Dial Table Parameters*

### **Programming Steps**

1. Press the DIRECTORY DIAL TABLE flexible button (**FLASH 85, Button #10**). The following message displays:

PRINT DIR - DIAL  
PRESS HOLD

2. To print the Directory Dialing Table parameters, press the HOLD button. The following message displays:

PRINTING DIR - DIAL

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### **Description**

The Print Directory Dialing Table command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. This is an example of the Directory Dialing Table database printout.

---

---

LST	BIN	NAME	049	149
---	---		050	150
000	100		051	151
001	101		052	152
002	102		053	153
003	103		054	154
004	104		055	155
005	105		056	156
006	106		057	157
007	107		058	158
008	108		059	159
009	109		060	160
010	110		061	161
011	111		062	162
012	112		063	163
013	113		064	164
014	114		065	165
015	115		066	166
016	116		067	167
017	117		068	168
018	118		069	169
019	119		070	170
020	120		071	171
021	121		072	172
022	122		073	173
023	123		074	174
024	124		075	175
025	125		076	176
026	126		077	177
027	127		078	178
028	128		079	179
029	129		080	180
030	130		081	181
031	131		082	182
032	132		083	183
033	133		084	184
034	134		085	185
035	135		086	186
036	136		087	187
037	137		088	188
038	138		089	189
041	141		090	190
042	142		093	193
043	143		094	194
044	144		095	195
045	145		096	196
046	146		097	197
047	147		098	198
048	148		099	199

**Figure 12-10: Directory Dialing Table Printout**

## *Print Hunt Group Parameters*

### Programming Steps

1. Press the HUNT GROUPS flexible button (**FLASH 85, Button #11**).  
The following message displays:

```
PRINT HUNT GROUP
PRESS HOLD
```

2. To print data for Hunt Group Parameters, press the HOLD button. The following message displays:

```
PRINTING HUNT GROUP
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### Description

The Print Hunt Group command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

HUNT GROUPS		RAN HUNT GROUPS	
-----		-----	
HG 0 . . 450	PILOT RING ONE	HG 8 . . 458	PILOT RING ONE
HG 1 . . 451	PILOT RING ONE	HG 9 . . 459	PILOT RING ONE
HG 2 . . 452	PILOT RING ONE	HG10 . . 460	PILOT RING ONE
HG 3 . . 453	PILOT RING ONE	HG11 . . 461	PILOT RING ONE
HG 4 . . 454	PILOT RING ONE		
HG 5 . . 455	PILOT RING ONE		
HG 6 . . 456	PILOT RING ONE		
HG 7 . . 457	PILOT RING ONE		

**Figure 12-11: Hunt Group Parameters Printout**

## Print ACD / UCD Group Parameters

### Programming Steps

1. Press the ACD\* or UCD GROUPS flexible button (**FLASH 85, Button #12**). The following message displays:

PRINT ACD GROUP  
PRESS HOLD

2. To print data for the ACD\* or UCD Group Parameters, press the HOLD button. The following message displays:

PRINTING ACD GROUP

When the system finishes sending the requested information to the printer, a confirmation tone is heard. \* The ACD feature is available with optional software.

### Description

The Print ACD/UCD Group command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. This represents the ACD or UCD Group Parameters database printout.

ACD	IQ Thrsld	Wrapup Time	Overflow Timer	Call Factor	ACD Timers
550	0	4	60	0	RING MIT OVER WRAP NAT NAR FRT
551	0	4	60	0	60 60 60 4 0 300 5
552	0	4	60	0	
553	0	4	60	0	Announcement Table
554	0	4	60	0	
555	0	4	60	0	Table Type Index Time
556	0	4	60	0	1 # ### ##
557	0	4	60	0	2 # ### ##
558	0	4	60	0	3 # ### ##
559	0	4	60	0	4 # ### ##
560	0	4	60	0	5 # ### ##
561	0	4	60	0	6 # ### ##
562	0	4	60	0	7 # ### ##
563	0	4	60	0	8 # ### ##
564	0	4	60	0	ACD SMDR Reporting
565	0	4	60	0	
					CO ICM EVT I/O BAUD
					N N N 1 9600

**Figure 12-12: ACD Group Parameters Printout**

---

---

## *Print Voice Mail Group Parameters*

### **Programming Steps**

1. Press the VOICE MAIL GROUP flexible button (**FLASH 85, Button #13**). The following message displays:

PRINT VM GROUP  
PRESS HOLD

2. To print data for Voice Mail Group Parameters, press the HOLD button. The following message displays:

PRINTING VM GROUP

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### **Description**

The Print Voice Mail Group command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. When printing the VM Group Parameters, the following data prints:

- Voice Mail Group Parameters
- Voice Mail Outpulsing Table (including the disconnect table)

## □ Voice Mail Options

VM	ALT	LEV	RET	STN#	Mailbox Table		
-----					-----		
440		0##	1		Index	Group	ID
441		###	#		1	440	
442		###	#		2	440	
443		###	#		3	440	
444		###	#		4	440	
445		###	#		5	440	
446		###	#		6	440	
447		###	#		7	440	
					8	440	
					9	440	
					10	440	
					11	440	
					12	440	
					13	440	
					14	440	
					15	440	
					16	440	
					17	440	
					18	440	
					19	440	
					20	440	
					..	...	
					..	...	
					240	440	
					241	440	
					242	440	
					243	440	
					244	440	
					245	440	
					246	440	
					...	...	
					...	...	
					255	440	

Figure 12-13: Voice Mail Group Parameters Printout

## *Print Verified Account Codes*

### Programming Steps

1. Press the VERIFIED ACCT CODES flexible button (**FLASH 85, Button #15**). The following message displays:

```
PRINT ACCT CODES
PRESS HOLD
```

2. To print the VERIFIED ACCT CODES, press the HOLD button. The following message displays:

```
PRINTING ACCT CODES
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### Description

The Print Verified Account Codes command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

ACCOUNT	CODE	TABLE	11	##	26	##
ENTRY	COS	DGTS	12	##	27	##
----	---	----	13	##	28	##
			14	##	29	##
00	##		15	##	30	##
01	##		16	##	31	##
02	##		17	##	32	##
03	##		18	##	33	##
04	##		19	##	34	##
05	##		20	##	35	##
06	##		21	##	36	##
07	##		22	##	37	##
08	##		23	##	38	##
09	##		24	##	39	##
10	##		25	##	40	##
						...
						and so on through 249

**Figure 12-14: Verified Account Codes Printout**



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# Index

## Numerics

3-Digit Area/Office Code Table (LCR) 10-8  
6-Digit Office Code Table (LCR) 10-9  
911 Feature 2-40  
911 Trunk 3-17

## A

Access Codes 2-66  
Account Codes - Forced 2-27  
ACD/UCD Grp Parameters, initializing 11-19  
Administration Access 4-16  
Agent Recall (ACD) 2-39  
Allow Table 9-9  
Alternate Group  
    Assignment (ACD) 6-5  
    Assignment (UCD) 7-4  
    Voice Mail 8-4  
Announcement Tables  
    ACD 6-17  
Announcement Tables (UCD) 7-11  
Attendant  
    Display Timer 2-19  
    Override 2-23  
    Recall Timer 2-6  
    Station Assignment 2-57  
Auto Callback - DSS/BLF 2-47  
Auto Wrap-Up Timer  
    ACD 6-7  
    UCD 7-9  
Automatic Call Back Timer 2-15  
Automatic/Manual Operation 2-71

## B

Background Music 2-26  
Barge-In Warn Tone 2-32  
Baud Rate Assignments 2-62  
Baud Rate Display 2-70  
    ICLID 5-6  
    PC/ACD 6-21

## C

Call Back Button 2-52  
Call Cost Display 2-29  
Call Coverage Ring Timer 2-19  
Call Factor 6-12  
Call Forward  
    Button 2-44  
    Display 2-34  
    No/Answer Timer 2-8  
Call Forwarding 4-11  
Call Park Recall Timer 2-9  
Call Qualifier Tone 2-30  
Calling Number/Name Display 5-3  
Camp-On Button 2-52  
Character Print Assignment 2-69  
CIQ Threshold (ACD) 6-7  
Class of Service COS) 3-10  
CO / PBX Programming 3-5  
CO Direction 3-15  
CO Line  
    Group Queuing 2-81  
    Identification Display 3-13  
    Initializing Attributes 11-9  
    Printing Attributes 12-7  
    Ringing Assignments 3-12  
    Ringing Options 4-14

- 
- 
- CO Line Attributes
    - Page A 3-3
    - Page B 3-18
    - Page C 3-24
  - CO Line Group Programming 3-10
  - CO Loop Pool Flex 4-16
  - CO Parameters (Miscellaneous) 3-29
  - CO Port Parameters
    - Printing 12-11
  - CO Ring Detect Timer 2-11
  - CO Ring Tones 2-33
  - CO/PBX Lines (Toll Restrictions) 9-5
  - CO/Station Port Parameters, initializing 11-13
  - Conference
    - Enable/Disable 4-5
  - Conference / DISA Timer 2-9
  - Cordless KTU Feature Button 4-36
  - Customer Data Worksheets 1-20
- D**
- Daily Start Time Table (LCR) 10-15
  - Database 1-20
    - Admin Password 2-67
    - Initializing Parameters 11-1
    - Upload/Download Routine 1-21
  - Database Parameters
    - Printing 12-3
  - Day of Week Programming 2-72
  - Deny Table 9-11
  - Dial Pulse Parameters 3-29
  - DID Phone Number 3-36
  - DID Programming 3-34
  - Direct Transfer Mode 2-36
  - Directory Dialing 2-72
    - Initializing Table Parameters 11-17
    - Printing Table Parameters 12-31
  - DISA Access Code 2-66
  - DISA CO-to-CO 3-6
  - DISA Programming 3-9
  - Disconnect Table (VM) 8-9
  - Display
    - Flexible Buttons 4-34
    - Ring Assignments 3-16
    - Toll Table Entries 9-15
  - Do Not Disturb 4-5
    - Button 2-53
    - DSS/BLF 2-46
  - DTMF / Dial Pulse Programming 3-4
  - DTMF On/Off Time Operation 2-21
- E**
- ECOM
    - Downloading Database 1-30
    - Uploading Database 1-29
  - Enable/Disable (ICLID) 5-5
  - Enable/Disable (PC/ACD) 6-20
  - Enhanced 911 2-40
  - Erasing a DID Table Entry 3-37
  - Exception Code Table (LCR) 10-10
  - Exception Tables
    - Initializing 11-13
    - Printing 12-12
    - Programming 9-3
  - Exclusive Hold 2-50
  - Exclusive Hold Recall Timer 2-5
  - Executive Override 4-6
    - Blocking 4-13
  - Executive Override Warning Tone 2-24
  - Executive/Secretary Pairs 2-60
  - External
    - Day Ring 2-35
    - Night Ring 2-24

---

---

## F

- Flash Timer 3-25
- Flexible Button 4-28
- Flexible Numbering Assignment 4-40
- Forced Account Codes (Toll Restrictions) 9-5
- Forced Least Cost Routing (LCR) 4-11

## G

- Group
  - Listening 2-28
  - Name (ACD) 6-4
  - Printing Parameters (ACD/UCD) 12-34
  - Programming (ACD) 6-3
  - Programming (UCD) 7-3
- Guaranteed
  - Message Timer 6-16
  - RAN Announcement (ACD) 6-9
- Guard Timer 3-27

## H

- Hold Preference 2-23
- Hunt Group 2-77
  - Initializing Parameters 11-18
  - Printing Parameters 12-33
  - Programming 2-76
- Hyper Terminal
  - Downloading Database 1-28
  - Uploading Database 1-27

## I

- ICLID
  - (Caller ID) Route Programming 5-1
  - Initializing Tables 11-16

- Ringling Assignments 3-30
- Viewing Ringing Assignments 3-32

- ICLID-DID
  - Printing Tables 12-28
- Idle Speaker Mode 2-28
- In-Band Digits (VM) 8-10
- In-Band Signaling (VM) 8-7
- Incoming
  - CO Line Ringing 2-43
  - Intercom Ringing 2-44
- Index Table (VM) 8-13
- Initialization (Default Values) 1-20
- Insert/Delete Table (LCR) 10-13
- Intercom Hold Button 2-54
- Inter-Digit Time-Out 2-16
- In-Use Hold (I-Hold) 2-51

## K

- Keyset Mode 4-33

## L

- LCR
  - Call Progress 2-37
  - Class of Service (COS) 4-26
  - Default Database 10-19
  - Versus Toll Restriction 9-6
- LCR Tables 10-4
  - Initializing 11-15
  - Printing 12-15
- Least Cost Routing (LCR) 2-26, 10-1
- Leave Mail Index Entry (VM) 8-5
- Line
  - Queue Button 2-53
- Line Group Access - Station 4-26
- Line Queuing 4-9

Local Number/Name Translation Table 2-82  
 Long Distance/All Calls 2-69  
 Loop Supervision Programming 3-8

## M

### Message

Callback - DSS/BLF 2-46  
 Interval Timer (ACD) 6-14  
 Interval Timer (UCD) 7-8  
 Wait / VM Button 2-45  
 Wait Reminder Tone 2-12

Modem Answer Timer 2-20  
 MOH Assignments 2-56  
 Music-On-Hold 2-29, 3-22

## N

Name Assigned to DID Number 3-36  
 Name in Display (ICLID) 5-6  
 Name/Number Display at Idle 4-14  
 Networking Tables 2-63  
 No-Answer Recall Timer  
   ACD 6-15  
   UCD 7-10  
 No-Answer Retry Timer  
   ACD 6-15  
   UCD 7-10

## O

Off-Hook Preference 4-27  
 Off-Hook Voice Over (OHVO) 4-10  
 On-Board Relay Programming 2-61  
 One-Touch Recording Warning Tone 2-38  
 Outpulsing Table (VM) 8-7  
 Overflow Station Assignment

ACD 6-5

UCD 7-4

Overflow Station Forward 2-35  
 Overflow Timer  
   ACD 6-12  
   UCD 7-9

## P

Page Warning Tone 2-25  
 Paging

  Access 4-4  
   Time-Out Timer 2-10  
   Zones 4-25

Pause Timer 2-8  
 PBX Dialing Codes 2-59  
 PC/ACD Interface Trace 6-20  
 Pickup Group(s) 4-24  
 Pilot Hunting Assignment 2-78  
 Pilot Ring All - Hunting Assignment 2-78  
 Port #1, #2, #3 Baud Rates 2-62  
 Port Assignment (ICLID) 5-7  
 Preferred Line Answer 4-9  
 Preset Call Forward 4-38  
 Preset Call Forward Destination 3-20  
 Preset Forward Timer 2-7, 3-28  
 Primary Agent Assignments  
   ACD 6-8  
   UCD 7-5  
 Primary RAN  
   Announcement (ACD) 6-10  
   Assignments (UCD) 7-6  
 Privacy 3-7, 4-7  
 Program Mode 1-19  
 Programmable Flash Rates 2-42  
 Pulse Dial Inter-Digit Timer 2-20

**Q**

Queued CO Ringing 2-49

**R**

Recall CO Ringing 2-49  
 Reminder Ring Timer 2-15  
 Repeat Redial Timer 2-18  
 Reseize Timer 3-27  
 Retrieve Mail Index Entry (VM) 8-6  
 Ring Delay Timer 3-26  
 Ring Timer UCD 7-7  
 Ring Tone (per CO Line) 3-23  
 Ringback on Transfer 2-39  
 Route List Table (LCR) 10-10

**S**

Secondary Agents (ACD) 6-9  
 Secondary RAN Announcement  
     ACD 6-11  
     UCD 7-6  
 SLT  
     DTMF Receiver Timer 2-11  
     Hook Flash Timer 2-13  
 SLT DTMF Receivers (Toll Restrictions)  
 9-6  
 SMDR  
     Call Qualification Timer 2-14  
     Enable/Disable 2-68  
     Port Assignments 2-70  
 Speakerphone/Headset 4-24  
 Special Table 9-13  
 Station  
     Attributes - Printing 12-9  
     Day Class of Service (COS) 4-21  
     Hunting Assignment 2-78  
     ID Lock 2-37

Identification 4-18  
 Night Class of Service (COS) 4-23  
 Voice Mail Assignments 8-6

**Station Attributes**

Initializing 11-10  
 Page A 4-3  
 Page B 4-17  
 Page C 4-36

**Station ID**

DSS/DLS Console W/Map 4-19

**Station Message Detail Recording 2-67**

Supervisor (ACD) 6-6  
 Supervisor Monitor with Barge-In  
 (ACD) 4-12

**System**

Additional Timers 2-17  
 Hold 2-50  
 Hold Recall Timer 2-4  
 Initializing Speed Nbr Database  
     11-14  
 Parameters 2-55  
 Printing Entire Database 12-27  
 Printing Speed Number Database  
     12-14  
 Speed Dial Access 4-8  
 Time and Date 2-58  
 Timers 2-3

**System Parameters**

Initializing 11-4  
 Printing 12-4

**System Reset 11-23****T**

Timers  
     ACD 6-13, 6-14

## UCD 7-7

Toll Information (LCR Routing) 10-18  
Toll Restriction (Related Items) 9-5  
Toll Table - Entering 9-7  
Trace Port Assignment (PC/ACD) 6-21  
Transfer  
    CO Ringing 2-48  
    Recall Timer 2-6  
Transfer/Forward (VM) 8-11  
Transferred RAN (ACD) 6-11  
Transmit Volume 3-19  
Traveling Class of Service 2-79

**Z**

Zap Tone 4-15

**U**

UCD Avail/Unavail - DSS/BLF 2-47  
Universal Night Answer (UNA) 3-5

**V**

Verified Account Codes 2-34, 2-79  
    Initializing Table 11-22  
    Printing Database 12-37  
VMID Station Numbers 2-41  
Voice Mail  
    Broker 8-12  
    Initializing Group Parameters 11-21  
    Printing Group Parameters 12-35  
    Programming 8-3  
Voice Mail ID  
    Translation 4-33  
Voice Mail ID Digit Length 8-12

**W**

Weekly Night Mode Schedule 2-71  
Weekly Schedule Table (LCR) 10-16



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