Feature Package 3

TRIAD 1/2/3 Product Description

TRIAD®

A NEW DIMENSION IN BUSINESS COMMUNICATIONS

STARPLUS™ Triad 1/2/3

Product Description Manual

Part Number: 8050-11

Issue 3.2 - March 2001

Issue	Release Date	Changes
2	8-99	☐ Feature Package 2 {FP2} enhancements have been added. ☐ Manual content contains extensive revisions.
2.1	12-99	☐ Feature Package 2 {FP2} updates have been added. ☐ Manual content has been revised
3	5-00	☐ Feature Package 3 {FP3} enhancements have been added. ☐ Manual format has been changed.
3.1	8-00	Feature Package 3 {FP3} enhancements have been clarified.
3.2	3-01	Manual content has been revised for correctness and clarity.

LIFE SUPPORT APPLICATIONS POLICY

VODAVI Technology, Inc. products are not authorized for and should not be used within Life Support applications. Life Support systems are equipment intended to support or sustain life and whose failure to perform when properly used in accordance with instructions provided can be reasonably expected to result in significant personal injury or death.

VODAVI Technology, Inc. warranty is limited to replacement of defective components and does not cover injury to persons or property or other consequential damages.

mlj/2001

Contents

3 Single Line Telephone Features

5 Electronic Telephone Operation

6 Digital Station Operation

11 Triad 3 System Configuration

Figures

Tables

1 Introduction

This manual provides the information necessary to operate and maintain the *STARPLUS Triad 1/2/3* 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.

Regulatory Information (U.S.A.)

The Federal Communications Commission (FCC) established rules to allow the direct connection of the *Triad 1/2/3* Systems to a telephone network. Certain actions must be undertaken or understood before the connection of customer provided equipment is completed.

5XX = ACD Group (550-565)

Telephone Company Notification

Before connecting *Triad 1/2/3* System to the telephone network, the local serving telephone company must be given advance notice of intention to use customer provided equipment, and must be provided with the following information:

Telephone Numbers

The telephone numbers to be connected to the system.

Triad 1/2 System Information

- The Ringer Equivalence Number also located on the KSU: 1.3B
- The USOC jack required for direct interconnection with the telephone network: RJ11C

Triad 3 System Information

- The Ringer Equivalence Number also located on the KSU: 1.3B
- The USOC jack required for direct interconnection with the telephone network: RJ21X

FCC Registration Numbers:

- For systems configured as a key system: (button appearances) DLPKOR-24039-KF-E
- For systems configured as a Hybrid system: (dial access codes) DLPKOR-24026-MF-E

Incidence of Harm

If the telephone company determines that the customer provided equipment is faulty and possibly causing harm or interruption to the telephone network, it should be disconnected until repairs can be made. If this is not done, the telephone company may temporarily disconnect service.

Changes in Service

The local telephone company may make changes in its communications facilities or procedures. If these changes affect the use of the *Triad 1/2/3* System or compatibility with the network, the telephone company must give written notice to the user to allow uninterrupted service.

Maintenance Limitations

Maintenance on the *Triad 1/2/3* System must be performed only by the manufacturer or its authorized agent. The user may not make any changes and/or repairs except as specifically noted in this manual. If unauthorized alterations or repairs are made, any remaining warranty and the software license for the system will be voided.

Hearing Aid Compatibility

All *Triad 1/2/3* Digital Terminals are Hearing Aid Compatible, as defined in Section 68.316 of Part 68 FCC Rules and Regulations.

UL/CSA Safety Compliance

The *Triad 1/2/3* System has met all safety requirements and was found in compliance with the Underwriters Laboratories (UL) 1459. This system is authorized to bear the “NRTL/C” marking.

Notice of Compliance

The *Triad 1/2/3* System complies with rules regarding radiation and radio frequency emissions by Class A computing devices. In accordance with FCC Standard 15 (Subpart J), the following data must be supplied to the end user:

"This equipment generates and uses RF energy and if not installed and used in accordance with the Instruction Manual, may cause interference to Radio Communications. It has been tested and found to comply with the limits for a Class A computing device, pursuant to Subpart J of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference, when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference."

Toll Fraud and DISA Disclaimer

"While this device is designed to be reasonably secure against intrusions from fraudulent callers, it is by no means invulnerable to fraud. Therefore, no express or implied warranty is made against such fraud including interconnection to the long distance network."

"While this device is designed to be reasonably secure against invasion of privacy, it is by no means invulnerable to such invasions. Therefore, no express or implied warranty is made against unlawful or unauthorized utilization which results in the invasion of one's right of privacy."

Vodavi has made every reasonable effort to ensure that this product works in most business environments. However, there may be some environments (RFI and EFI) in which this product may not work properly. In such cases, it is the responsibility of the installer to take the necessary actions to correct the situation.

This product is tested and found to be Year 2000 ready. Vodavi shows 00 as the year in SMDR output and on LCD displays.

2 Digital Station Features

The System and Station features of *STARPLUS Triad 1/2/3* are listed and described in alphabetical order. An abbreviated feature index is provided in the following table.

Station Features Index

Table 2-1: Key Station Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
A			
ACCOUNT CODES	•	•	N
ACCOUNT CODES (VERIFIED)	•	•	N
ANSWERING MACHINE EMULATION	•	•	VM System
ATTENDANT RECALL	•	•	N
AUTOMATIC CALL BACK TIMER	•	•	N
AUTOMATIC CALL DISTRIBUTION (ACD)			
Agent Positions		•	N
Alternate ACD Group Assignment		•	N
ACD Group Member Status		•	N
Guaranteed Message Announcement		•	N
Incoming CO Direct Ringing		•	N
No-Answer Recall Timer		•	N
No-Answer Retry Timer		•	N
Overflow Station Assignments		•	N
Overflow Station Forwarding		•	N
PC/ACD Interface Trace		•	N
Recorded Announcements (RAN)		•	N
Supervisor Positions		•	N
Supervisor/Agent Calls in Queue Display		•	N
Wrap-Up Timer Per ACD Group		•	N
AUTOMATIC LINE ACCESS	•	•	N
AUTOMATIC NIGHT SERVICE	•	•	N

N = No Additional Equipment Required

Table 2-1: Key Station Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
AUTOMATIC PAUSE INSERTION	•	•	N
AUTOMATIC PRIVACY	•	•	N
AUTOMATIC SELECTION	•	•	N
B			
BACKGROUND MUSIC	•	•	Music Source
BATTERY BACK-UP (Memory)	•	•	N
BUSY LAMP FIELD (BLF)	•	•	N
C			
CALL BACK	•	•	N
CALL COST DISPLAY	•	•	N
CALL COVERAGE	•	•	N
CALL FORWARD: PRESET			
ACD Groups		•	N
Hunt Groups	•	•	N
Off-Net	•	•	N
Per CO Line	•	•	N
Stations	•	•	N
UCD Groups	•	•	N
VM Groups		•	VM System
CALL FORWARD: STATION			
All Calls	•	•	N
Busy	•	•	N
Busy/No Answer	•	•	N
Follow-Me	•	•	N
No Answer	•	•	N
Off-Net	•	•	N
CALL PARK	•	•	N
CALL PICKUP			

N = No Additional Equipment Required

Table 2-1: Key Station Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
Directed Call Pick-Up	•	•	N
Group Pick-Up	•	•	N
CALL TRANSFER	•	•	N
CALLER ENTERED ICLID DIGITS		•	N
CALLER ID NAME/NUMBER OPTION	•	•	N
CALLING STATION TONE MODE OPTION	•	•	N
CAMP-ON	•	•	N
CAMP-ON RECALL	•	•	N
CANNED TOLL RESTRICTION	•	•	N
CENTREX COMPATIBILITY			
Flex Button Programming	•	•	N
Off-Hook Preference	•	•	N
Private Line Appearance	•	•	N
Programmable Flash Timer	•	•	N
Programming *, #, and Hook-Flashes into Speed Dial	•	•	N
CENTREX/PBX TRANSFER	•	•	N
CHAINING SPEED BINS	•	•	N
CO LINE ACCESS	•	•	N
CO LINE CLASS OF SERVICE	•	•	N
CO LINE CONTROL (Contact)	•	•	Ancillary Relay
CO LINE GROUPS	•	•	N
CO LINE IDENTIFICATION	•	•	N
CO LINE INCOMING RINGING ASSIGNMENT	•	•	N
CO LINE LOOP SUPERVISION	•	•	N
CO LINE QUEUING	•	•	N
CO LINE RINGING OPTIONS	•	•	N
CO RING DETECT	•	•	N
CO RING TONES	•	•	N

N = No Additional Equipment Required

Table 2-1: Key Station Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
CONFERENCE			
Multi-Party Conference	•	•	N
Unsupervised Conference	•	•	N
CONFERENCE ENABLE/DISABLE	•	•	N
D			
DATABASE PRINTOUT (Dump)	•	•	PC/Terminal
DATABASE UPLOAD/DOWNLOAD	•	•	Printer/Terminal
DAY/NIGHT CLASS OF SERVICE (COS)	•	•	Printer/Terminal
DEFAULT BUTTON MAPPING	•	•	N
DIAL BY NAME	•	•	N
DIAL PULSE SENDING	•	•	N
DIALING PRIVILEGES	•	•	N
DIRECT INWARD DIALING (DID)	•	•	DID Board DTMF Receiver
DIRECT INWARD SYSTEM ACCESS (DISA)			
CO Line Group Access	•	•	N
DISA Call Forwarding	•	•	N
Programmable Access	•	•	N
Station Access	•	•	N
Trunk-to-Trunk	•	•	N
DIRECT STATION SELECTION	•	•	N
DIRECT TRANSFER MODE	•	•	N
DIRECTED CALL PICK-UP			
ACD/UCD Groups	•	•	N
Station	•	•	N
DIRECTORY DIALING	•	•	N
DISABLE OUTGOING CO LINE ACCESS	•	•	N
DO NOT DISTURB			
One-Time Do Not Disturb	•	•	N

N = No Additional Equipment Required

Table 2-1: Key Station Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
DTMF SENDING	•	•	N
E			
E911 INTEGRATION	•	•	Proctor PBX-ANI
EMERGENCY TRANSFER	•	•	PFTU/12v
END-TO-END SIGNALING	•	•	N
EXCLUSIVE HOLD	•	•	N
EXECUTIVE OVERRIDE	•	•	N
EXECUTIVE/SECRETARY TRANSFER	•	•	N
EXTERNAL NIGHT RINGING	•	•	Paging Equip.
F			
FLASH	•	•	N
FLASH ON INTERCOM	•	•	N
FLASH RATES (Programmable)	•	•	N
FLASH WITH SPEED DIAL	•	•	N
FLEXIBLE ATTENDANT	•	•	N
FLEXIBLE BUTTON ASSIGNMENT	•	•	24-Btn/12-Btn
FLEXIBLE INTER-DIGIT TIMEOUT	•	•	N
FLEXIBLE NUMBERING	•	•	
FORCED ACCOUNT CODES	•	•	N
FORCED LEAST COST ROUTING (LCR)	•	•	N
FORWARD OVERRIDE	•	•	N
G			
GROUP CALL PICK-UP	•	•	N
GROUP LISTENING	•	•	N
H			
HEADSET COMPATIBILITY	•	•	Headset
HEADSET MODE	•	•	N
HEARING AID COMPATIBLE	•	•	N

N = No Additional Equipment Required

Table 2-1: Key Station Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
HOLD PREFERENCE	•	•	N
HOLD RECALL	•	•	N
HOT KEYPAD	•	•	N
HOT LINE/RING DOWN	•	•	N
HUNT GROUPS			
Hunt Group Chaining	•	•	N
Pilot Hunting	•	•	N
Station Hunting	•	•	N
I			
ICLID (Caller ID)			
Calling Number/Name Display	•	•	Exec Keyset
Incoming Number/Name for SMDR Records	•	•	Exec Keyset
Unanswered Call Management	•	•	Exec Keyset
IDLE SPEAKER MODE	•	•	N
INCOMING CO CALL TRANSFER	•	•	N
INCOMING CO LINES OFF-NET FORWARD (via Speed Dial)	•	•	N
INTERCOM BUTTONS	•	•	N
INTERCOM CALLING	•	•	N
INTERCOM SIGNALING SELECT	•	•	N
ISDN	•	•	PRI Board
K			
KEYSET MODE	•	•	CTI Box
KEYSET SELF TEST	•	•	24-Btn/12-Btn
L			
LAST NUMBER REDIAL (LNR)	•	•	N
LCD INTERACTIVE DISPLAY	•	•	Exec Keyset
LEAST COST ROUTING (LCR)			
3-Digit Table	•	•	N

N = No Additional Equipment Required

Table 2-1: Key Station Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
6-Digit Table (Office Codes)	•	•	N
Daily Start Time Tables	•	•	N
Default LCR Database	•	•	N
Exception Tables	•	•	N
Insert/Delete Tables	•	•	N
LCR Routing for Toll Information	•	•	N
Route List Tables	•	•	N
Weekly Time Tables	•	•	N
LOCAL NUMBER/NAME TRANSLATION TABLE	•	•	N
LOOP BUTTON CO LINE ACCESS	•	•	N
M			
MAILBOX BUTTON	•	•	N
MEET ME PAGE	•	•	N
MESSAGE WAITING	•	•	N
MESSAGE WAITING REMINDER TONE	•	•	N
MESSAGES - PERSONALIZED			
Custom Messages	•	•	N
Date and Time Entry to Personalized Messages	•	•	N
Personalized Message Code on a Flex Key	•	•	N
Scrollable Canned Messages	•	•	Music Source
MUSIC ON HOLD	•	•	N
MUTE KEY	•	•	N
N			
NAME IN DISPLAY	•	•	Exec Keyset
NAME/NUMBER DISPLAY AT IDLE	•	•	Exec Keyset
NIGHT SERVICE	•	•	N
NIGHT SERVICE MODE			
Automatic Night Mode Operation	•	•	N

N = No Additional Equipment Required

Table 2-1: Key Station Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
External Night Ringing	•	•	N
Manual Operation	•	•	N
Night Class of Service (COS)	•	•	N
Night Ringing Assignments	•	•	N
Universal Night Answer (UNA)	•	•	N
Weekly Night Mode Schedule	•	•	N
O			
OFF-HOOK PREFERENCE			
Auto Feature Access	•	•	N
Auto Line Access	•	•	N
Hot Line/Ring Down	•	•	N
Intercom Access	•	•	N
User Programmable Preference	•	•	N
OFF-HOOK SIGNALING	•	•	N
OFF-HOOK VOICE OVER (OHVO)	•	•	N
ONE-TOUCH RECORDING	•	•	N
ON-HOOK DIALING	•	•	N
ON-LINE PROGRAMMING	•	•	N
P			
PAGE/RELAY CONTROL	•	•	MISU
PAGING			
External Paging	•	•	Paging Equip
Internal Paging	•	•	
Paging Access Restriction	•	•	N
PAUSE TIMER	•	•	N
PBX DIALING CODES	•	•	N
PERSONAL PARK	•	•	N
POOL BUTTON OPERATION	•	•	N

N = No Additional Equipment Required

Table 2-1: Key Station Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
PREFERRED LINE ANSWER	•	•	N
PRIVACY RELEASE			
Per CO Line Option	•	•	N
Per Station Option	•	•	N
PRIVATE LINE	•	•	N
PULSE-TO-TONE SWITCHOVER	•	•	N
R			
RANGE PROGRAMMING	•	•	N
REMOTE ADMINISTRATION			
Database Upload/Download	•	•	PC/Term/Modem
REMOTE SYSTEM MONITOR & MAINTENANCE			
Remote System Maintenance	•	•	PC/Term/Modem
Remote System Monitor	•	•	PC/Term/Modem
REPEAT REDIAL	•	•	N
RING TONE	•	•	N
S			
SAVE NUMBER REDIAL (SNR)	•	•	N
SINGLE LINE TELEPHONE (SLT) COMPATIBILITY	•	•	CSIB 2500/2600 Type
SPEAKERPHONE	•	•	24-Btn/12-Btn
STATION CLASS 0F SERVICE	•	•	N
STATION ID LOCK	•	•	N
STATION MESSAGE DETAIL RECORDING (SMDR)	•	•	Printer/Terminal
STATION RELOCATION	•	•	N
STATION SPEED DIAL	•	•	N
SYSTEM CAPACITY	•	•	N
SYSTEM HOLD	•	•	N
SYSTEM SPEED DIAL	•	•	N

N = No Additional Equipment Required

Table 2-1: Key Station Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
T			
T-1 TRUNKING	•	•	T-1 Board
TEXT MESSAGING (Silent Response)	•	•	Exec Keyset
TOLL RESTRICTION (Table Driven)	•	•	N
TRANSFER RECALL	•	•	N
U			
UNIFORM CALL DISTRIBUTION (UCD)			
Agent Queue Status Display	•	•	N
Alternate UCD Group Assignments	•	•	N
Auto Wrap-Up with Timer	•	•	N
Available/Unavailable Mode	•	•	N
Incoming CO Direct Ringing	•	•	N
No-Answer Recall Timer	•	•	N
No-Answer Retry Timer	•	•	N
Overflow Station Assignments	•	•	N
Recorded Announcements (RAN)	•	•	RAN Devices
UNIVERSAL DAY/NIGHT ANSWER (UDA/UNA)	•	•	N
V			
VOICE MAIL GROUPS (VM)			
VM Disconnect Signal - Pass Through	•	•	VM System
VM In-Band Signaling Integration	•	•	VM System
VM LCD Message(s) Indication1	•	•	VM System
VM Message Waiting Indication	•	•	VM System
VM Tone Mode Calling Option	•	•	VM System
VM Transfer/Forward	•	•	VM System
VM Transfer with ID Digits	•	•	VM System
VOLUME CONTROL BAR (DKT)	•	•	N

N = No Additional Equipment Required

Account Codes

An account code is the last field within Station Message Detail Recording (SMDR), that provides tracking capabilities for specific calls by entering a non-verified, variable length (up to 12 digits) identifier.

The use of forced Account Codes is optional, offered on a system-wide basis. SMDR must be enabled to use account codes.

Account Codes - Forced

The *Triad 1/2/3* System allows arranging of the system so that station users must enter an account code before placing an outside call.

Account codes can also be used as a Traveling Class-of-Service to upgrade a restricted stations class-of-service for unrestricted dialing. Account Codes must be entered before the call when forced.

Account Codes - Traveling COS (Verified)

The Verified Account Code/Traveling Class of Service (COS) feature provides the ability to track 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 presented.

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 1/2/3* System allows up to 250 12-digit account codes.

Answering Machine Emulation

When a call is sent to a voice mailbox, the station associated with that mailbox can press a pre-programmed button to listen to the caller leaving the voice mail message. If the mailbox owner decides to speak with the caller, they can press the pre-programmed button and connect to the caller.

Two methods of notification are available, a ring mode or a speaker mode. These methods are controlled by the type of flexible button assigned on the telephone.

Attendant Assignment

Any three Digital Telephones in the system can be assigned as Attendant stations. These stations receive recalls and can place the system into Night Service. The Attendant stations must be either Enhanced or Executive stations.

Attendant Recall

When a line is left on hold for a programmable time period, the station placing that line on hold is recalled. If that station fails to answer the recall, the call is recalled to the Attendant(s) for handling. There can be three Attendants per system. Transferred, Parked and Camp-On recalls also recall the Attendant.

Automatic Call Back Timer

The Automatic Call Back Timer invokes a call back anytime a user listens to a busy tone for a programmable period of time. The Automatic Call Back Timer can be set to 00-99 seconds. A value of 00 disables the timer. An Automatic Call Back does not occur when the timer is disabled.

Automatic Call Distribution (ACD)

The ACD feature is available with optional software. When purchased, Uniform Call Distribution (UCD) is not used and is replaced by the ACD functions identified below.

Sixteen Automatic Call Distribution (ACD) groups can be programmed, each containing up to 252 station numbers (up to the system station maximum).

Each group is assigned a pilot number. When this number is dialed, the first available agent in that group is rung. Calls are routed to the station that has been on-hook for the longest time period.

Agent Positions

Login/Logout with Agent ID Feature – The Agent Login/Logout feature provides a means for an agent to log into one of the ACD groups and receive calls.

The Agent ID entered in the login process identifies the agent and places that agent in the available agent list for the ACD group specified in the login process. This feature allows an agent to log into any ACD group from any station in the system and receive calls.

Login to Primary/Secondary ACD Group – Agents can login to both primary and secondary ACD groups. The agent always receives calls from a primary group first. The agent receives calls from a secondary group when there are no calls in the primary group.

Identification Code – Each ACD Agent has a unique ID (0000-9999) for use during login/logout procedures. This unique ID is not verified or stored in the system database.

Available/Unavailable Mode – The Available/Unavailable feature allows agents logged into an ACD Group to remove themselves from the group by dialing a code or pressing a flexible button. When an agent is in the Available mode, that agent receives ACD calls in the normal manner. When an agent is in the Unavailable mode, that agent no longer receives ACD calls, however the agent may receive non-ACD calls. Agents that have gone Unavailable receive a visual reminder with a flashing LED/LCD message.

Help Request -- The HELP feature provides a means for an ACD agent to signal the assigned supervisor for assistance. While on a call, the agent can press the HELP button to signal the assigned supervisor. The supervisor may respond by using the HELP button and the ACD Barge-In feature.

Call Qualification -- This feature provides a means for an agent on ACD calls to enter codes that identify the call. This feature permits entering up to 12 digits to print in the SMDR record. A programmable confirmation tone option was added to the Agent Call Qualification feature on a system-wide basis.

ACD Transfer Display -- This feature changes the LCD message to indicate to what ACD group the call was transferred. The LCD indicates if the call was transferred to a station number or a pilot group number.

Zap Tone (for Headset use) -- This feature can be enabled at agent stations to provide an automatic connection of ACD calls to the agent. When logged in and available, the agent hears a tone in their headset and is automatically connected to the incoming caller.

Alternate ACD Group Assignments

An alternate ACD group can be programmed so if stations in one group are busy, the alternate group is checked for an available station.

ACD Group Member Status

The Supervisors Group Member Status feature provides a means for an ACD supervisor to view the status of the 16 ACD groups in the system, individually. This display tells the supervisor which stations are logged into the group, and if the station logged in is available, unavailable, out-of-service, in DND, or busy on a call. The supervisor can use this display to determine why there are a lot of queued calls in a specific group.

Guaranteed Message Announcement

The Guaranteed Message feature insures that callers routed to an ACD Group hear the message prior to being placed in queue or to an agent. Callers may enter DTMF digits during this message. These digits can be used by the system to route callers to specific destinations and provides Calling Name Identification.

Incoming CO Direct Ringing

CO Lines can be programmed to ring directly into an ACD group. When all agents are busy and RAN is enabled, the system answers the caller and presents the first RAN announcement automatically.

No-Answer Recall Timer

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. The station that failed to answer the ringing ACD call is also placed into an out-of-service (OOS) state.

No-Answer Retry Timer

When the No-Answer Retry 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 is placed back in service if the agent presses 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 ACD call, they are again taken out-of-service. This cycle continues until the station answers calls, logs out, or goes unavailable.

Overflow Station Assignments

An overflow station may be assigned to route callers in queue to a designated station after a specified time.

The Overflow station may remove themselves from their assigned group by dialing the Overflow Available/Unavailable code. When the Overflow station is in the available mode, that station receives ACD calls in the normal manner. When the Overflow station is in the Unavailable mode, that station no longer receives ACD calls, however they may receive non-ACD calls. The Overflow station that went Unavailable receives a visual reminder with a flashing LED. The overflow station may NOT be one of the ACD group stations.

Overflow Station Forwarding

The Overflow Station Forwarding feature allows ACD calls reaching the ACD Overflow Station to call forward to another station. This is allowed or denied on a system-wide basis. Once enabled in programming, an ACD Overflow station can Busy/No-Answer forward to Voice Mail Groups, ACD Groups, Hunt Groups and stations.

If the ACD Overflow station is busy or does not answer before the no-answer call timer expires, the ACD call forwards to Voice Mail.

If no stations are logged into the ACD Group, ACD calls route to the Attendant station.

The Overflow Timer only applies to calls that are in queue.

PC/ACD Interface Trace

The PC/ACD Interface Trace feature is available with optional software. The PC/ACD Interface Trace provides a series of events trace output that can be used for ACD reporting packages from third parties.

Recorded Announcements (RAN)

Recorded announcement devices can be assigned to provide up to eight different messages per system, if all stations in an ACD group are busy. The eight messages are available to all 16 ACD groups in different configurations. Each group can have a Guaranteed RAN and two other RANs, a primary and a secondary. A RAN device can provide an announcement to one caller at a time. Subsequent callers are queued onto the message on a first-in basis.

Each RAN Announcement Table can be directed to a Hunt Group, therefore each primary and secondary RAN Table can have eight announcements. RAN Hunt Group numbers can be chained together by placing the RAN Group Number (458-461) as the last member in the desired group. RAN Groups are pilot type only.

Digital Voice Mail (DVM) -- DVM can serve as a RAN Announcer by using a menu as the announcement. With this unique benefit: callers can route to other destinations, hear their place in queue, and hear their hold time.

Supervisor Positions

Login/Logout Feature -- The Supervisor Login/Logout feature provides a means for a supervisor to log into one of the ACD groups.

The Supervisor ID entered in the login process identifies the supervisor for the specific ACD group to which they are assigned. A supervisor can log into any ACD group from any station in the system. However, to let the supervisor monitor with barge-in feature, the supervisor must log in at a station with monitor barge-in capability. Only one supervisor can be logged into a group at time.

Identification Code -- Each ACD Supervisor has a unique Supervisor ID (0000-9999) that is used during login and logout procedures. This unique ID is not verified or stored in the system database.

Help Request -- The HELP feature provides a means for an ACD agent to signal their assigned supervisor for assistance. While on a call the agent can press the HELP button to signal the assigned supervisor. The supervisor may respond by using the HELP button and the ACD Barge-In feature.

Monitor with Barge-In Feature -- The ACD Supervisor Monitor with Barge-In feature provides a means for an ACD supervisor to monitor an agent's call in progress to coach sales techniques or customer relations skills. When used, a supervisor may intrude onto an agent's call in a listen only mode or in a true conference mode.

Monitor with Barge-in is available with or without a warning tone.

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.

Station Assignment Feature -- The ACD Supervisor Station Assignment feature provides a means to assign each ACD group a supervisor. This supervisor station can:

- Receive calls in queue display in real time.
- Receive No Answer/out-of-service.
- Receive HELP displays from assigned groups.
- Can barge in on active calls in their ACD group or groups.

Supervisor/Agent Calls in Queue Status Display

The Calls in Queue Status Display feature provides a means for an agent and ACD supervisor to view the status of their ACD group.

This display is an idle state display and prompts a supervisor that agents in the group are having problems answering all their calls. The display tells the agent and their supervisor how many calls are in queue, how many agents are logged into the ACD group, and the length of time that the oldest call has been in queue.

This feature displays the oldest call in queue duration in hours, minutes, and seconds. When an ACD agent is on a CO call, the LCD displays trunk name and call duration of the present call in the lower half of the display.

This feature allows an ACD station (12/24 button executive only) to assign multiple buttons that display the calls in queue information for a particular group on the LCD. The button LED indicates the number of calls in queue.

Wrap-Up Timer Per ACD Group

The Wrap-Up Timer allows an ACD agent time to complete paperwork and computer entries associated with the ACD call. This timer feature is programmable for each ACD Group in the system.

Automatic Selection/Line Access

Each digital station may have their phone programmed to access a particular CO Line, such as a private line or a line from a Group of CO lines upon going off-hook. This is useful in Centrex or PBX applications when station users have dedicated or individual lines.

The user can select an outside line, intercom station, speed dial button or dial a feature and automatically place the phone in the dialing mode without pressing the ON/OFF button or lifting the handset.

Automatic Night Service

The system may optionally be programmed to go in and out of night service automatically. This method does not require the Attendant to activate or deactivate night service on a daily basis.

The automatic night service is enabled and disabled on a programmable daily schedule including Saturday and Sunday. A time can be set to enable Night Service and to Disable Night Service on a per day basis.

Automatic Pause Insertion With Speed Dial

If a flash command is placed into system speed dial numbers or station speed dial numbers, a pause is automatically inserted after the flash. A pause is also automatically inserted after a PBX dialing code is used.

Manually dialing a flash during a call causes only those numbers dialed after the flash to be redialed for a Last Number redialed number or for a Save Number redialed number.

Automatic Privacy

Privacy is automatically provided on all calls. If one station is conversing, another station cannot intrude on that line.

The Automatic Privacy feature can be disabled, allowing up to seven other stations to join in on existing CO line conversations.

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

Background Music

Each digital telephone user may receive music over their speaker when an optional music source is connected to the system. The Background Music feature can be allowed or denied on a system-wide basis by programming.

Battery Back-Up (Memory)

A lithium battery is located on the Master Processor Board (MPB) of the *Triad 1/2/3* System to protect system memory in case of commercial power outage or the system power being turned off for a time period. Battery Back-up Memory retains all system features including system and station speed dial during a power outage.

Busy Lamp Field (BLF)

When a button on an Digital Telephone is assigned as a DSS, it also serves as a Busy Lamp Field to display the status of that telephone.

Call Back

A station can initiate a call back request to another busy station. Once that station becomes idle, the station that left the call back request is signaled.

Call Cost Display

The Call Cost Display feature allows a user to view the approximate cost of each call made. This approximate cost is also printed as part of the SMDR record. The Call Cost Display replaces the call duration display when a call is made using LCR. This display is enabled in programming.

The cost information is programmable by selecting one of the 16 route list tables and one of the four time periods. This allows the user to program four separate costs based on the time of day for each of the 16 routes. The costs entered in the tables is a cost for one minute, however, costs are calculated using a 1/10th of a minute value. These costs are rounded down and are based on the start time of the call, even if the call extends into a different time period. The SMDR printout contains a cost calculated using a 1/10th of a minute increment and the display updates approximately every 30 seconds. The user must have LCR enabled to get the call cost display.

Call Coverage

The Call Coverage feature provides the functionality for stations to answer calls for other stations by utilizing call coverage buttons. Visual and Audible status of ringing stations to an assigned coverage station are provided. Multiple coverage stations can have the same remote ringing station(s) programmed on their stations. Once a coverage station answers the call, other stations attempting to answer the call receives busy tone and the call coverage button extinguishes on all appearances of that button.

This feature can cover SLT extensions, however an SLT cannot perform the call coverage function. The SLT extension need not be physically installed, only the SLT card must be installed.

Direct CO calls have ring and LCD priority over call coverage calls. The call coverage station must have a direct CO appearance or Loop button in order to pick up an external call. If the call coverage station is in DND, no audible ringing is heard, however visual and LCD information is presented.

This feature can be programmed by the station user or through admin programming. By default, no call coverage buttons are assigned.

Call Forward - Preset

The Call Forward Preset feature allows the system database to be configured so that incoming CO Lines, which are programmed to ring at a particular station, can be forwarded elsewhere in the system predetermined by programming. This feature is active if the station ringing is not answered in a specified time, and is particularly useful in overflow applications in which a Voice Mail or Auto Attendant may be in use.

- A station may have one designated preset forward location defined in the database.
- Preset Call Forward is chainable only to other predetermined preset forward stations specified in the database up to a chain of 5 stations.
- Chainable Preset Call Forwarding forces the incoming CO Line to ring at each station preassigned in the database for the Preset Forward Ring Timer specified in the database before forwarding.
- Each station in the system may, independently, have incoming CO calls preset forwarded to the following destinations:

Preset Call Forward - ACD, Voice Mail, UCD, or Hunt Groups

CO Lines can be Preset Forwarded to ring to one of the group types in the system (ACD, Hunt Voice Mail, or UCD). CO lines do not Preset Forward to a busy ACD Group. Each time the Preset Forward Timer expires (a total of 5 attempts), the group is checked for an idle station.

Preset Call Forward - Off-Net

CO Lines can be preset forwarded to ring Off-Net via speed dial from any station. After the expiration of the preset forward timer, the system selects an idle CO line and dial the off-net location, then connect the two CO lines.

Preset Call Forward - Per CO Line

The Preset Call Forward feature allows each CO line to be preset call forwarded on a per CO line basis. This allows a CO line to initially ring at multiple stations and forward to a predetermined destination. The destination can be a station or Hunt Group. Each CO line has a Preset Forward Timer. Each CO line also has a VMID field to allow specific VM digits to be sent when a CO line forwards to a VM group. Feature applies to initial CO ringing lines only.

If a forward destination is programmed in the CO line field, the CO call forwards to that destination after the CO Preset Forward timer expires. This forward occurs regardless of how many or how few stations the line is ringing on. Once the CO line is answered and transferred, station call forwarding rules are in effect.

Calls still follow all call or busy forwards, however, CO preset forward forwards the call if the first forward destination has not answered the call. VMID digits per CO line override station VMID. Calls ringing into ACD, UCD or VM Groups continue to ring the group. The CO call does not forward when ringing one of these types of groups.

Preset Call Forward - Stations

Each station user may have Preset Call Forward in the database to direct incoming, transferred, as well as intercom calls to other destinations in the system. The system allows for different destinations based on a Busy or a No Answer condition, as wells as internal versus external (CO) call.

Call Forward: Station

When any type of station call forwarding is invoked, the LCD display normally indicates the call forwarding mode at all times. This feature has modified the LCD forwarding display to make the call forwarding mode display optional. This feature is enabled/disabled in admin programming on a system-wide basis. The call forward status is stored in a battery protected area of memory.

Call Forward - All Calls

The Call Forward All Calls feature allows a station the ability to have all their calls (internal or external) forwarded immediately to a designated station, an ACD or UCD group pilot number, Voice Mail group number, or Hunt group.

Call Forward - Busy

The Call Forward Busy feature allows a station the ability to have their calls forwarded to a designated station, an ACD or UCD group pilot number, Voice Mail group number, or Hunt group when their station is busy.

Call Forward - Busy/No Answer

The Call Forward Busy/No Answer feature allows a station the ability to forward a combination busy/no answer calls to a designated station, an ACD or UCD group pilot number, Voice Mail group number, or Hunt group. No answer calls forward when the system-wide no answer timer expires. Initial CO ringing, transferred CO ringing and intercom ringing calls can all be forwarded. Calls that ring to an idle station is call forwarded after expiration of the No Answer Ring Timer.

Call Forward - Follow-Me

The Follow-Me Forward feature allows a station user to activate the Call Forward function from another station, or through the DISA function. Once activated, calls presented to the designated station are forwarded immediately.

Call Forward - No Answer

The Call Forward No Answer feature allows a station the ability to have their calls forwarded to a designated station, an ACD or UCD group pilot number, Voice Mail group number or Hunt group number when there is no answer at the station. No answer calls forward when the system-wide no answer timer expires.

Call Forward - Off-Net

Stations are allowed to forward intercom and transferred CO line calls to an off-net location. The Call Forward Off-Net feature allows a station to reroute calls that would normally be lost. Calls can be forwarded to home or another off-net site. Initially ringing CO calls cannot be forwarded with this feature.

Call Park

An outside line can be placed into one of eight parking locations and can be retrieved by any station that has a direct line appearance or an available Loop button. Parked calls have their own recall timer that recalls the originating station, and if still unanswered, the Attendant(s). An outside line may also be placed into a station park location. The station user then dials a code followed by their station number to retrieve the call.

Call Pick-Up

ACD/UCD Groups

Stations outside of an ACD or UCD group can pick up a tone-ringing intercom call, transferred, incoming, or recalling outside line call ringing to a specific UCD station. The call must be a tone ringing call.

Directed

A station can pick up an intercom call, transferred, incoming, or recalling outside line call to a specific unattended station. The call must be a tone ringing call.

Group

Stations can be placed in one or more of eight pick-up groups. Stations within a group can pick up tone ringing intercom calls, transferred, incoming, or recalling outside line calls for another station in that group.

Call Transfer

An outside CO line can be transferred from one keyset to another. By using the TRANS button, screened (announced) or unscreened transfers can be made. The line being transferred rings on the keyset and provides Exclusive Hold flashing indication to the receiving party's keyset. Any number of attempts can be made to locate someone by calling different keysets without losing the call.

The Direct Transfer Mode allows transferring of an outside CO line directly to the key station handset, if enabled in programming.

A system-wide database parameter can select music on hold or ringback tone to the CO caller when CO calls are transferred in the system.

Calling Station Tone Mode

The Calling Station Tone Mode feature provides an easy means for a calling station to override a desired stations H (handsfree) or P (call announce) intercom setting. A dial code has been added that is dialed in front of the extension number to force the tone ringing.

Camp-On

A station may alert a busy party that an outside line is on hold and waiting for them by using the CAMP-ON button. To camp on a call, press the TRANS button to transfer the call to the desired busy station, then press the CAMP-ON button. The busy party receives a muted ring over the keyset speaker, and a visual flashing CAMP-ON LED. By pressing the CAMP-ON button, the person called places their existing outside call on hold and is connected to the person placing the Camp-On. They can then pick up the call on the appropriate line. Calls cannot be camped on when a station is in DND or in Conference.

Camp-On Recall

When a station does not answer a Camp-On, that call recalls the person placing the Camp-On, and if unanswered by them, recalls the Attendant(s).

Centrex Compatibility

The *Triad 1/2/3* System provide features that are Centrex compatible so that Centrex users can utilize the *Triad 1/2/3* System to enhance their Centrex capabilities. The system actually simplifies and provides easier access to many Centrex features by offering the following features.

Flex Button Programming

Flexible button programming allows Centrex users to program complex Centrex dial codes onto a keyset button for easy one touch access to Centrex features.

Off-Hook Preference

Digital telephones may be programmed to have their personal Centrex line accessed automatically just by lifting the handset or pressing the ON/OFF button. Internal features to the *Triad 1/2/3* System are still made available to digital telephones by accessing intercom before going off-hook.

Private Line Appearance

The *Triad 1/2/3* System allow for private line assignment on an unlimited basis. Each station may have sole access to a particular outside line if desired and may also be assigned to receive incoming ringing on that line.

Programmable Flash Timer

CO line flash is a momentary opening on a CO line used for signaling. When using the *Triad 1/2/3* System in a Centrex environment, the CO line flash is to signal the intention to transfer a caller using Centrex transfer. The CO line flash timer is programmable on a per CO line bases to facilitate a mixture of Centrex and CO lines within the same system.

Programming ✳, #, and Hook-Flashes into Speed Dial

Many Centrex codes utilize a hook-flash followed by, in many cases, the digit [✳] and or [#]. The *Triad 1/2/3* System allow programming of these codes as a part of system or station speed dial sequences.

Centrex/PBX Transfer

When Centrex or PBX lines are connected to the *Triad 1/2/3* System, users may, by using the Flash button, transfer callers to other Centrex or PBX extensions. The Flash command may also be included within a Speed Bin and programmed onto a flex button for one button transfer.

Class Of Service (COS) Day/Night

The COS Day/Night feature allows stations that are a certain COS during the day, to be assigned a different COS when the system is put in the night mode. The night COS goes into affect when the system is placed into the night mode, manually or automatically. This prevents the misuse of phones after hours.

Class Of Service (COS) Station

Each station is assigned a Class of Service which governs that stations dialing privileges. Day Class of Service and Night Class of Service assignments to stations provide the system administrator additional control over station dialing, preventing misuse of phones after hours.

Six uniquely defined Classes of Service are available for assignment to stations on a per station basis and all six are available for day and night assignment. Station Class of Service works in conjunction with CO line Class of Service to provide the most flexible means for offering custom toll restriction.

As a part of the Dialing privilege assignment through Class of Service the system offers two programmable Allow and Deny tables for additional customization of a toll restriction plan for a particular customer. Each station can reference up to four special area code tables.

CO Line - Access

Through programming, telephones are allowed or denied access to particular outside lines or line groups.

CO Line - Class Of Service (COS)

Each CO Line may be programmed with a Class-of-Service to provide dialing privileges. The *Triad 1/2/3* System uses an array between CO Line Class-of-Service and Station Class-Of-Service to offer a wide variety of dialing privilege possibilities.

CO Line - Control (Contact)

On the *Triad 1/2/3* System, there are four or six control contacts which may be individually programmed as either CO Line Control (to control ancillary equipment) or Loud Bell Control to control a customer provided ringing device to external areas. When programmed as CO Line Control and assigned to a CO line, the corresponding contact closes whenever that CO line is accessed by a station.

CO Line - Distinctive Ring

The tone ring 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 is used to ring each station. The system provides 36 different ring patterns that can be selected for each CO line in the system. CO line distinctive ringing overrides station distinctive ringing.

CO Line - Groups

Outside lines can be placed in one of twenty-four groups if the customer's business requires such grouping. Stations are then individually assigned access to these groups and given the ability to dial on particular lines.

CO Line - Identification

The CO Line Identification feature allows entering a name into the database for each individual line (trunk) connected to the system. The name may be entered in any combination up to 12-characters in length (this represents 24 digits entered). When the CO line identification field is programmed, display telephones receive the identification field in place of the default field (LINE XXX).

SMDR always print the line number in place of the programmed name. A programmable data field is available for each line in the system.

CO Line - Incoming Ringing Assignment

Each CO line may be programmed (in database admin) so that incoming ringing on the specified CO line(s) may be assigned initial ringing to one of the following destinations:

- One or more stations (Keyset or SLT)
- An ACD, UCD, Voice Mail or Hunt Group
- Off-Net (via Speed Dial)

The ring-in follows Day Ring assignments unless Night Service mode is active, in which case all incoming CO calls follow Night Ring assignments.

When ringing is assigned to a keyset, a direct line appearance or an idle LOOP button must be available to receive the call. Station call forwarding of the initial ringing CO call is possible and can be directed to other keysets with an available LOOP button or direct appearance.

- If the initial ringing CO call cannot ring at the destination assigned, the call rings at the first Attendant station.
- If all ringing assignments are deleted, calls continue to ring at Station 100.

CO Line - Loop Button

A station not having a direct appearance for a CO line receives incoming CO calls and transferred CO calls under the LOOP button. Only one call at a time can be connected to a keyset on the LOOP button.

- If more than one LOOP button is on a key set, the LOOP buttons may be conferenced together.
- If all programmed LOOP buttons on a keyset are busy or have a CO call on hold, the party attempting to transfer a CO line to that station receives busy tone and cannot transfer the call to that station.
- If a transfer is attempted, the CO line recalls the initiator immediately.

CO lines are also presented to a Loop when dialing out using LCR or when using speed dial to dial out and the line chosen does not appear on the key station.

CO Line - Loop Supervision

The *Triad 1/2/3* System can be programmed to monitor CO lines while on-hold or connected to RAN devices or Voice Mail systems, or in Trunk-to-Trunk connections for disconnect signal provided by the Telco.

After a disconnect signal is detected, the *Triad 1/2/3* System releases the CO lines and automatically place them back in service.

CO Line - Pool Button Operation

The Pool Group feature is used primarily to access CO lines that do not appear on a station, so that outgoing calls may be made. Pooled group keys are associated to CO line groups and may be programmed for use on any of the flexible buttons. CO lines are accessed in descending order of priority starting with the highest numbered available (not busy) CO line in a CO line group. Stations may have as many POOL buttons as there are CO line groups. Multiple POOL buttons for the same group are also allowed.

CO Line - Queuing

When all the outside lines in a group are busy, stations can be placed in queue awaiting a line in the same group to become available. If a station doesn't answer the queue signal within 15 seconds, that station is dropped from the queue.

CO Line - Ringing Options

When a CO call rings at a busy station, the call rings at the station using a muted ring signal. This option allows a user to receive a reminder ring at their busy station, instead of muted ringing. A reminder ring timer is also available to provide the reminder ring every time the timer expires, as long as the incoming CO line remains connected. The system defaults this option to muted ringing.

CO Ring Detect

The duration of the ringing signal from the CO or the PBX is matched with ringing detection circuitry in the *Triad 1/2/3*. The ring detect can range from 200 to 900 ms programmed in 100 ms increments. This timer helps prevent false ringing.

Conference

There are two different types of conferencing.

Multi-Party Conference

Up to eight parties can engage in a conference. A maximum of five external parties can be conferenced.

Unsupervised Conference

The conference initiator can exit a conference with two outside parties and leave them in an unsupervised conference. The initiator can re-enter the conference at any time.

The *Triad 1/2/3* System can automatically terminate the call when both parties hang up, when Loop Supervision is provided by the Telco and enabled in the database.

A programmable conference timer disconnects the unsupervised conference if the initiator does not re-enter.

Conference Enable/Disable

The Conference Enable/Disable feature allows administering of the system conference feature on a per station basis for the ability of a station to initiate a conference.

Database Printout (Dump)

Through a system programming command, either portions of or a complete database dump can be printed using the RS-232C connector located on the Master Processor Board (MPB), on the *Triad 1/2/3* System.

Database Upload/Download

DataBase Upload/Download feature provides a maintenance facility which has been added to the Remote Administration routine. This routine permits downloading of the database to a PC when a software change is made, or when the system must be initialized and re-programmed. The routine also facilitates the programming of a database on an in-house system, which can be 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.

Dial By Name

The system allows station users to dial extension numbers, or speed bins by entering the name of a person that has been programmed for that station. The system database allows entry of a name (alphanumeric) up to 24 digits in length for each station. The programmed name can be used for dial-by-name station users and in directory dialing. This feature should not be confused with the *Name In Display* feature.

Dial Pulse Sending

Each CO interface circuit for outside lines can be programmed to send dial pulse or DTMF signals. Dialing speed and break/make ratios are programmable.

Dialing Privileges

The system provides a flexible means of providing toll or dialing restriction. Through the assignment of class of service (both station and outside line) many combinations of allow and deny numbers can be set. Both area and office codes can be screened for allow/deny privileges.

Direct Inward Dialing (DID)

The DID feature provides one-way direct inward dialing access to specific 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 DID feature requires the DID Interface Board (DIDB) which provides four one-way DID circuits on the *Triad 1/2* Systems, and eight one-way DID circuits on the *Triad 3* System. The system can accept from two to seven digits from the Central Office (CO).

This feature allows the number and name field of the LCD display on a DID call to be presented to the ICLID port. Calls are identified in the SMDR field as Answered (I) or Unanswered (U) followed by the DID number. At least one DTMF receiver must be installed on the system.

Direct Inward System Access (DISA)

Triad 1/2/3 allows programming of an unlimited number of outside line calls to provide direct access to the system. DISA callers may access LCR, All Internal/External Paging, All Call Paging, Call Park Pick-Up, and Meet-Me Paging. A DTMF receiver must be available for DISA operation. The duration of a trunk-to-trunk DISA call can be set by system administrator.

Vodavi has taken precautions to prevent fraud by requiring a security code for this feature. However, it is may still be vulnerable to fraud.

Group Access

Incoming DISA callers may access all line groups such as FX or WATS lines or other outgoing services while away from the office.

DISA Call Forwarding

Four options are available for a DISA line: 1) 24-hour, 2) night, 3) 24-hour with forwarding, 4) or night with forwarding. The CO line ringing at a station follows preset forward or no-answer call forward using the preset forward timer the same as an initially ringing CO line does. It follows direct forward and busy forward the same as an initially ringing CO line. If the preset forward timer is set to 00 (disabled) the first forward of the DISA ringing call at a station takes 15 seconds.

Programmable Access

A three-digit security code can be assigned in the system database to restrict unwanted use of the DISA circuits. Each DISA line can be programmed independently for each option.

Station Access

DISA callers may dial any station directly without going through the Attendant.

Trunk-to-Trunk

The DISA Trunk-to-Trunk (or Conference) option on the CO line governs a DISA callers ability to access other outside lines. CO lines must have DISA Trunk-to-Trunk enabled to allow a DISA caller to establish an outgoing trunk-to-trunk connection. This allows for specific CO line access restriction on DISA calls.

Direct Station Selection (DSS)

A user with DSS buttons assigned at their Key Station can call an intercom station or transfer a CO call by simply pressing the appropriate DSS button.

Direct Transfer Mode

An outside CO line can be transferred from one keyset to another. By using the TRANS button, a screened (announced) transfer can be transferred directly to the handset on any key station. Any number of attempts can be made to locate someone by calling different keysets without losing the call. If a line is transferred to a busy station, it receives muted ringing. This feature is programmable on a system-wide basis in admin programming.

Directory Dialing

Directory Dialing allows station users to obtain a directory of station users and have the system dial the extension that is currently on the display. The *Triad 1/2/3* System provide locations for up to 200 names.

Directory Dialing also allows users to program a name along with a speed dial bin for use in later locating a speed dial number. When prompted to do so, the system displays the name associated with a speed dial number on the LCD display so that when the desired name is shown, the user may then have the system dial the number.

Directory Dialing also allows users to associate a name with an entry in the Local Number/Name Translation Table. When prompted, the system displays the name associated with the table on the LCD display so that when a name is shown, the user may have the system dial the number.

Disable Outgoing CO Line Access

The Disable Outgoing CO feature allows the first Attendant station to dial a code and disable a CO line from outgoing CO calls. This applies to all station(s) that have access to that line. Incoming status is not affected.

Do Not Disturb (DND)

Placing a keyset in DND eliminates incoming outside line ringing, intercom calls, transfers and paging announcements. A ringing station may go into DND to silence ringing. The Attendant can override a station in DND. Stations in DND can continue to make normal outgoing calls. A station can be denied this feature through programming. DND does not apply to the first Attendant station.

One-Time Do Not Disturb

Allows a station user to turn off muted ringing that occurs while off hook (handset or ON/OFF) on another call. Useful when having an important conversation and do not wish to be disturbed by ringing. The station, while off hook, (ON/OFF or handset) depresses the DND button which eliminates muted ringing. When the station goes on-hook the DND button is extinguished and DND is cancelled.

DTMF Sending

Each CO interface circuit for outside lines can be individually programmed to send DTMF (tone) or dial pulse signals.

E911 Integration

The E911 feature integrates the system to the Proctor PBX ANI-LINK product to provide E911 service. Once programmed, 911 calls dialed by system users are routed to the Proctor unit for processing.

This feature also provides a means to identify a power failure signal from the Proctor Unit. If a power failure signal is detected, the KSU routes 911 calls to Trunk Group 1 until the signal is removed.

End-to-End Signaling

The End-to-End Signaling feature enables station users to communicate with external devices such as answering machines and IVR devices.

Executive Override

The Executive Override feature allows designation of certain stations as executive stations with the ability to override and barge-in on other keysets engaged in conversation on a CO line or intercom call.

This system programmable option enables or disables a warning tone when the station marked as an executive is cut-thru to the conversation. This is useful for ACD agent supervisors or training personnel who require a service observing option.

A separate condition has been added to this feature which allows or disallow an Executive to override an extension. This prevents an extension with override capability from overriding an Executive's station.

Use of this feature when the Executive Override Warning Tone is disabled may be interpreted as a violation of federal or state laws.

A change in volume may occur on the CO line or intercom call after the barge-in occurs.

Executive/Secretary Pairing

There are four sets of Executive/Secretary pairings available. When the Executive station is busy or in DND, the Secretary station receives intercom calls and transfers. The Secretary station can signal the Executive in DND by using the Camp-On feature.

External Night Ringing

The system can be programmed so that CO lines marked for UNA provides ringing out the external page ports when the system is placed into Night mode.

Flash

Provides telephone users with the ability to terminate an outside call or transfer a call behind a PBX or Centrex and restore dial tone without hanging up the handset. A FLASH button is located on each digital telephone.

Flash Rates (Programmable)

Fixed and flexible button flash rates can be programmed. There are programmable flash rates for 19 features/functions that can now be programmed to up to 15 different red flash rate options and 14 different green flash rate options. These are set-up in admin programming. All other flash rates in the system are fixed (defaulted) at the rates for the *Triad 1/2/3* System.

Flexible Button Assignment

The *Triad 1/2/3* System has the following flexible button assignment features which enables programming from a remote location (off-site). Range programming can also be used to assign these buttons to multiple stations.

- **Outside Line** -- Automatically accesses assigned line. (User programmable)
- **DSS/BLF** -- Automatically signal assigned station and provides BLF for off-hook and DND. (User programmable)

- **Feature** -- Any feature with a dialing code (Personalized Messages, Paging, Account Code, Call Park, Music, etc.) can be assigned to a flexible button. (User programmable)
- **Group Access** (ACD, UCD, Hunt, Voice Mail group pilot numbers) -- User programmable.
- **Speed Dial** -- Automatically dials Speed number. (System, Station, Saved Number Redial, Last Number Redial) (User programmable)
- **Pooled Group Access** -- Some or all outside lines can be grouped; pressing this button accesses the highest numbered unused CO line in that group. (User programmable)
- **Loop** -- Used to answer a transferred call on a line for which a user does not have a button assigned. (User programmable)
- **Unassign** (Locked-Out) -- Specific buttons may be designated 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.
- **Flexible Port Assignments** – The Flexible Port Assignment feature provides a means to assign stations and CO line numbers to any station or CO line port in the system. This provides complete flexibility in determining station and CO line numbers within the system numbering plan. Therefore, a station can be assigned any number between 100 to 171 on the *Triad 1/2* Systems, and 100 to 351 on the *Triad 3* System.

  A CO line can be assigned any number between 001 and 048 on the *Triad 1/2* Systems, and 001 and 144 on the *Triad 3* System. Additional stations can be added to the system by reducing the number of CO lines.

Default Button Map illustration shows the 22 flexible buttons available on Executive and Enhanced model telephones.

Figure 2-1: Default Button Map (Executive and Enhanced Models)

Enhanced or Executive Digital Telephones -- The 24/12-button models have 11 fixed feature buttons and 24/12 flexible buttons. Each flex button can be assigned as a CO/PBX line, DSS button, Speed Dial or Feature button. Refer to *Table 2-2: Flex Button Programming Codes*.

Figure 2-2: Digital Executive (24-Button) Telephone

Figure 2-3: Digital Executive (12-Button) Telephone

Enhanced Digital Telephones (8-button) with 5 fixed feature buttons and 8 flexible buttons. Each flex button can be assigned as a CO/PBX line, DSS button, Speed Dial or Feature button. Refer to *Table 2-2: Flex Button Programming Codes*.

Figure 2-4: Digital Enhanced (8-Button) Telephone

Table 2-2: Flex Button Programming Codes

Account Codes	627
ACD* Agent Help	574
ACD* Agent Login (Primary Grp)	572+[5UU]
ACD* Agent Login (Secondary Grp)	582+ [5UU]
ACD* Agent Logout (Primary Grp)	571
ACD* Agent Logout (Secondary Grp)	581
ACD* Available/Unavailable	566
ACD* Call Factor	580+[5UU]
(requires button)	+[FFF]
ACD* Call Qualifier Code	570+[YY]
ACD* Calls in Queue Display Buttons	579+ [5UU]
ACD* Group Member Status Display	573
ACD* Group Pilot Numbers	5+ [UU]
ACD* Overflow Available/Unavailable	578
ACD* Supervisor Login	576+[5UU]
ACD* Supervisor Logout	575+[5UU]
ACD* Supervisor Queue Status Display	577+[5UU]
ACD*/UCD Calls in Queue Display	567
All Call Page (Internal & External)	700
Answering Mach. Emulation Mode	654+[0, 1]
Attendant	0
Attendant Override	601
Background Music	632
Call Back	622
Call Coverage (Non-Ringing Type)	647+[XXX]
Call Coverage (Ringing Type)	646+[XXX]
Call Park Location - Personal	438
Call Park Location - Station	439+[XXX]
Call Park Location - System	43+[C]
Caller ID Name/Number Toggle	653
Camp-On	620
CO Line Direct Access	88+[LLL]
CO Line Group	800-823
CO Line Off-Net Forward	603
Directory Dial	680
Do Not Disturb	631
Executive Override/Monitor Barge-In	625
Extension Numbers - *Triad 1/2*	100-171
Extension Numbers - *Triad 3*	100-351
Flash	660
Group Call Pick Up	#0
Headset Mode	634
HPT (8 btn sets)	667
Hunt Group Pilot Numbers	45+ [H]
ICLID Display (Answered Calls)	659
ICLID Display (Unanswered Calls)	635
Intercom Button(s)	645
Last Number Redial	[SPEED]+[#]
LCR Queue Cancel	626
Least Cost Routing Access	9
Line Queue	621
Loop Key (Requires Button)	89
Mailbox Button	644+[IDX]
Message Waiting	623
Mute Button	629
Night Service	604
OHVO Enable	628
One-Touch Recording	649+[44V]
Page - External All Call	76+[0]
Page - External Zones	76+[P]
Page - Internal All Call	709
Page - Internal Zone 1-8	701-708
Page - Meet Me (Answer)	770
Personalized Messages	633+[ZZ]
Personalized Messages - Clear	633+[00]
Release Button	641
Repeat Redial	643
Ring Tone	695
Save Number Redial	[SPEED]+[✳]
Speed Dial Access	[SPEED]+[YYY]
(000-019 STA) (020-999 SYS)	
UCD Group Pilot Numbers	55+ [U]
Universal Day/Night Answer	#5
VM Group Pilot Numbers	44+ [V]

LEGEND --

C = Call Park Location (0-7)
FFF = ACD Call Factor (000-999)*
H = Hunt Group Number (0-7)
IDX† = 001-255
LLL = Line Number
(001-048 Triad 1/2, 001-144 Triad 3)
P = 1 or 2
U = UCD (0-7) Group Number
UU = ACD (50-65)*
V = Voice Mail Group Number (0-7)
XXX = Station Extension Numbers
YYY = Speed Dial Bin Numbers
ZZ = Personalized Messages

** Features available with optional software*

†IDX = Index numbers reference Mailbox numbers
(Contact System Administrator for specific Index/Mailbox numbers.)

Flexible Numbering

The Flexible Numbering feature allows the user to modify the system's numbering plan to accommodate their specific requirements. Station, pilot, and feature access code numbers (as well as the length of these numbers) may be changed to meet user applications.

Forced Least Cost Routing (LCR)

The *Triad 1/2/3* System may be programmed on a per station basis to force the use of LCR for outgoing accessed. This allows the system administrator to maintain greater control over dialing patterns and the lines used for placing outgoing CO calls.

Forward Override

The Forward Override feature allows a user to reach a busy station that is busy forward, no answer forward or all call forwarded. This allows the calling station to call to a forwarded station, OHVO, Executive Override, Monitor, Message Wait, Camp-On, or Call Back at that station rather than forwarding to the busy destination.

Group Listening

All digital key stations 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.

This feature is not available when the station is in headset mode.

Headset Compatibility

The *Triad 1/2/3* Digital Telephones are designed to allow the connection of an industry standard, electret mic compatible, modular headset. The user connects the modular headset to the handset jack on the telephone leaving the handset in place. The ON/OFF button on the Digital Telephone is then used to activate the headset.

Headset Mode

Each digital telephone can be individually programmed for headset operation. When programmed, an industry standard headset with it's adapter box may be connected to a digital telephone for headset use. This allows handset or headset operation by switching the selector switch on the adapter box. Speakerphone operation and call announce on intercom are disabled while a station has enabled headset mode.

Once programmed in station programming, the user may then select between headset mode or normal handset/speakerphone mode by simply dialing a code or pressing a user programmable flex button.

Hearing Aid Compatible

All Digital and Single Line Telephones are hearing aid compatible in compliance with the FCC Part 68, Section 68.316. This allows using the telephone in conjunction with users wearing hearing aids.

Hold - Exclusive

When a line is placed on Exclusive Hold, no other station in the system can retrieve this call. Exclusive Hold may be programmed and activated on the first or second depression of the HOLD button. CO Lines while in a transfer hold are always placed in an Exclusive Hold condition.

Hold - Preference

The Hold Preference feature allows either System or Exclusive hold as the primary hold on the first depression of the HOLD button, depending upon programming. A second depression invokes the second hold preference.

Hold - Recall

When an outside call has been on Hold for a programmable length of time, recall ringing tone is sent to the station placing the call on Hold. If this station does not answer the recall, a recall tone is sent to the Attendant(s).

Hold - System

When a line is placed on System Hold, any station in the system with an appearance of that line can retrieve the call.

Hot Keypad

The Hot Keypad feature enables a station user to activate the telephone by dialing digits without going off hook.

Hot Line/Ring Down

Digital key stations may be programmed to immediately call or ring down a particular station or outside number upon going off hook. This is done by programming the stations Off-Hook preference to activate a DSS or Speed dial feature key. This feature can be overridden if the station user selects a CO line first when going off-hook.

Hunt Groups

The system can be arranged for up to eight Hunt groups. Each Hunt group can contain up to eight stations each. Each Hunt group is independently arranged to utilize either a pilot hunting technique or station hunting technique.

Chaining

Hunt Groups can be chained or joined together forming larger Hunt Groups. This is accomplished by assigning a Pilot Hunt Group number as the last member of a group.

Pilot Hunting

Incoming CO, transferred CO, and intercom calls can be directed to a pilot extension 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 directed to stations (by calling the extension number) within the Hunt group do not hunt but receive call progress tones of the extension dialed.

The Pilot Hunting feature has the option to bypass the sequential search and to ring all idle stations in the Hunt Group. This option can be enabled/disabled on a group basis.

Station Hunting

Transferred CO calls and intercom calls that are presented to a busy, or DND station, who is a member of a station Hunt group, searches 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 rings 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 allows the member of the hunt group to receive private calls and hunt group calls.

ICLID/Caller ID

The ICLID (Incoming Calling Line IDentification) feature has been added to the *Triad 1/2/3* System. However, in order for this feature to operate properly, it must be activated from the Central Office so that the numbers of the calling party is delivered over the individual tip and ring of the CO lines during the first silent interval between ringing. The following features have been implemented.

Answered ICLID Table

The Answered ICLID Table feature adds a table that captures the ICLID calls that were answered. The table can store up to 100 entries of the most recently answered ICLID calls. A station may dial a unique access code to view the entries, scroll through the entries, and dial a desired entry back. The table displays the number as well as the station that answered the call.

Caller-Entered ICLID Digits

The Caller-Entered ICLID Digits feature is available with optional software. The Guaranteed Message announcement feature provides a means to force incoming callers to an announcement before being placed into an ACD Queue or routed to an agent.

The outside callers are presented with the entire message before being routed to the ACD Group. Agents in an ACD Group with a Guaranteed Message enabled receives incoming callers only after the caller has heard the designated recorded announcement in its entirety.

The Guaranteed Message feature also provides an option to capture digits dialed by the incoming caller which can be inserted as ICLID incoming number identification.

If the Guaranteed Message announcement is programmed in Admin, incoming ACD calls is routed to the Guaranteed Message RAN before going to the ACD Group. If the ICLID option is selected, digits received before the announcement time-out is captured and inserted as incoming ICLID number information.

When the ICLID option is selected, a [#] is recognized as a termination of the announcement and a [✳] is recognized as an entry error. An entry error removes the ICLID number and the incoming caller can re-enter their phone number.

Caller ID Name/Number

The Caller ID Name/Number feature allows a station user to program a flexible button to view both the number and name on the LCD when receiving a Caller ID CO call. The top line of the LCD displays the number of the caller and the bottom line of the LCD displays the name.

Calling Number/Name Display

The Calling Number/Name Display feature is intended as the basic offering of the ICLID service when associated with the *Triad 1/2/3* System. Whenever an incoming call is received at the system, the number received along with the ringing signal is stored in the line control tables and used at various points in the processing of the call.

- The primary function is that the calling number is displayed (if available) at any point at which the LINE RINGING is displayed in the system.
- With the availability of the calling name feature, if the calling name is provided, the system delivers that to the display instead of the calling number.

Incoming Number/Name for SMDR Records

The Incoming Number/Name for SMDR Records feature 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 calls.

- If the calling name is present, an additional line is output in the SMDR record identifying the name. This record immediately follows the normal SMDR record. The normal SMDR record includes an indicator which identifies that a following record with name identification is present.
- Unanswered calls are recorded in the SMDR record for incoming with an indicator to allow the identification of callers for statistical and call-back purposes.

Unanswered Call Management Table

An Unanswered Call Management Table with 100 entry capacity is maintained in the system database. The calling number/name information pertaining to any unanswered call is placed in this table at the time the system has determined that the call has been abandoned.

This table may be accessed from any display telephone to review unanswered calls. Only an Attendant station(s) can delete an entry from this table.

Idle Speaker Mode

The Idle Speaker Mode feature allows the system to determine whether the first digit dialed is heard over the digital telephone speaker. This feature is allowed or denied on a system-wide basis in programming.

Incoming CO Call Transfer

The Incoming CO Call Transfer feature provides station users the ability to transfer a call that is currently ringing at their station without answering it. Only Incoming and Transferred calls can be forced. This feature only operates when the station is in an idle mode and is not available to Single Line Telephone users. Calls may be forwarded to any available station, ACD/UCD group, VM Group.

A destination station must have a direct appearance for that CO Line or Loop button and not in DND, or an error tone is presented to the originator and the call continues to ring their station. If the station is busy, the current call must be placed on hold, the ringing transfer initiated, and then the station can return to their original call.

Intercom Button(s)

The Intercom Button feature provides station users the function of ringing a busy station via the intercom without using the Camp-On or Executive Override features. This also allows stations to place intercom calls on hold. If calls are ringing on intercom buttons and a Handsfree call is received, the Handsfree call is allowed and the calls ringing continue with muted ringing.

Multiple intercom path buttons can be assigned to a single station, however up to five internal parties can be placed on hold per station. Music-On-Hold is provided to intercom callers on hold.

This feature can be programmed on any key station or DSS Console with an available flexible button. If there is an available intercom button, a station calling that station cannot OHVO, Camp-On or Override that station. Depending on the key station programming, intercom ringing is muted or reminder ringing.

If all intercom buttons are in use, then the station may utilize the Camp-On or Executive Override features. By default, no intercom buttons are assigned to any key stations.

Intercom Calling

The system's architecture allows non-blocking of intercom calls. A station is reached on intercom by dialing the associated three-digit number.

Intercom Signaling Select

Users can control the method by which they receive intercom calls and signals. A convenient intercom signal switch (electronic telephones) or HPT button (digital telephones) is located on each telephone for easy selection. The choices are:

- Handsfree (H) -- The station user, upon hearing a tone burst and voice announcement over the speaker, can reply handsfree.
- Privacy (P) -- The station user receives a burst of tone and a voice announcement over their speaker. The microphone is deactivated for privacy. The called party must lift the handset or press the MUTE button to answer the call.
- Tone Ringing (T) -- A standard tone ring notifies the party of an incoming intercom call. The called party answers by lifting the handset or moving the switch to the handsfree (H) position or pressing the ON/OFF button.

Inter-Digit Time-Out

The Inter-Digit Time-Out feature allows programming of the inter-digit time-out on a system-wide basis. This feature applies to intercom and LCR calls. DISA inter-digit time-out remains unaffected by this timer.

ISDN

Current *Triad 1/2/3* software supports Primary Rate Interface (PRI) and Basic Rate Interface (BRI) Integrated Services Digital Network (ISDN) circuits. The PRI provides 23 bearer channels and one data channel (23B+D). The BRI provides two bearer channels and one data channel (2B+D).

Calling Number and Called Number services are supported with the PRI and BRI. Calling Number services will be routed in the same manner as ANI/ICLID calls using the ICLID route table and name/number translation table.

The rules and conditions of ANI/ICLID are the same, and still apply to Calling Number service on ISDN lines. Called Number services will be routed using the DID/DNIS route table. The rules and conditions of DID and DNIS are the same, and still apply to ISDN Called Number service on ISDN lines.

Channels

- The bearer channels (B channels) transport voice information to and from the Central Office.
- The data channel (D) controls all signaling information for the bearer channels.

PRIB/BRIB

- Both the PRIB and the BRIB require the Phase Lock Loop Unit (PLLU) to properly operate.
- Both the PRIB and the BRIB can only be installed in the Basic KSU.
- The *Triad 3* system requires a memory expansion unit (MEMU) for use of the PRIB/BRIB cards.
- The PRIB only supports the NI-2 standard. The BRIB only supports the NI-1 standard.
- Neither the PRIB nor the BRIB will support the trunk features of Paging, Reseize, Queuing, or RAN Support.
- Vodavi has successfuly integrated its BRI ISDN with the Lucent 5 ESS Central Office and its PRI ISDN with the Lucent 5 ESS, Siemens, Stromburg Carlson, and the DMS 100 Central Offices. Vodavi ISDN should interface with all Central Office switches, but this has not been verified. Therefore some delays in service may be experienced.

Electronic Key Telephone Service

Electronic key telephone service (EKTS) is a feature that can be provided on BRI ISDN to simulate standard analog DID lines. This allows several different numbers to be shared by a single BRI circuit.

Due to the decline in telephony tariffs, there is an increasing demand for BRI ISDN features. A BRI circuit allows two simultaneous calls to be handled, due to its technical specification. BRI circuits have two B-Channels at 64 kilobytes per second and one D-Channel at 16 kilobytes per second.

The Bearer (B) Channels are designed for PCM (voice) and the Data (D) Channel is designed to carry information specific to each incoming and/or outgoing call.

The EKTS feature allows a single ISDN Service Profile Identifier (SPID) or B-Channel to support multiple directory numbers. A SPID is a number that telephone company switching equipment uses to track configuration information for each terminal adapter connected to an ISDN telephone line. The telephone company should provide SPIDs at the same time that the ISDN directory numbers are assigned. A directory number is another term for a telephone number.

If an application requires EKTS, be aware that BRI ISDN handles a busy number differently than a DID circuit. When the called number is busy, BRI will issue a busy signal, but a DID circuit will ring another line in the circuit. The busy signal is provided by the telephone company, therefore the call is not presented to the Vodavi telephone switch and it is not forwarded to voice mail. For example, a caller dials 480-443-6000 and is connected to the extension. While the first caller is still connected, a second caller dials the same number. The second caller will receive a busy signal that is provided by the telephone company.

In a normal BRI application, two numbers are assigned to each BRI circuit, which consists of 2 channels. There can be a maximum of 4 circuits equipped to handle 8 channels per BRIB. This is a direct number-to-channel relationship without hunting capability. Most circuit providers offer an optional "hunting" feature capability on BRI circuits. This optional feature allows numbers to hunt for idle channels on the BRIB up to a maximum of 8 channels per BRIB, assuming 4 BRI circuits were installed. In EKTS applications, you can have a maximum of 64 DID numbers hunt to one BRIB. Hunting cannot be accomplished between BRIBs, nor will the hunting feature allow calls to be routed to a busy DID number.

Conditions

BRI EKTS support is available in Vodavi telephone systems with software version 3.0G and higher.

Like DID, EKTS can be programmed to route calls using up to 7 digits. By default, only the last three digits are analyzed for routing.

EKTS does not require a line appearance on a specific telephone because the BRI terminates directly into the KSU.

Vodavi supports Basic EKTS. The EKTS caching option is not supported by Vodavi. Caching is normally used when an ISDN telephone instrument is used on the customer premise.

Keyset Mode (Digital KTU Only)

The Keyset Mode feature allows the station user to determine the mode in which the Digital Telephone with CTI Box (optional) operates. The five modes are: Inactive mode, PC Phone mode, ATD Command mode, ATH Command mode and CKTU mode. 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.

Last Number Redial (LNR)

The Last Number Redial feature permits the automatic redialing of the last telephone number dialed on an outside line. Up to 24-digits can be stored. Outside line selection of the same line used is automatic.

LCD Interactive Display

The Executive Digital Telephone provides the user with visual indication of call status. Calls to and from other extensions, number dialed, line used and camp-on are some of the features displayed.

Least Cost Routing (LCR)

The LCR feature allows the system to automatically select the least costly route available according to the number dialed, the time of day/day of week, the class of service (COS) assigned to the station/trunk group priority level assigned.

Local Number/Name Translation Table

An administrable table provides a local translation from a received calling number to a name. This table can be administered by the customer from the Attendant console location. 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 shall rule. 200 entries are provided for the *Triad 1/2/3* System.

Mailbox Button(s)

Mailbox Buttons allow station users to transfer internal/external callers to specific voice mailboxes. The station user can assign a mailbox index number to a flexible button for a specific Voice Mail group or mailbox in System Administration Programming. 255 buttons are available for system use.

This feature can be programmed on any key station or DSS Console with an available flexible button. If a station is:

- An OHVO, Camp-On or Executive Override initiator, they may not use the mailbox button feature. Stations engaged in a conference cannot use this feature.
- NOT programmed in the Voice Mail Group, the user receives an error tone. By default, no mailbox buttons are assigned to any key stations.

Meet Me Page

Users may answer a page call from any phone in the system by dialing a special code. The party who initiated the page must remain off-hook.

Message Waiting

Stations that are busy, unattended, or in DND can be left a message indication by other stations in the system. Up to five messages can be left at one keyset. Upon return to the station, the user can press the flashing MSG WAIT button to ring each party in sequential order.

Message Waiting Reminder Tone

A key station can be programmed with a Message Waiting Reminder Tone at timed intervals.

Music-On-Hold

A music source, when connected to the system, 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 can be allowed or denied on a system-wide basis in database programming. This feature can also allow or deny Music-On-Hold heard on each CO line and is programmable on a per CO line basis. This feature also allows the system to assign CO line circuits as additional music inputs. This increases the capacity of music channels beyond the two available on this system. A total of eight channels is available for use on the system.

Mute Key

Pressing the MUTE button while in the speakerphone mode or using the handset disables the microphone but not affect the speech coming over the speaker or handset. Pressing the illuminated MUTE button again reactivates the microphone.

Name In Display

The Name in Display feature allows every extension (electronic/digital/SLT) the capability to program the users name, for that station, so that people using display telephones see the name instead of the station number on their display. The name is programmed at each station by the user and may be up to seven letters in length.

Name/Number Display At Idle

The Name/Number Display feature allows the programmed seven-digit name and station number to display 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 priority of the idle display is UCD/ACD, Hunt, Station/Name, or Station alone.

Night Service

The Night Service feature provides a means to put the system in night mode from any keyset or remove the system from night mode from any keyset as long as the system was put in night mode by the night service feature flex button. If the system was placed in night mode by the Attendant using the DND button or if the system was placed in night mode by the automatic schedule, the night service flex button can not remove the system from night mode.

Digital Voice Mail (DVM) -- The DVM Day/Night Operation can be set up to follow the same path as the Day/Night/Special Mode for the telephone system.

Night Service Mode

Automatic Night Mode Operation

The *Triad 1/2/3* System can be programmed in database administration to place the system into Automatic Night Mode. The Attendant(s) can override the Automatic Night Mode schedule simply by pressing the NIGHT (DND) button.

External Night Ringing

The system can be programmed so that CO lines marked for UNA rings on the external page speakers.

Manual Operation

The Attendant(s) can control the use of Night Mode manually by pressing the NIGHT (DND) button. An LED indicates when the system is in Night Mode operation.

Night Class of Service (COS)

The system allows each station to be assigned a different COS for night operation. The night COS goes into effect when the system is put into night mode manually or via the automatic schedule. Prevents the misuse of phones after hours.

Night Ringing Assignments

Each CO line may be individually programmed for Night Ringing to other stations, to Hunt/ACD/UCD/Voice Mail groups, or off-net via Speed Dial. When the system is placed into night mode, manually or automatically, ringing follows the Night Ringing Assignments for each CO line.

Universal Night Answer (UNA)

Incoming CO lines can be programmed for Universal Night Answer (UNA). Stations that do not have access to a line during the day can answer that line while the system is in the Night Mode by dialing a UNA code.

Weekly Night Mode Schedule

A programmable weekly night mode schedule provides for 24 hour, 7 day a week automatic night mode operation. The system can be put into and out of night mode automatically on a daily basis.

Digital Voice Mail (DVM) -- The DVM Day/Night Operation can be set up to follow the same path as the Day/Night/Special Mode for the telephone system.

Off-Hook Preference

Auto Feature Access

In addition to Auto Line Access, digital telephones have the ability to have their off-hook preference select a DSS or feature button upon going off-hook or pressing the ON/OFF button.

Auto Line Access

Each station, key or SLT, may have their phone programmed to access a particular CO Line such as a private line or a line from a group of CO lines upon going off-hook. This is useful in Centrex or PBX applications when station users have dedicated lines. Outside line dial tone is received just by going off-hook, without the need to dial an access code.

Hot Line/Ring Down

Digital telephones may be programmed to immediately call or ring down a particular station or outside number upon going off hook. This is done by programming the stations Off-Hook Preference to activate a DSS or Speed Dial feature key. This feature can be overridden if the station user selects a CO line first when going off-hook.

Intercom Access

When Off-hook Preference is enabled, at a key station, that station may still obtain intercom dial tone for accessing internal stations or other system features. This is done either by pressing an DSS button or dialing their own intercom station number prior to going off-hook.

User Programmable Preference

Based on a station programmable option, digital telephones may be given the ability to enable, disable or change their Off-hook Preference by dialing a code. This option can be denied in station programming on a per key station basis.

Off-Hook Signaling

If a station has been programmed to receive direct outside line ringing and is busy on another call, the call rings at the station using a muted ring signal. This option allows a user to receive a reminder ring at their busy station, instead of muted ringing. A Reminder Ring Timer has been added to the system to provide the reminder ring every time the timer expires, as long as the incoming CO line remains connected. The system defaults this option to muted ringing. CO calls may also be camped-on to a busy station and receive muted ringing.

Off-Hook Voice Over (OHVO)

Off-Hook Voice Over allows station users to signal a busy station that your call is waiting. Your voice is only heard through the handset of the called party's telephone. The called party can connect to the two parties and carry on two independent conversations using the handset.

The called party can also respond using the text messaging feature which sends messages to the calling party's display.

A third method provides for the receiving station to respond to an OHVO announcement using the MUTE feature button. This button is pressed to carry on a two-way conversation with the OHVO initiator while still listening to the original call.

The calling station is placed in a one-time DND mode upon initiating the Voice Over. One-Time DND cannot be toggled during the OHVO call. The station receiving the OHVO call must be off-hook and in the H mode.

On-Hook Dialing

The Digital Telephone user can place calls without lifting the handset. If the speakerphone is disabled, the handset must be lifted to converse.

Online Programming

Changes to the system database can be made without interrupting normal system operation. Programming may be performed using a digital telephone connected to the system (Station 100) or via an external PC either on-site or remotely.

One-Touch Recording

The One-Touch Recording feature allows the station user while on an internal/external call to press a button and have the system record the conversation in the station user's mailbox. It has been designed to work with the *Triad 1/2/3* Digital *DISPATCH* Voice Mail System via in-band signaling.

Use of this feature may be interpreted as a violation of federal or state laws and an invasion of privacy. Check applicable laws in your area before recording calls using this feature.

Page/Relay Control

On the *Triad 1/2/3* Systems, there are four or six relays that may be individually programmed for: External Page, Loud Bell Control, CO Line Control, Power Failure Transfer, and Recorded Announcement uses.

Paging

Access Restriction

Programming on a per-station basis, can deny any station the ability to make any type of page.

External

There are two External Paging Zones available on the *Triad 1/2/3* System. External paging requires a three-digit dialing code and an externally provided amplifier and paging system. Each zone can have a relay contact associated to it.

Internal

There are eight internal paging zones available in the *Triad 1/2/3* System. A station can be in any or all zones or in no zone at all. Stations not assigned to a page group can still make page announcements, if allowed in station programming. Stations can be assigned to a page group in order to receive pages but not allowed to make page announcements.

Park Personal

Each digital telephone in the system can place a call into a personal park location and then later retrieve that call from the originating station. Intercom calls and CO line calls can be placed into the stations' personal park location. Calls parked in a personal park location are subject to the system call park recall timer.

A station retrieving a personal parked CO call must have either a direct CO line appearance or an available loop button to retrieve the parked call.

Only one call can be parked in a Personal Call Park location at one time. When dialing the Personal Park location and the location is already occupied, the initiating station receives the previously parked call and the second call is then parked.

Pause Timer

When dialing a speed number, a timed pause between digit sending can be placed in the number. The length of this pause can be programmed in the system database.

PBX Dialing Codes

Five one or two-digit access codes can be entered into memory. When one of these codes is dialed, it signals the KSU that the user is dialing a PBX access code, not dialing directly over an outside CO line, and to apply toll restriction to the next dialed digits after the code. Therefore, toll restriction is not applied to the station unless one of these five PBX codes is dialed first. This allows dialing of PBX extensions 100, 110, 111, etc. and functions on lines marked as PBX lines in programming.

Personalized Messages

Each station not forwarded, can select a pre-assigned message to display on the LCD of the digital key telephone calling that station. There are ten possible messages which can be displayed:

00	= (clears messages)	06	= On Trip
01	= On Vacation	07	= In Meeting
02	= Return AM	08	= At Home
03	= Return PM	09	= On Break
04	= Return Tomorrow	10	= At Lunch
05	= Return Next Week		

Custom

The Custom Message feature allows the system administrator to enter up to ten custom messages for use by station users of the system. These messages may be specified and customized by the customer on a system-wide basis.

Date and Time Entry to Personalized Message(s)

The Date/Time Personalized Message feature allows the station users to activate certain messages that allow the user to enter a specific time or a date of return. These messages display on calling stations to alert them of the desired party's return time or date.

11 = On Vacation Until: MM/DD
12 = Return: HH:MM xm or MM/DD
13 = On Trip Until: MM/DD
14 = Meeting Until: HH:MM xm
15 = At Home Until: HH:MM xm
16 = On Break Until: HH:MM xm
17 = At Lunch Until: HH:MM xm

Personalized Message Code on a Flex Key

The Personalized Message Code feature allows a key station user to program the personalized message code [633#] onto a flex button. This speeds access of the pre-selected messages.

Scrollable Canned Messages

The Scrollable Canned Message feature allows the user to use a single digit [#] or [✳] to scroll through the canned messages and select one. When the desired message is displayed, pressing the hold button places that message on the station LCD. This feature operates when the phone is in the idle mode only. This feature cannot be activated if the station is in the Call Forward or DND mode(s). This feature is not available to Attendant stations. The messages scroll in the following order:

1. (clears message)
2. On Vacation
3. At Home
4. Return AM
5. At Lunch
6. Return PM
7. In Meeting
8. Return Next Week
9. On Break
10. Return Tomorrow
11. On Trip

Preferred Line Answer

A station with Preferred Line Answer can answer any assigned outside, transferred, or recalling line, or queue callbacks by lifting the handset or pressing the ON/OFF button. The station MUST be physically ringing, to function properly.

Privacy Release

Privacy is insured on all communications in the system. If desired, the customer may elect to disable the Automatic Privacy feature, thus allowing up to seven other stations to join in on an existing CO Line conversations.

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

Per CO Line Option

The Per CO Line feature allows programming of each CO line individually for privacy. This feature is useful for maintaining security on such lines as data lines, private lines, or special circuits requiring privacy. If privacy is disabled on a CO line then, while in use, another station may enter the conversation simply by pressing the CO line button. A programmable warning tone is presented to all parties prior to actual cut-thru. The station attempting to enter the conversation must also have privacy disabled.

Per Station Option

Each station may be programmed to give the station the capability to join an existing conversation simply by pressing the CO line button that is in use. A programmable warning tone is presented to all parties when the station enters the conversation. The CO line must also have privacy disabled to allow the cut-through. Privacy per station on SLT type stations allows/denies camp-on to the SLT. This is useful for data applications.

Private Line

Private line programming allows certain lines to ring at a specific station only. When placed on Hold, these lines are active at the programmed station only. A private line can be transferred to other stations, provided the station receiving the call has a loop button or direct appearance of that CO line.

Pulse-to-Tone Switchover

When commanded, the system changes the signaling on an outside line from dial pulse to DTMF (tone), allowing the use of common carriers behind a dial pulse outside line. This can be done manually when dialing, or can be stored within a speed dial number.

Range Programming

The *Triad 1/2/3* System allow for range programming when programming CO lines and Stations. Range programming allows you to program all parameters alike for the entire range or you can change or modify a few items for all members in the range.

Remote Administration

The Remote Administration feature allows authorized personnel to access the administration programming via a terminal device (portable telephone device or personal computer with communications software package).

The feature permits the review and entry of the customer database in the same manner as via the digital telephone. The terminal device can be connected directly to the RS-232C connector on the Master Processor Board (MPB) on the *Triad 1/2/3* System, or can be accessed by a telephone modem linking the RS-232C connector (via a CO line) to a remote location. When entering the system remotely via a terminal device, access to the 2400 baud modem (optional *Triad 1/2*, On Board on *Triad 3*) is available.

Database Upload/Download

Database Upload/Download provides a maintenance facility which is added to the Remote Administration routine. This routine permits downloading of the database to a PC, when a software change is made or when the system must be initialized and reprogrammed.

The routine facilitates the programming of a database on an in-house system which can be 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.

Remote System Monitor And Maintenance

Maintenance

The Remote Maintenance feature allows the Interconnects' technical staff to review the system configuration data and individual card slot configuration data. This can be done on-site using a data terminal or remotely using a modem to access a remote data terminal. When entering the system remotely via a terminal device, access to the 2400 baud modem (optional on *Triad 1/2*, On Board on *Triad 3*) is available.

Monitor

The Remote Monitor feature provides remote access to the installed system for diagnostic purposes. These capabilities benefit Service personnel enabling them to support the end user remotely. Different levels of access, via password, allows authorized personnel to trace, monitor, and up-load critical information directly from the *Triad 1/2/3* System. This provides a more accurate means of acquiring system information that leads to a quick resolution of problems that may occur. This is all done without interfering with ongoing call processing or normal system operation, and in many cases may be performed without a site visit.

Capabilities reserved for this high-level troubleshooting also include:

- Monitor Mode
- Enable and Disable Event Trace
- Dump Trace Buffer (Up-Load)

Repeat Redial

The Repeat Redial feature allows a digital key station to 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 call back indication. The REPEAT REDIAL flexible button flashes at the call back rate of 120 ipm for 15 seconds.

If the station:

- Doesn't answer within the 15 seconds, the call back is canceled. The system retains the last call the user made.
- Is busy on an internal/external call when the Repeat Redial queue call back occurs, the call back does not occur until the user goes on-hook.

The user must enter a Redial Timer value when invoking this feature. This value is from 006-999 which represents seconds. A 2-minute interval would be entered as 120. Default value is 1 minute (60).

Ring Tone (User Selectable)

The ring tone signal used to notify stations of an incoming call can be changed by each station user to provide distinctive ringing among a group of stations. Each station user may select a distinctive ringing tone that is used to ring their station. The system provides 36 different ring patterns that the station users may select from.

Save Number Redial (SNR)

Any number dialed on an outside line can be saved permanently and used at any time. This number is saved until a new number is stored.

Single Line Telephone (SLT) Compatibility

The *STARPLUS* Digital Telephone Systems support industry standard 2500- type (DTMF) single line instruments. When the Single Line Interface Board (SLIB) is installed in the *Triad 1/2* Systems up to 48 single line telephones can be supported, while in the *Triad 3* System, a maximum of 180 single telephones can be supported.

Speakerphone

Both Enhanced and Executive Digital Telephones are equipped with a speakerphone. However, the speakerphone can be programmed to work in one of three ways:

- Normal speakerphone operation.
- Disabled for outgoing and incoming CO calls but handsfree on intercom allowed.
- Headset operation allowed.

Speed Bins/Chaining

Speed dial bins may be chained together by simply pressing one speed bin, and then another as required. This is helpful for accessing Long Distance carriers or banking services when account codes are required.

Speed Dial - Flash

A flash can be programmed within a speed dial number. When this is done, a pause is automatically inserted before the remaining speed dial digits are sent.

Speed Dial - Station

Each station user can program up to 20 frequently dialed numbers. Numbers can be up to 24 digits including pauses, flash commands, pulse-to-tone switchover, and no-display characters. There are 2000 speed locations in *Triad 1/2/3* Systems (3000 with expanded memory) for dividing among all telephones. Numbers are entered by pressing SPEED and dialing a 3-digit code. This feature can also be assigned to any of the buttons in the flexible button field of each keyset for 1-button activation.

Speed Dial - System

Up to 980 commonly dialed numbers can be programmed into System Speed Dial for use by stations allowed this feature. These numbers can be up to 24 digits including pauses, flash commands, pulse-to-tone switchover, and no-display characters. Numbers 060-099 are not monitored by toll restriction. Each station may be allowed or disallowed access to an assigned range of bin numbers.

Station ID Lock

The Station ID Lock feature provides a means for the installer/programmer to lock the station ID of all stations in the system. Once locked, attempts to plug unlike devices (i.e., a DSS into a 24-button port) results in the device not working. This feature is designed to prevent loss of station programming that results when a different station type is plugged into a port already designated as another station type.

Station Message Detail Recording (SMDR)

The *Triad 1/2/3* System provides details on both incoming and outgoing calls. This feature is programmable to allow recording of all calls or just outgoing long distance calls. The system tracks calls by outside line, number dialed, time-of-day, date, station that placed the call and duration of call. Account codes may also be entered and recorded.

Station Relocation

The Station Relocation feature provides a means to allow a user to unplug their station and plug it in at another location. Then by dialing a code followed by the old station number, all station attributes, including extension number, button mapping, speed dial, and class of service are transferred to the new location.

If a station is assigned to a specific port and that station user unplugs their station and plugs it in at another location, the database administration programming is updated to reflect the new port change. Station lock may prevent this feature from working correctly.

T-1 Trunking

The T-1 trunk card provides the *Triad 1/2/3* Systems the ability to connect to digital T-1 trunk circuits. The T-1 trunk card supports the standard D4 framing format with Alternate Mark Inversion (AMI) coding. The system can support TIE, loop start, ground start, and DID signaling per channel.

The T-1 trunk card can be used to connect 24 lines (24 channels per T-1 circuit) from a CO to the system. These lines can be any mix of inbound WATS, outbound WATS, standard DDD lines, DID lines, or TIE lines. The system also supports Fractional T-1 Service. The *Triad 1/2/3* Digital Systems use the TIE signaling simulation from the CO to add the additional protocol of DID.

T-1 trunking provides services called Automatic Number Identification (ANI) and Dialed Number Identification Service (DNIS). The T-1 feature supports both of these services. The *Triad 1/2/3* Digital Systems support ANI, DNIS, or an ANI and DNIS combination on a per channel (line) basis.

Text Messaging (Silent Response)

The Text Messaging feature allows a station user to use text messages to respond to a caller that has either Camped-On or has used the Off-Hook Voice Over (OHVO) feature to alert a busy station of a waiting call or message. The camped-on station may respond to the caller via the personalized, custom, and response text (LCD) messages. The text messages appear on the calling party LCD display. The calling (originating) station and receiving station MUST be a digital telephone. The receiving station MUST also be programmed to allow OHVO calls.

Toll Restriction (Table Driven)

The system provides a flexible means of providing toll restriction to internal stations of the *Triad 1/2/3* System. Each station is assigned a Class of Service for day mode operation and one for night mode operation these station COS' work in conjunction with a CO line Class of Service to allow for customized toll restriction. Two Allow and Deny tables along with four special tables afford the system administrator to devise a variety of complex toll restriction or dialing privilege schemes.

Canned Toll Restriction

The system provides an easy means of applying the most common form of toll restriction where 1+ and 0+ along with 976, 555, and 411 type of calls are denied and 1-800, 1-888, 911, 1-911, and 1-611 type of calls are allowed. This canned toll restriction is applied through the use of a single pre-built COS and can be assigned to stations using range programming.

Transfer Recall

Screened and unscreened transfers recalls the initiating party if unanswered for a programmable length of time, and then if unanswered, recalls the Attendant.

Uniform Call Distribution (UCD)

Eight Uniform Call Distribution (UCD) groups can be programmed, each containing up to eight three-digit station numbers. Each group is assigned a pilot number. When this number is dialed, the first available agent in that group is rung. Calls are routed to the station that has been on-hook for the longest period of time.

Agent Queue Status Display

The Agent Queueing Status allows UCD agents to view stations of a UCD group on their display. The display shows how many calls are in queue, how many agents are available, and the length of time the oldest call has been in queue.

There are two methods of viewing UCD group Call Queue Status.

1 -- In-service UCD agents and the assigned overflow station sees the quantity of calls in queue on the LCD of their station for the UCD group of which they are a member. If every member of a UCD group is busy and calls are in queue, the Supervisor/Agent Queue Status display is seen at all UCD members of that group.

If a UCD member is taken out of the group (e.g., DND, All Call Forward, Unavailable, etc.) they do not receive calls in queue information.

2 -- Any station not assigned in a UCD group can view the number of calls in queue for any given UCD Group. To view the number of calls in queue the station user dials the Calls In Queue code (or presses a programmed FLEX button with this code) then enters the UCD group desired. The LCD displays, on a real time basis, the number of calls in queue for that group.

Alternate UCD Group Assignments

An alternate UCD group can be programmed so that if stations in one group are busy, the alternate group is checked for an available station.

Auto Wrap-Up with Timer

After completion of a UCD call (on-hook) the agent is not subjected to another UCD call for the duration of the Auto Wrap-Up Timer (regardless of the number of calls in queue), allowing the agent to finish call related work or access other facilities. This allows agents to remove themselves from the group (i.e., DND, Unavailable, Call Forward or originate another call). The Auto Wrap-Up Timer is programmed as part of the UCD database. (System-wide)

Incoming CO Direct Ringing

CO Lines can be programmed to ring directly into a UCD group. When all agents are busy and RAN is enabled, the system answers the caller and present the 1st RAN announcement automatically.

No-Answer Recall Timer

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. The station that failed to answer the ringing UCD call is placed into an Out-Of-Service (OOS) state.

No-Answer Retry Timer

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 (OOS) is placed back in service if the agent hits their available flex button or dials the available flex code. The agent is also placed back in service if the No-Answer Retry timer expires. If the agent does not answer their next UCD call, they are again taken out-of-service. This cycle continues until the station answers calls, logs out, or goes unavailable.

Overflow Station Forwarding Assignments

An overflow station may be assigned to route callers in queue to a designated station after a specified time. The overflow station may not be one of the UCD group stations.

This feature allows UCD calls reaching the UCD Overflow Station to call forward to another station. This is allowed or denied on a system-wide basis. Once enabled in programming, a UCD Overflow station can Busy/No-Answer forward to Voice Mail Groups, Hunt Groups and stations. If the UCD Overflow station is busy or does not answer before the no-answer call timer expires, the UCD call forwards to Voice Mail.

Recorded Announcements (RAN)

Recorded announcement devices can be assigned to provide up to eight different messages, if all stations in a UCD group are busy. The eight messages are available to all eight UCD groups in different configurations. A RAN table can be the answer port for unanswered incoming calls to a UCD group, while another table can provide the secondary message. Each RAN device can provide an announcement to one caller at a time. Subsequent callers is queued onto the message on a first-in basis. The Digital Voice Mail (DVM) can be used as a RAN device for UCD groups.

Universal Day/Night Answer (UDA/UNA)

Incoming CO lines can be programmed for Universal Day Answer (UDA) or Universal Night Answer (UNA). UDA/UNA assigned CO lines can also signal over the external page port(s). External Day ringing is programmed on a system-wide basis in admin programming. Stations which do not have access to a line during the day can answer that line while the System is in the Night Mode by dialing a UNA code. In order to use this feature, a LOOP button or an appearance of the trunk must be present on the station.

Voice Mail Groups (VM)

The Voice Mail feature automatically handles unanswered calls. Stations may forward calls to a voice mail group (for leaving mail) or may call the voice mail group directly (to retrieve mail) with no assistance from the Attendant. Up to twenty-four (24) voice mail groups containing up to eight Voice Mail stations can be configured in the system. Each station interfaces with a port on the Single Line Interface Board (SLIB) or the (DIDB/DTIBE) board for the Digital Voice Mail (DVM). Each voice mail station can be shared by a number of actual users. Calls transferred from a Voice Mail group do not recall to the VM group.

Disconnect Signal

To avoid Voice Mail ports from being unavailable as a result of CO line callers abandoning the call or not exiting the VM system properly, a disconnect signal is provided to notify the VM system that a CO or intercom caller hung up or abandoned the call. Silence is provided to the VM port followed by busy tone to aid the VM system to recognize that an intercom caller has abandoned the call.

In-Band Signaling Integration

The *Triad 1/2/3* System allow programming so that if a station programmed to receive incoming CO line ringing is forwarded to Voice Mail, they may have incoming callers routed directly into their stations voice mail box through the use of In-Band signaling. Alternately, incoming CO lines can be programmed to ring directly into the Voice Mail system. In this case, callers are answered by the Voice Mail or Auto Attendant Main greeting.

Incoming CO callers can be call forwarded into Voice Mail automatically, if a Preset Forward Destination is programmed for that CO line and the same CO line programmed to ring at one station. CO lines may also be programmed to ring at an Attendant station, call forward into the Voice Mail system (if programmed to ring at one Attendant station) and presented to the main greeting (not the Attendant stations mailbox) even when ID digits are enabled.

LCD Message(s) Indication

The LCD Message Indication feature presents the number of new Voice Messages to users on their LCD display. The new VM LCD message on the keyset takes priority over Forward, DND, Messages, and idle displays. Ringing, Recalling, Outgoing Calls, and current call operation displays override the VM message display for the duration of the call or operation.

Message Waiting Indication

When Voice Mail receives a voice message for a user who has a station on the *Triad 1/2/3* System, the VM connected to the system can leave a message indication at the VM users station. When the station retrieves their mail, the VM system can cancel the message waiting indication left at a station via a VM port. The message waiting indication displays on the programmed Voice Mail (group) button. If such a button was not programmed, a voice mail message waiting indication displays on the MSG WAIT button as a normal message waiting signal.

Tone Mode Calling Option

Voice Mails Systems and/or Automated Attendants can utilize the Calling Station Tone Mode option. This is useful when using supervised transfer or call screening options on voice mail or auto Attendant(s) requiring ring back tone for proper call handling.

Transfer/Forward

The Transfer/Forward feature allows Voice Mail calls, upon reaching a forwarded to VM station, to forward back into the Voice Mail unit. This is useful when VM ports are used as Auto Attendant and VM ports. This feature can be enabled/disabled for all VM groups.

Transfer With ID Digits

The Transfer With ID Digits feature provides an Attendant or station user a way to transfer a caller directly into a voice mail box. This allows the station identification digits to be entered by the transferring party. Using this feature, a caller can be transferred to a voice mail box when 1) a station user on the system is not forwarded to VM, or 2) 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 identification digits of the transferring station are sent to the voice mail.

This feature allows dialing of digits 0000-9999 when using the VM with ID feature. This allows, on a per station basis, the ID number that is sent to Voice Mail to be flexible. By default, the station number is sent to the Voice Mail system. In database programming, there is a field to insert a 4-digit entry (0000-9999) that can be sent to the Voice Mail system instead of the station number. This is useful when a station user manually transfers a caller to a mailbox.

Volume Control Bar

The Volume Control Bar on the Digital Key Telephone is located below the keypad. It controls ringing, handset, and speakerphone volumes. It also affects the receive volume of the Wanderer cordless unit.

3 Single Line Telephone Features

The Single Line Telephone features of *STARPLUS Triad 1/2/3* are listed and described in alphabetical order. An abbreviated feature index is provided in the following table.

SLT Features Index

Single Line Telephones (SLTs) have access to most system and station features listed in the previous section; however, the features listed below are common to Single Line Interface Board (SLIB) and are required in the *Triad 1/2/3* System for proper SLT operation.

Table 3-1: SLT Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
A			
ACCOUNT CODES	•	•	N
ACCOUNT CODES/TRAVELING COS (VERIFIED)	•	•	N
AUTOMATIC LINE ACCESS	•	•	N
B			
BROKER CALL	•	•	N
C			
CONFERENCE	•	•	N
CONFERENCE WITH PERSONAL PARK	•	•	N
CALL FORWARD	•	•	N
CAMP-ON	•	•	N
CO LINE QUEUING	•	•	N
D			
DIRECT OUTSIDE LINE GROUP ACCESS	•	•	N
DIRECT OUTSIDE LINE RINGING	•	•	N
DIRECTED CALL PICK-UP	•	•	N
DO NOT DISTURB (DND)	•	•	N
G			
GROUP CALL PICK-UP	•	•	N
H			
HANDSET RECEIVER GAIN	•	•	N
I			
INTERCOM CALLING	•	•	N

Table 3-1: SLT Features/Software Packages

Feature	Std Pkg	ACD Pkg	Additional Equipment
L			
LOOP INTERRUPT OPTION	•	•	N
M			
MESSAGE WAITING	•	•	N
MESSAGES - PERSONALIZED			
MESSAGES - CUSTOM	•	•	N
N			
NIGHT SERVICE	•	•	N
O			
OFF-HOOK PREFERENCE	•	•	N
P			
PAGING	•	•	External Page Equipment
PERSONAL PARK	•	•	N
S			
STATION SPEED DIAL	•	•	N
SYSTEM SPEED DIAL	•	•	N
T			
TRANSFER	•	•	N

N = No Additional Equipment required.

Account Codes

SLT stations may enter an account code to identify calls for billing/tracking purposes. The account code may be entered before the call or during the call (the outside caller is placed on hold while the account code is entered if during the call). The account code is recorded on the SMDR printout. Account codes are not verified and can vary in length from 1-12 digits.

Verified Account Codes/Traveling COS

The Verified Account Code/Traveling Class of Service (COS) feature provides tracking of specific calls by entering a verified, variable length identifier (up to 12 digits). 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 1/2/3* System allows up to 250 12-digit account codes for verification purposes.

Automatic Call / Uniform Call Distribution

A single line telephone may be an agent in an ACD group as a primary or secondary member.

Automatic Line Access

SLTs may have their station programmed to access a particular CO Line, such as a private line or a line from a Group of CO lines, upon going off-hook. This is useful in Centrex or PBX applications when station users have dedicated or individual lines. Outside line dial tone is received just by going off-hook, without dialing access codes.

Call Brokering

Enables SLT user on a CO call to Hook-Flash and make another CO call. Once this other call is established, the SLT user can Hook-Flash to move back and forth between parties.

Call Forward

Single line telephones may direct intercom calls and transferred CO lines for forwarding to another station. SLTs have access to all forwarding options that Key station users have:

- Call Forward - All Calls [6]
- Call Forward - No Answer [7]
- Call Forward - Busy [8]
- Call Forward - Busy/No Answer [9]
- Call Forward - Off-Net [✳]
- Preset Call Forward

Call Pick-Up Directed

Tone ringing intercom calls, Initial Ringing CO calls and transferred outside line calls to specific stations can be picked up by single line telephones. For this type of pickup, the stations need not be in the same pickup group.

Call Pick-Up Group

Tone ringing intercom calls, transferred outside line calls, and initially ringing calls can be picked up by single line telephones by dialing a special pickup code. The telephones must be in the same pickup group.

Camp-On

A busy station can be notified that an outside line is on hold and waiting for them. The busy station is notified of this by a beep tone. Single line telephones can receive a camp on indication or initiate one by using an access code.

CO Line Queuing

Single line telephones can be placed in a queue awaiting the first available outside line in a group to become available.

Conference

An SLT user can initiate a conference with an outside line and one other internal station.

Conference With Personal Park

Single Line Telephones (SLT) can initiate a conference between two outside (CO) calls. The Personal Park feature is used in conjunction with the SLT conference code to make this possible.

Direct Outside Line Group Access

Single line telephones can access outside lines by dialing CO line group access codes.

Direct Outside Line Ringing

Single line telephones can receive direct outside line ringing. SLTs may be programmed to receive incoming CO Ringing on more than one CO line. However, an SLT can answer only **ONE** call at a time. If an SLT is busy when a CO call rings in, Camp-On tone is given to that SLT station.

Do Not Disturb (DND)

Each telephone user can place their phone in Do Not Disturb. The user receives an error tone if they are not allowed this feature. They also receive a stuttered dial tone when lifting the handset to remind them they are in Do Not Disturb. The attendant can override a station in DND.

Handset Receiver Gain

Handset Receiver Gain allows an SLT user, while on a CO/ICM call, to Hook-Flash and dial a code to increase/decrease the handset volume.

Intercom Calling

Single line telephones can make and receive intercom calls.

Loop Interrupt

The Loop Interrupt feature enables single line telephone ports to provide a loop disconnect signal to any devices connected to an SLT port. This is an inherent operation, no programming is necessary.

The Loop Interrupt signal is sent and received as follows:

- The signal is provided when a CO Line, marked with loop supervision, connected to an SLT port receives loop supervision from the Central Office.

- Upon termination of an internal call to an SLT, the SLT provides the loop interrupt signal.
- Loop interrupt signal consists of an open for 700 ms with less than 5 mA.

Message Waiting

Message Waiting can be indicated by an stutter dial tone when SLT stations go off-hook instead of a message waiting lamp.

If a station ID is set to:

- 6 SLT, the operation is automatic.
- 7 SLT (w/message), the lamp is used for message waiting notification.

Messages

Personalized

Each SLT station can select a pre-assigned message to display on the LCD of the Digital Terminal receiving that message.

There are ten possible messages that can be displayed:

00 = (clears messages)	06 = On Trip
01 = On Vacation	07 = In Meeting
02 = Return AM	08 = At Home
03 = Return PM	09 = On Break
04 = Return Tomorrow	10 = At Lunch
05 = Return Next Week	

Custom

This feature allows the system administrator to enter up to ten custom messages for use by system station users. These messages may be specified and customized by the customer on a system-wide basis.

Name In Display

The Name in Display feature allows every extension (electronic/digital/SLT) the capability to program the user's name for that station, so that people using display telephones see the name instead of the station number on their display. The name is programmed at each station by the user and may be up to seven letters in length.

Off-Hook Preference

SLTs may access a particular CO Line such as a private line or a line from a Group of CO lines upon going off-hook. This is useful in Centrex or PBX applications when station users have dedicated lines. Outside line dial tone is received just by going off-hook, without the need to dial access codes.

Paging

Access Restriction

Programming on a per-station basis, can deny any station the ability to make any type of page.

External

There are two external paging zone available on the *Triad 1/2/3* System. External Paging requires a three-digit dialing code. External paging requires an externally provided amplifier and paging system. Each zone can have a relay contact associated to it.

Internal

There are eight internal paging zones available in the *Triad 1/2/3* System. A station can be in any or all zones or in no zone at all. Stations not assigned to a page group can still make page announcements, if allowed in station programming. Stations can be assigned to a page group in order to receive pages but not allowed to make page announcements.

Personal Park

Single line telephones can be connected to two calls (Intercom or CO lines) at the same time and toggle between the two calls. This can be performed with originated or received calls. This feature is also used with the SLT multi-line conference feature.

Speed Dial - Station

An SLT user may program up to 20 speed dial numbers. Each speed dial number can be up to 24-digits in length.

Speed Dial - System

Each SLT user can access system speed dial numbers on a programmable basis. The last forty system speed numbers override toll restriction.

Toll Restriction (Table Driven)

The system provides a flexible means of providing toll restriction to internal stations of the *Triad 1/2/3* System. Each station is assigned a Class of Service for day mode operation and one for night mode operation. These stations COS work in conjunction with a CO line Class of Service to allow for customized toll restriction. Two Allow and Deny tables along with four special tables afford the system administrator to devise a variety of complex toll restriction or dialing privilege schemes.

Canned Toll Restriction

The system provides an easy means of applying the most common form of toll restriction where 1+ and 0+ along with 976, 555, and 411 type of calls are denied and 1-800, 1-888, 911, 1-911, and 1-611 type of calls are allowed. This canned toll restriction is applied through the use of a single pre-built Class-of-Service and can be assigned to stations using range programming.

Transfer

Outside lines may be transferred by or to single line telephones. These transfers can be announced or unannounced.

Transfer Recall

Screened and unscreened transfers recalls the initiating party if unanswered for a programmable length of time, and then if unanswered, recalls the attendant.

Universal Day/Night Answer (UDA/UNA)

Incoming CO lines can be programmed for Universal Day Answer (UDA) or Universal Night Answer (UNA). UDA/UNA assigned CO lines can also signal over the external page port(s). External Day ringing is programmed on a system-wide basis in admin programming. Stations which do not have access to a line during the day can answer that line while the System is in the Night Mode by dialing a UNA code. In order to use this feature, a LOOP button or an appearance of the trunk must be present on the station.

Voice Mail Groups (VM)

The Voice Mail feature automatically handles unanswered calls. Stations may forward calls to a voice mail group (for leaving mail) or may call the voice mail group directly (to retrieve mail) with no assistance from the attendant.

Message Waiting Indication

When Voice Mail receives a voice message for a user who has a station on the *Triad 1/2/3* System, the VM connected to the system can leave a message indication at the VM users station. When the station retrieves their mail, the VM system can cancel the message waiting indication left at a station via a VM port.

4 Attendant Features

The Attendant and Attendant(s) with DSS/DLS features of the *STARPLUS Triad 1/2/3* System are listed and described in alphabetical order. An abbreviated version of the features and software packages has been provided in the following table.

Attendant Features - Index

Table 4-1: Attendant Features/Software Packages

Features	Std Pkg	ACD Pkg	Additional Equipment
ATTENDANT FEATURES			
911 ATTENDANT ALERT	•	•	N
ALTERNATE POSITION	•	•	N
AUTOMATIC NIGHT MODE	•	•	N
DISABLE OUTGOING ACCESS	•	•	N
DISPLAY TIMER	•	•	N
NIGHT SERVICE	•	•	N
OFF-NET FORWARD - INCOMING CO LINE	•	•	N
OVERRIDE	•	•	N
POSITION	•	•	N
PRESET FORWARD	•	•	N
RECALL	•	•	N
SPECIAL RING MODE	•	•	N
TIME AND DATE PROGRAMMING	•	•	N
ATTENDANT WITH DSS/DLS FEATURES			
BUSY LAMP FIELD INDICATORS	•	•	N
DIRECT STATION CALLING	•	•	N
MAPPING OPTIONS	•	•	N
MESSAGES - CUSTOM	•	•	N
RELEASE KEY	•	•	N
TRANSFER SEARCH	•	•	N
VOLUME CONTROL BAR (DKT)	•	•	N

N = No Additional Equipment Required

Attendant Features

911 Attendant Alert

The 911 Attendant Alert feature allows Attendants with a 911 flexible button to be alerted of internal stations placing 911 calls. The Attendant can store the sixteen most recent 911 calls. Calling information includes the time/date of the call as well as the station number that placed the call.

Alternate Position

The Alternate Position feature allows Attendant stations to program a flexible button to place their station in an unavailable mode. When the station is in unavailable mode, the next Attendant station (second) receives recalls. This feature is based on the system having three Attendant stations. If all Attendants are unavailable, no Attendants are available for internal/external calls.

Automatic Night Mode

The system's Automatic Night Mode Feature can be overridden by the Attendant station. The Attendant station user can press their DND button to place the system into Night Mode.

Direct Station Selector - DSS Console

An optional DSS console is available which may be associated with an Attendant station to provide additional buttons for DSS/DLS features.

Disable Outgoing Access

The first Attendant can disable CO lines, preventing outgoing access to those lines. This is useful for removing a faulty line from service, or for reserving CO lines for important use. All stations that normally make calls on the lines are affected, but incoming calls are unaffected. A CO line may be disabled while it is being used. When the trunk becomes idle, further outgoing access is prevented.

Display Timer

The Attendant Display Timer changes the way in which multiple calls ringing at the Attendant station are displayed. If two calls are ringing at an Attendant station, when the station goes off hook, the first call is answered. The LCD display then 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 programmed timer keeps the current calls' information on the LCD for a programmable time period before showing any other calls ringing in at the time.

Night Service

The Night Service feature provides a means to put the system in night mode from any keyset or remove the system from night mode from any keyset, providing the system was put in night mode by the night service feature flex button. If the system was placed in night mode by the Attendant using the DND button or if the system was placed in night mode by the automatic schedule, the night service flex button cannot remove the system from night mode.

Off-Net Forward - Incoming CO Lines

The Off-Net Forward feature allows the first Attendant to forward incoming CO calls to an Off-Net location. The Attendant must have a direct appearance of the CO line to be forwarded. Forwarding can be established on a per CO line group basis, all CO lines, or an individual CO line may be simultaneously forwarded to an off-net location.

Override

Attendant stations may override a busy station or ring a station in DND. While busy, pressing the override key provides override tone and a five second delay before voice cut-through to the called party occurs, automatically placing any outside line call on Hold. The Attendant Override function must be programmed onto a flex button and can be enabled or disabled.

Position

The system identifies three maximum programmable stations as Attendants for line recalls and Attendant features. The first programmed Attendant can enter system date and time information and System Speed numbers from this position without entering the programming mode. The *Triad 1/2/3* System is placed in Night Service by any programmed Attendant pressing the NIGHT (DND) button or dialing the NIGHT code.

Preset Forward

System programming allows programming of the Attendant station so if the Attendant is busy or not there, the call is automatically forwarded to another station or group (VM, Hunt, ACD, or UCD) after a programmed time period. (Refer to *Call Forward, Station,* and *Preset* features.)

Recall

A held CO call left unattended by a station recalls the Attendant(s) after a programmable time period elapses. A recalling CO line flashes at a distinctive rate and has an LCD display that identifies the originating station of the unanswered call.

Special Ring Mode

The Special Ring Mode feature provides an additional ring mode that is manually invoked by the Attendant. This mode provides a third ring list so that the system has a day ring mode, a night ring mode, and a special ring mode. Each CO line can have a special mode ring assignment associated to it. Up to ten stations per CO line may ring in the special mode. By default, no stations are programmed to ring in the special ring mode.

Time and Date Programming

The Time/Date Programming feature allows the first programmed Attendant to set the time and date without entering the programming mode.

DSS/DLS Features

Busy Lamp Field Indicators

Each station key on the DSS console has a corresponding indicator that shows whether the station is idle or busy. The indicator is lit when the station is busy and unlit if the station is idle. A station in DND mode is shown by a flashing indicator.

Direct Station Calling

Enables the Attendant to make an intercom voice call to any digital telephone in the system. You automatically can put an outside caller on hold and simultaneously make an intercom call to an internal station; also can transfer an intercom or outside call that is on hold to another station.

Mapping Options

The DSS/DLS Console unit can access Stations, Direct Appearing CO Lines, or features that may be assigned to any of the flexible buttons. A DSS/DLS unit may be assigned to one of the different MAP configurations available.

Any one of the five MAP configurations may be assigned to the DSS/DLS and any number of maps may be assigned to one station. However, MAPs that have buttons assigned as CO lines cannot be changed, buttons assigned as Stations can be changed by the user.

There are five pre-defined MAPs for the DSS/DLS console with default button programming. Refer to *Figure 4-1* through *Figure 4-5* in this chapter.

Messages - Custom

The Custom Message feature allows the first programmed Attendant (system administrator) to enter up to ten custom messages for use by station users of the system. Up to 24 characters may be entered as the custom message (this represent 48 digits entered).

A station user may store any of the available messages under a flexible button assigned as a Message Access button. These messages may be specified and customized by the customer on a system-wide basis.

Message status is stored in battery protected area of memory for retention in the event of a power failure or system reset (soft or hard).

Release Key

Allows the Attendant to disconnect calls while off-hook, speeding up call handling time.

Transfer Search

Allows the Attendant to make a series of intercom calls without hanging up the handset. An intercom connection is switched to another station whenever a DSS key is pressed. Pressing the next DSS key terminates the previous intercom call.

Volume Control Bar (DKT)

On the Digital Key Telephones (DKT), there is a volume control bar below the keypad to control the ringing, handset, and speakerphone volumes.

MAP #1 -- By default has the first 12 CO Lines and the first 36 Stations, 100-135. This provides a default layout of a 12 X 36 configuration.

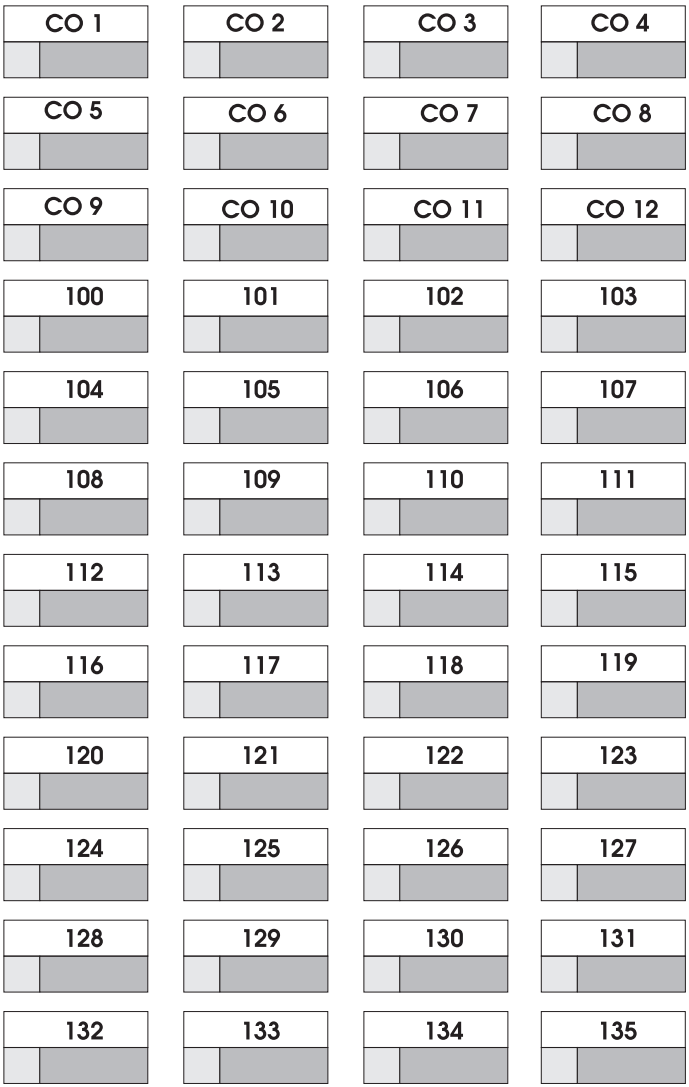


Figure 4-1: DSS Console Map #1

MAP #2 -- By default has the first 48 Stations, 100-147, appear in sequential order. All buttons on Map #2 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.

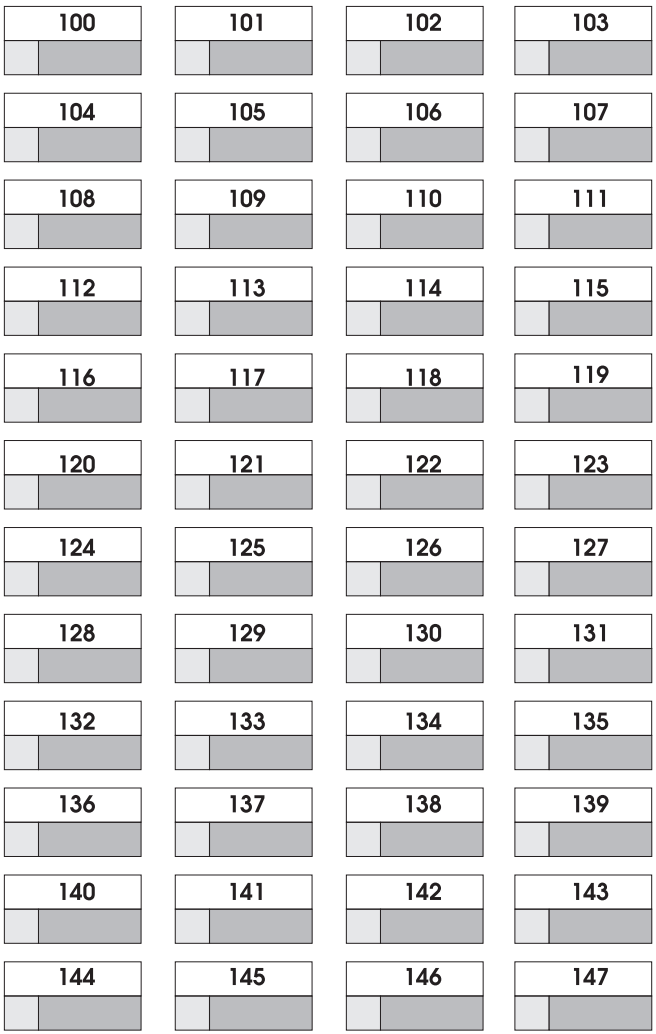


Figure 4-2: DSS Console Map #2

Map #3 -- By default is to be used with Map #2 in that it has the remaining stations, 148-195, to provide a full Station mapping. All of the buttons on Map #3 are flexible and can be changed by the user. This map can be duplicated on another DSS/DLS Console and assigned to the same station.

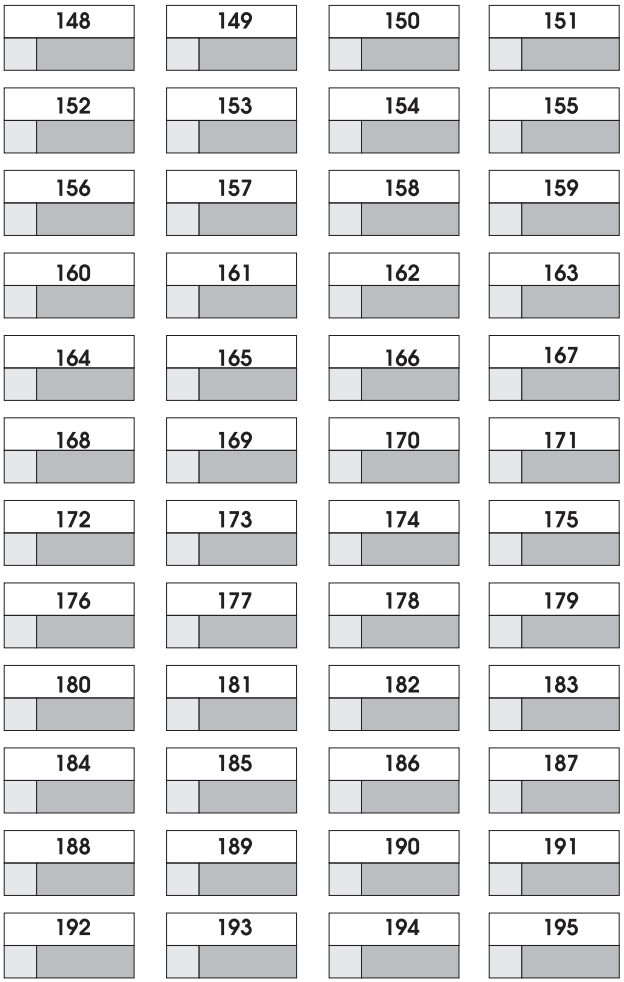


Figure 4-3: DSS Console Map #3

MAP #4 -- By default, CO Lines 1-48 appear in sequential order.

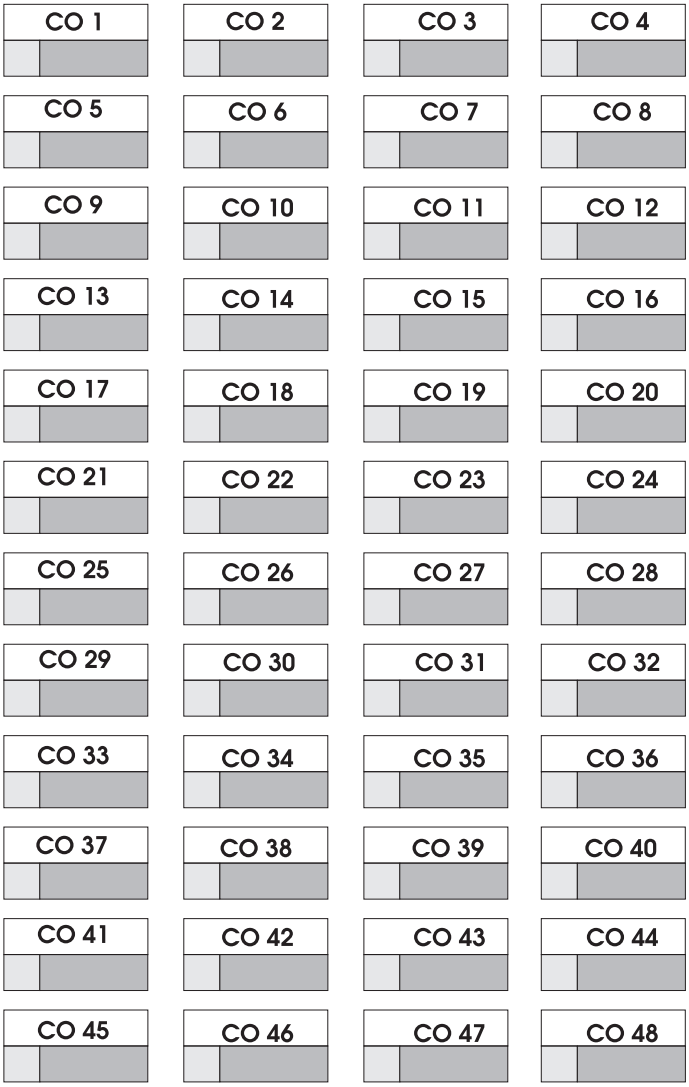


Figure 4-4: DSS Console Map #4

Map #5 – By default, CO Lines 49-96 appear in sequential order. Provides the receiving station with CO Line buttons when used in conjunction with DSS Map #4 for a full 96 CO Line mapping. CO Line ringing on Maps 1, 4 and 5 is determined by CO Line Ringing Assignments.

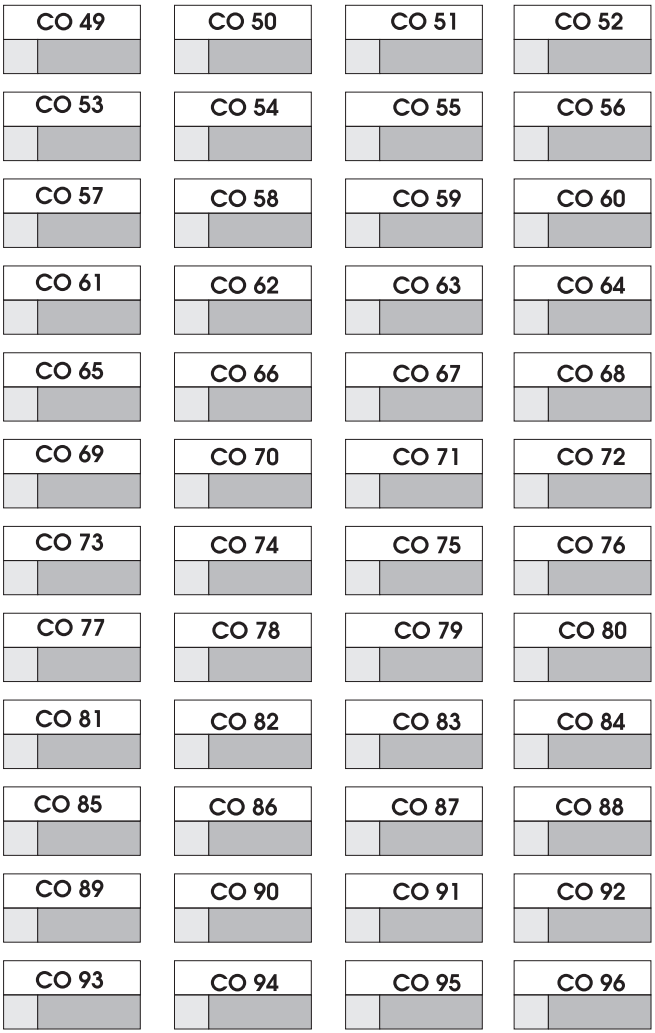


Figure 4-5: DSS Console Map #5

5 Electronic Telephone Operation

This chapter contains the following information for operating Electronic Telephones with the *Triad 1/2/3* Systems:

- Operating instructions for the electronic key telephones.
- Description of the keys on the telephone and their functions.
- Visual and audible cues which accompany the various steps in the operation of the features.

A *Station User's Guide* is also available that provides detailed operating instructions.

Introduction

The *STARPLUS Triad 1/2/3* Systems have a wide variety of features and flexible programming, allowing each telephone user to program their telephone to meet their own individual needs. Each Electronic key telephone provides the following keys, indicators and features:

Handset and Speaker are located at the left side of the front panel. A handset is provided to allow confidential conversation when desired. Lifting the handset from its cradle (going off-hook) disengages the station's built-in speaker. The speaker is located directly below the center portion of the handset. The station may be operated with the handset on-hook. When this occurs, audio is transmitted to the station user through the station's speaker.

Flexible Feature Buttons are used to access idle outside lines, provide DSS/BLF for internal stations, access speed dial number and activate features. These buttons are programmed by the individual station user. The default flex feature buttons are described as follows:

- MUTE button allows you to switch the built-in microphone on or off when using the speakerphone, or the handset microphone when using the handset.
- CAMP-ON button allows you to alert a busy party that an outside line is on hold and waiting for them.
- CALL BACK button allows you to initiate a call back request to another busy station. As soon as that station becomes idle, the station that left the call back request is automatically signalled. This feature is NOT available on the *STARPLUS* Basic Key Telephone.
- DO NOT DISTURB (DND) button allows the user to place their telephone into a Do Not Disturb mode to eliminate incoming outside line ringing, intercom calls, transfers and paging announcements. The station in DND can use the telephone to make normal outgoing calls. On Attendant stations, this button becomes the system Night Mode button.
- PICK UP button allows you to pickup a tone ringing intercom call, transferred, incoming, or recalling outside line call to a specific unattended station either by group or directed call pick-up.

- LINE QUEUE button allows you to queue onto an outside line when all lines in a group are busy. Your station is placed in queue awaiting a line in the same group to become available.

Fixed Feature Buttons function as follows:

- SPD button provides you with access to speed dialing, save number redial and last number redial. This button is also used to access speed dial and flex button programming.
- FLASH button is used to terminate an outside call and restore dial tone without having to hang up the handset. It is also used to transfer calls behind a PBX or Centrex within those systems.
- HOLD button enables you to place an outside caller on hold.
- ON/OFF button enables you to make a telephone call without lifting the handset. It turns the telephone on and off when using the speakerphone.
- CONFERENCE (CONF) button is used to establish and build conference calls.
- TRANSFER (TRANS) button is used to transfer an outside call from one station to another.
- CALL FWD button allows you to forward your calls to another station.
- MESSAGE WAIT (MSG WAIT) button allows you to initiate a message waiting indication at stations that are busy, unattended, or in Do Not Disturb. Message Waiting Callback request left at your station is indicated by a flashing Msg Wait LED.

Figure 5-1: Executive Electronic Key Telephone Default Button Map

Outside Calls are announced by a tone signal repeated every 3.2 seconds. The corresponding outside line indicator flashes slowly.

Intercom Calls can be tone ringing or voice announce. If it is voice announced, the receiving station receives 3 bursts of tone prior to the announcement. If it is a tone ringing call, the receiving station hears a tone ring every 2.4 seconds.

Table 5-1: Electronic Telephone Numbering Plan

ACD* Agent Help	574	Last Number Redial	[SPEED]+[#]
ACD* Agent Login (Primary Grp)	572+[5UU]	LCR or CO Line Grp 1 (if LCR disabled)	9
ACD* Agent Login (Secondary Grp)	582+[5UU]	LCR Queue Cancel	626
ACD* Agent Logout (Primary Grp)	571	Loop Key (Requires Button)	89
ACD* Agent Logout (Secondary Grp)	581	Message Wait	623
ACD* Call Qualifier	570+[YY]	Modem via DISA Access or Trans	499
ACD* Group Member Status	573	Name in Display Programming	690
ACD* Group Pilot Numbers 1-16	5+[UU]	Off-Hook Pref Programming	691+[BB]
ACD* or UCD Available/Unavailable	566	Off-Net - Call Forward	[FWD]+[✳]
ACD* or UCD Calls in Queue Display	567 55+[U]	OHVO Enable	628
ACD* Overflow Sta Avail/Unavail	578	Page - All Call (Int & Ext)	700
ACD* Supervisor Login	576+[5UU]	Page - External All Call (All Zones)	76+[0]
ACD* Supervisor Logout	575[5UU]	Page - External Zones	76+[P]
ACD* Supv Queue Status Display	577+[5UU]	Page - Internal All Call (All Zones)	709
Attendant	0	Page - Internal Zones 1-8	701-708
Background Music	632+[0, 1, 2]	Page - Meet Me (Answer)	770
Call Forward - All	[FWD]+[6]	Personalized Messages	633+[ZZ]
Call Forward - Busy	[FWD]+[8]	Personalized Messages - Clear	633+[00]
Call Forward - Busy/No Answer	[FWD]+[9]	Repeat Redial	643
Call Forward - No Answer	[FWD]+[7]	Save Number Redial	[SPEED]+[✳]
Call Forward - Follow Me	642	Speed Dial Access	[SPEED]+[YYY]
Call Forward Override	5#	(000-019 Sta) (020-999 Sys)	
Call Park Location - Personal	438	Station Relocate	636+[XXX]
Call Park Location - Station	439+[XXX]	Tone Mode Ring Option	6#+[XXX]
Call Park Location - System	43+[C]	UCD Group Pilot Numbers	55+ [U]
Call Park Pickup (Key and SLT)	#43+[C]	Universal Day/Night Answer	#5
Clear Call Forward, DND, Msg	662	Voice Mail Grp Pilot Numbers	44+[V]
CO Line Direct Access	88+[LLL]		
CO Line Group (LCR if 911 active)	800		
CO Line Groups 1-24	800-823		
Dial By Name	6✳	*LEGEND --*	
Directory Dial	680	*C = Call Park Location (0-7)*	
Distinctive Ringing	695	*H = Hunt Group Number (0-7)*	
Do Not Disturb	631	*LLL = Line Number*	
Executive Override/Monitor Barge-In	625	*(001-048 Triad 1/2, 001-144 Triad 3)*	
Extension Numbers - *Triad 1/2*	100-171	*P = External Page Zone Number (1-2)*	
Extension Numbers - *Triad 3*	100-351	*U = UCD Group Number (0-7)*	
Group Call Pick Up (Key and SLT)	#0	*UU = ACD* (50-65)*	
Headset Mode	634	*V = Voice Mail Group Number (0-7)*	
Hunt Group Pilot Numbers	45+[H]	*XXX = Intercom Station Numbers*	
ICLID Display (Answered Calls)	659	*YYY = Speed Dial Bin Numbers*	
ICLID Display (Unanswered Calls)	635	*ZZ = Personalized Messages*	

** Features available with optional software*

Account Codes

When connected to an outside line call:

1. Press the pre-programmed ACCOUNT CODE button.
2. Dial account code up to 12-digits. (The other party does not hear the digits being dialed).
   - If account code is less than 12-digits, an [✳] must be entered to return to the call.
   - If account codes are forced, the account code must be entered prior to dialing the outside number.

SMDR must be enabled in order for the Account Code feature to operate. Also, SMDR must be enabled in order for the account code to become part of the SMDR record.

Account Codes/Traveling COS (Verified)

The Verified Account Code/Traveling Class of Service (COS) feature provides the ability to track 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, intercom dial tone is returned, otherwise an error tone is be presented.

The use of forced Account Codes is optional, offered on a system-wide basis. SMDR must be enabled in order for the account code to print out as part of the SMDR record. The *Triad 1/2/3* Systems allow for up to 250 12-digit account codes for verification purposes.

Entering an Account Code Prior to a CO Call

1. Press pre-programmed ACCOUNT CODE button before accessing a CO line.
2. Dial the account code up to 12-digits. If the account code matches a verified account code, and intercom dial tone is returned. Otherwise an error tone is presented.

   (If account code is less than 12-digits, an [✳] asterisk must be entered to return to the call.)
3. Access the outside CO line or dial the LCR code and dial the desired number.

SMDR must be enabled in order for the Account Code feature to operate. Also, SMDR must be enabled in order for the account code to become part of the SMDR record.

Conditions

- Verified Account Codes allows the use of an account code as a traveling Class of Service.
- If LCR is activated in the system and verified account codes are forced, the user must enter the account code before dialing the LCR code.
- When verified account codes are forced, station MUST enter an account code to dial a number that is restricted through station COS and toll restriction. An account code is not required for calls that are not restricted through station COS and toll restriction.
- When verified account codes are not forced, a station user may place a call without entering an account code. In this case, the station user's COS is based on their station COS. In this case, a user can enter a verified account code to upgrade their COS.
- Verified Account Codes does not function with Redial feature.

Answering a Recall

When an outside line remains on hold for an extended time period, a recalling ring reminder is sent. (If Preferred Line Answer is enabled, skip Step 1.)

1. Press outside line, LOOP or POOL button flashing at very fast rate.
2. Lift handset or press ON/OFF button to converse.

Answering Machine Emulation

When a call is sent to a voice mailbox, the station associated with the mailbox can press a pre-programmed button to listen to the caller leaving the voice mail message. If the mailbox owner decides to speak with the caller, they can press the pre-programmed button to be connected to the caller.

Notification Methods

Two methods of notification are available, a Ring Mode or a Speaker Mode. These methods are controlled by the type of flexible button assigned on the telephone.

EXAMPLE -- Station A places their phone in the answering machine mode by pressing the flexible button programmed on the telephone. The button light is solid red. Whatever button type is assigned on the telephone defines the operation mode of the feature.)

When an incoming CO call rings at a station and forwards (except busy type) to the station's voice mailbox:

- In RING MODE, the pre-programmed answering machine flex button flashes at 480 ipm red while the caller is in the owner's mailbox. The mailbox owner presses the pre-programmed flashing button and the audio is broadcast over the speaker of the keyset. The mute key is enabled on the keyset at this point. The LED light is solid red.
- In SPKR MODE, the voice mail message is broadcast over the speaker. The mute key is enabled on the keyset and the LED light is solid red.

Mailbox Options

- **To leave the caller in the voice mail** and stop the speaker broadcast, press the ON/OFF button. The mailbox owner can continue to listen to the message being left without taking action at their keyset. When the caller disconnects after leaving the voice mail message, the button returns to solid red and the keyset returns to idle.
- **To talk to the party** leaving the message, press the MUTE key. The station remains in the CONF mode, and the caller hears the voicemail and the station user.
- **To pick up the call,** press the flexible button. When the call is picked up, the voice mail system disconnects from the call, and the voice mail port returns to the idle (waiting) state. The caller is in a normal talk state with the CO caller.

Conditions

- The user must have an Electronic or Digital Keyset.
- The keyset must have a pre-programmed ANSWER MACHINE flex button for this feature.
- After the in-band digits have been sent to the voice mail, the station's flexible button status is then checked. The feature is executed based on this check, and the result is as follows:

  Inactive = No feature operation executed.

  Active=Feature executed as per button function (ring or speaker mode).
- An idle station can press the flexible button to go to the inactive mode. The LED is extinguished and no answer machine calls are presented to the station.
- Once the button is programmed at the station, it remains in the inactive mode (LED extinguished).
- If the station user answers the call, the normal CO line LCD window appears. The call timer shows the elapsed time including the time the caller was in VM. The call timer does not start at 0 in this case.

Display Messages

When the call is ringing the station in the ring mode, the following message displays:

```
VM SCREENING RING
MMM DD YY                HH:MM am
```

When the station is monitoring the caller in VM, the following message displays:

```
VM SCREENING
MMM DD YY                HH:MM am
```

Automatic Call Distribution (ACD)

The ACD feature is available with optional software. When purchased, Uniform Call Distribution (UCD) is not used and is replaced by the ACD functions identified below. Sixteen Automatic Call Distribution (ACD) groups can be programmed, each containing up to 252 three-digit station numbers.

ACD Agent Help

The ACD Agent Help feature provides a means for an ACD agent to signal their assigned supervisor for assistance. A flex button must be programmed for this feature to operate.

While on a call in progress, the agent can perform these functions:

- Press the pre-programmed HELP flex button. A confirmation tone is heard by the agent. The agent sees their HELP button illuminate if a supervisor is logged into their ACD group. If no supervisor is logged in, the agent receives a burst of error tone and their HELP button does not illuminate.

- The ACD supervisor station receives a Help message if a member of one of the ACD groups they are assigned to initiates a Help request. The Help function also sends a Camp-On tone to the speaker of the supervisor's keyset. The Help message takes precedence over any other message and can be cleared by the supervisor by pressing their HELP button.
- At the time the supervisor receives a Help request, they can press their HELP flex button followed by their override feature button to bridge onto the ACD group members call. The HELP button places an intercom call to the station requesting Help. The Help message is cleared after the supervisor's HELP button is depressed. In addition, the Help message is cleared if the agent was on a call and went back on hook before the supervisor could respond. In this case, the Help message is converted to a message wait indication. The agent can also clear the Help request by hitting the HELP button a second time.

Conditions

- Up to five messages can be left at any supervisor station.
- The supervisor can cancel the Help request signal by depressing their flashing HELP button. In addition, a call is placed to the agent requesting Help.
- If the agent is on a call, the supervisor can press their BARGE-IN button to monitor the call or to give assistance.

Only digital telephones can use this feature, since a flexible button is required to be programmed.

Agent Login/Logout

The Agent Login/Logout feature lets an Agent log into a Primary and Secondary ACD group to receive calls. An Agent must first login to be placed into an active ACD state.

If a member is assigned to a specific ACD group and uses the login-logout codes to enter and exit an ACD group, other than their assigned group, the database is changed to reflect the different group.

When the agent logs in or out of their ACD Group, an ACD login-logout event is sent to the ACD Events Trace port, if active.

Primary Group

To **log in** an ACD Primary Group:

Dial LOGIN CODE **[572]** on the dial pad, followed by the desired ACD group number (5XX),

-or-

Press a pre-programmed LOGIN flex button.

The Agent enters their unique AGENT ID code (0000-9999). The LOGIN flex button LED is lit steady. A confirmation tone is heard and the agent is logged onto the ACD group.

- The ON/OFF LED extinguishes if the agent started the sequence in the handsfree mode.
- The ACD Agent Login LED only lights for the ACD group that is assigned to that button.

To **log out** of an ACD Primary Group:

Dial LOGOUT CODE **[571]** on the dial pad,

-or-

Press a pre-programmed LOGOUT flex button. The LOGIN flex button LED extinguishes.

Secondary Group

To **log in** an ACD Secondary Group:

Dial LOGIN CODE **[582]** on the dial pad, followed by the desired ACD group number (5XX),

-or-

Press a pre-programmed LOGIN flex button.

The Agent enters their unique AGENT ID code (0000-9999). The LOGIN flex button LED is lit steady. A confirmation tone is heard and the agent is logged onto the ACD group.

- The ON/OFF LED extinguishes if the agent started the sequence in the handsfree mode.
- The ACD Agent Login LED only lights for the ACD group that is assigned to that button.

To **log out** of an ACD Secondary Group:

Dial LOGOUT CODE **[581]** on the dial pad,

-or-

Press a pre-programmed LOGOUT flex button. The LOGIN flex button LED extinguishes.

Conditions

- If an agent logs into an ACD group from a station that is logged into another ACD group, the station is automatically removed from the previous ACD group.
- An agent may log out while in wrap-up, or unavailable.
- An agent logging in is placed in wrap-up mode before receiving an ACD call.
- If an agent attempts to log into an ACD group that already has 252 members, that agent receives error tone.
- The *Triad 1/2/3* Digital System does not verify agent's ID codes, other than requiring entry of four digits.
- An Agent may not login to the same group as a primary and secondary member.

ACD Call Factor

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 (Flash 60, Button #14) or the ACD supervisor can use a flexible button, [580]+ACD group number+XXX (Call Factor in minutes 000-999), to enter the factor (average call duration).

The following formula is used to calculate the average call duration:

$$\frac{\textit{(Place in Queue)}\ \textit{(Call Factor)}}{\textit{Number of Agents Logged into Group}}$$

ACD Call Qualification

The ACD Call Qualification feature provides a means for an Agent on ACD type calls to enter codes that identify the call. This feature provides up to four digits for the ACD SMDR reporting function. This feature permits up to 12 digits to be entered, however only the first four digits are provided for in the SMDR Record.

The QUALIFY button is programmed using flex code [570]. If the agent wishes to enter their qualify code into a speed bin, they can do so using the standard speed bin programming sequence. They can then enter [570] followed by the bin number. This provides an agent with a series of buttons with qualify codes under them. If a [✳] is entered along with the Call Qualification code into a speed bin, the display does not show the Call Qualifier code but is sent to the SMDR record.

While Agent is on a call:

1. Press the pre-programmed CALL QUALIFY flex button, followed by the four-digit qualify code.
2. Enter a [✳] to complete the sequence. A short burst of confirmation tone is heard through the keyset speaker, if programmed.

Conditions

- The outside party does not hear the (qualify code) account code being entered.
- The qualify code uses the first four digits of the account code. Therefore the account code record in the SMDR contains the qualify code in the first four digits.
- The qualify code must be entered during CO talk state.
- Speed dial entries can contain all digits including the [✳], which terminates the entry.

ACD Agent Queue Status Display

From an idle key telephone:

1. Dial **[567]** on the dial pad,

   -or-

   Press pre-programmed flex button.
2. Dial a valid ACD group number (5XX). ON/OFF button LED lights steady. The Agent Queue Status messge displays:

```
ACD5XX 00 CALLS IN QUEUE
MMM DD YY              HH:MM am
```

5XX = ACD Group (550-565)

Idle display tells the agent/supervisor how many calls are in queue.

3. Replace the handset,

   -or-

   Press the ON/OFF button to terminate the display.

This feature cannot be used with a call in progress and the station is considered busy for incoming calls during this operation.

The agent automatically receives an enhanced Calls in Queue display whenever there is a call in queue. The display shows the following information:

```
5XX: CIQ: XX AGENT(S): XX
OC:HH:                    MM:SS
```

5XX = ACD Group (550-565)

CIQ:XX = Calls in queue

AGENT(S):XX = Agents logged in

OC:hh:mm:ss = Oldest call in hours, minutes and seconds

This feature allows an ACD station (12/24 button executive only) to assign multiple buttons that display the calls in queue information for a particular group on the LCD. The button LED indicates the number of calls in queue, determined in programming.

From an idle key telephone:

The pre-programmed flex button for the ACD group being monitored is flashing at 240 ipm indicating there are calls in queue.

Press the pre-programmed flex button, the Agent Queue Status display shows the following:

```
ACD5XX 00 CALLS IN QUEUE
MMM DD YY            HH:MM am
```

5XX = ACD Group (550-565)

The idle display tells the agent and/or their supervisor how many calls are in queue.

Terminating the Display

Replace the handset, or press the ON/OFF button.

The user assigns a flex button by dialing 579 XXX (XXX = ACD Group Number 550-565), and sees the following LED indications:

- 0 calls in Queue = LED off
- X calls in queue = LED 240 ipm flutter

Conditions

Any ACD station can have a button assigned to view the calls in queue of any ACD group.

ACD Available/Unavailable Mode

If you are an ACD agent, you may place your station in the Available mode to receive ACD type of calls or you may place your station in the Unavailable mode to block ACD type calls from ringing your station.

Placing a Station in Available Mode

Dial [566] on the dial pad,

-or-

Press the pre-programmed AVAILABLE/UNAVAILABLE button to receive ACD calls.

Placing a Station in Unavailable Mode

Dial [566] on the dial pad,

-or-

Press the pre-programmed AVAILABLE/UNAVAILABLE button to block ACD calls.

ACD Overflow Station - Available/Unavailable Mode

If you are a ACD Overflow station, you may place your station in the Available mode to receive ACD type calls or you may place your station in the Unavailable mode to block ACD type calls from ringing your station.

Placing Station in Available Mode

Dial [578] on the dial pad,

-or-

Press the pre-programmed AVAILABLE/UNAVAILABLE button to receive ACD calls.

Placing Station in Unavailable Mode

Dial [578] on the dial pad,

-or-

Press pre-programmed AVAILABLE/UNAVAILABLE button to block ACD calls.

If no stations are logged into the ACD Group, ACD calls overflow to the Attendant station.

ACD Overflow Station - Forwarding

The ACD Overflow Station Forwarding feature allows ACD calls reaching the ACD Overflow Station to follow the call forward of the overflow station.

1. Lift the handset or press ON/OFF button.
2. Press the pre-programmed FWD button.
3. Dial the desired code:

   [6] = All Calls

   [7] = No Answer Calls

   [8] = Busy Calls

   [9] = Busy and No Answer Calls
4. Dial the destination number where calls are to be forwarded (Station, Voice Mail, ACD or Hunt group). A confirmation tone is heard.
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift handset or press ON/OFF button.
2. Press the pre-programmed FWD button. A confirmation tone is heard and the FWD LED is extinguished. Overflow Station forwards when:
   - The No Answer Timer is set to: No Answer or Busy No Answer.
   - Immediately, if the station is set to any other forward type. (Flash 06, button 6 must be enabled.)

Supervisor Login/Logout

The Supervisor Login/Logout feature provides a means for a supervisor to log into one of the ACD groups and monitor calls.

1. Dial the LOGIN CODE [576] on the dial pad, followed by the ACD group number (5XX) that the supervisor is going to log into,

   -or-

   Press a pre-programmed LOGIN flex button. (Flex button must have 576+5XX programmed onto it.)
2. Enter unique SUPERVISOR ID code (0000-9999).

   The LOGIN flex button LED is lit solid. A confirmation tone is heard and the supervisor is logged onto the ACD group. The ON/OFF LED extinguishes if the supervisor started the sequence in the handsfree mode.

Leaving an ACD Group (as an active supervisor)

Dial the LOGOUT CODE [575] on the dial pad, followed by the ACD group number (5XX) that the supervisor wants to log out of,

-or-

Press a pre-programmed LOGOUT flex button. (Flex button must have 575+5XX programmed onto it). The LOGIN flex button LED extinguishes.

The ACD Supervisor Log-in LED only lights for the ACD group that is assigned to that button.

When an ACD Login flex button is programmed in the system, that same flex button can be used to toggle the Login/Logout feature.

When the supervisor logs in or out of an ACD group, an ACD logout event is sent to the ACD Events Trace port, if active.

Conditions

- If a supervisor logs into an ACD group from a station that is logged into another ACD group, the station remains in the previous ACD group.
- A supervisor may log out while in wrap-up, or unavailable.
- A supervisor logging in is first placed in wrap-up mode before receiving an ACD call.
- If a supervisor attempts to log into an ACD group as an agent and that group already has 252 members, the supervisor receives an error tone.
- The *Triad 1/2/3* Systems does not verify supervisor's ID codes, other than requiring four digits to be entered.

Supervisor Monitor With Barge-In

The Supervisor Monitor with Barge-In feature provides a means for an ACD supervisor to monitor an agent's call in progress in order to coach sales techniques or customer relations skills. When using the Barge-In feature, a supervisor may intrude onto an agent's call in a listen only mode or in a true conference mode.

This feature is available with or without a warning tone.

The use of Supervisor Monitor w/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 result on the CO line or intercom call after Barge-In occurs.

The ACD supervisor can intrude on an agent's call in the *listen only mode* as follows:

1. Dial the station number of the agent's station.
2. Upon hearing busy tone, press the pre-programmed Barge-In flex button.
    - The conversation in progress is heard by the Supervisor on the handset receiver and the Supervisor's MUTE button LED is lit indicating that the Supervisor's transmit is muted.

- If the Supervisor wishes to participate in the conversation in a true conference mode, they can depress their MUTE button which removes mute.

The Executive Override Code, [625] is used to program SupvMonitor with Barge-In feature onto a flex button.

Conditions

- Supervisors are granted the Barge-In option if they log in at a station with the Supervisor Barge-In/Executive Override enabled in programming.
- Supervisors can only Barge-In on calls of members of the ACD group(s) that they are logged into.
- Warning tone is enabled and disabled using the Executive override warning tone option (FLASH 05, Button 4).
- Supervisor stations must be digital telephones.

Supervisor Queue Status Display

The Supervisor Queue Status feature provides a means for an ACD supervisor to view the status of their ACD group. This idle display prompts a Supervisor that a group is having problems answering all their calls. The display tells the supervisor how many calls are in queue, how many agents are logged into the ACD group, and the length of time in minutes that the oldest call has been in queue.

Viewing the Queue Status Display

Dial the Queue Status code [577] on the dial pad, followed by the ACD group (5XX) the supervisor wants to observe,

-or-

Press the pre-programmed flex button.

The Queue Status display shows the following information:

```
5XX: CIQ: XX AGENTS: XX
OC:                          HH:MM:SS
```

5XX = ACD Group (550-565)
CIQ: XX = Calls in queue
AGENT(S): XX = Agents logged in
OC: hh:mm:ss = Oldest call in hours, minutes and seconds

Changing the Display to a Different Group

Dial the Queue Status code [577] on the dial pad, followed by the ACD group they want to observe,

-or-

Press the pre-programmed flex button.

Conditions

- To receive the Supervisor's Queue Status display, the station must be logged in as a Supervisor and dial the flex code for the appropriate group.
- ACD Supervisors receive the Queue Status display in real time.
- The Queue Status display is only given when the ACD group member or Supervisor's station is not receiving a higher priority display, such as HELP or Out-Of-Service, or other applicable off-hook events are taking place at the station.
- The Supervisor's Queue Status display is saved in battery backed memory.
- When a Supervisor logs out of the group they are presently displaying, they must enter a new request for Queue Status display.

ACD Group Member Status

The ACD Group Member Status feature provides a means for an ACD Supervisor/Agent to view the status of the eight ACD groups in the system. This display tells the Supervisor/Agent which stations are logged into the group, and if the station logged-in is Available/Unavailable, Out-of-Service, in DND, or busy on a call. The Supervisor/Agent could use this display to determine why there are a lot of queued calls in a specific group.

Any station (Supervisor or Agent) logged onto the ACD group can bring up the group members display as follows:

1. Dial the ACD Group Member Status code [573] on the dial pad,

   -or-

   Press the pre-programmed flex button. The display now shows ACD Group 550. The status of the ACD agents is displayed with a letter following the station number where the agent logged in.

   ```
   ACD5XX: 110A 111A 112A
   113O 114U 115D 116B 117N
   ```

   (N) = Not Equipped
   (D) = Do not Disturb
   (O) = Out of service
   (U) = Unavailable
   (B) = Busy on a call
   (A) = Available

   NOTE – If an Agent made a call while out of service, the status would be out of service, not busy.

2. Press [✳] to scroll up to the next ACD Group. If more than eight members are in the ACD group, the next depression of the [✳] displays the additional members,

   -or-

   Press [#] to scroll down to the previous ACD Group. To return to an idle display, the Supervisor/Agent station returns to on-hook condition.

Conditions

The ACD Group Members Status display updates when the code is dialed.

Zap Tone

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. (A flex button must be programmed for this button to operate.)

Background Music (Optional)

To select multiple background music channels from a station:

1. Dial [632] on the dial pad,

   -or-

   Press pre-programmed flex button. The following message displays:

   ```
   0:OFF   1:CH-1   2:CH-2
   MMM DD YY              HH:MM am
   ```

2. Enter the desired channel on the dial pad. A confirmation tone is heard. Music is now heard through the speaker.

   Music is discontinued automatically:

   - When you pick up the handset,

     -or-

   - Press the ON/OFF button.

Call Back

If you dial a telephone that is busy and want to activate Call Back:

1. Press the CALL BACK button.
2. Hang up.
3. When busy station hangs up, you are signaled.

4. Answer the call; the station you called is then signaled. (If your station is busy when signaled, an automatic MSG is left at your phone.

When the Automatic Call Back timer is enabled, a Call Back request is automatically be invoked anytime a user listens to intercom busy tone for a preset period of time.

Only one Call Back request can be left at a station; the second request is converted to a message wait call back request.

Call Coverage

The Call Coverage feature provides the functionality for stations to answer calls for other stations by using enhanced DSS buttons. Visual and Audible status of ringing stations to an assigned coverage station are provided.

Programming Flex Button for Call Coverage

1. Press the SPEED button twice.
2. Press the desired flexible button to be programmed.
3. Dial [646] (ringing type) or [647] (non-ringing type) on the dial pad followed by the extension number to be covered. A confirmation tone is heard. If an error was made during entry, an error tone is presented.

   When the button is assigned on the station and a call rings in:

   - The coverage station hears ringing for the coverage station after a five second delay.
   - The ring tone is the internal ring tone cadence.
   - The coverage station's LCD identifies the ringing station:

```
CALL FOR STA XXX
MMM DD YY                HH:MM am
```

4. The coverage station then performs one of the following steps:

   Press the flashing COVERAGE flexible button,

   -or-

   Press the ON/OFF button,

   -or-

   Lift the handset, if PLA is enabled.

   The flash rate is the same as the incoming CO line ringing rate. The call is answered and ceases to ring at any other stations that may have the same coverage appearance. The following message is displayed after the call is answered:

   ```
   CALL TO STATION XXX
   FROM STA YYY              HH:MM:SS
   ```

   By default, no CALL COVERAGE buttons are assigned.

Conditions

- Multiple coverage stations can have the same remote ringing station(s) programmed on their stations.
- Once a coverage station answers the call, other stations attempting to answer the call receive a busy tone and the call coverage button extinguishes on all appearances of that button.
- This feature can cover SLT extensions, however an SLT cannot perform the call coverage function. The SLT extension does not have to be physically installed, only the SLT card needs to be installed.
- Direct CO calls have ring and LCD priority over call coverage calls. The call coverage station must have a direct CO appearance or Loop button in order to pick up an external call. If the call coverage station is in DND, no audible ringing is heard, however visual and LCD information is presented.
- This feature can be programmed on any key station or DSS Console with an available flexible button. If the DSS with a call coverage button assigned is unplugged or moved, the station associated with that DSS stops ringing until the DSS is plugged in again.
- Camp-On or Override drops any internal callers that a station is talking to.

- Only one button type (646 or 647) per covered station can be assigned on a keyset.

A Flex button must be programmed for this feature to operate. Refer to "Flexible Button Assignment" in this chapter.

Call Forward: Station

Station users may forward their calls to alternate destinations. This feature is enabled/disabled in admin programming on a per station basis. Valid destinations are other stations and call groups (ACD, UCD, Hunt, and Voice Mail).

Call Forward - All Calls

Activating Call Forwarding

1. Lift handset or press ON/OFF button.
2. Press the FWD button or dial [640].
3. Dial the All Call code [6].
4. Press DSS button of desired station,

   -or-

   Dial the desired extension number where all calls are to be forwarded (including ACD or UCD, Voice Mail, and Hunt Group pilot numbers).
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift handset or press ON/OFF button.
2. Press the FWD button. A confirmation tone is heard and the FWD LED is extinguished.

Conditions

- Line Queue, Call Back requests, Message Wait requests, and pre-selected messages are canceled when a station activates call forward.
- Call Back requests are not allowed at a station where calls are forwarded.

- CO Line calls can be transferred by the receiving station back to the original forwarded station.
- A station in the call forward mode may still make outgoing calls.

Call Forward - Busy

Activating Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the FWD button or dial [640] on the dial pad.
3. Dial the Call Forward Busy code [8] on the dial pad.
4. Dial the desired destination number where calls are to be forwarded. A confirmation tone is heard.
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift the handset or press the ON/OFF button.
2. Press the FWD button. A confirmation tone is heard and FWD LED is extinguished.

Call Forward - Busy/No Answer

Activating Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the FWD button or dial [640] on the dial pad.
3. Dial the Call Forward Busy/No Answer code [9] on the dial pad.
4. Dial the desired destination number where calls are to be forwarded. A confirmation tone is heard.
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the pre-programmed FWD button. A confirmation tone is heard and the FWD LED is extinguished.

Call Forward - Follow-Me

The Follow-Me feature lets a user who is away from their station, activate/deactivate call forwarding from another station in the system. This lets the user forward their calls to their current location or into Voice Mail, ACD/UCD, Hunt Groups, or to any other station in the system. When this call forward is activated, all calls presented to the forwarded station forward to the destination station immediately.

Activating Follow-Me Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Dial the Follow-Me Forward code [642] on the dial pad.
3. Dial the station number of the station from which forwarding is desired.
4. Dial the appropriate forwarding condition code.

   [6] = All Calls [8] = Busy

   [7] = No Answer [9] = Busy/No Answer
5. Dial the three-digit destination number where calls are to be forwarded (Station, Voice Mail, ACD/UCD, or Hunt Groups.) A confirmation tone is heard.
6. Replace handset or press ON/OFF button.

Removing Follow-Me Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Dial the Follow-Me Forward code [642] on the dial pad.
3. Dial the station number of the station that forwarding is to be cancelled.
4. Dial [6] (regardless of the forward condition).
5. Redial the same station number. A confirmation tone sounds and the FWD LED extinguishes.

Establishing Follow-Me Call Forwarding (off-site location)

1. Dial into the system on a DISA or TIE trunk. Enter the DISA access code, if applicable.
2. Dial the Follow-Me Forward code [642] on the dial pad.
3. Dial the station number of the station from which forwarding is desired.

4. Dial the appropriate forwarding condition code.
   [6] = All Calls [8] = Busy
   [7] = No Answer [9] = Busy/No Answer
5. Dial the three-digit destination number where calls are to be forwarded. Station, Voice Mail, ACD/UCD, or Hunt Groups.) A confirmation tone sounds; five seconds later a dial tone is received.

Removing Follow-Me Call Forwarding (off-site location)

1. Dial into the system on a DISA or TIE trunk. Enter the DISA access code, if applicable.
2. Dial the Follow-Me Forward code [642] on the dial pad.
3. Dial the station number of the station that forwarding is to be cancelled.
4. Dial [6] (regardless of the forward condition).
5. Redial the same station number. A confirmation tone sounds; five seconds later a dial tone is received.

Conditions

- If a Call Forward mode is currently active at the station where forwarding is desired, the new forward becomes active and cancels the previous forward.
- Both internal and external calls to the affected station forward to the designated location.
- Call forwarding must be allowed in programming for the affected station.
- When remote forward is activated, the forwarding is immediate.
- A station's Call Forward status is stored in a battery protected area of memory. A station's Call Forward status is returned after a power failure or system reset occurs.
- When a key telephone is forwarded remotely, the key station's forward button lights. The station user may cancel the forwarding at their station by pressing ON/OFF, then the FWD button. SLT users can cancel their forwarding by going off hook and dialing the forward code.

- DISA callers entering the code and making a mistake are given an error tone for 3 seconds, silence for 2 seconds, then the dial tone is returned.

Call Forward - No Answer

Activating Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the FWD button or dial [640] on the dial pad.
3. Dial the Call Forward No-Answer code [7] on the dial pad.
4. Dial the desired destination number where calls are to be forwarded. A confirmation tone is heard.
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the FWD button. A confirmation tone is heard and FWD LED is extinguished.

Call Forward - Off-Net (via speed dial)

The Call Forward Off-Net feature allows stations to forward intercom and transferred CO calls to an off-net location. In a speed dial bin, store the number of the off-net location where calls are to be forwarded. Follow instructions provided for storing station or system speed dial numbers.

1. Lift handset or press ON/OFF button.
2. Press the FWD button or dial [640] on the dial pad.
3. Press [✳], then dial the speed bin number (000-019, 020-999) that contains the number where calls are to be forwarded. A confirmation tone is heard and the FWD button LED is flashing.
4. Replace handset or press ON/OFF button.

Removing Off-Net Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the FWD button. A confirmation tone is heard and FWD LED is extinguished.

Conditions

- Line Queue, Call Back requests, Message Wait requests, and pre-selected messages are canceled when a station activates call forward.
- Call Back requests are not allowed at a station where a call is forwarded.
- A station in the call forward mode may still make outgoing calls.

Caller ID Name/Number

The Caller ID Name/Number feature allows a station user to program a flexible button to view both the number and name on the LCD when receiving a Caller ID CO call.

If the feature is enabled, the flex button LED is lit solid, and the name/number is displayed. During the call, the user can press the flexible button to view the normal call information. The top line of the LCD displays the number of the caller and the bottom line displays the name.

Conditions

- When enabled, this display overrides transfer call LCD, ACD Ring, Call Pickup, and Answer messages. If the user wishes to view the Line Number/Call Timer and the standard call information they can press the flex button to toggle between name/number and normal mode.
- By default, no button is assigned on telephones. A flex button must be programmed for this feature to operate.

Calling Station Tone Mode

Calling Station Tone Mode allows a calling station to override a called stations H or P intercom switch settings.

When placing a call to a station and Tone Ringing is desired:

1. Dial [6#] on the dial pad.
2. Dial the extension number,

   -or-

   Press DSS button of desired station. (Call tone rings station.)

Call Park

Call Park allows you to place an outside call in park and consult with/page/call an internal party.

While connected to an outside line:

1. Press TRANS button. The caller is put on Exclusive hold.
2. Dial parking location (430 to 437). A confirmation tone is heard.
3. If you hear busy tone, press TRANS twice and dial another parking location.

Retrieving a Parked Call

1. Lift handset or press ON/OFF button.
2. Press the pound [#] button.
3. Dial parking location (430 to 437) where the call was parked.

Call Park (by Station Number)

While connected to an outside line:

1. Press TRANS button.
2. Dial [439] + XXX (station number).

Retrieving a Station Park Call

Dial [# 6] + XXX (user's station number from any telephone in the system).

-or-

Dial [438] from the user's station.

Conditions

- A flex button may be assigned to Call Park feature code 439. The user can press the specified flex button and dial a station number on the dial pad.
- 8-button telephones must assign a pickup button on the telephone to have the pickup feature.
- Only one call can be in a park location at a time. Multiple calls to the same station park location is not possible.
- The #6 code is flexible and can be assigned in Flash 52 programming.
- The call will be placed in the Station's Personal Park location.

Call Pick-Up: Group Pick-Up

When intercom tone ringing, transferred outside line ringing, recall ringing or initially ringing call is heard at an unattended telephone:

1. Lift handset or press ON/OFF button.
2. Dial [#0] on the dial pad,

   -or-

   Press the pre-programmed PICK-UP button to be connected to calling party.

You must be in the same pick up group as the ringing telephone to pick up the call.

Conditions

User must have access to the specific outside line or loop button to do a group call pick up.

Call Transfer

Outside lines can be transferred from one phone to another within the system. The transfer can be either screened (announced) or unscreened to either an idle or busy station, ACD or UCD Group, or Hunt Group.

Screened Transfer

While connected to an outside line (if programmed on your telephone):

1. Press station button where call is to be transferred,

   -or-

   Press TRANS button and dial three-digit station number. The called extension signals according to the intercom position.
2. When that extension answers, announce the transfer.
3. Hang up to complete transfer.

If Direct Transfer Mode is enabled in admin programming, the supervised transfer is transferred directly to the key station handset.

Answering a Screened Transfer

Your intercom signals according to the intercom position.

1. Answer the intercom and receive the transfer notice.
2. Press the outside line button or loop button flashing on hold.

Transfer Search

When attempting to locate a party, press a station button to signal the desired station. If party is not located:

1. Press another station button to continue the search.
2. When the called party answers, hang up to complete the transfer.

Unscreened Transfer

When the called extension begins to signal, hang up to transfer the call (Recall Timer starts).

Camp-On

If you call a station that is busy and want to alert them to your call:

1. Press the CAMP-ON button. Called station receives one-burst of ringing. Wait for their response.
2. When called party answers, consult with them or hang up to transfer the call.

If a station is in DND, only the Attendant can Camp-On using the Attendant Override feature. Camp-On or Override drops any internal callers that a station is talking to.

Answering a Camp-On

If you are on a connected call, you hear one burst of muted ringing and your CAMP-ON button is flashing, you have a call waiting for you.

1. Press the CAMP-ON button. Any outside line you are connected to is placed on hold. You may converse with the station placing the call.
2. Press flashing Outside Line button, if a call is being transferred.

If you do not have a Camp-On button either:

Go on-hook with present call. Camp-On rings through,

-or-

Place present call on hold. Then go on-hook. Camp-On rings through.

CO Line Access

Accessing an Outside Line

1. Press idle CO line button, Pool button,

   -or-

   Dial CO line group access code or LCR access code.
2. Dial desired number for outside call.
3. Lift handset to converse or use speakerphone.

CO Line Queuing

A station can queue only one line at a time. If you see that a particular outside line is busy and you wish to be placed on a list waiting for that line to become available:

Placing a Line Queue

1. Press desired busy OUTSIDE LINE button,

   -or-

   POOL button. (Busy tone is heard.)
2. Press pre-programmed LINE QUEUE button.
3. Replace handset or press ON/OFF button.

Answering a Line Queue

If you hear ringing and an outside line of the line group or a LOOP button, you queued onto is rapidly flashing:

1. Lift handset or press ON/OFF button.
2. Press flashing OUTSIDE LINE button or LOOP button to answer.

If your station has been programmed for Preferred Line Answer, you receive the line automatically upon lifting the handset.

Conditions

A LOOP button or direct appearance of the queued line is required

Conference Combinations

Only stations that have Conference enabled are able to institute a conference.

- Add-On Conference -- Up to eight internal parties can engage in a conference, or seven internal parties with a limit of one external party. A maximum of five 8-party conferences (five external parties max.) can be established.
- Multi-Line Conference -- One internal station can engage in a conference with no more than five outside parties.

A maximum of eight parties can be included in a conference.

Establishing a Conference

1. Lift handset.
2. Select intercom station or dial desired outside party.
3. When called party answers, press the CONF button.
4. Add next conference party by selecting another outside line or intercom station.
5. If the next conference party is an outside line and a busy or wrong number is encountered, press one of the conference parties on hold. This drops the busy or wrong number party. Press the CONF button again and repeat step 4.
6. When party answers, press the CONF button twice. (All parties are connected.)

Exiting a Conference (Controller Only)

There are three (3) methods of exiting a conference:

1 -- Press the ON/OFF button to ON, press the MUTE button, and replace the handset (to monitor a conference).

Use the following methods **only** if multi-line conference is in progress:

2 -- Press HOLD button to place outside parties on hold. Hold timer starts. If one of the two parties is internal, that party is dropped.

3 -- Press CONF and hang up or press the ON/OFF button to leave the other conference parties still connected in an unsupervised conference. The CONF button flashes and the timer starts. There is a warning tone before the other parties are dropped.

Re-Entering a Conference

When the controller re-enters a conference, the disconnect timer is reset.

1. Lift handset to re-enter a monitored conference.
2. To re-enter a conference placed on hold, repeat steps for establishing a conference.
3. To re-enter an unsupervised conference, lift handset and press flashing CONF button. The CONF button lights steady and a confirmation tone is heard.

Terminating a Conference (when initiator is in conference)

Replace handset or push ON/OFF button to OFF position.

Terminating Unsupervised Conference

Press flashing CONF button while on-hook, all parties are dropped.

Dial By Name

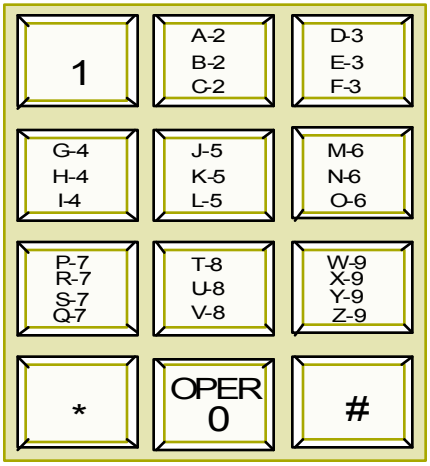
The system allows station users to dial extension numbers by entering a name of a person that has been programmed for that station. The system database allows entry of a name (alphanumeric) up to 24-characters in length for each station. This programmed name can be used for dialing-by-name station users and is displayed on LCD displays.

1. Dial the Dial-By-Name code [6✳] on the dial pad,

   -or-

   Press the pre-programmed DIAL-BY-NAME flex button.
2. Dial person's last name on the keypad as shown.

EXAMPLE -- To search for the name BROWN, press [2][7][6][9][6].



- When the system finds a unique numeric match to the name being dialed, the call is placed to the station matching the name.
- The intercom call signals the station according to the **H-T-P** switch setting.
- If fewer than 8 digits are dialed, the numeric match is dialed after a 10 second interdigit time-out occurs, or if a **#** (pound) is pressed.

Conditions

- The system dials the station that matches the dialed name when a unique match is found. If multiple names are located (found) after 8 digits, the first one is dialed.
- The names are entered as a part of the system attributes database. Numbers may be entered as part of a name. To avoid conflicts, all names must have a unique numerical sequence.
- The numeric match is dialed after 10 seconds by default. This internal timer is automatically programmed to be twice the value of what is programmed for the Inter-digit Time-out Timer.

Directed Call Pick-up

A station can pick up a tone ringing intercom call, transferred, incoming or recalling outside line to a specific unattended station. The call must be a tone ringing call:

1. Dial the station number of the known ringing telephone. Receive ringback tone or call announce tone depending on the intercom selector switch setting.
2. Press the pre-programmed PICK UP button to answer the call.

Conditions

User must have access to the specific outside line or a Loop button to do a directed call pickup.

Directory Dialing - Stations

Directory dialing allows station users to obtain a directory of station users and have the system dial the extension that is currently displayed. The *Triad 1/2/3* System provides locations for up to 200 names.

Directory Dialing Functions

- Allows users to program a name with a speed dial bin for later locating a speed dial number. When prompted, the system displays the name associated with a speed dial number on the LCD display. The user may then have the system dial the number.
- Enables users to associate a name with an entry in the local number/name translation table. When prompted, the system displays the name associated with the table on the LCD display. The user may then have the system dial the number.
- Directory Dialing list may be programmed and maintained at the first assigned Attendant station. However, this admin routine lets the system programmer maintain the list locally (at Attendant) or remotely via modem access.
- May be used to transfer a call from one station to another.

Viewing Directory List

1. Dial the Directory List dial code [680] on the dial pad,

   -or-

   Press the pre-programmed flex button programmed as a directory dialing button.
2. Press a button on the key pad once, twice, or three times to represent the letter of the alphabet to begin viewing the list of names as follows:
   - Press [2] once to produce the names beginning with A.
   - Press [2] again to produce the names beginning with B.
   - Press [2] a third time to produce the names beginning with C.

   Names starting with the letter chosen appear on the LCD display.

If there are no names in the Directory List beginning with the desired letter, a name with the next higher letter is shown on the LCD display

3. Press [✳] to scroll up (next entry) through the list,

   -or-

   Press [#] to scroll down (previous entry) through the list,

   -or-

   Press another button to view the list for a different letter of the alphabet.
4. When the desired name is shown on the LCD display, press the SPEED button to automatically dial the destination station or outside phone number (via speed dial).

Conditions

- If the desired party is an intercom station, that station is signaled according to that station's intercom selector switch (SLT stations will tone ring).
- If the desired party is associated to a speed dial bin, the system selects a CO line and dial the number programmed into the speed dial bin. Call progress tones are then heard.

- If a station is in the Directory Dialing mode and a CO or intercom call rings in, the station must exit the Directory Dialing mode to answer the call.
- Analog display stations experience a slow display which affects the usefulness of this feature.

Transfer a Call Using Directory Dialing

While on a call:

1. Press the TRANS button.
2. Dial the Directory Dial Code [680] on the dial pad,

   -or-

   Press a pre-programmed flex button programmed for directory dialing.
3. Press the digit associated with the person's name and when it is displayed, press the SPEED button to automatically dial the destination station.
4. Hang up to complete the transfer.

Calls may only be transferred to internal stations only. An attempt to transfer a call off-net (via a Speed dial bin) results in the call recalling upon going on-hook.

Direct Inward System Access (DISA)

1. Call the phone number the system administrator specified as the DISA line. The system answers and returns intercom dial tone.
2. Enter the DISA access code also specified by the system administrator, if applicable. Dial tone is returned.

Placing an Outgoing Call

1. Dial a group access code: 9, 81–87. CO Dial tone is returned.
2. Dial the desired telephone number.

The conference timer monitors a DISA trunk-to-trunk call and release the lines one (1) minute after the time expires.

Reaching an Internal Station

1. Dial the three-digit station number. A ringback tone is heard.
2. Converse when party answers.

If the station dialed is unattended, busy or in DND, intercom dial tone is returned (after the Preset Call Forward Timer expires).

(Refer to *System Timers* in chapter 2 of the *System Programming Manual*.)

Do Not Disturb (DND)

Activating Do Not Disturb

Press the DND button. DND button lights steady. The DND button can be pressed while the phone is ringing to stop the ringing. (Refer to *One-Time Do Not Disturb*.)

Removing Do Not Disturb

Press the DND button. The button LED extinguishes and DND is canceled.

One-Time Do Not Disturb

Allows you to prevent calls from ringing at your station while you're on a call. The One-Time DND condition automatically cancels when you end your call.

Press the DND button while you're off-hook and connected to a CO line or intercom call. The DND button LED lights and off-hook tones at your station are cancelled.

Cancelling One-Time Do Not Disturb

Replace handset. The DND button LED extinguishes and DND is cancelled.

Exclusive Hold

When a line is placed on Exclusive Hold, no other station in the system can retrieve this call. Exclusive Hold may be programmed to be activated on the first or second depression of the Hold button. CO Lines while in a transfer hold are always placed in an Exclusive Hold condition.

Executive Override

Allows designated Executive stations the ability to override and barge-in on other keysets engaged in conversation. If you call a busy station:

1. Press the pre-programmed EXECUTIVE OVERRIDE button. Executive station are bridged onto the CO line conversation in progress at the called station. Optional warning tone is heard and presented to all parties prior to cut-thru.
2. Replace handset at Executive station to terminate the override.

Conditions

- An error tone occurs when the called party is in a conference, is already on an OHVO call, or has a Camp-On at their station.
- If the Executive joins a call and one of the members does a hook-flash or depresses their transfer button, the Executive is dropped.
- If the Executive presses the hook-flash or transfer button, it is ignored.
- When the Executive jumps in on an intercom call or CO call and the Executive is not in a mute condition, and any member of the party hangs up, the call is converted to a two-party conversation.
- When the Executive jumps in on an intercom call or CO call and the Executive is in the mute condition and either of the two parties in the intercom call hang up, the call is dropped. If the Executive hangs up, the call remains as a two-party conversation.

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.

Executive/Secretary Transfer

- If you are designated the Executive station and your phone is busy or in DND, all calls are routed to the Secretary station.
- If you are the designated Secretary station, you can signal the Executive that is busy or in DND by using the Camp On feature.

Flash

When connected to an outside line, press the FLASH button to disconnect outside line and re-seize outside line dial tone.

Flash On Intercom

When connected to a page zone or another internal party, press the FLASH button to disconnect page or intercom call. An intercom dial tone is heard.

Flexible Button Assignment

If all the buttons on your telephone have NOT been assigned as CO lines, Pooled group, or LOOP buttons, you may program them to suit your own individual needs. The Flexible Button Assignment feature also allows flexible button programming from a remote location (off-site). Range programming can also be used to assign these buttons to multiple stations.

Executive and Enhanced Model Telephones have 22 flexible buttons. Their default button map is shown in *Figure 5-1: Executive Electronic Key Telephone Default Button Map*.

There are 7 possible functions you may assign to these buttons:

1) DSS/BLF -- Pressing this button, automatically signals the assigned intercom station. DSS/BLF buttons are programmed by the station user.

2) FEATURES -- This button can be programmed so that when pressed it activates a particular feature, thus eliminating the need for dialing the feature code.

Some features require a flex button to be programmed for that feature to be accessible to the station user. Where this is the case, it is so designated in this Feature Operation Section and user guide. Feature buttons are programmed by the station user.

3) LOOP -- This button acts as the direct appearing button for outside lines that do not appear on the user's individual telephone. Any phone that doesn't have all lines appear on it must have a loop button. There is NO limit to the number of LOOP buttons a station may have.

4) POOLED GROUP ACCESS -- A group of outside lines can be placed under one button. When this button is pressed, the system selects an available line from this group for the user to place a call on.

5) SPEED DIAL -- This button can be programmed to automatically access a speed number location for one-step operation. PBX and Centrex codes can be programmed into a speed dial bin and accessed by one button depression.

6) UNASSIGN (Locked Out) -- Specific buttons may be designated 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.

7) CO LINES -- Specific buttons may be designated as specific outside lines.

Programming a Flexible Button

1. Press the SPEED button twice.
2. Press the assigned button to be programmed (it must be programmed in database as a multi-function button).
3. Dial the desired code.

Erasing a Flexible Button

1. Press the SPEED button twice.
2. Press the button to be erased.
3. Press the FLASH button. A confirmation tone is heard.
4. Replace handset or press ON/OFF button.

Forward Override

The Forward Override feature allows a user to reach a busy station who is Busy Forward, No Answer Forward, or All Call Forwarded. This allows the calling station to call a forwarded station, Executive Override, Monitor, Message Wait, Camp-On, or Call Back at that station rather than forwarding to the busy destination.

Overriding Call Forwarding

Dial [5#] on the dial pad followed by the desired station extension.

Handset Receiver Gain

The Handset Receiver Gain feature allows the user to increase/decrease the handset receiver gain while on a CO or intercom call.

1. Press the pre-programmed HANDSET RECEIVER GAIN button.
2. Dial a one-digit value from 0 to 9 (0=lowest, 9=highest),

   -or-

   Press [#] to increase or [✳] to decrease the gain, one level at a time. The LCD displays the volume settings as they occur.
3. Press the pre-programmed HANDSET RECEIVER GAIN button again to select settings.

Hot Keypad

The Hot Keypad feature allows the user, while on a CO call, to press and hold a DTMF digit so that the DTMF tone is generated for as long as the key was depressed.

Depress and hold the DTMF digit. The DTMF tone is generated as long as the DTMF digit is depressed.

Headset Mode

If you wish to use a headset and have been given the ability to do so in programming, use the specified feature code or a pre-programmed flexible button:

Activating Headset Mode

Dial [634] on the dial pad,

-or-

Press pre-programmed HEADSET MODE button. LED lights solid.

While Headset mode is active, the ON/OFF button activates the headset and disable speakerphone and intercom call announce operation at your station.

Cancelling Headset Mode

Dial [634] on the dial pad,

-or-

Press the pre-programmed HEADSET MODE button. LED is extinguished.

Station must be programmed in database programming for headset operation before flex button can be programmed.

ICLID Answered Call Management Table

An Answered Call Management Table with 100 entry capacity is maintained in the system. The calling number/name information pertaining to any answered call is placed in this table at the time the system determines the call was answered.

Table 5-2: ICLID Answered Call Buttons

Function	Button
Go to beginning of table	Dial Code 659
Review next item in table entry	MUTE
Step to next table entry	HOLD
Delete this table entry (Attendant Only)	FLASH
Exit table review function	ON/OFF
Step to previous table entry	TRANSFER
Call Back	SPEED

ICLID Unanswered Call Management Table

An Unanswered Call Management Table with 100 entry capacity for the *Triad 1/2/3* Systems is maintained in the system. The calling number/name information pertaining to any unanswered call is placed in this table at the time the system has determined that the call has been abandoned.

This table may be interrogated from any station so that the unanswered calls may be reviewed and handled by the end user. Any Attendant station(s) can delete an entry from the table, one entry at a time.

Upon entering the review process, the functions available to a phone are:

Table 5-3: ICLID Unanswered Call Buttons

Function	Button
Go to beginning of table	Dial Code 635
Review next item in table entry	MUTE
Step to next table entry	HOLD
Delete this table entry (Attendant Only)	FLASH
Exit table review function	ON/OFF
Step to previous table entry	TRANSFER
Call Back	SPEED

Reviewing ICLID Unanswered Call Management Table

1. Dial the access code [635] on the dial pad from any station in the system.
2. When the desired table entry is displayed on the LCD, press the SPEED button to automatically dial the table entry.
   - For Next Item in this Entry -- Press the MUTE button to toggle to the next item or the ON/OFF button to exit the review function.
   - For Next Table Entry -- Press the HOLD button.
   - For Previous Table Entry -- Press the TRANS button.

Incoming CO Call Transfer

The Incoming CO Call Transfer feature provides station users the ability to transfer a call that is currently ringing at their station without answering it. This feature only operates when the station is in an idle mode and not available to Single Line Telephone users.

While on an internal/external call and an incoming or transferred CO call is ringing at your station:

1. Place the current call on hold.
2. Press the pre-programmed INC CO XSFR flexible button,

   -or-

   Dial the Incoming CO call transfer code [639] on the dial pad.
3. Press a DSS, Group button or dial the three-digit station number or group number. Call is automatically transferred to that destination. The incoming transferred CO call receives Music-On-Hold during the transfer state. (Station user can return to call placed on hold.)

Conditions

- Calls may be forwarded to any available station, ACD/UCD group, Hunt Group or VM Group.
- Destination station must have an direct appearance for that CO Line or Loop button and not in DND or an error tone is presented to the originator and the call remains ringing at their station.
- Attendant stations do not send ID digits.

Intercom Button(s)

The Intercom Button feature provides station users the function of ringing a busy station via the intercom without using the Camp-On or Executive Override features. This also allows stations to place intercom calls on hold.

Programming Flex Button as Intercom Button

1. Press the SPEED button twice.

2. Press the desired flexible button to be programmed.
3. Dial [645] on the dial pad. A confirmation tone is heard. If an error was made during entry, an error tone is received.

Receiving an Intercom Call when Station is Busy (and has intercom button)

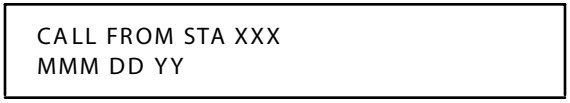
The calling station receives ringback tone instead of a busy tone. The called station hears ringing and their intercom button LED starts flashing at the incoming CO line rate. This indicates an incoming intercom call.

The called station can press the HOLD button to:

1. Place the current CO call on hold,

   -or-

   Place the current intercom call on hold. The intercom call is placed on hold on the available intercom button.
2. Press the flashing INTERCOM button to answer the incoming intercom call, the following message displays on called station's LCD:



Sta XXX could also be a programmed station name.

By default, no INTERCOM buttons are assigned to any key stations.

Conditions

- If calls are ringing on INTERCOM buttons and a Handsfree call is received, the Handsfree call is allowed and the calls ringing continue with muted ringing.
- Multiple intercom path buttons can be assigned to a single station, however up to five internal parties can be placed on hold per station. Music-On-Hold is provided to intercom caller on hold.
- Once an INTERCOM button is set-up on the keyset, callers dialing that station always receive a ringback tone as long as an available INTERCOM button is idle. If all INTERCOM buttons are in use, the station may use the Camp-On or Executive Override features to reach the station. Internal callers are dropped after the Camp-On is answered.

- This feature can be programmed on any key station or DSS Console with an available flexible button. If there is an available INTERCOM button, a station calling that station cannot OHVO, Camp-On or Override that station.
- A call ringing to a station on an INTERCOM button rings either muted or as a reminder ring depending on station's tone ringing cadence.
- Up to five internal parties can be placed on hold. No recall timers apply to Intercom buttons. Internal callers can be placed and removed from hold when they appear on an INTERCOM button.
- To use the capability of INTERCOM buttons, Busy Forward cannot be active at the station.
- A call ringing to a station on an INTERCOM button and the DND button is pressed, returns DND tone to caller and the call is dropped.

Intercom Calling

Placing an Intercom Call

1. Press the DSS button of the party to be called (if programmed at your phone),

   -or-

   Dial the three-digit extension number.

   Dialing a number in the numbering plan activates the telephone automatically.

   You hear ringing if the called station is in the T answering mode; or three bursts of tone if called station is in the H or P position.
2. Lift the handset or use the speakerphone, after the three tone bursts stop.
3. Hang up to end the call.

Answering an Intercom Call

With your intercom signal in the T Mode, you hear repeated bursts of intercom tone ringing and the HOLD button slowly flashes.

1. Lift the handset or press the MUTE button to answer,

   -or-

   Move the intercom signal switch to the H mode to reply.
2. Replace the handset to end the call.

In the P Mode, you hear three bursts of tone and one-way announcement. The calling party cannot hear conversations in progress.

Lift the handset or press the MUTE button to answer,

-or-

Move the intercom signal switch to the H mode to reply.

In the H Mode, you hear three bursts of tone and an announcement.

Reply handsfree or lift the handset for privacy.

Intercom Transfer

For Intercom Transfer Without DSS Buttons:

1. Receive or make an intercom call.
2. Press the TRANS button. Intercom dial tone is heard.
3. Dial the station where the call is to be transferred.
4. When the 2nd station answers, you are in a supervised transfer mode (1st station is staged for transfer).
5. Hang up (station 1 and 2 are connected).

For Intercom Transfer Using DSS Buttons:

1. Receive or make an intercom call using a DSS button.
2. Press the TRANS button. Intercom dial tone is heard.
3. Press the DSS button where call is to be transferred.
4. Hang up (station 1 and 2 are connected).

Last Number Redial (LNR)

1. Press the SPEED button.
2. Press the pound [#] key. The last number dialed over an outside line is automatically redialed. The system automatically selects the original line used to place the call and redial the number.
   - If that line is busy, the system automatically selects another line from the same group and redial the number.
   - If no lines are available in the same group, the station receives a busy tone and can queue for a line.
   - If the station user preselects a line before activating LNR, the preselection overrides the line which was used originally.

Least Cost Routing (LCR)

Placing an Outside Call (when LCR enabled)

1. Dial [9] on the dial pad.
2. Dial the desired seven-digit telephone number (i.e., 1+ area code +7-digit number).
3. Wait for an answer. Lift handset or use the speakerphone to converse.

   If all lines available to you are busy, remain off-hook for four seconds to automatically be queued onto LCR for an available line.

Answering an LCR Queue Call Back

When telephone is signaled, answer the call. The desired telephone number automatically is redialed.

Only one LCR Queue Call Back request may be initiated by a station. When a second request is made, the first request is canceled.

Cancelling an LCR Queue Call Back Request

1. Dial the LCR Queue Cancel code, [626] on the dial pad.
2. Replace handset or press ON/OFF button.

Mailbox Button(s)

The Mailbox Button feature provides station users to program specific mailbox index numbers onto flexible button at their station or DSS Console. Users can then transfer internal/external callers to specific Voice Mail Groups or Mailbox numbers. These Voice Mail Groups or Mailbox numbers are programmed in admin programming. A total of 255 mailbox buttons are allowed per system.

Programing a Flexible Button (for mailbox button at station)

1. Press the SPEED button twice.
2. Press the desired flexible button to be programmed.
3. Dial [644] on the dial pad followed by the three-digit VM Index number (001-255). A confirmation tone is heard. If an error was made during entry, an error tone is presented.

Using Mailbox Button (while on internal/external call)

The called station presses the MAILBOX flexible button and goes on-hook. The call is then transferred to the VM port by the telephone system. By default, no mailbox buttons are assigned to any key stations.

Conditions

- This feature can be programmed on any key station or DSS Console with an available flexible button.
- Stations engaged in a conference cannot use this feature.
- If no station(s) are programmed in the Voice Mail Group, the user receives an error tone.
- Mailbox buttons interact with the station VMID feature as follows:

  VM transfer with ID (manually enter digits) = No station VMID

  VM transfer with ID (press DSS button) = Use station VMID

  Mailbox button feature = No station VMID

Meet Me Page

Requesting Another Party to Meet You on a Page

1. Dial the desired two-digit or three-digit paging code,

   -or-

   Press pre-programmed PAGING button.
2. Request that party meet you on the page.

   Do not hang up; wait for requested party to answer. When paged party answers and is connected to you, the page circuit is released.

Answering a Meet Me Page

Go to the nearest telephone and dial [770] on the dial pad,

-or-

Press the pre-programmed MEET ME PAGE ANSWER button. You are connected to the party that paged you.

Message Waiting

Leaving a Message Waiting Indication

If you dial a station that is busy, unattended, or in DND, you can leave a message waiting indication.

1. Lift handset or press ON/OFF button.
2. Dial the desired intercom station. Busy tone or DND tone is heard.
3. Press the MSG button. A confirmation tone is heard. Called party's MSG button slowly flashes.
4. Replace the handset or press the ON/OFF button to end the call.

Up to five (5) messages can be left at any Station.

Answering a Message Waiting Indication

If your MSG button is flashing at a slow rate, you have a message waiting for you. The first message left is the first one called.

1. Press flashing MSG button. Station that left message is signaled with tone ringing.
2. If called station does not answer, press MSG once to leave message.

Mute Key

The MUTE button provides privacy during speakerphone or handset operation by disabling the microphone.

1. Press MUTE while off-hook on speakerphone or handset to activate.
2. Press the MUTE button again to deactivate. The mute feature automatically deactivates upon call termination.

Name In Display

Every extension (key and SLT) has the capability to program the users name so that people using display telephones see the name instead of the station number.

1. Dial [690] on the dial pad.
2. Enter the name (up to 7 characters) using dial pad keys as follows:

Figure 5-2: Other Key Pad Codes (Name)

Other Codes			
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 the SPEED button to complete the programming process.

Erasing Your Name

1. Dial [690] on the dial pad.
2. Press the SPEED button to complete the erasing process.

Night Service

The Night Service feature provides a means to put the system in night mode from any keyset or remove the system from night mode from any keyset as long as the system was put in night mode by the Night Service feature flex button. If the system was placed in night mode by the Attendant using her Night Service (DND) button or if the system was placed in night mode by the automatic schedule, the Night Service flex button can not remove the system from night mode.

From an idle station:

Press the pre-programmed Night Service flex button. The system is now in the Night Service Mode.

Removing Night Service Mode

Press the pre-programmed Night Service flex button again. The system is now removed from the Night Service Mode.

Off-Hook Preference

To access an outside line or a feature:

Go off-hook or press the ON/OFF button.

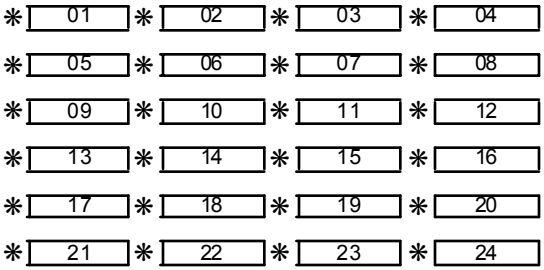
To access internal intercom dial tone, while Off-Hook Preference enabled:

Press pre-programmed ICM button or dial your own intercom number. (Do not lift handset or press ON/OFF button before dialing intercom number.) LED lights steady and intercom dial tone is heard. You may now dial an internal station or feature Access Code.

Off-Hook Preference Programming

If your phone is programmed for Off-Hook Preference and has been given the ability to enable or change the prime flex button.

1. Dial [691] on the dial pad.
2. Dial the desired button number. Refer to the following chart:



Disabling Off-Hook Preference

1. Dial [691] on the dial pad.
2. Dial [00] on the dial pad.

Programming PBX/Centrex Codes Onto Flex Button

For easy one-button access to Centrex or PBX features, perform the following steps:

1. Program the Centrex or PBX code into a station or system speed dial bin, including hook-flash (flash key), [*], and [#] commands. Refer to station or system speed dial programming.
2. Program that speed bin onto a flexible* button.

One-Touch Recording

The One-Touch Recording feature allows the station user while on an internal/external call to press a button and have the system record the conversation in the station users mailbox. This is done by creating a conference bridge between the caller, station, and VM port.

Using this feature when the One-Touch 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 recording calls using this feature.

While on an internal/external call:

Station user presses the pre-programmed VM RECORD button. The LED flutters red @240 ipm during setup and the following message displays:

```
RECORDING SETUP
MMM DD YY                    00:00:00
```

Once the system has connected to the station (the user's mailbox), the flexible button LED lights solid green and the LCD displays as follows:

```
RECORDING
MMM DD YY                    00:00:00
```

When the user is finished recording, the pre-programmed VM RECORD button is pressed. The LED is extinguished and the normal LCD call information is returned to the display.

Conditions

- If the user hangs up without terminating the record function, the system automatically extinguishes the and the normal LCD call information is returned to the display.
- If the user presses the TRANS, CAMP-ON, MSG, or FWD buttons during recording, the button depression is ignored.
- During the recording setup, any depression of the CONF button is ignored.

- If no VM port is available when the station user wants to record, the user receives the following display (lasts 6 seconds):

  ```
  RECORDING UNAVAILABLE
  MMM DD YY                00:00:00
  ```

  The user may retry after the display extinguishes.
- Once in the recording mode, the CONF button depression allows the user to add members to the recording (conference). Normal conference operation/conditions apply.
- If an internal station is being recorded, the internal station receives a CONFERENCE LCD message and the CONF LED lights.
- If the FLASH or HOLD button is pressed during the recording, the recording is terminated.
- If a station user presses the record button while in a two-party conference, the conference is recorded. If the button is depressed a second time, the conference is broken down and the call is returned to a two-way conversation.
- Only one active recording per station is allowed.
- If a recording is done to another internal station, the station being recorded cannot invoke the record feature.
- If a conference is being recorded and the master of the conference exits, the recording stays active. The recording stops if the initiator re-enters the conference and breaks it down, removes the record function, or the conference breaks down on its' own.
- Only the initiator of a conference can invoke/remove the record function during a conference.
- Conference Warning Tone is not given to the conference members, if the initiator is recording the conference and the record tone is disabled.
- Recording is not allowed to a station that is barged in, Executive Overridden, or on an active OHVO call.

Outside Call

Answering an Outside Call

1. Lift handset or press ON/OFF button.
2. Press slow flashing OUTSIDE LINE button or LOOP button. (If your telephone is programmed with Preferred Line Answer, you may answer an outside line by lifting the handset or pressing the ON/OFF button.)

Making an Outside Call

1. Press OUTSIDE LINE or POOL button. ON/OFF button LED lights and dial tone is heard.
2. Dial the desired party.
3. When called party answers, lift handset to converse or use speakerphone.

   (A station user can also dial an individual trunk group access code to access an outside line.)

Placing an Outside Call on Hold

If your system is programmed for Exclusive Hold Preference:

Press HOLD button once for Exclusive Hold, twice for System Hold.

If your system is programmed for System Hold Preference:

Press HOLD button once for System Hold, twice for Exclusive Hold.

Paging

Making a Page Announcement

1. Lift handset or press ON/OFF button.
2. Press pre-programmed PAGE button,

   -or-

   Dial the two-digit or three-digit paging code.

   [700] = All Call - Internal and External

   [701-708] = Internal Zone 1-8

   [709] = Internal All Calls

   [76]+[0] = External All Calls (All Ext Zones)

   [76]+[P] = External Zones (1-2)
3. Speak in a normal tone of voice to deliver message.

- Stations off-hook or in DND do not hear the internal page announcement.

- When making a zone page or All Call page and the zone is busy, the page initiator receives ringback tone until the zone becomes available. You then hear a warning tone and can make the page announcement

PBX/Centrex Transfer

While connected to an outside line (PBX/Centrex):

1. Press the FLASH button. Receive transfer dial tone.
2. Dial a PBX/Centrex station number.
3. Hang up to complete the transfer.

Personal Park

Each station in the system can place a call into a personal park location and then later retrieve that call from the originating station.

While connected to an outside line:

1. Press the TRANS button. The caller is put on Exclusive Hold.
2. Dial the Personal Park location [438] on the dial pad,

   -or-

   Press the pre-programmed PERSONAL PARK button. A dial tone is heard.

When dialing the personal park location and that location is already occupied, the initiating station receives the previously parked call and the second call is parked.

Retrieving a Parked Call

Dial the Personal Call Park location code [438] on the dial pad,

-or-

Press the pre-programmed PERSONAL PARK button. A talk path is established between the two parties.

Conditions

- Intercom calls and CO line calls can be placed into the station's personal park location.
- Calls parked in a personal park location are subject to the System Call Park Recall Timer.
- A CO call parked in a personal call park location recalls to the station that parked the call when the Call Park Recall Timer expires. The CO call rings into this station until the System Hold Timer expires. The CO call then recalls to the Attendant(s) (at this point, the Attendant station and the initiating station are ringing), and the Attendant Recall Timer is initiated. When the Attendant Recall Timer expires, the CO call is disconnected.

Personalized Messages

Each station can select a pre-assigned message to be displayed on the LCD of any key telephone calling that station. There are ten possible messages which can be left.

1. Dial [633] on the dial pad,

   -or-

   Press a pre-programmed MSG button.

2. Dial the two-digit code for the message that appears. A confirmation tone is heard and the DND button LED starts to flash.

00 = (clears messages)	06 = On Trip
01 = On Vacation	07 = In Meeting
02 = Return AM	08 = At Home
03 = Return PM	09 = On Break
04 = Return Tomorrow	10 = At Lunch
05 = Return Next Week	

This feature is not available to the Attendant(s).

Messages - Custom

System-Wide Custom Messages

Each station can select from ten possible custom messages to be displayed on the LCD of any key telephone calling that station. These messages are programmed from the first Attendant station.

To use:

1. Dial [633] on the dial pad,

   -or-

   Press a pre-programmed MSG button.
2. Dial the desired two-digit message number (18-30) for the custom message desired. The first Attendant should provide a list of messages to each station user.

Unique Custom Messages

Each station can also program three unique custom messages.

To program:

1. Dial [633] on the dial pad.
2. Dial a valid message number (18-20) for the desired custom message.
3. Enter a custom message, up to eight characters.
4. Press HOLD to save.

To use:

1. Dial [633] on the dial pad.

   -or-

   Press a pre-programmed MSG button.
2. Dial a valid message number (18-30) for the desired custom message.

Cancelling the Message

1. Dial the Message Access Code [633] + [00].
2. Replace handset.

   DND button LED extinguishes.

Date & Time Entry on Personalized Message

As an enhancement to the original canned messages, station users can activate certain messages that allows the user to enter a specific time or a date of return. These messages appear on calling station's display to alert them of the desired party's return time or date.

Activating a Message (with a custom return time or date)

1. Dial the Message Access code [633] on the dial pad.
2. Then dial the desired message number [11-17].

   Users may activate the following messages and be prompted to enter a time or date of return:

   [11] = Vacation Until: *MM/DD*

   [12] = Return: *HH:MM xm* or *MM/DD*

   [13] = On Trip Until: *MM/DD*

   [14] = Meeting Until: *HH:MM xm*

   [15] = At Home Until: *HH:MM xm*

   [16] = On Break Until: *HH:MM xm*

   [17] = At Lunch Until: *HH:MM xm*
3. Enter the date/time by using buttons on the dial pad as follows:

Figure 5-3: Other Key Pad Codes (Date and Time)

Other Codes			
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 enter message. A confirmation tone is received and DND button LED starts to flash.

Canceling the Message

1. Dial the Message Access Code [633] + [00].
2. Replace handset.

   DND button LED extinguishes.

Personalized Message Code On A Flex Button

You can program the code [633] onto a flexible button to speed access of pre-selected messages.

1. Press the SPEED button twice.
2. Press the desired flex button. LED flashes.
3. Dial [633] + [#] on the dial pad. A confirmation tone is heard. The user can now press that flex button and dial the two-digit canned message number (00-10), or the two-digit custom message number (18-30) to activate the message. A confirmation tone is heard and DND button LED starts to flash.

Scrollable Canned Messages

The Scrollable Canned Message feature allows the user to use a single digit to scroll through the canned messages and select one. This feature operates when the phone is in the idle mode only and cannot be activated if the station is in the Call Forward or DND mode(s). This feature is not available at Attendant stations.

1. Dial [633]+[#] on the dial pad,

   -or-

   Press the MSG button. Clear Messages is always first. The following message displays:

   ```
   CLEAR MESSAGES
   NEXT=#     PREV=✳     SAVE=HOLD
   ```

2. Press the [#] to scroll through the messages,

   -or-

   Press the [✳] to scroll backward through the list.

The scroll forwards through the messages in the following order (a rolodex type of scroll):

1 - (Clear Messages)
2 - At Home
3 - At Lunch
4 - In Meeting
5 - On Break
6 - On Trip
7 - On Vacation
8 - Return AM
9 - Return PM
10 - Return Next Week
11 - Return Tomorrow

3. When the desired message is shown on the LCD display, press the HOLD button to activate that message on your station. A confirmation tone is heard and the DND button LED starts to flash.

Conditions

- The telephone receiving the message must be a display telephone.
- Both key telephones and SLTs may activate the message. SLT's are notified that they have an active message with a warning tone when going off-hook.
- Incoming and outgoing calls displays take precedence over a canned message display.
- When a message is displayed by a key telephone, the DND button LED flashes at 15 ipm.
- When DND is invoked on the telephone the message is canceled.
- Message Access (with a desired message) may be assigned to a flex button.
- Messages may be entered while off-hook on a call if an intercom call has camped-on to the station. This causes the station calling to see the message.
- Messages are retained in battery protected area of memory in the event of power failure or system reset.

Pulse-To-Tone Switchover

The signaling on an outside line can be changed from dial pulse to tone (DTMF) manually while dialing out.

Performing the Change-Over

Dial an [✳] on the dial pad. The remaining digit(s) are sent using DTMF.

The Pulse-To-Tone Switchover command may also be included into a speed dial bin. Refer to "Storing Speed Numbers" in this chapter for Speed Dial programming.

Repeat Redial

The Repeat Redial feature allows an electronic key telephone to 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 doesn't answer within the 15 seconds, the callback is cancelled. The system retains the last call the user made.
- If station is busy when the Redial queue callback occurs, the callback does not take place until the user goes on-hook.

  The user must enter a Redial timer value when invoking this feature. This value is from 006-999 which represents seconds. A 2-minute interval would be entered as 120. Default value is 1 minute (60).

Placing a CO Call (when Busy or No Answer received)

1. Press the pre-programmed Redial flexible button. The LCD prompts the user for a timer value.

   ```
   ENTER RPT REDIAL TIMER:
   XXX                    006-999
   ```

2. Enter a valid number (006-999 seconds) for the Repeat Redial timer. Default value is 1 minute (60). A confirmation tone is heard and the station user goes on-hook. The flexible button LED light solid.

When the timer expires, the station is signaled via a CO line queue indication on the Repeat Redial flexible button. During the queue callback, the LCD display indicates that this is a Redial Callback.

3. Once the line queue is answered and the LCD indicates an outgoing CO line display:

   Press the Redial flexible button,

   -or-

   Press the ON/OFF button,

   -or-

   Lift the handset. Line is seized and the number dialed. If user receives a busy/no answer, Step 1 is repeated to activate another redial.

Cancelling the Operation

Press the pre-programmed Redial flexible button. A confirmation tone is heard and the Auto Redial function is cancelled.

Conditions

Once the user presses the pre-programmed flexible button, there is no timer applied until the user enters a digit. Once a digit is entered, the inter-digit timer applies between the digits.

Save Number Redial (SNR)

Saving the Last Number Dialed

1. After placing an outside call, keep handset off-hook.
2. Press the SPEED button twice.

Dialing a Saved Number (using Last Number Dialed Steps)

1. Press the SPEED button.
2. Dial the asterisk [✳] button.
   - System automatically selects the original line used to place the call and redial the number.
   - If that line is busy, the system automatically selects another line from the same group and redial the number.
   - If no lines are available in the same group, station receives a busy tone and can queue for a line.

- If the station user preselects a line before activating SNR, the preselection overrides the line which was used originally.

Speakerphone

1. Press ON/OFF button to ON. Intercom dial tone is heard.
2. Press the DSS button of the desired party, or press an available outside line button and dial number. Speakerphone is activated.
3. Press ON/OFF button to OFF to end call.

For further references in this section where lift handset is specified, you may also use the method of pressing the ON/OFF button, if the telephone is programmed to be a true two-way speakerphone.

Station Relocation

The Station Relocation feature allows a user to unplug their station and plug it in at another location. Then by dialing a simple code followed by their old station number, bring all the station attributes including extension number, button mapping, speed dial, and class of service to the new location.

After plugging a station into a new location.

1. Dial [636] on the dial pad.
2. Then dial the extension number of the station being relocated.

   All station attributes are copied to the current station.

If a station is assigned to a specific port and that user unplugs their station and plugs it in at another location, the database administration programming is updated to reflect the new port change after code [636] is dialed.

Conditions

- The station number that is dialed as the relocated station must be currently out of service.
- The relocated station is given the station attributes of the station doing the relocating. The two stations have traded station numbers and station attributes.

- If a keyset is plugged into the relocated position it retains all the station attributes of the relocating station.
- This feature only is applicable to keysets.
- If the relocated station is in service, an error tone is received.
- Electronic key telephones must be relocated to another electronic key telephone port. If an analog user moves their station number to a digital port, the buttons are initialized and need to be reprogrammed.

Station Speed Dial

If no outside line has been specified in programming, one is chosen automatically or you can choose one now.

1. Press SPEED button and dial bin location,

   -or-

   Press the pre-programmed speed bin button. Station Speed numbers are 000 to 019.
2. When the called party answers, pick up the handset or use the speakerphone to converse.

Storing Speed Numbers

Station Speed numbers can be entered by keyset users. System Speed numbers must be entered by using the first programmed Attendant or WinDBA. If no Attendant is specified, enter at Station 100.

1. Press the SPEED button once.
2. Press a desired outside line button or pool button,

   -or-

   Select an outside line automatically by pressing the SPEED button a second time.

3. Dial the speed bin location.
   - 000-019 = Station Speed numbers;
   - 020-999 = System Speed numbers.

System Speed numbers 101-999 are available only when expanded memory is used.

4. Dial the desired telephone number. Include the special codes described when entering the number:
   - TRANS -- Initiates a Pulse-To-Tone switchover.
   - HOLD -- Inserts a Pause.
   - FLASH -- Inserts a Flash into the speed number.
   - TRANS -- Pressing the TRANS button as the first entry in the speed bin inserts a no-display character causing the numbers stored in the bin not to appear on the Digital Telephones display when the bin is accessed.
5. Press the SPEED button.
6. Replace the handset to end the speed bin programming.

Programming Multiple Speed Numbers

1. Press the SPEED button twice to conclude programming a number.
2. Then enter the next speed number bin to be programmed.

   If the station has no line appearance for the line programmed into the speed bin, that line comes up under the Loop button or Pool button when accessed.

Erasing an Existing Speed Bin

1. Press the SPEED button twice.
2. Dial the speed bin location:
   - 000 - 019 = Station speed numbers
   - 020 - 999 = System speed numbers
3. Press the SPEED button again. A confirmation tone is heard.

System Speed Dial

If no outside line has been specified in programming, one is chosen automatically or you can choose one now.

1. Press the SPEED button.
2. Dial the speed bin location,

   -or-

   Press the pre-programmed speed bin button.

   020 to 999 = System Speed numbers
3. When the called party answers, pick up the handset or use the speakerphone to converse.

Text Messaging (Silent Response)

The Text Messaging feature allows a station user to use text messages to respond to a caller that has Camped-On to alert a busy station user of a waiting call or message. The camped-on station may respond to the caller via the canned, custom, and silent response text (LCD) messages. The text messages appear on the calling party LCD Display.

While receiving a Camp-On:

The called party may press a pre-programmed Text Message button with a specific message [633+XX].

Example – [633] + [38] means that a telephone calling the station receives the message WHO IS IT?.

The following additional messages can also be sent as a text response:

[31] = I Will Take Call
[32] = Take Message
[33] = Transfer To Secretary
[34] = Put Call On Hold
[35] = Call Back
[36] = One Moment Please
[37] = I Will Call Back
[38] =Who Is It?
[39] =Is It Long Distance?
[40] =Is It Personal?
[41] =Is It An Emergency?
[42] = Is It Important?
[43] = Is It Urgent?
[44] = Send Call To Voice Mail
[45] = Park Call
[46] = Out Of Office
[47] = Put Call Through
[48] = I Am Busy
[49] = O.K.
[50] = No
[51] = Yes

Conditions

- All canned and custom messages may be used to respond to a calling party.
- Text response messages automatically clears when the calling station (station receiving the messages) goes on-hook.
- A station can receive only one message at a time.
- Text messages may be chained (i.e. multiple messages sent to a caller).
- The text message responses appear on both the calling station and the called station (station activating text responses) LCD displays.
- If the calling station is a non-LCD telephone, the called station receives an error tone when responding via text messaging.
- The called station may press a flex button programmed as a Text Message button, [633+#]. This flex button can be pressed and two-digit message number (31-51) dialed to respond to the calling station. DTMF digits are not heard by either party.

- When silent messaging is used to respond to a call, the existing call of the called station is not disconnected while the messages are being sent to the calling station.
- The calling station must remain off-hook to receive silent messages.
- If the called station responds with a text message, the text message appears on the LCD.
- LEDs follow that of the Camp-On.
- Each individual message may be programmed onto a flexible button including a flex button on a DSS/BLF console.

The calling station must be a display telephone and the called station must be a keyset.

Transferring CO Calls to a Station Forwarded to VM

While connected to a CO line:

1. Press the TRANS button.
2. Dial the extension number of the station forwarded to Voice Mail.

   The transferring station hangs up. The CO call is directed to the mailbox of the forwarded station.

If the transferring station attempts to supervise the transfer or just waits until the voice mail system answers, then it becomes necessary to re-access the CO line and re-transfer them and go on-hook before the voice mail system answers. This ensures that the CO party hears the personal greeting of the mailbox user and any applicable instructions.

Uniform Call Distribution (UCD)

Eight Uniform Call Distribution (UCD) groups can be programmed, each containing up to eight three-digit station numbers. Each group is assigned a pilot number. When this number is dialed, the first available agent in that group is rung. Calls are routed to the station that has been on-hook for the longest period of time.

UCD Calls in Queue Display

From an idle display key telephone:

1. Dial [567] on the dial pad, followed by the three-digit UCD group number (55X),

   -or-

   Press pre-programmed flex button. ON/OFF button LED lights steady.

   This display is an idle state display and prompts a Supervisor that a group is having problems answering all their calls. The display tells the agent and their supervisor how many calls are in queue, how many agents are available or logged into the group, and the length of time in minutes that the oldest call has been in queue. The agent automatically receives the calls in queue display whenever there is a call in queue.
2. Hang up handset or press ON/OFF button to terminate the display.

This feature cannot be used with a call in progress and the station is considered busy for incoming calls during this operation.

UCD Available/Unavailable Mode

If you are a UCD agent, you may place your station in the Available mode to receive UCD type of calls or you may place your station in the Unavailable mode to block UCD type calls from ringing your station.

Placing a Station in Available Mode

Dial [566] on the dial pad,

-or-

Press the pre-programmed Available/Unavailable button.

Placing a Station in Unavailable Mode

Dial [566] on the dial pad,

-or-

Press the pre-programmed Available/Unavailable button. You are now blocked from receiving UCD calls.

UCD Overflow Station - Forwarding Assignments

An enhancement has been made to the UCD Overflow Station to allow UCD calls reaching the UCD Overflow Station to call forward to another station.

1. Lift the handset or press ON/OFF button.
2. Press the pre-programmed FWD button.
3. Dial the desired code:

   [6] = All Calls

   [7] = No Answer Calls

   [8] = Busy Calls

   [9] = Busy and No Answer Calls.
4. Dial the destination number where calls are to be forwarded (Station, Voice Mail, UCD groups, or Hunt group). A confirmation tone is heard.
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift handset or press ON/OFF button.
2. Press the pre-programmed FWD button. A confirmation tone is heard and the FWD LED is extinguished.

Universal Day/Night Answer (UDA/UNA)

Incoming CO lines can be programmed for Universal Day Answer (UDA) or Universal Night Answer (UNA). UDA/UNA assigned CO lines can also signal over the external page port(s). If External Day programming is enabled and the system is in the day mode, the assigned external page port(s) presents a ringing signal. UDA/UNA is established on a per CO line basis in admin programming.

When the system is in day or night mode and you hear outside line ringing at another station and wish to answer it:

Dial [#5] on the dial pad. The connected outside line can be transferred or disconnected.

Each telephone utilizing Universal Day/Night Answer must have a loop button appearance if the ringing outside line does not appear at their phone.

Conditions

- During the Day mode, all common CO lines ring when programmed for UDA ringing.
- CO lines not programmed for UDA ringing does not participate in common audible ringing.
- If External Day ring is disabled, or the system is not in the day mode, no external page ringing occurs.
- Ringing CO lines not assigned CO line group access for a particular SLT may be answered in a UDA service. Dialing privileges are not granted on CO lines that an SLT does not have access to. CO lines not given UDA status may not be answered or accessed via UDA procedures.
- If two SLTs attempt to retrieve a single ringing CO line simultaneously, one user is connected to the incoming CO line and the other user receives intercom busy tone.
- The special ring mode is treated as day mode.

Voice Mail Groups (VM)

Forwarding Callers to your Mailbox

Intercom and Transferred CO callers may be routed directly to your mail box by forwarding your phone to a voice mail group. Callers are then greeted by your personal voice mail greeting if available.

Retrieving Voice Messages

If your Message Waiting button or programmed Voice Mail group button is flashing, you may have a voice message waiting for you.

To enter the voice mail system to check for mail:

Dial the Voice Mail group number,

-or-

Press the pre-programmed Voice Mail Group button or flashing Message Wait button. You are immediately prompted to enter your password for your mail box.

Receiving a Voice Mail Message Wait

To receive a message waiting indication that a voice message has been taken for you, the Voice Mail system must be programmed to provide such an indication. After the voice mail system receives a voice message for a station user:

1. The voice mail must go off-hook and dial the Voice Mail Message Wait code [420] on the dial pad.
2. Dial the extension number of the station user who received a voice message.

Turning Off Message Waiting Lamp

When a station user retrieves the voice messages:

1. Dial the Message Cancel code [421] on the dial pad to program the VM system to go off-hook.
2. Dial the extension number of the station user who received a voice message.

VM Transfer with ID Digits

The VM Transfer with ID Digits feature provides an Attendant or station user a way to transfer a caller directly into a voice mail box. This allows the station identification digits to be entered by the transferring party. Using this feature a caller can be transferred to a voice mail box when: 1) a station user on the system is not forwarded to VM, or 2) the destination Voice Mail Box owner is not a station user.

When a caller wants to be transferred into a user's Voice Mail box and the desired user's station is not forwarded into voice mail, then the Attendant or a station user may initiate a Voice Mail Transfer.

While on a call and the distant end wants to leave a Voice Message for a VM user, the initiating station performs the following steps:

1. Press the TRANS button.
2. Dial the Voice Mail Group number,

   -or-

   Press the pre-programmed VM group button.
3. Dial the VMID (Mail Box location) of the desired party and go on-hook.

   The system then makes the connection to an available Voice Mail port and send the Leave Mail Prefix (if any) + the digits dialed as the VMID number + then the Leave Mail Suffix digits (if any). The system then cuts through the transferred caller.

The VMID (mail box location) can be any number 000 through 999. If 4-digit VMID (Flash 09) is enabled, the range is 0000 through 9999.

Conditions

- CO Trunks and Internal Calls may be transferred into Voice Mail using this feature.
- If no VMID digits are dialed by the transferring station then the identification digits of the transferring station is sent to the VM.

VM Tone Mode Calling Option

The VM Tone Mode Calling feature allows the Voice Mail system to override a called stations H or P intercom settings.

When placing a call to a station and Tone ringing is desired, the Voice Mail system **must** be programmed as follows:

1. Dial [6#] on the dial pad.
2. Dial the station extension (call tone rings station).

Volume Controls

There are two volume wheels on the right side of the Key Telephone. (Sliding the switch toward you decreases the volume.)

1 -- The front wheel is for voice, background music, and speakerphone volume.

2 -- The back wheel is for tone ringing volume.

6 Digital Station Operation

The *Triad 1/2/3* System has a variety of features and flexible programming, allowing each telephone user to program the telephone to meet their individual needs.

This chapter contains the following information:

- Operating instructions for the digital telephone.
- Telephone key descriptions and their functions.
- Visual and audible cues that accompany the various steps for operating the features.

A *Station User's Guide* is also available that provides detailed operating instructions.

Introduction

Each *Triad 1/2/3* System provides the all the keys, indicators, and features described.

Handset and Speaker are located at the left side of the front panel. A handset is provided to allow confidential conversation when desired. Lifting the handset from its cradle (going off-hook) disengages the station's built-in speaker. The speaker is located directly below the center portion of the handset.The station may be operated with the handset on-hook. When this occurs, audio is transmitted to the station user through the station's speaker.

Figure 6-1: Executive Digital Telephone

Digital Telephone Description

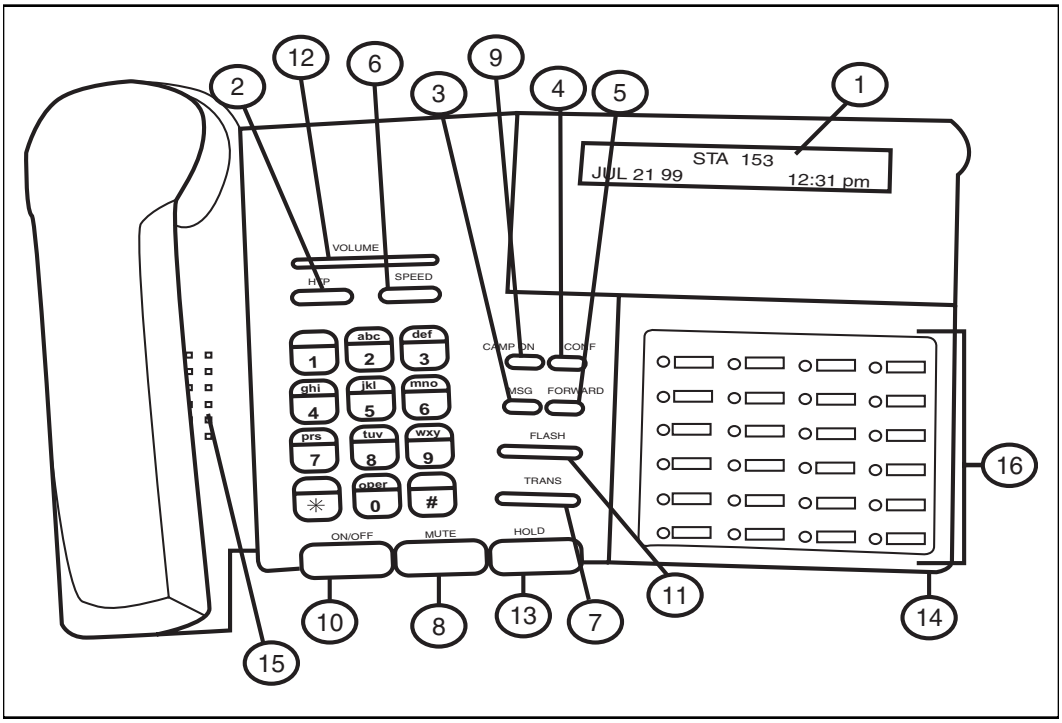


Figure 6-2: Digital Key Telephone

Table 6-1: Digital Key Telephone Buttons

Number	Feature	Description
1	Display (Executive Models only)	Displays information about telephone status, dialing directories, and text message information.
2	h.t.p.	Used to select mode of operation: Handsfree, Tone, or Privacy.
3	*msg* Key	Used for Auto-CallBack to a telephone which has left a text message or to access voice messages.
4	*conf* Key	Used to establish conference calls.
5	*forward* Key	Used to forward your calls to another station or voice mail.
6	*speed* Key	Used to access speed dialing, save number redial, and last number redial. This button also is used to access flex button programming.
7	*trans* Key	Used to transfer an outside call from one station to another.
8	*mute* Key	Used to activate/deactivate MUTE function. When activated, the party on the other end cannot hear you.
9	*camp-on* Key	Used to alert a busy station that an outside line is on hold and waiting for them.
10	*on/off* Key	Used to make a call without lifting the handset.
11	*flash* Key	Used to end an outside call and to restore dial tone without hanging up receiver.
12	*volume* Key	Used to adjust level of tones, background music, ringing, receiver volume, and display contrast.
13	*hold* Key	Used to hold calls, to retrieve held calls.
14	Microphone	Used to talk with other party without using the handset.
15	Speaker	Outputs tones and voice at your extension.
16	Flexible Button Keys	Used to access outside lines or access call-handling features.

Flexible Buttons provide access to idle outside lines, DSS/BLF for internal stations, access speed dial numbers and activate features. These buttons can be programmed by the individual station user. The default flex feature buttons are described as follows:

- CALL BACK button lets you initiate a call back request to another busy station. As soon as that station becomes idle, the station that left the call back request is automatically signaled. A flex button must be assigned to use this feature.
- PICK-UP button lets you pick up a tone ringing intercom call, transferred, incoming, or recalling outside call to a specific unattended station, by group or directed call pick-up.
- DND (DO NOT DISTURB) button lets the user place their telephone into Do Not Disturb mode to eliminate incoming outside line ringing, intercom calls, transfers and paging announcements. The station in DND can use the telephone to make normal outgoing calls. On Attendant stations, this button becomes the system Night Mode button. A flex button must be assigned to use this feature.
- LINE QUEUE button lets you queue to an outside line when all lines in a group are busy. Your station is placed in queue, awaiting a line in the same group to become available.

Outside Calls are announced by a tone signal repeated every 3.2 seconds. The corresponding outside line indicator flashes slowly.

Intercom Calls can be tone ringing or voice announce. If voice announced, the receiving station receives three tone bursts prior to the announcement. If a tone ringing call, the receiving station hears a tone ring every 2.4 seconds.

Digital Numbering Plan

Table 6-2: Digital Telephone Numbering Plan

ACD* Agent Help	574
ACD* Agent Login (Primary Grp)	572+[5UU]
ACD* Agent Login (Secondary Grp)	582+[5UU]
ACD* Agent Logout (Primary Grp)	571
ACD* Agent Logout (Secondary Grp)	581
ACD* Call Factor (requires button)	580+[5UU] +[FFF]
ACD* Call Qualifier	570+[YY]
ACD* Group Member Status	573
ACD* Group Pilot Numbers 1-16	5+[UU]
ACD* or UCD Available/Unavailable	566
ACD* or UCD Calls in Queue Display	567 55+[U]
ACD* Overflow Sta Avail/Unavail	578
ACD* Supervisor Login	576+[5UU]
ACD* Supervisor Logout	575[5UU]
ACD* Supv Queue Status Display	577+[5UU]
Attendant	0
Background Music	632+[0, 1, 2]
Call Forward - All	[FWD]+[6]
Call Forward - Busy	[FWD]+[8]
Call Forward - Busy/No Answer	[FWD]+[9]
Call Forward - No Answer	[FWD]+[7]
Call Forward - Follow Me	642
Call Forward Override	5#
Call Park Location - Personal	438
Call Park Location - Station	439+[XXX]
Call Park Location - System	43+[C]
Call Park Pickup (Key and SLT)	#43+[C]
Clear Call Forward, DND, Msg	662
CO Line Direct Access	88+[LLL]
CO Line Group (LCR if 911 active)	800
CO Line Groups 1-24	800-823
Dial By Name	6✳
Directory Dial	680
Distinctive Ringing	695
Do Not Disturb	631
Executive Override/Monitor Barge-In	625
Extension Numbers - *Triad 1/2*	100-171
Extension Numbers - *Triad 3*	100-351
Group Call Pick Up (Key and SLT)	#0
Headset Mode	634
Hunt Group Pilot Numbers	45+[H]
ICLID Display (Answered Calls)	659
ICLID Display (Unanswered Calls)	635
Last Number Redial	[SPEED]+[#]
LCR or CO Line Grp 1 (if LCR disabled)	9
LCR Queue Cancel	626
Loop Key (Requires Button)	89
Message Wait	623
Modem via DISA Access or Trans	499
Name in Display Programming	690
Off-Hook Pref Programming	691+[BB]
Off-Net - Call Forward	[FWD]+[✳]
OHVO Enable	628
Page - All Call (Int & Ext)	700
Page - External All Call (All Zones)	76+[0]
Page - External Zones	76+[P]
Page - Internal All Call (All Zones)	709
Page - Internal Zones 1-8	701-708
Page - Meet Me (Answer)	770
Personalized Messages	633+[ZZ]
Personalized Messages - Clear	633+[00]
Repeat Redial	643
Save Number Redial	[SPEED]+[✳]
Speed Dial Access (000-019 Sta) (020-999 Sys)	[SPEED]+[YYY]
Station Relocate	636+[XXX]
Tone Mode Ring Option	6#+[XXX]
UCD Group Pilot Numbers	55+[U]
Universal Day/Night Answer	#5
Voice Mail Grp Pilot Numbers	44+[V]

LEGEND --

C = Call Park Location (0-7)
FFF = ACD Call Factor (000-999)*
H = Hunt Group Number (0-7)
LLL = Line Number
(001-048 Triad 1/2, 001-144 Triad 3)
P = External Page Zone Number (1-2)
U = UCD Group Number (0-7)
UU = ACD (50-65)*
V = Voice Mail Group Number (0-7)
XXX = Intercom Station Numbers
YYY = Speed Dial Bin Numbers
ZZ = Personalized Messages

** Features available with optional software*

Account Codes

When connected to an outside line call:

1. Press the pre-programmed ACCOUNT CODE button.
2. Dial account code up to 12-digits. (The other party does not hear the digits being dialed).
   - If account code is less than 12-digits, an [✳] must be entered to return to the call.
   - If account codes are forced, the account code must be entered prior to dialing the outside number.

SMDR must be enabled for the Account Code feature to operate. Also, SMDR must be enabled for the account code to become part of the SMDR record.

Account Codes/Traveling COS (Verified)

The Verified Account Code/Traveling Class of Service (COS) feature provides the ability to track 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 feature 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 presented.

Using forced Account Codes is optional, available on a system-wide basis. SMDR must be enabled for the account code to print as part of the SMDR record. The *Triad 1/2/3* System allows up to 250 12-digit account codes for verification purposes.

Entering an Account Code Prior to a CO Call

1. Press pre-programmed ACCOUNT CODE button before accessing a CO line.
2. Dial the account code up to 12-digits. If the account code matches a verified account code, intercom dial tone is returned. Otherwise an error tone is presented.
3. Access the outside CO line or dial the LCR code and dial the desired number.

SMDR must be enabled for the Account Code feature to operate. Also, SMDR must be enabled for the account code to become part of the SMDR record.

Conditions

- Verified Account Codes allow use of an account code as a traveling Class of Service.
- If LCR is activated in the system and verified account codes are forced, the user must enter the account code before dialing the LCR code.
- When verified account codes are forced, station MUST enter an account code to dial a number that is restricted through station COS and toll restriction. An account code is not required for calls that are unrestricted through station COS and toll restriction.
- When verified account codes are not forced, a station user may place a call without entering an account code. In this case, the station user's COS is based on their station COS. In this case, a user can enter a verified account code to upgrade their COS.
- The Redial feature does not support Verified Account Codes.

Answering a Recall

When an outside line remains on hold for an extended time period, a recalling ring reminder is sent. (If Preferred Line Answer is enabled, skip step 1.)

1. Press outside line, LOOP or POOL button flashing at very fast rate.
2. Lift handset or press ON/OFF button to converse.

Answering Machine Emulation

When a call is sent to a voice mailbox, the station associated with that can press a pre-programmed button to listen to the caller leaving the voice mail message. If the mailbox owner decides to speak with the caller, they can press the pre-programmed button to be connected to the caller.

Notification Methods

Two methods of notification are available, a Ring Mode or a Speaker Mode. The pre-programmed button type (654+0=Ring Mode, 654+1=Spkr Mode) defines the operation mode.

EXAMPLE -- Station A places their phone in the answering machine mode by pressing the flexible button programmed on the telephone. The button light is solid red. Whatever button type is assigned on the telephone defines the operation mode of the feature.)

When an incoming CO call rings at a station and forwards (except busy type) to the station's voice mailbox:

- In RING MODE, the pre-programmed answering machine flex button flashes at 480 ipm red while the caller is in the owner's mailbox. The mailbox owner presses the pre-programmed flashing button and the audio is broadcast over the speaker of the keyset. The mute key is enabled on the keyset at this point. The LED light is solid red.
- In SPKR MODE, the voice mail message is broadcast over the speaker. The mute key is enabled on the keyset and the LED light is solid red.

Mailbox Options

- **To leave the caller in the voice mail** and stop the speaker broadcast, press the ON/OFF button. The mailbox owner can continue to listen to the message being left without taking action at their keyset. When the caller disconnects after leaving the voice mail message, the button returns to solid red and the keyset returns to idle.
- **To talk to the party** leaving the message, press the MUTE key. The station remains in the CONF mode, and the caller hears the voicemail and the station user.

- **To pick up the call**, press the flexible button. When the call is picked up, the voice mail system disconnects from the call, and the voice mail port returns to the idle (waiting) state. The caller is in a normal talk state with the CO caller.

Conditions

- The user must have an Electronic or Digital Keyset.
- Keyset must have a pre-programmed ANSWER MACHINE flex button.
- After the in-band digits are sent to the voice mail, the station's flexible button status is checked. The feature is executed based on this check. The result of the check is as follows:

  - Inactive = no feature operation executed

  - Active = feature executed as per button function (ring mode or speaker mode)
- An idle station can press the flexible button to go to the inactive mode. The LED extinguishes and no answer machine calls are presented to the station.
- Once the button is programmed at the station, it is in the inactive mode (LED extinguishes).
- If the station user answers the call, the normal CO line LCD window displays. The call timer shows the elapsed time including the time the caller was in VM. The call timer does not start at 0 in this case.

Display Messages

When a call is ringing the station in ring mode, this message displays:

```
VM SCREENING RING
MMM DD YY                HH:MM am
```

When a station is monitoring the caller in VM, this message displays:

```
VM SCREENING
MMM DD YY                HH:MM am
```

Answering Machine Emulation only operates on Station Forwarding.

Automatic Call Distribution (ACD)

The ACD feature is available with optional software. When purchased, Uniform Call Distribution (UCD) is not used and is replaced by the ACD functions identified below. Sixteen (16) Automatic Call Distribution (ACD) groups can be programmed, each containing up to sixty (60) three-digit station numbers for *Triad 1/2* and 252 station numbers for *Triad 3*.

ACD Agent Help

The ACD Agent HELP feature provides a means for an ACD agent to signal their assigned supervisor for assistance. A flex button must be programmed for this feature.

While on a call in progress, the agent:

- Presses their pre-programmed HELP flex button. A confirmation tone is heard by the agent. The agent's HELP button illuminates if a supervisor is logged into their ACD group. If no supervisor is logged in, the agent receives a burst of error tone and the HELP button does not illuminate.
- The ACD supervisor station receives a Help message when an ACD member that belongs to the same group initiates a Help request. The Help function also sends a Camp-On tone to the speaker of the supervisor's keyset. The Help message takes precedence over any other message and can be cleared by the supervisor by pressing their HELP button.
- At the time the supervisor receives a Help request, they can press their HELP flex button followed by the override feature button to bridge onto the ACD group member's call. The HELP button places an intercom call to the station requesting Help. The Help message is cleared after the supervisor's HELP button is pressed. The Help message is also cleared if the agent was on a call and went back on-hook before the supervisor could respond. In this case, the Help message is converted to a message wait indication. The agent can also clear the Help request by pressing their HELP button a second time.

Conditions

- Up to five (5) messages can be left at any supervisor station.
- The supervisor can cancel a Help request signal by pressing their flashing HELP button. A call is placed to the agent requesting Help. If the agent is on a call, the supervisor can press the BARGE-IN button to monitor the call or give assistance.

Agent Login/Logout

The Agent Login/Logout feature lets an Agent log into a Primary and Secondary ACD group to receive calls. An Agent must first login to be placed into an active ACD state.

If a member is assigned to a specific ACD group and uses the login-logout codes to enter and exit an ACD group, other than their assigned group, the database is changed to reflect the different group.

When the agent logs in or out of their ACD Group, an ACD login-logout event is sent to the ACD Events Trace port, if active.

Primary Group

To **log in** an ACD Primary Group:

Dial LOGIN CODE **[572]** on the dial pad, followed by the desired ACD group number (5XX),

-or-

Press a pre-programmed LOGIN flex button.

The Agent enters their unique AGENT ID code (0000-9999). The LOGIN flex button LED is lit steady. A confirmation tone is heard and the agent is logged onto the ACD group.

- The ON/OFF LED extinguishes if the agent started the sequence in the handsfree mode.
- The ACD Agent Login LED only lights for the ACD group that is assigned to that button.

To **log out** of an ACD Primary Group:

Dial LOGOUT CODE **[571]** on the dial pad,

-or-

Press a pre-programmed LOGOUT flex button. The LOGIN flex button LED extinguishes.

Secondary Group

To **log in** an ACD Secondary Group:

Dial LOGIN CODE **[582]** on the dial pad, followed by the desired ACD group number (5XX),

-or-

Press a pre-programmed LOGIN flex button.

The Agent enters their unique AGENT ID code (0000-9999). The LOGIN flex button LED is lit steady. A confirmation tone is heard and the agent is logged onto the ACD group.

- The ON/OFF LED extinguishes if the agent started the sequence in the handsfree mode.
- The ACD Agent Login LED only lights for the ACD group that is assigned to that button.

To **log out** of an ACD Secondary Group:

Dial LOGOUT CODE **[581]** on the dial pad,

-or-

Press a pre-programmed LOGOUT flex button. The LOGIN flex button LED extinguishes.

Conditions

- If a member is assigned to a specific ACD group and uses the login-logout codes to enter and exit an ACD group, other than their own group, the database is changed to reflect the different group.
- If an agent logs into an ACD group from a station that is logged into another ACD group, the station is automatically removed from the previous ACD group.
- An agent may log out while in wrap-up, or unavailable.
- An agent logging in is placed in wrap-up mode before receiving an ACD call.
- If an agent attempts to log into an ACD group that already has the maximum number of members, that agent receives an error tone.
- The *Triad 1/2/3* Digital System does not verify agent's ID codes, other than requiring entry of four digits.
- An Agent may not login to the same group as a primary and secondary member.

ACD Agent Queue Status Display

From an idle key telephone:

1. Dial [567] on the dial pad,

   -or-

   Press pre-programmed flex button.
2. Dial the ACD group number (5XX). ON/OFF button LED lights steady.
   - The Agent Queue Status display shows the following information:

   ```
   ACD5XX  00  CALLS IN  QUEUE
   MMM DD YY                HH:MM am
   ```

   5XX = ACD Group (550-565)

   - This idle display tells the agent and/or their supervisor how many calls are in queue.
3. Replace handset or press ON/OFF button to terminate the display.

This feature cannot be used with a call in progress. The station is considered busy for incoming calls during this operation. Each time this feature is used, wrap-up is started.

The agent automatically receives an enhanced Calls in Queue display whenever there is a call in queue. The display shows the following:

```
5XX: CIQ: XX  AGENT(S): XX
OC:                      HH:MM:SS
```

5XX = ACD Group (550-565)
CIQ: XX = Calls in queue
AGENT(S): XX = Agents logged in
OC: HH:MM:SS = Oldest call in hours, minutes and seconds

This feature also allows an ACD station (12/24 button executive only) to assign multiple buttons that display the calls in queue for a particular group on the LCD. Additionally, the button LED indicates the number of calls in queue, determined in programming.

From an idle key telephone:

The pre-programmed flex button for the ACD group being monitored is flashing at 240 ipm indicating there are calls in queue.

1. Press the pre-programmed flex button. The Agent Queue Status display shows the following:

```
ACD5XX  00  CALLS IN QUEUE
MMM DD YY                HH:MM am
```

5XX = ACD Group (550-565)

The idle display tells the agent and/or their supervisor how many calls are in queue.

2. Replace the handset or press the ON/OFF button to terminate the display.

The user assigns a flexible button by dialing 579 XXX. (XXX is the ACD group number 550-565.)

Conditions

Any ACD station can have a button assigned to view the calls in queue for any ACD group.

ACD Available/Unavailable Mode

If you are an ACD agent, you may place your station in the Available mode to receive ACD calls, or you may place your station in the Unavailable mode to block ACD calls from ringing your station.

Making a Station Available

Dial [566] on the dial pad,

-or-

Press the pre-programmed AVAILABLE/UNAVAILABLE button. You may now receive ACD calls.

Making a Station Unavailable

Dial [566] on the dial pad,

-or-

Press the pre-programmed AVAILABLE/UNAVAILABLE button. You are now blocked from receiving ACD calls.

ACD Call Factor

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 (Flash 60, Button #14) or the ACD supervisor can use a flexible button, [580]+ACD group number+XXX (Call Factor in minutes 000-999), to enter the factor (average call duration).

The following formula is used to calculate the average call duration:

$$\frac{\textit{(Place in Queue) (Call Factor)}}{\textit{Number of Agents Logged into Group}}$$

ACD Call Qualification

The CALL QUALIFICATION feature provides a means for an Agent on ACD calls to enter call identification codes. This feature provides up to four digits for the ACD SMDR reporting function. Up to 12 digits can be entered, however only the first four digits are used in the SMDR record.

While Agent is on a call:

1. Press the pre-programmed CALL QUALIFY flex button, followed by the four-digit qualify code.
2. Enter a [✳] to complete the sequence. A short burst of confirmation tone is heard through the keyset speaker, if programmed.

Conditions

- The outside party does not hear the (qualify code) account code being entered.
- The qualify code is the first four digits of the account code. Therefore, the account code record in the SMDR contains the qualify code in the first four digits.
- The qualify code must be entered during CO talk state.
- The QUALIFY button is programmed using a flex code [570+##] or a speed bin number [570+YY]. The speed bin number can also have the Call Qualifier code.

ACD Group Member Status

The ACD Group Member Status feature provides a means for an ACD Supervisor/Agent to view the status of the 16 ACD groups in the system. This display tells the Supervisor/Agent which stations are logged into the group, and if the stations logged in are Available/Unavailable, Out-of-Service, in DND, or busy on a call.

Any station (Supervisor or Agent) logged onto the ACD group view the group members display as follows:

1. Dial ACD Group Member Status code [573],

   -or-

   Press pre-programmed flex button. Display shows ACD Group 550.

   The status of the ACD agents is displayed with a letter following the station number where the agent is logged in.

   ```
   ACD5XX: 110A 111A 112A
   113O 114U 115D 116B 117N
   ```

   (N) = Not Equipped
   (D) = Do not Disturb
   (O) = Out of service
   (U) = Unavailable
   (B) = Busy on a call
   (A) = Available
   NOTE – If an Agent made a call while out of service, the status would be out of service, not busy.

2. Press [✳] to scroll up to the next ACD Group. If more than eight members are in the ACD group, the next depression of the [✳] displays the additional members,

   -or-

   Press [#] to scroll down to the previous ACD Group. To return to an idle display, the Supervisor/Agent station goes to on-hook condition.

Conditions

- The ACD Group Members Status display is updated at the time the code is dialed.
- If an agent made a call while out of service, the status would be out of service, not busy.

ACD Overflow Station - Available/Unavailable Mode

If you are an ACD Overflow station, you may place your station in the Available mode to receive ACD calls, or you may place your station in the Unavailable mode to block ACD calls from ringing your station.

Placing a Station in Available Mode

Dial [578] on the dial pad,

-or-

Press the pre-programmed AVAILABLE/UNAVAILABLE button. You may now receive ACD calls.

Placing a Station in Unavailable Mode

Dial [578] on the dial pad,

-or-

Press the pre-programmed AVAILABLE/UNAVAILABLE button. You are now blocked from receiving ACD calls.

ACD Overflow Station - Forwarding

The ACD Overflow Station feature allows ACD calls reaching the ACD Overflow Station to follow the call forward of the overflow station.

1. Lift the handset or press ON/OFF button.
2. Press the FWD button.
3. Dial the desired code:
   [6] = All Calls
   [7] = No Answer Calls
   [8] = Busy Calls
   [9] = Busy and No Answer Calls
4. Dial the desired destination number where calls are to be forwarded (Station, Voice Mail, ACD or Hunt groups). Confirmation tone is heard.
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift handset or press ON/OFF button.
2. Press the FWD button. A confirmation tone is heard and the FWD LED is extinguished.

Supervisor Login/Logout

The Supervisor Login/Logout feature provides a means for a supervisor to log into one of the ACD groups and monitor calls.

- To log in, dial LOGIN CODE **[576]** on the dial pad, followed by the desired ACD group number (5XX),

  -or-

  Press a pre-programmed LOGIN flex button. (Flex button must have 576+5XX programmed onto it.)

  The Supervisor enters a unique SUPERVISOR ID code (0000-9999). The LOGIN flex button LED is lit steady. A confirmation tone is heard and the supervisor is logged onto the ACD group. The ON/OFF LED extinguishes if the supervisor started the sequence in the handsfree mode. When the supervisor logs in, an ACD login event is sent to the ACD Events Trace port, if active.

- To log out, dial LOGOUT CODE **[575]** on the dial pad, followed by the desired ACD group number (5XX),

  -or-

  Press a pre-programmed LOGIN/LOGOUT flexible button, the LED extinguishes.

ACD Supervisor Log-in LED only lights for ACD group assigned to that button.

The same flex button can be used to toggle the Login/Logout feature.

Conditions

- Only 1 supervisor can be logged into a group.
- If a supervisor logs into an ACD group from a station that is logged into another ACD group, the station remains in the previous ACD group.
- A supervisor may log out while in wrap-up, or unavailable.
- A supervisor logging in is first placed in Wrap-Up mode before receiving an ACD call.
- If a supervisor attempts to log into an ACD group as an agent and that group already has 32 members, the supervisor receives error tone.

- The *Triad 1/2/3* Digital System does not verify the supervisor's ID codes, other than requiring that four digits are entered.
- Flex button must have 575+5XX programmed onto it.

Supervisor Monitor With Barge-In

The Supervisor Monitor with Barge-In feature provides a means for an ACD supervisor to monitor an agent's call in progress, to coach sales techniques or customer relations skills.

When used, a supervisor may intrude onto an agent's call in a listen-only mode or in a true conference mode by use of the Barge-In feature. This feature is available with or without a warning tone.

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.

The ACD supervisor can intrude on an agent's call in the Listen Only mode as follows:

1. Dial the agent's station number.
2. Upon hearing a busy tone, press the pre-programmed BARGE-IN flex button.
   - The conversation in progress is heard by the Supervisor on the handset receiver and the Supervisor's MUTE button LED is lit indicating that the Supervisor's transmit is muted.
   - If the Supervisor wishes to participate in the conversation in a true conference mode, they can press the MUTE button which removes mute.

The Executive Override Code, [625] programs Supv Monitor with Barge-In feature onto a flex button.

Conditions

- Supervisors are granted the Barge-In option if they log in at a station with the ACD Supervisor Barge-In enabled in station programming.
- Supervisors can only Barge-In on calls of ACD group(s) members into which they are logged.

Supervisor Queue Status Display

The Supervisor Queue Status feature provides a means for an ACD supervisor to view the status of their ACD group. This idle display and prompts a Supervisor when a group is having problems answering their calls. The display tells the supervisor how many calls are in queue, how many agents are logged into the ACD group, and the length of time, in minutes, that the oldest call is in queue.

Viewing the Queue Status Display

Dial the Queue Status code [577] on the dial pad, followed by the ACD group (5XX) the supervisor wants to observe,

-or-

Press the pre-programmed flex button.

The Queue Status display shows the following information:

```
5XX: CIQ: XX AGENTS: XX
OC:                    HH:MM:SS
```

5XX = ACD Group (550-565)
CIQ: XX = Calls in queue
AGENT(S): XX = Agents logged in
OC: hh:mm:ss = Oldest call in hours, minutes and seconds

Changing the Display to a Different Group

Dial the Queue Status code [577] on the dial pad, followed by the ACD group they want to observe,

-or-

Press the pre-programmed flex button.

Conditions

- To receive the Supervisor's Queue Status display, station must be logged in as Supervisor and dial the flex code for the desired group.
- ACD Supervisors receive the Queue Status display in real time.
- The Queue Status display is only given when the ACD group member or Supervisor's station is not receiving a higher priority display, such as HELP or Out-Of-Service, or other applicable off-hook events are taking place at the station.

- The Supervisor's Queue Status display is saved in battery backed memory.
- When a Supervisor logs out of the group presently displayed, they must enter a new request for Queue Status display.

Zap Tone

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. (A flex button must be programmed for this button to operate.)

Background Music (Optional)

1. Dial **[632]** on the dial pad,

   -or-

   Press the pre-programmed flexible button. The LCD display shows the following:

```
    0:OFF     1:CH-1     2:CH-2
MMM DD YY                HH:MM am
```

2. Enter the desired channel on the dial pad. Confirmation tone is heard. Music is now heard through the speaker.
3. Press the Volume Bar to change the volume. The following message displays:

```
SPEAKER BGM              [#########]
MMM  DD  YY               HH:MM am
```

Conditions

- When you pick up the handset or press the ON/OFF button, music is discontinued automatically.
- Once the headset is enabled, BGM is discontinued.

Call Back

If you dial a telephone that is busy and want to activate Call Back:

1. Press the CALL BACK button.
2. Hang up.
3. When the busy station hangs up, you are signaled.
4. Answer the call; station you called is then signaled. (If your station is busy when signaled, an automatic MSG is left at your phone).

A call back request is automatically invoked anytime a user listens to the intercom busy tone for a preset period of time.

Only one Call Back request can be left at a station; the second request is converted to a message wait call back request.

Call Coverage

The Call Coverage feature lets stations answer calls for other stations that are ringing. A Visual and Audible status of ringing stations to an assigned coverage station are provided.

Once the button is assigned on the station and a call rings in:

1. The coverage station hears ringing for the coverage station after a programmable period of time. The ring tone is the internal ring tone cadence. The coverage station's LCD identifies the ringing station as:

```
CALL FOR STA XXX
MMM DD YY                HH:MM am
```

2. The Coverage station then presses their flashing COVERAGE flexible button,

   -or-

   Presses the ON/OFF button,

   -or-

   Lifts the handset if PLA is enabled.

The flash rate is the same as the incoming CO line ringing rate. The call is answered and ceases to ring at any other stations that may have the same coverage appearance. The following message is displayed after the call is answered:

```
CALL TO STATION XXX
FROM STA YYY              HH:MM:SS
```

By default, no call coverage buttons are assigned.

Conditions

- This feature can cover SLT extensions, however an SLT cannot perform the call coverage function. The SLT extension need not be physically installed, only the SLT card must be installed.
- Direct CO calls have ring and LCD priority over call coverage calls. The call coverage station must have a direct CO appearance or LOOP button to pick up an external call. If the call coverage station is in DND, no audible ringing is heard, however visual and LCD information is presented.
- This feature can be programmed on any key station or DSS Console with an available flexible button. If the DSS with a call coverage button assigned is unplugged or moved, the station associated with that DSS stops ringing until the DSS is plugged in again.
- Camp-On or Override drops any internal callers to which a station is talking.
- Only one button type (646 or 647) per covered station can be assigned on a keyset.

Call Forward: Station

Call Forward - All Calls

Forwarding All Calls

1. Lift handset or press ON/OFF button.
2. Press the FWD button or dial [640].
3. Dial the All Calls code [6].
4. Press DSS button of desired station,

   -or-

   Dial the desired extension number where to forward calls, including ACD or UCD, Voice Mail, Hunt Group pilot numbers and Speed Dial bins for off-net forwarding.
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift handset or press ON/OFF button.
2. Press the FWD flex button. A confirmation tone is heard and the FWD LED is extinguished.

Conditions

- Call Forward remains engaged until manually released. When released, the station number is returned to the LCD.
- Calls cannot be forwarded to a station in the DND mode.
- CO Line queues, a Message Waiting request, and pre-selected messages are canceled when a station is placed in the Forward mode.
- A Forwarded Call signals to the forwarded station in the Tone mode, regardless of the Intercom Signaling Switch mode selection.
- A station in the Forward mode can make outgoing calls.
- A Camp-On signal is allowed at the forwarded station if that station is busy.
- A station denied the use of Call Forwarding receives an error tone when pressing the CALL FORWARD button.

- When in All Call Forwarding mode, ACD/UCD calls cannot be received.
- If a CO Line rings into a station with manual Call Forward, the line sequences to the last station of the chain. If the last station is in DND mode or does not have a Direct appearance for the CO Line or a Loop button, the call reverts back to the first station.
- If a CO Line rings into a station with both Station and Preset Call Forwarding, Station Call Forwarding takes precedence. Once the Station Forward determines the station to be rung as per above, preset Call Forward may then apply at the new station.
- An unlimited number of stations can be set up in a Station Call Forward chain. However, a station cannot forward to a station that is already a member of their chain.
- If the last number of the Station Call Forward chain is in DND mode, the internal caller gets a DND response.
- Calls to a station in both Station Call Forward and DND mode follow the forward.
- If a private line rings into a station with Manual Call Forward the CO Line forwards, providing the forwarded station has a direct CO Line appearance or an available Loop button.
- Idle Keyset in hands-free mode does not follow no answer/busy-no-answer forwarding for internal calls.

Call Forward - Busy

Activating Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the FWD button or dial [640] on the dial pad.
3. Dial the Call Forward Busy code [8] on the dial pad.
4. Dial the desired destination number where calls are to be forwarded. A confirmation tone is heard.
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Press FWD. Confirmation tone is heard and FWD LED is extinguished.

Call Forward - Busy/No Answer

Activating Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the FWD button or dial [640] on the dial pad.
3. Dial the Call Forward Busy/No Answer code [9] on the dial pad.
4. Dial the desired destination number where calls are to be forwarded. A confirmation tone is heard.
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the pre-programmed FWD button. A confirmation tone is heard and the FWD LED is extinguished.

Conditions

- The user cancels the feature by dialing the Call Forward code or pressing the Call Forward button again.
- For Call Forward No Answer, the number of rings before the call is forwarded is determined by the system-wide Call Forward No Answer timer.
- Stations Call Forwarded/No Answer forward incoming CO calls according to the Preset Forward Ring Timer.
- ICM calls forwarded to a VM group receive ringback until a member of the VM group becomes available.
- If a station is denied Station Call Forwarding, then Off-Net Forwarding is not allowed.

Call Forward - Follow-Me

The Follow-Me feature lets a user who is away from their station, activate/deactivate call forwarding from another station in the system. This lets the user forward their calls to their current location or into Voice Mail, ACD/UCD, Hunt Groups, or to any other station in the system. When this call forward is activated, all calls presented to the forwarded station forward to the destination station immediately.

Activating Follow-Me Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Dial the Follow-Me Forward code [642] on the dial pad.
3. Dial station number of the station from which forwarding is desired.
4. Dial the appropriate forwarding condition code.

   [6] = All Calls [8] = Busy

   [7] = No Answer [9] = Busy/No Answer
5. Dial the three-digit destination number where calls are to be forwarded. Station, Voice Mail, ACD/UCD, or Hunt Groups.)
6. Replace handset or press ON/OFF button.

Removing Follow-Me Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Dial the Follow-Me Forward code [642] on the dial pad.
3. Dial the station number of the station that forwarding is to be cancelled.
4. Dial [6] (regardless of the forward condition).
5. Redial the same station number. A confirmation tone sounds and the FWD LED extinguishes.

Establishing Follow-Me Call Forwarding (off-site location)

1. Dial into the system on a DISA or TIE trunk. Enter the DISA access code, if applicable.
2. Dial the Follow-Me Forward code [642] on the dial pad.
3. Dial the station number of the station from which forwarding is desired.
4. Dial the appropriate forwarding condition code.

   [6] = All Calls [8] = Busy

   [7] = No Answer [9] = Busy/No Answer
5. Dial the three-digit destination number where calls are to be forwarded. Station, Voice Mail, ACD/UCD, or Hunt Groups.) A confirmation tone sounds; five seconds later a dial tone is received.

Removing Follow-Me Call Forwarding (off-site location)

1. Dial into the system on a DISA or TIE trunk. Enter the DISA access code, if applicable.
2. Dial the Follow-Me Forward code [642] on the dial pad.
3. Dial the station number of the station that forwarding is to be cancelled.
4. Dial [6] (regardless of the forward condition).
5. Redial the same station number. A confirmation tone sounds; five seconds later a dial tone is received.

Conditions

- If a Call Forward mode is currently active at the station where forwarding is desired, the new forward becomes active and cancels the previous forward.
- Both internal and external calls to the affected station forward to the designated location.
- Call forwarding must be allowed in programming for the affected station.
- When remote forward is activated, the forwarding is immediate.
- A station's Call Forward status is stored in a battery protected area of memory. A station's Call Forward status is returned after a power failure or system reset occurs.
- When a key telephone is forwarded remotely, the key station's forward button lights. The station user may cancel the forwarding at their station by pressing ON/OFF, then the FWD button. SLT users can cancel their forwarding by going off hook and dialing the forward code.
- DISA callers entering the code and making a mistake are given error tone for 3 seconds, silence for 2 seconds, then the dial tone is returned.

Call Forward - No Answer

Activating Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the FWD button or dial [640] on the dial pad.
3. Dial the Call Forward No-Answer code [7] on the dial pad.
4. Dial the desired destination number where calls are to be forwarded. A confirmation tone is heard.
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the FWD button. A confirmation tone is heard and FWD LED is extinguished.

Call Forward - Off-Net (via speed dial)

1. Lift handset or press ON/OFF button.
2. Press the FWD button or dial [640] on the dial pad.
3. Dial [✳] on the dial pad. Dial the speed bin number (000-019, 020-999) that contains the number where calls are to be forwarded. A confirmation tone is heard and the FWD button LED is flashing.
4. Replace handset or press ON/OFF button.

Removing Off-Net Forwarding

1. Lift the handset or press ON/OFF button.
2. Press the FWD button. A confirmation tone is heard and FWD LED is extinguished.

Conditions

- The user cancels forwarding by going off-hook and pressing the FWD button.
- Forwarding is unconditional and occurs immediately when a station calls an Off-Net forwarded station.
- The call to a station is not answered until the outgoing CO Line is seized and the digits are out-pulsed. The calling Station receives ICM ringback until answered. Upon answer the Station receives whatever CO progress tones apply (Ringback, Busy, Error, Announcement, etc.).

- If a station is denied Station Call Forwarding, Off-Net forwarding is not allowed.
- Toll Restriction is based on the forwarding station's COS and the outgoing CO Line COS.
- The calling station must have an appearance (Direct, Loop) for the outgoing (Off-Net) line. The call is not forwarded if a Direct Appearance or LOOP key is unavailable.
- SMDR printout reflects transferred and outgoing calls like a DISA call record.
- Station users may use Station or System Speed Dial as the Speed Dial Bin used for Station Off-Net Forward.
- Call must be an intercom or transferred CO call.

Caller ID Name/Number

The Caller ID Name/Number feature lets a station user program a flexible button to view the number and name on the LCD when receiving a Caller ID CO call.

If the feature is enabled, use flex button [653], the LED is lit solid and the name/number is displayed. During the call, the user can press the flexible button to view the normal call information. The LCD displays the number of the caller on the top line the name on the bottom line.

Conditions

- When enabled, this display overrides transfer call LCD messages, ACD Ring messages, Call Pickup messages, and Answer messages. If the user wishes to view the Line Number/Call Timer and the standard call information, they can press the flexible button to toggle between the name/number and normal mode.
- By default, no button is assigned on telephones. A flex button must be programmed for this feature to operate.

Calling Station Tone Mode

Enables a calling station to override a called station's H or P intercom settings.

When placing a call to a station and tone ringing is desired:

1. Dial [6#] on the dial pad.
2. Dial the extension number,

   -or-

   Press DSS button of desired station (call tone rings station).

Call Park

While connected to an outside line:

1. Press TRANS button. The caller is put on hold.
2. Dial parking location (430 to 437). A confirmation tone is heard.
3. If busy tone is received, press TRANS twice, dial another park location.

Retrieving a Parked Call

1. Lift handset or press ON/OFF button.
2. Press the [#] button.
3. Dial parking location (430 to 437) where the call was parked.

Call Park (by Station Number)

While connected to an outside line:

1. Press TRANS button.
2. Dial [439] + XXX (station number).

Retrieving a Station Park Call

Dial [# 6] + XXX (user's station number, while at the user's telephone or from any telephone in the system).

-or-

Dial [438] from the user's station.

Conditions

- A flex button may be assigned to Call Park feature code 439. The user can press that flex button and dial a station number on the dial pad.
- The directed call pickup code for 8-button telephones is eliminated. 8-button telephones must assign a pickup button on the telephone to have the pickup feature.
- Only one call can be in a park location at a time. Multiple calls to the same station park location is not possible.
- The #6 code is flexible and can be assigned in Flash 52 programming.
- The call will be placed in the Station's Personal Park location.

Call Pick-Up

Directed

A station can pick up a tone ringing intercom call, transferred, incoming or recalling outside line to a specific unattended station. The call must be a tone ringing call:

1. Dial the station number of the known ringing telephone. Receive ringback tone or call announce tone depending on the intercom selector switch setting.
2. Press the pre-programmed PICK UP button to answer the call.

Conditions

User must have access to the specific outside line or a LOOP button for a directed call pick up.

Group

When intercom tone ringing, transferred outside line ringing, recall ringing or initially ringing call is heard at an unattended telephone:

1. Lift handset or press ON/OFF button.
2. Dial [#0] on the dial pad,

   -or-

   Press the pre-programmed PICK UP button to connect to the calling party.

You must be in the same pick up group as the ringing telephone to pick up the call.

Conditions

User must have access to the specific outside line or loop button to do a group call pick up.

Call Transfer

Outside lines can be transferred from one phone to another within the system. The transfer can be screened (announced) or unscreened to an idle or busy station, ACD or UCD Group, or Hunt Group.

Screened Transfer

While connected to an outside line:

1. Press DSS button where to transfer call (if programmed on your telephone),

   -or-

   Press TRANS button and dial the station number. The called extension signals according to the intercom position.
2. When that extension answers, announce the transfer.
3. Hang up to complete transfer.

If Direct Transfer Mode is enabled in admin programming, the supervised transfer is transferred directly to the key station handset.

Answering a Screened Transfer

Your intercom signals according to the intercom position.

1. Answer the intercom and receive the transfer notice.
2. Press the outside line button or LOOP button flashing on hold.

Transfer Search

When attempting to locate a party, press a station button to signal the desired station.

If the party is not located:

1. Press another station button to continue the search.
2. When the called party answers, hang up to complete the transfer.

Unscreened Transfer

When the called extension begins to signal, hang up to transfer the call (Recall Timer starts).

Camp-On

If you call a station that is busy and wish to alert them to your call:

1. Press the CAMP-ON button. Called station receives one-burst of ringing. Wait for their response.
2. When called party answers, consult with them or hang up to transfer the call.

If a station is in DND, only the Attendant can Camp On using the Attendant override feature. Camp-On or Override drops any internal callers to which that station is talking.

If you are on a connected call, hear one burst of muted ringing, and your CAMP-ON button is flashing, you have a call waiting.

1. Press the CAMP-ON button. Any outside line you are connected to is placed on hold. You may converse with the station placing the call.
2. Press flashing outside line button if a call is being transferred

If you do not have a CAMP-ON button:

- Go on-hook with present call. Camp-On rings through,

  -or-

- Place present call on hold, then go on-hook. Camp-On rings through.

Conditions

CAMP-ON button can be assigned on 8-btn telephones using code 620.

CO Line Access

Accessing an Outside Line

1. Press idle CO line button, POOL button,

   -or-

   Dial CO line group access code or LCR code (9, 801-823, 88+LLL).

   (LLL = 001-048 Triad 1/2, 001-144 Triad 3)
2. Dial desired number for outside call.
3. Lift handset to converse or use speakerphone.

CO Line Queuing

A station can queue only one line at a time. If you see that a particular outside line is busy and you wish to be placed on a list waiting for that line to become available:

1. Press desired busy outside line button,

   -or-

   Press POOL button. (Busy tone is heard.)
2. Press pre-programmed LINE QUEUE button (621).
3. Replace handset or press ON/OFF button.

Answering a Queue

If you hear ringing and an outside line of the line group or a LOOP button you queued onto is rapidly flashing:

1. Lift handset or press ON/OFF button.
2. Press flashing outside line button or Loop button to answer.

Conditions

A LOOP button or direct appearance of the queued line is required.

Conference Combinations

Only stations that have conference enabled can institute a conference.

- Add-On Conference – Up to eight internal parties can engage in a conference, or seven internal parties with one external party. A maximum of five 8-party conferences (five external parties maximum) can be established.
- Multi-Line Conference -- One internal station can engage in a conference with up to four outside parties.

A maximum of eight parties can be included in a conference.

Establishing a Conference

1. Lift handset.
2. Select intercom station or dial desired outside party.
3. When called party answers, press the CONF button.
4. Add next conference party by selecting another outside line or intercom station.
5. If the next conference party is an outside line and a busy or wrong number is encountered, press one of the conference parties on hold. This drops the busy or wrong number party. Press the conference button again and repeat step 4.
6. When party answers, press the CONF button twice. (All parties are connected.)

Exiting a Conference (Controller only)

There are three methods of exiting a conference:

1 -- Press the ON/OFF button to ON, press MUTE, then replace the handset (to monitor a conference).

To exit a multi-line conference in progress:

2 -- Press the HOLD button to place outside parties on hold. The Hold Timer starts. If one of the two parties is internal, that party is dropped.

3 -- Press CONF and hang up or press the ON/OFF button to leave the other conference parties still connected in an unsupervised conference. The CONF button flashes and the timer starts. There is a warning tone before the other parties are dropped.

Re-entering a Conference

When the controller re-enters the conference, the disconnect timer is reset.

1. Lift handset to re-enter a monitored conference.
2. To re-enter a conference placed on hold, repeat steps for establishing a conference.
3. To re-enter an unsupervised conference, lift handset and press flashing CONF button. The CONF button lights steady and a confirmation tone is heard.

Terminating a Conference

To terminate a conference, the conference initiator who is actively in the conference must:

Replace handset or push ON/OFF button to OFF.

To terminate an unsupervised conference:

Press the flashing CONF button while on hook, all parties are dropped.

Terminating Party from a Conference (while in conference)

1. Press line button of party to drop.
2. Replace handset or press ON/OFF button.
3. Lift Handset or press ON/OFF button.
4. Press flashing Conference button.

Conditions

8-button telephones can assign a Conference button by using code 624.

Dial By Name

The system lets station users dial extension numbers by entering the name of a person programmed for that station. The system database allows entry of a name (alphanumeric) up to 24 characters for each station. This programmed name can be used for dialing-by-name station users and displays on LCD displays.

1. Dial the Dial-By-Name code [6✳] on the dial pad,

   -or-

   Press the pre-programmed DIAL-BY-NAME flex button.
2. Dial person's last name on the keypad as shown:

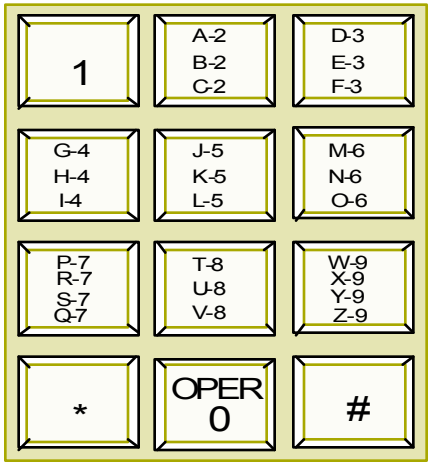


Figure 6-3: Key Pad - Dial By Name

EXAMPLE -- To search for the name BROWN, press [2][7][6][9][6].

- When the system finds a unique numeric match to the name being dialed, the call is placed to the station matching the name.
- The intercom call signals the station according to the H-T-P button.

- If fewer than 8 digits are dialed, the numeric match is dialed after a 10 second interdigit time-out occurs, or if [#] is pressed.

Conditions

- The system dials the station that matches the dialed name when a unique match is found. If multiple names are located (found) after eight digits, the first one is dialed.
- Names are entered as part of the system attributes database. Numbers may be entered as part of a name. To avoid conflicts, all names must have a unique numerical sequence.

Directory Dialing - Stations

Directory Dialing allows station users to obtain a directory of station users and have the system dial the extension that is currently displayed. The *Triad 1/2/3* System provides locations for up to 200 names. Directory Dialing also includes the following functions:

- Allows users to program a name with a speed dial bin for later locating a speed dial number. When prompted, the system displays the name associated with a speed dial number on the LCD display. The user may then have the system dial the number.
- Enables users to associate a name with an entry in the local number/name translation table. When prompted, the system displays the name associated with the table on the LCD display. The user may then have the system dial the number.
- Directory Dialing list may be programmed and maintained at the first assigned Attendant station. However, this admin routine lets the system programmer maintain the list locally (at Attendant) or remotely via modem access.
- May be used to transfer a call from one station to another.

Viewing the Directory List

1. Dial the Directory List dial code [680] on the dial pad,

   -or-

   Press the pre-programmed flex button programmed as a directory dialing button.

2. Press a button on the key pad once, twice or three times to represent the letter of the alphabet to begin viewing the list of names as follows:

   - Pressing 2 once produces the names beginning with A.
   - Pressing 2 again produces the names beginning with B.
   - Pressing 2 a third time produces the names beginning with C.

   The letters of the alphabet are represented on the key pad as shown.

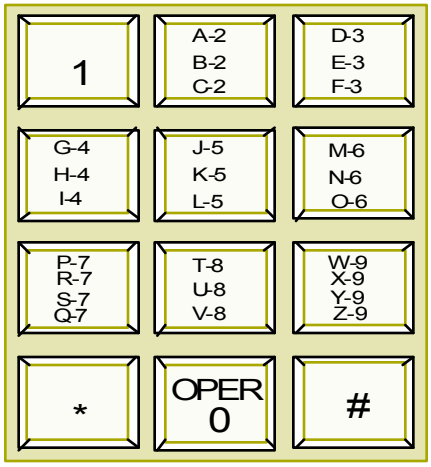


Figure 6-4: Key Pad - Directory Dialing

Names beginning with the letter chosen display on the LCD display.

If there are no names in the Directory List beginning with the desired letter, a name with the next higher letter shows on the LCD display

3. Press [✳] to scroll up (next entry) through the list,

   -or-

   Press [#] to scroll down (previous entry) through the list,

   -or-

   Press another button to view list for a different letter of the alphabet.
4. When the desired name is shown on the LCD display, press SPEED to automatically dial the destination station or outside phone number (via speed dial).

Conditions

- If the desired party is an intercom station, that station is signaled according to it's H-P-T switch (SLT stations tone ring).
- If the desired party is associated to a speed dial bin, the system selects a CO line and dials the number programmed into the speed dial bin. Call progress tones are then heard.
- If station is in Directory Dialing mode and a CO or intercom call rings in, the station must exit Directory Dialing mode to answer the call.

Transferring a Call Using Directory Dialing (while on a call)

1. Press the TRANS button.
2. Dial the Directory Dial Code [680] on the dial pad,

   -or-

   Press a pre-programmed flex button programmed for directory dialing.
3. Press the digit associated with the person's name and when it displays, press SPEED to automatically dial the destination station.
4. Hang up to complete the transfer.

Calls may be transferred to internal stations only. An attempt to transfer a call off-net (via a speed dial bin) results in the call recalling upon going on-hook.

Direct Inward System Access (DISA)

1. Call the phone number the system administrator specified as the DISA line. The system answers and returns internal dial tone.
2. Enter the DISA access code specified by the system administrator, if applicable. Dial tone returns.

Placing an Outgoing Call

1. Dial a group access code: 9, 81–87. CO Dial tone returns.
2. Dial the desired telephone number.

*The conference timer monitors a DISA **trunk-to-trunk** call and release the lines one (1) minute after the time expires.*

Reaching an Internal Station:

Dial the desired station number. (Ringback tone is heard.)

If the station dialed is unattended, busy or in DND, intercom dial tone returns, (after the Preset Call Forward Timer expires).

WARNING: Toll fraud can occur if DISA is not properly implemented.

Do Not Disturb (DND)

DND blocks incoming paging and ringing, and provides visual status to other telephones with DSS appearance. The DND code is [631].

Activating Do Not Disturb

Press the pre-programmed DND button (DND button lights steady), or dial [631] on the 8-button keyset. The DND button can be pressed while the phone is ringing to stop the ringing.

Removing Do Not Disturb

Press the pre-programmed DND button or dial [631]. The button LED extinguishes and DND cancels.

Conditions

- Calling stations receive a DND audible tone.
- The first programmed attendant does not have DND capability.
- DND capability is programmable on a per-station basis.

One-Time Do Not Disturb

Prevents calls from ringing at your station while you are on a call. The One-Time DND condition automatically cancels when you end your call.

Press the pre-programmed DND button while you are off-hook and connected to a CO line or intercom call. The DND button LED lights and off-hook tones at your station cancel.

Cancelling One-Time Do Not Disturb

Replace handset. The DND button LED extinguishes and DND cancels.

Executive Override

The Executive Override feature enables Executive designated stations the ability to override and barge-in on other keysets engaged in conversation. The programming code is [625].

If you call a busy station:

1. Press the pre-programmed EXECUTIVE OVERRIDE button.

   Executive station is bridged onto the CO line conversation in progress at the called station. Optional warning tone is heard and presented to all parties prior to cut-through.
2. Replace handset at Executive station to terminate the override.

Conditions

- An error tone occurs:

  - If the called party is in a conference.

  - If the called party is already on an OHVO call.

  - If the called party has a Camp-On at their station.
- If the Executive joins a call and one of the members does a hook-flash or presses their transfer button, the Executive is dropped.

- If the Executive does a hook-flash or presses their transfer button, it is ignored.
- When the Executive joins an intercom call or CO call and the Executive is not in a mute state, and any member of the party hangs up, the call is converted to a two-party conversation.
- When the Executive joins an intercom call or CO call and the Executive is in the mute state, and either of the two parties in the intercom call hang up, the call is dropped. If the Executive hangs up, the call remains a two-party conversation.
- Certain forwarding types affect override operation.
- Intercom button disallows Executive Override..

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.

Executive/Secretary Pairing

There are four sets of Executive/Secretary pairings available. When the Executive station is busy or in DND, the Secretary station receives intercom calls and transfers. The Secretary station can signal the Executive in DND by using the Camp-On feature.

Conditions

- If you are designated the Executive station and your phone is busy or in DND, all calls are routed to the Secretary station.
- If you are the designated Secretary station, you can signal the Executive that is busy or in DND by using the Camp-On feature.

Flash

When connected to an outside line:

Press FLASH to disconnect outside line and reseize outside line dial tone.

Conditions

8-button telephones can assign a FLASH button by using code [660].

Flexible Button Assignment

If you have buttons on your telephone, you may program them to suit your own needs. This feature was enhanced in database programming to allow programming of flexible buttons from a remote location (off-site). Range programming can also assign these buttons to multiple stations.

There are seven possible functions you may assign to these buttons:

DSS/BLF -- When this button is pressed, it automatically signals the assigned intercom station. DSS/BLF buttons are programmed by the station user.

FEATURES -- When this button is pressed, it activates a particular feature, thus eliminating the need for dialing the feature code.

Some features require a programmed flex button for that feature to be accessible to the station user. In the case, it is designated in this Feature Operation Section and user guide. Feature buttons are programmed by the station user.

SPEED DIAL -- This button can automatically access a speed number location for one-step operation. PBX and Centrex codes can be programmed into a speed dial bin and accessed by pressing one button.

POOLED GROUP ACCESS -- A group of outside lines can be placed under one button. When this button is pressed, the system selects an available line from this group on which the user may place a call.

LOOP -- This button appears as the direct button for outside lines that do not appear on the user's telephone. Any phone that does not have all lines appearing on it must have a loop button. There is NO limit to the number of LOOP buttons a station may have.

UNASSIGN (Locked Out) -- Specific buttons may be designated as locked out or unused. When a button is unused, the button may not be programmed using flex button programming procedures.

CO LINES -- This button represents a specific CO line for outgoing/ incoming access.

Programming Flexible Buttons

1. Press the SPEED button twice.
2. Press the assigned button to program (it must be programmed in the database as a multi-function button).
3. Dial the desired code.

Erasing a Flexible Button

1. Press the SPEED button twice.
2. Press the button to erase.
3. Press the FLASH button. Confirmation tone is heard.
4. Replace handset or press ON/OFF button.

Table 6-3: Digital Station - Flex Button Programming Codes

Account Code Enter	627
ACD* Agent Help	574
ACD* Agent Login (Primary Grp)	572+[5UU]
ACD* Agent Login (Secondary Grp)	582+[5UU]
ACD* Agent Logout (Primary Grp)	571
ACD* Agent Logout (Secondary Grp)	581
ACD* Available/Unavailable	566
ACD* Call Factor	580+[5UU]
(requires button)	+[FFF]
ACD* Call Qualifier Code	570+[YY]
ACD* Calls in Queue Display Buttons	579+ [UU]
ACD* Group Member Status Display	573
ACD* Group Pilot Numbers	5+[UU]
ACD* Overflow Available/Unavailable	578
ACD* Supervisor Login	576+ [5UU]
ACD* Supervisor Logout	575+ [5UU]
ACD* Supervisor Queue Status Display	577+ [5UU]
ACD*/UCD Calls in Queue Display	567
All Call Page (Internal and External)	700
Answering Mach. Emulation Mode	654+[0, 1]
Attendant	0
Attendant Override	601
Background Music	632
Call Back	622
Call Coverage (Non-Ringing Type)	647+[XXX]
Call Coverage (Ringing Type)	646+[XXX]
Call Park Location - Personal	438
Call Park Location - Station	439+[XXX]
Call Park Location - System	43+[C]
Caller ID Name/Number Toggle	653
Camp-On	620
CO Line Direct Access	88+[LLL]
CO Line Group	800-823
CO Line Off-Net Forward	603
Directory Dial	680
Do Not Disturb	631
Executive Override/Monitor Barge-In	625
Extension Numbers - *Triad 1/2*	100-171
Extension Numbers - *Triad 3*	100-351
Flash	660
Group Call Pick Up	#0
Headset Mode	634
Hunt Group Pilot Numbers	45+[H]
ICLID Display (Answered Calls)	659

	659
ICLID Display (Unanswered Calls)	635
Intercom Button(s)	645
Last Number Redial	[SPEED]+[#]
LCR Queue Cancel	626
Least Cost Routing Access	9
Line Queue	621
Loop Key (Requires Button)	89
Mailbox Button	644+[IDX]
Message Waiting	623
Mute	629
Night Service	604
OHVO Enable	628
One-Touch Recording	649+[44V]
Page - External All Call (All Zones)	76+[0]
Page - External Zones	76+[P]
Page - Internal All Call	709
Page - Internal Zones 1-8	701-708
Page - Meet Me (Answer)	770
Personalized Messages	633+[ZZ]
Personalized Messages - Clear	633+[00]
Release Button	641
Ring Tone	695
Save Number Redial	[SPEED]+[✳]
Speed Dial Access	[SPEED]+[YYY]
(000-019 Station) (020-999 System)	
UCD Group Pilot Numbers	55+[U]
Universal Day/Night Answer	#5
Voice Mail Group Pilot Numbers	44 [V]

LEGEND --

C = Call Park Location (0-7)
FFF = ACD Call Factor (000-999)*
H = Hunt Group Number (0-7)
IDX† = 001-255
LLL = Line Number
(001-048, Triad 1/2, 001-144 Triad 3)
P = External Page Zone Number (1-2)
U = UCD Group Number (0-7)
UU = ACD (50-65)*
V = Voice Mail Group Number (0-7)
XXX = Station Extension Numbers
YYY = Speed Dial Bin Numbers
ZZ = Personalized Messages

** Features available with optional software*

†IDX = Index numbers reference Mailbox numbers
(Contact System Administrator for specific Index/Mailbox numbers.)

Forward Override

The Forward Override feature lets a user reach a busy station that is busy forward, no answer forward or all call forwarded. This allows the calling station to call a forwarded station, OHVO, Executive Override, Monitor, Message Wait, Camp On, or Call Back at that station rather than forwarding to the busy destination.

Dial [5# XXX] on the dial pad where XXX is the desired station extension.

Group Listening

All digital key stations have a built-in speakerphone. 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.

While conversing on the handset, press the ON/OFF button. Both parties can then be heard on the digital station's speaker. The speakerphone microphone is muted while the handset is off-hook.

To deactivate Group Listening while off-hook, press the ON/OFF button.

Conditions

- While using the speakerphone, lifting the handset turns off the speakerphone. To activate group listening, press the ON/OFF button (to ON) while the handset is off-hook.
- While in group listening mode, pressing the MUTE button causes the transmit from the handset to be muted (the speakerphone microphone is already muted). However, the distant end is still heard over the handset receiver and the station speaker.
- If full speakerphone operation is desired while in group listening mode, simply set the handset on-hook.
- Group listening is unavailable when the station is in headset mode.

- When placing the handset on-hook to full speakerphone operation, it is normal for a to hear a squeal caused by audio feedback. To eliminate this noise, press MUTE prior to initiating speakerphone operation.
- Must be enabled in Station Programming.

Headset Mode

Activating Headset Mode

Dial [634] on the dial pad,

-or-

Press pre-programmed HEADSET MODE button. LED lights steady.

While Headset mode is active, the ON/OFF button activates the headset and disables speakerphone and intercom call announce operation at your station.

To install the headset, see the Installation Manual.

Deactivating Headset Mode

Dial [634] on the dial pad,

-or-

Press the pre-programmed HEADSET MODE button. LED extinguishes.

Station must be programmed in database programming for headset operation before flex button can be programmed.

Hold - Exclusive

When a line is placed on Exclusive Hold, no other station in the system can retrieve the call. Exclusive Hold may be programmed for activation when the Hold button is pressed once or twice. CO Lines, while in a transfer hold, are always placed in an Exclusive Hold condition.

Hot Keypad

The Hot Keypad feature enables a station user to activate the telephone by dialing digits or pressing telephone buttons without going off hook.

ICLID Answered Call Management Table

An Answered Call Management Table with 100 entry capacity is maintained in the system. The calling number/name information pertaining to any answered call is placed in this table at the time the system determines the call was answered. This table may be accessed from any user station display phone so the answered calls may be reviewed and handled by the end user. Any Attendant station(s) can delete a table entry, one entry at a time.

When entering the review process, the functions available to a phone are:

Table 6-4: ICLID Answered Call Table - Button Functions

Function	Button
Go to the beginning of table	Dial Code 659
Review next item in table entry	MUTE
Step to next table entry	HOLD
Delete this table entry (Attendant only)	FLASH
Exit table review function	ON/OFF
Step to previous table entry	TRANSFER
Call Back	SPEED

ICLID Unanswered Call Management Table

An Unanswered Call Management Table with 100 entry capacity for the *Triad 1/2/3* System is maintained in the system. The calling number/name information pertaining to any unanswered call is placed in this table at the time the system determines the call was abandoned. This table may be accessed from any user station display phone so the unanswered calls may be reviewed and handled by the end user. Any Attendant station(s) can delete a table entry, one entry at a time.

When entering the review process, the functions available to a phone are:

Table 6-5: ICLID Unanswered Call Table - Button Functions

Function	Button
Go to the beginning of table	Dial Code 635
Review next item in table entry	MUTE
Step to next table entry	HOLD
Delete this table entry (Attendant only)	FLASH
Exit table review function	ON/OFF
Step to previous table entry	TRANSFER
Call Back	SPEED

Conditions

- Telco must activate Caller ID service.
- Auto Attendant calls are considered answered.

Reviewing ICLID Unanswered Call Management Table

1. Dial the access code [635] on the dial pad from any station in the system.
2. When the desired table entry is displayed on the LCD, press the SPEED button to automatically dial the table entry.

For Next Item in this Entry:

1. Press the MUTE button to toggle to the next item.
2. Press the ON/OFF button to exit the review function.

For Next Table Entry:

Press the HOLD button.

For Previous Table Entry:

Press the TRANS button.

Incoming CO Call Transfer

This feature lets station users transfer a call that is currently ringing at their station without answering it. This feature is unavailable to Single Line Telephone users. While station is idle:

1. Call rings in at idle station.
2. Press the pre-programmed INC CO XSFR flexible button,

   -or-

   Dial the Incoming CO call transfer code [639] on the dial pad.
3. Press a DSS, Group button or dial the 3-digit station number or group number. Call is automatically transferred to that destination.

While on an internal/external call and an incoming or transferred CO call is ringing at your station:

1. Place the current call on hold.
2. Press the pre-programmed INC CO XSFR flexible button,

   -or-

   Dial the Incoming CO call transfer code [639] on the dial pad.
3. Press a DSS, Group button or dial the 3-digit station number or group number. Call is automatically transferred to that destination. The incoming transferred CO call receives Music-On-Hold during the transfer state.
4. Station user can return to call placed on hold.

Conditions

- Calls may be forwarded to any available station, ACD/UCD group, Hunt Group or VM Group.
- Destination station must have a direct appearance for that CO Line or LOOP button, and not in DND, or error tone is presented to the originator and the call remains ringing at their station.
- Attendant stations do not send ID digits.
- ACD agents are not allowed to transfer ACD calls using this feature.

Intercom Buttons

The Intercom Button feature enables station users the ring a busy station via the intercom without using the Camp-On or Executive Override features. This allows stations to place intercom calls on hold.

Programming a Flexible Button as an Intercom Button

1. Press the SPEED button twice.
2. Press the desired flexible button to program.
3. Dial [645] on the dial pad. A confirmation tone is heard. If an error was made during entry, error tone is heard.

Placing Intercom Call to a Busy Station (has intercom button)

1. The calling station receives ringback tone instead of busy tone. The called station hears muted or reminder ring and their intercom button LED starts flashing at the incoming CO line rate. This indicates an incoming intercom call.
2. The called station can place the current CO call on hold by pressing the HOLD button,

   -or-

   Place the current intercom call on hold by pressing the HOLD button. The intercom call is placed on hold on the available intercom button.

3. The called station then presses the flashing intercom button to answer the incoming intercom call. Once the call is answered, the following message displays on the called station LCD:

```
CALL FROM STA XXX
MMM DD YY                HH:MM am
```

Sta XXX can be a programmed station name.

By default, no intercom buttons are assigned to key stations

Conditions

- If calls are ringing on intercom buttons and a Handsfree call is received, the Handsfree call is allowed and the calls ringing continue with muted ringing.
- Multiple intercom path buttons can be assigned to a single station, however up to five internal parties can be placed on hold per station. Music-On-Hold is provided to the intercom caller on hold.
- Once an intercom button is set up on the keyset, callers dialing that station always receive ringback tone as long as an available intercom button is idle. If all intercom buttons are in use, the station may use the Camp-On or Executive Override features to reach the station. Internal callers are dropped after the camp-on is answered.
- This feature can be programmed on any key station or DSS Console with an available flexible button. If there is an available intercom button, the following actions cannot be performed: Executive Override, ACD Supervisor Barge-In, OHVO, Camp-On or Override.
- A call ringing to a station on an intercom button rings muted or reminder ringing, depending on the stations tone ringing cadence.
- Up to five internal parties can be placed on hold. No recall timers apply to Intercom buttons. Internal callers can be placed and removed from hold when they appear on an Intercom button.
- To utilize the capability of intercom buttons, busy forward cannot be active at the station.
- A call ringing to a station on an intercom button and the DND button is pressed, returns DND tone to the caller and the call is dropped.

Intercom Calling

Placing an Intercom Call

1. Press the DSS button of the party to be called (if programmed at your phone),

   -or-

   Dial the extension number.

   Dialing a number in the numbering plan activates the telephone automatically.

   (You hear ringing if the called station is in the T answering mode; or three bursts of tone if called station is in the H or P position.)
2. Lift handset or use the speakerphone after the three tone bursts stop.
3. Hang up to end the call.

Answering an Intercom Call

In the T mode (LED On), you hear repeated bursts of intercom tone ringing and the HOLD button slow flashes.

1. Lift the handset or press the ON/OFF button to answer,

   -or-

   Press the H-T-P button to the H mode (No LED) to reply.
2. Replace the handset to end the call.

In the P mode (LED flashes at 30 ipm), you hear three bursts of tone and one-way announcement. The calling party cannot hear conversations in progress.

Lift the handset or press the ON/OFF button to answer,

-or-

Press the H-T-P button to the H mode to reply.

In the H mode (No LED), you hear three bursts of tone and an announcement.

Reply handsfree or lift the handset for privacy.

Intercom Transfer

Using Intercom Transfer without DSS Buttons

1. Receive or make an intercom call.
2. Press the TRANS button. Intercom dial tone is heard.
3. Dial the station.
4. When the second station answers, you are in a supervised transfer mode (first station is staged for transfer).
5. Hang up (stations 1 and 2 are connected).

Using Intercom Transfer with DSS Buttons

1. Receive or make an intercom call using a DSS button.
2. Press the TRANS button. Intercom dial tone is heard.
3. Press the DSS button where to transfer the call.
4. Hang up (stations 1 and 2 are connected).

Keyset Mode

The Keyset Mode feature lets a station user determine the mode and baud rate of the optional CTI Module connected to their phone. When the telephone is set to the AT command mode, the following AT commands are supported:

- Inactive -- No CTI information is sent/received by the telephone.
- PC Phone -- CTI information used with VODAVI Discovery Desktop software must be set to 4800 baud rate.
- ATD – This is the modem dialing command. The telephone recognizes the ATD and accepts digits after the command. This allows the PC connection to the telephone to use the AT Ringing command. (Available baud rates are: 1200, 2400, and 4800.)
- ATH or ATHX (X = 0 or 1) -- The modem on hook/off hook command (ATH) forces the telephone to the on-hook state from its current state. ATH1 forces the telephone to the off-hook state from its current state.

If the handset is off hook (lifted), these commands are discarded and no action is taken by the telephone.

- CKTU -- This mode is used when the optional *Wanderer* (cordless key telephone unit) is connected to the station. (Refer to the *Wanderer User Guide* for additional information.)

The KSU system software version must be 1.34 or greater for Wanderer operation. Version 1.3 can be obtained from the Sales department.

KSU system software Version 1.3 does not support DOS DBA.

On the Triad 3 system, the Firmware version must be 1.0B on Issue 1 cards (Issue 1 F/W Part Number 9022-00) or 1.0D on Issue 2 cards (Issue 2 F/W Part Number 9022-10). This firmware can be obtained from the Sales department.

At an idle station:

1. Dial the Keyset Mode code [648] on the dial pad,

   -or-

   Press pre-programmed KEYSET MODE button, the following displays:

```
INACTIVE
MODE=✳   SAVE=HOLD   BAUD=#
```

2. Press [✳] to scroll through the keyset modes.
3. Press [#] to scroll through the baud rates.
4. Press the HOLD button to save the desired entries.

Conditions

- Telephone must be in AT command mode to process AT commands.
- CTI information is still sent out the RS232 port in AT command mode.
- The ATD command is always accepted by the telephone while it is in the AT command mode. ATHX is accepted only if enabled.
- ATZ is always enabled if station is in the ATD or ATH command mode.
- ATD accepts W to indicate a pause command (ATDT9W9982200).
- ATH or ATH0 causes an on hook event. ATH1 must be specified to go off hook.
- Default mode is inactive.
- AT or ATZX (X = 0 or 1) is the modem reset/initialize command. When these commands are sent to the keyset, it returns OK in ASCII format.

Keyset Self Test

The *Triad 1/2/3* System contains a test mode feature that supports the off-line testing of Digital Telephones and DSS consoles. The term off-line means that the unit under test is disconnected from the system during the test operation. Digital Telephones not under test continue to operate in the normal manner.

Tests are provided to verify the keyset and DSS LED, LCD, and keypad button operations.

Last Number Redial (LNR)

1. Press the SPEED button.
2. Press [#]. The last number dialed over an outside line is automatically redialed.
   - The system automatically selects the original line used to place the call and redials the number.
   - If that line is busy, the system automatically selects another line from the same group and redials the number.
   - If no lines are available in the same group, the station receives busy tone and can queue for a line.
   - If the station user preselects a line before activating LNR, the preselection overrides the line that was used originally.

LCD Display - Contrast

There are four contrast adjustments available to the user to adjust the LCD for different lighting levels.

At idle phone:

Press volume bar up or down for desired effect.

Conditions

- BGM must be inactive.
- Handset must be in cradle.
- ON/OFF button must be set to OFF.

Least Cost Routing (LCR)

Placing an Outside Call when LCR is Enabled

1. Dial [9] on the dial pad,

   -or-

   Press pre-programmed LCR button.
2. Dial the desired telephone number.
3. Wait for an answer. Lift handset or use the speakerphone to converse.

   If all available lines are busy, remain off-hook for four seconds to automatically be queued onto LCR for an available line, then hang up.

If an LCR Queue Call Back is activated:

1. When telephone is signaled, answer the call.
2. Desired telephone number is automatically redialed.

Only one LCR Queue Call Back request may be initiated by a station. When a second request is made, the first request is cancelled.

If the 911 feature is enabled, the LCR access code is 80 instead of 9.

If an LCR Queue Call Back is activated and you wish to cancel that call back request:

1. Dial the LCR Queue Cancel code, [626] on the dial pad.
2. Replace handset or press ON/OFF button.

Mailbox Buttons

The Mailbox Button feature lets station users program specific mailbox index numbers onto flexible buttons at their station or DSS Console. Users can then transfer internal/external callers to specific Voice Mail Groups or Mailbox numbers.

These Voice Mail Groups or Mailbox numbers are programmed in admin programming. Up to 255 mailbox buttons per system are allowed. The button code is 644XXX (*XXX = 001-255*).

Using Mailbox Button while on Internal/External Calls

The called station presses the Mailbox flexible button and goes on-hook. The call is then transferred to the VM port by the telephone system. By default, no mailbox buttons are assigned to key stations.

Conditions

- This feature can be programmed on any key station or DSS Console with an available flexible button. If a station is an OHVO, Camp-On or Executive Override initiator, they may not use the Mailbox Button feature.
- Stations engaged in a conference cannot use this feature.
- If no station(s) are programmed in the Voice Mail Group, the user receives error tone.
- Mailbox buttons interact with the station VMID feature as follows:

  - VM Transfer with ID (manually enter digits) = No station VMID.

  - VM Transfer with ID (press DSS button) = Use station VMID.

  - Mailbox Button Feature = No station VMID.

Meet Me Page

Requesting Another Party Meet You on a Page

1. Dial the desired 2-digit or 3-digit paging code,

   -or-

   Press pre-programmed MEET ME button.
2. Request that party meet you on the page.
3. Do not hang up, wait for the requested party to answer. As soon as the paged party answers and is connected to you, the page circuit releases.

Answering a Meet Me Page

Go to the nearest telephone and dial [770] on the dial pad,

-or-

Press the pre-programmed MEET ME button. You are connected to the paging party.

Message Waiting

Leaving a Message Waiting Indication

If you dial a station that is busy, unattended, or in DND, you can leave a message waiting indication.

1. Lift handset or press ON/OFF button.
2. Dial the desired intercom station.
3. Press the MSG button. A confirmation tone is heard. Called party's MSG button slow flashes.
4. Replace the handset or press the ON/OFF button to end the call.

Up to five messages can be left at any Station.

Answering a Message Waiting Indication

If your MSG button is lit, you have a message waiting for you. The first message left is the first one called.

1. Press MSG. Station that left message is signaled with tone ringing.
2. If called station does not answer, press MSG once to leave message.

Conditions

8-button phones use code 623 to assign a MESSAGE WAITING button.

Mute Key

The MUTE button provides privacy during speakerphone or handset operation by disabling the microphone.

1. Press MUTE while off-hook on speakerphone or handset to activate.
2. Press MUTE again to deactivate. The mute feature automatically deactivates upon call termination.

Conditions

Changing the operation, from handset to speakerphone (or the reverse), cancels the Mute function.

Name in Display

Every extension (key and SLT) allow users to program their name so that people using display telephones see the name instead of the station number.

1. Dial [690] on the dial pad.
2. Enter the name (up to 7 characters may be entered) by using keys on the dial pad.

Figure 6-5: Other Key Pad Codes (Name)

Other Codes			
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 the SPEED button to complete the programming process.

Erasing Your Name

1. Dial [690] on the dial pad.
2. Press the SPEED button to complete the erasing process.

Night Service

The Night Service feature [604] provides a means to put the system in night mode from any keyset or remove the system from night mode from any keyset as long as the system was put in night mode by the Night Service feature flex button.

If the system was placed in night mode by the attendant using the Night Service (DND) button or if the system was placed in night mode by the automatic schedule, the Night Service flex button can not remove the system from night mode.

From an idle station:

Press the pre-programmed Night Service flex button. The system is now in the Night Service Mode.

Removing Night Service Mode

Press the pre-programmed Night Service flex button again. The system is now removed from the Night Service Mode.

Off-Hook Preference

If your phone has been programmed for Off-Hook Preference, you can access an outside line, or a feature by going off-hook or pressing the ON/OFF button. It simulates the depression of a specific button and can be programed by a station user or a database administration programmer using code [691] + the button number.

While Off-Hook Preference is enabled, you may access internal intercom dial tone as follows:

1. Press the pre-programmed ICM button,

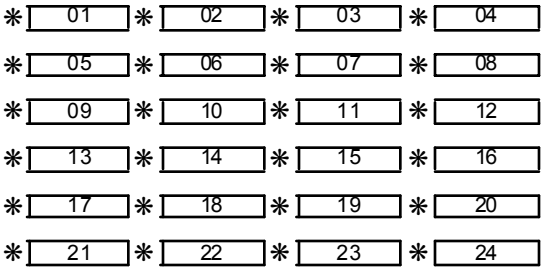
   -or-

   Dial your intercom number. (Do not lift handset or press ON/OFF button before dialing intercom number.) LED lights steady and intercom dial tone is heard.
2. Dial an internal station or feature access code.

Off-Hook Preference Programming

If your phone is programmed for Off-Hook Preference and were given the ability to enable or change the prime flex button:

1. Dial [691] on the dial pad.
2. Dial the desired button number. Refer to the following chart.



Disabling Off-Hook Preference

1. Dial [691] on the dial pad.
2. Dial [00] on the dial pad.

Programming PBX/Centrex Codes Onto Flex Button

For one-button access to Centrex or PBX features, perform these steps:

1. Program the Centrex or PBX code into a station or system speed dial bin, including hook-flash (FLASH key), [*], and [#] commands. Refer to station or speed dial programming.
2. Program that speed bin onto a flexible button.

Off-Hook Voice Over (OHVO)

The OHVO feature enables users, off-hook on a call (CO or Intercom), to receive a voice announcement through the handset receiver without interrupting the existing call. The Voice Over is muted so it does not override or drown out the existing conversation. The overridden party may then talk to the calling party using Camp-On procedures, or use Silent Text Messaging to respond to the calling party via LCD Displays.

Placing an Off-Hook Voice Over Call

When an OHVO station calls a busy OHVO station and a busy tone is received, the calling OHVO station performs one of the following steps:

Dial the OHVO code [628] on the dial pad,

-or-

Press a pre-programmed OHVO button to initiate an OHVO announcement, and the following occurs:

- The HOLD button LED flashes at the called OHVO station.
- The OHVO receiving station receives a one-beep warning tone. The station receiving the OHVO call must be off-hook and in H mode, then the calling OHVO party may begin the voice announcement to the called OHVO party. The called OHVO station's existing conversation is uninterrupted and the voice over announcement does not drown out the existing conversation.
- The calling OHVO station is not connected or able to hear the called station's conversation (the connection only allows the calling station to transmit to the called station).

The calling station is placed in a one-time DND mode upon initiating the Voice Over. One-Time DND cannot be toggled during the OHVO call. The station receiving the OHVO call must be off-hook and in H mode.

Responding to an Off-Hook Voice Over

After receiving an OHVO announcement, **three options** are available to respond to the caller:

Option 1 – This method lets the receiving station respond to an OHVO announcement utilizing the MUTE feature button. This button is pressed to carry on a two-way conversation with the OHVO initiator while still listening to the original call.

Option 2 – The OHVO receiving station may respond to the calling station by using the Silent Text Messaging (this feature is only available to digital key telephones, and the calling station must be a digital display telephone.)

The OHVO receiving station may press a pre-programmed Message button to respond to the voice over announcement without being released from the current call, (i.e. by pressing a flex button pre-programmed for the message IN MEETING), the calling station receives this message on the LCD display.

Option 3 – The OHVO receiving station may respond to the calling OHVO station by using the Camp-On feature. The OHVO receiving station presses the flashing HOLD button to consult with the calling station. The existing call (CO line) goes on Exclusive Hold automatically. This method then follows Camp-On procedures and operation.

Conditions

- The station receiving the OHVO call MUST be off-hook and in H mode.
- The receiving station must have OHVO enabled.
- When the dialed station responds via Camp-On, all conditions and options available to Camp-On apply. (Refer to *Camp-On* feature description for more information).
- OHVO may be used to notify the called party of a transferred call (CO Line or Intercom) by announcing the call, then releasing to complete the transfer. When this occurs, the receiving station need not respond to the OHVO.
- When a call is transferred via OHVO, the receiving station receives muted ringing after the transfer is complete.

- Any messages including Canned, Custom, or Silent Response text messaging may be used to respond to an OHVO call. The message appears on the calling station and called station LCD displays.
- If the calling station is a non-LCD telephone, the called station receives error tone when responding via text messaging.
- The called station may press a flex button programmed as a Text Message button, [633+#]. Press this flex button and dial the 2-digit message number (31-51) to respond to the calling station. DTMF digits are not heard by either party.
- The receiving station must be programmed to allow OHVO calls.
- When silent messaging is used to respond to an OHVO call, the existing call on the called station is not disconnected while the messages are being sent to the calling station.
- The calling station of an OHVO call must remain off-hook to receive silent messages. The calling station's voice transmit remains connected to the called station and may respond verbally to the text messages. The OHVO call ends when calling station goes on-hook.
- If the receiving station is on-hook in speakerphone mode and a calling party initiates OHVO, the receiving station receives a Camp-On warning tone and normal Camp-On procedures are followed.
- The called station may send a message, and then press MUTE to talk to the calling station. Each time a message is sent, the splash tone is heard and both displays are updated.
- LEDs follow Camp-On LED lamp sequences.
- OHVO does not function if busy station is in Group Listening Mode.

One-Touch Recording

The One-Touch Recording feature lets the station user, while on an internal/external call, press a button to have the system record the conversation into the station users mailbox. Code [649 44X], where X=0-7 for desired VM group.

Use of this feature when the One-Touch 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 recording calls using this feature.

While on an external call:

1. Station user presses the pre-programmed VM RECORD button. The LED flutters red at 240 ipm during the setup and the following message displays:

```
RECORDING SETUP
MMM DD YY                00:00 am
```

2. Once the system connects to the station, the user's mailbox, the flexible button LED lights solid green and the LCD displays:

```
            RECORDING
MMM DD YY                00:00 am
```

3. When the user finishes recording, press the pre-programmed VM RECORD button. The LED extinguishes and the normal LCD call information displays.

Conditions

- If the user hangs up without terminating the record function, the system performs the exit procedure as described in step 3 above.
- If the user presses the TRANS, CAMP-ON, MSG, or FWD buttons during recording, pressing the button is ignored.
- During the recording setup, pressing the CONF button is ignored.
- If a VM port is **not available** when the station user wants to record,

the user receives the following display (lasts six seconds):

```
RECORDING UNAVAILABLE
MMM DD YY                    00:00 am
```

(The user may retry after the display extinguishes.)

- In the recording mode, pressing the CONF button lets the user add members to the recording (conference). Normal conference operation/conditions apply.
- If the FLASH or HOLD button is pressed during the recording, the recording is terminated.
- If a station user presses the record button while in a two-party conference, it is recorded. If the button is pressed a second time, the conference ends and the call is returned to a two-way conversation.
- Only one active recording per station is allowed.
- If a conference is being recorded and the conference master exits, the recording stays active. The recording stops if the initiator re-enters the conference and ends it, removes the record function, or the conference ends on its own.
- Only the initiator of a conference can invoke/remove the record function during a conference.
- A conference warning tone is not given to conference members, if the initiator is recording the conference and record tone is disabled.
- Recording is not allowed for a station that is barged in, Executive Overridden, or on an active OHVO call.
- An Unsupervised Conference Call can be recorded.

Outside Call

Answering an Outside Call

1. Lift handset or press ON/OFF button.
2. Press slow flashing OUTSIDE LINE button or LOOP button. (If your telephone is programmed with Preferred Line Answer, you may answer an outside line by lifting the handset or pressing the ON/OFF button.)

Making an Outside Call

1. Press OUTSIDE LINE or POOL button. ON/OFF button LED lights and dial tone is heard.
2. Dial the desired party.
3. When called party answers, lift handset to converse or use speakerphone.

   (A station user can also dial an individual trunk group access code to access an outside line.)

Placing an Outside Call on Hold

1. If your system is programmed for Exclusive Hold Preference, press HOLD button once for Exclusive Hold and twice for System Hold.
2. If your system is programmed for System Hold Preference, press HOLD button once for System Hold and twice for Exclusive Hold.

Paging

If you were given the ability to make page announcements:

1. Lift handset or press ON/OFF button.
2. Press pre-programmed PAGE button,

   -or-

   Dial the paging code.

   [700] = All Call - Internal and External

   [701-708] = Internal Zone 1-8

   [709] = Internal All Calls

   [76]+[0] = External All Calls (All Ext Zones)

   [76]+[P] = External Zones (1-2)
3. Stations receiving a Page Announcement can press the Volume Bar to change the paging volume. The following message displays:

```
SPEAKER PAGE          [#########]
MMM DD YY               HH:MM am
```

Stations off-hook or in DND do not hear internal page announcements.

When making a zone page or All Call page and the zone is busy, the page initiator receives ring back tone until the zone becomes available. You then hear a warning tone and can make the page announcement.

External paging requires optional hardware.

Park - Personal

Each station in the system can place a call to a personal park location and later retrieve that call from the originating station.

While connected to an outside line:

1. Press the TRANS button. The caller is put on Exclusive Hold.
2. Dial the Personal Park location [438] on the dial pad,

   -or-

   Press the pre-programmed PERSONAL PARK button. Dial tone is heard.

When dialing the personal park location and it is already occupied, the initiating station receives the previously parked call and the second call is parked.

Retrieving a Parked Call

Dial the Personal Call Park location code [438] on the dial pad,

-or-

Press the pre-programmed PERSONAL PARK button. A talk path is established between the two parties.

Conditions

- Intercom calls and CO line calls can be placed into the station's personal park location.
- Calls parked in a personal park location are subject to the system call park recall timer.
- A CO call parked in a personal call park location recalls to the station that parked the call, when the call park recall timer expires. The CO call rings to this station until the system hold timer expires. The CO call then recalls the Attendant (both the Attendant and initiating stations are ringing), and the Attendant recall timer is initiated. When the Attendant recall timer expires, the CO call is disconnected.

PBX/Centrex Transfer

While connected to an outside line (PBX/Centrex):

1. Press the FLASH button. Receive transfer dial tone.
2. Dial a PBX/Centrex station number.
3. Hang up to complete the transfer.

Personalized Messages

Each station can select a pre-assigned message to display on the LCD of any key telephone calling that station. There are ten messages available.

1. Dial **[633]** on the dial pad,

   -or-

   Press a pre-programmed MSG button.
2. Dial the 2-digit code for the message that displays. A confirmation tone is heard and the DND button LED flashes.

00 = (clears messages)	06 = On Trip
01 = On Vacation	07 = In Meeting
02 = Return AM	08 = At Home
03 = Return PM	09 = On Break
04 = Return Tomorrow	10 = At Lunch
05 = Return Next Week	

This feature is unavailable at Attendant stations. Stations cannot be call forwarded and have this feature active

Personalized Messages - Custom

Each station can select from ten possible custom messages to display on the LCD of a key telephone calling that station. These messages are programmed from the first attendant station.

1. Dial [633] on the dial pad,

   -or-

   Press a pre-programmed MSG button.
2. Dial a valid code (21-30) for the desired custom message. The first Attendant should provide a list of messages to each station user.

Each station can also program three unique custom messages.

To program:

1. Dial [633] on the dial pad.
2. Dial a valid code (18-20) for the desired custom message.
3. Enter a custom message, up to eight characters.
4. Press HOLD to save.

To use:

1. Dial [633] on the dial pad.

   -or-

   Press a pre-programmed MSG button.
2. Dial a valid code (18-20) for the desired custom message.

Conditions

This feature is not available to attendant stations.

Date and Time Entry on Personalized Message

Station users can activate certain messages that let users enter a specific time or return date. These messages appear on the calling station's display to alert them of the desired party's return time or date.

Activating a Message with a Custom Return Time or Date

1. Dial the Message Access code [633] on the dial pad.
2. Then dial the desired message number [11 - 17].

Users may activate the following messages and be prompted to enter a return time or date:

[11] = Vacation Until: *MM/DD*

[12] = Return: *HH:MM xm* or *MM/DD*

[13] = On Trip Until: *MM/DD*

[14] = Meeting Until: *HH:MM xm*

[15] = At Home Until: *HH:MM xm*

[16] = On Break Until: *HH:MM xm*

[17] = At Lunch Until: *HH:MM xm*

3. Enter the date/time using buttons on the dial pad as shown in the following table.

Figure 6-6: Other Key Pad Codes (Date and Time)

Other Codes			
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 enter message. A confirmation tone is received and the DND button LED flashes.

Cancelling the Message

Dial the Message Access code [633] + [00] and replace handset. DND button LED extinguishes.

Personalized Message Code on a Flex Button

You can program the code [633] onto a flexible button to speed access of pre-selected messages.

1. Press the SPEED button twice.
2. Press the desired flex button. LED flashes.
3. Dial [633]+[#] on the dial pad. A confirmation tone is heard. The user can now press that flex button and dial the 2-digit message number (00-10), or the 2-digit custom message number (18-30) to activate the message. Confirmation tone is heard and DND button LED flashes.

Scrollable Canned Messages

The Scrollable Canned Message feature lets the user use a single digit to scroll through the messages and select one. This feature operates when the phone is in idle mode only and cannot be activated if the station is in Call Forward or DND mode(s). This feature is unavailable at Attendant stations.

1. Dial [633]+[#] on the dial pad,

   -or-

   Press the MSG button. Clear Messages is always first. The following message displays:

   ```
   CLEAR MESSAGES
   NEXT=#     PREV=*   SAVE=HOLD
   ```

2. Press [#] to scroll through the messages,

   -or-

   Press [✳] to scroll backward through the list.

3. Scroll forward through the messages in the following order. The scroll is a rolodex type scroll.

   1 - (Clear Messages)
   2 - At Home
   3 - At Lunch
   4 - In Meeting
   5 - On Break
   6 - On Trip
   7 - On Vacation
   8 - Return AM
   9 - Return PM
   10 - Return Next Week
   11 - Return Tomorrow

4. When the desired message is shown on the LCD display, pressing the HOLD button activates that message on your station. Confirmation tone is heard and the DND button LED flashes.

Conditions

- The telephone receiving the message must be a display telephone.
- Key telephones and SLTs may activate the message. SLTs are notified of an active message with a warning tone when going off-hook.
- When a message displays by a key telephone, the DND button LED flashes at 15 ipm.
- When DND is invoked on the telephone the message cancels.
- Message Access (with a desired message) may be assigned to a flex button.
- Messages may be entered while off-hook on a call if an intercom call is camped onto the station. This causes the station calling to see the message.
- Messages are retained in battery protected area of memory in the event of power failure or system reset.

Pulse-to-Tone Switchover

Signaling on an outside line can be changed from dial pulse to tone (DTMF) manually while dialing out.

Performing the Change-Over

Dial [✳] on the dial pad. The remaining digit(s) is sent using DTMF.

(The Pulse-To-Tone Switchover command may also be included in a speed dial bin.)

Repeat Redial

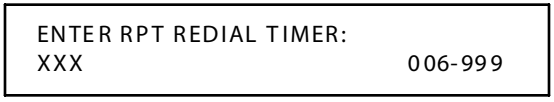
The Repeat Redial feature lets a digital key station redial a busy or no-answer number at specific intervals. The user is signaled via a queue call back indication.

The REDIAL flexible button flashes at the callback rate of 120 ipm for 15 seconds. If the station does not answer within 15 seconds, the callback cancels. The system retains the last call the user made. If the station is busy on an internal/external call when the Redial Queue Call Back occurs, the callback does not occur until the user goes on-hook.

The user must enter a Redial Timer value (006-999 that represents seconds) when invoking this feature. A two minute interval is entered as 120. Default value is 1 minute (60).

A keyset station user places a CO call and receives a Busy or No Answer:

1. Press the pre-programmed REPEAT REDIAL flexible button [643]. The LCD prompts the user for a timer value.



2. Enter a valid number (006-999 seconds) for the Repeat Redial timer. Default value is 060 (one minute). A confirmation tone is heard and the station user goes on-hook. The flexible button LED lights steady.

   When the timer expires, the station is signaled via a CO line queue indication on the REPEAT REDIAL flexible button. During the Queue Call Back, the LCD display indicates this is a Redial Call Back. Once line queue is answered, the LCD indicates an outgoing CO line display.

Activating a Redial

Press the pre-programmed REDIAL flexible button,

-or-

Press the ON/OFF button,

-or-

Lift the handset, line is seized and number is dialed. If the user receives a busy/no answer, they may repeat the step to activate another redial.

Cancelling the Operation

Press the pre-programmed REDIAL flexible button. A confirmation tone is heard and the Auto Redial function is cancelled.

Conditions

Once the user presses the pre-programmed flexible button, the timer applies when the user enters a digit. After a digit is entered, the inter-digit timer applies between the digits.

Ring Tone

The tone ring signal that notifies stations of an incoming call can be changed by each station user to provide distinctive ringing among a group of stations. Each station user may select a distinctive ringing tone used to ring their station. The system provides 36 different ring patterns that station users may select from.

Selecting a Distinctive Ring Tone for a Station

1. Dial the Tone Ring program code [695] on the dial pad. The following message displays:

```
ENTER RING TONES              00-36
XX PRESS SPEED TO SAVE
```

2. Enter a valid tone number. The telephone speaker sounds a steady tone that correlates to the 2-digit entry.

3. When the desired tone is selected (default ringing code is set to 00), press the SPEED button to save it as the tone to present when the station is tone rung. A confirmation tone is heard.

   This tone is presented as a result of an incoming CO or intercom call, recalling CO line or Transferred CO line or at any other time the station is tone rung. The 2-digit tone number displays in the lower left corner of the LCD display.

The ringing choices are as follows:

Table 6-6: Ringing Choices

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	Off
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

Conditions

- Station users may listen to all tones by dialing the 2-digit codes one after another. The tone that is sounding when the SPEED button is pressed is saved as that station's tone ringing selection.
- A station's tone ringing selection is maintained in a battery protected area of memory. Therefore, if a system experiences a power failure or a soft or hard restart, the tone ringing selection is restored.
- The tone selected provides TONE ringing normal or muted to the station whenever the station is commanded to tone ring (i.e., this excludes camp-on tone programming confirmation tones or other specific tones not considered TONE ringing).
- The selected tone is used to notify the station in the following cases:
  - Incoming CO Call
  - Incoming Intercom Call
  - Transferred CO Line
  - Recalling CO Line
  - Call Back Notification
  - Message Wait Call Back
  - All Types of Forwarded Calls
  - Executive/Secretary calls
  - Line Queue Call Back
  - LCR Queue Call Back
- CO distinctive ringing supersedes station distinctive ringing.

Save Number Redial (SNR)

Saving the Last Number Dialed

1. After placing an outside call, keep handset off-hook.
2. Press the SPEED button twice.

Dialing a Number that was Saved (using the steps above)

1. Press the SPEED button.
2. Dial the [✳] button.

- System automatically selects the original line used to place the call and redials the number.
- If that line is busy, the system automatically selects another line from the same group and redials the number.
- If no lines are available in the same group, the station receives busy tone and can queue for a line.
- If the station user preselects a line before activating SNR, the preselection overrides the line originally used.

Speakerphone

1. Press ON/OFF button to ON. Intercom dial tone is heard.
2. Press the Volume Bar to change the tone volume. The following message displays:

```
SPEAKER TONE          [#########]
MMM DD YY               HH:MM am
```

3. Press the party's DSS button, or press an available outside line button and dial the number. Speakerphone is activated.
4. Press ON/OFF button to OFF to end the call.

For further references in this section where lift handset is specified, you may also press the ON/OFF button, if the telephone is programmed as a two-way speakerphone.

Speed Dial

If an outside line was not specified in programming, one can be selected now or the system assigns the line.

Press the SPEED button and dial speed bin location,

-or-

Press the pre-programmed speed bin button.

Station Speed Numbers

A keyset user can enter Station Speed numbers (000 to 019).

System Speed Numbers

The first programmed attendant must enter the System Speed numbers (020 to 999). If an attendant was not specified, speed numbers are entered at Station 100.

Storing Speed Dial Numbers

1. Press the SPEED button once.
2. Press an OUTSIDE LINE button or POOL button.

   -or-

   Select an outside line by pressing the SPEED button again.
3. Dial the speed bin location.
4. Dial the desired telephone number and include these special codes:
   - TRANS -- Initiates a Pulse-To-Tone switchover.
   - HOLD -- Inserts a Pause.
   - FLASH -- Inserts a Flash into the speed number.
   - TRANS -- When used as the first entry in the speed bin, this inserts a no-display character causing numbers stored in the bin not to appear on the digital telephone's display when bin is accessed.
5. Press the SPEED button.
6. Replace the handset to end the speed bin programming.

Programming Multiple Speed Numbers

1. Press the SPEED button twice to conclude programming a number.
2. Enter the next speed number bin to program.

   If the station has no line appearance for the line programmed into the speed bin, that line comes up under the LOOP button or POOL button when accessed.

Erasing an Existing Speed Bin

1. Press the SPEED button twice.
2. Dial the speed bin location:
3. Press the SPEED button again. A confirmation tone is heard.

Station Relocation

The Station Relocation Feature lets a user unplug their station and plug it into another location. Dialing a code followed by the old station number brings all the station attributes including extension number, button mapping, speed dial, and class of service to the new location.

1. A station can be relocated by unplugging it, then plugging it into a new location.
2. Dial [636] on the dial pad. Then, dial the extension number of the station being relocated. Once this is done, all station attributes are copied to the current station.

If a station is assigned to a specific port and the user unplugs their station and plugs it into another location, database administration programming is updated to reflect the new port change.

Conditions

- The station number that is dialed as the relocated station must be unplugged.
- The relocated station is given the station attributes of the station doing the relocating. The two stations trade station numbers and station attributes.
- If a keyset is plugged into the relocated position it has all station attributes of the relocating station. This feature is only applicable to keysets.
- Digital stations must be relocated to another digital port. If a digital user moves their station number to an analog port, the buttons are initialized and must be reprogrammed.
- Station Lock disables this feature.

Text Messaging (Silent Response)

The Text Messaging feature lets a station user use text messages in response to a caller that has camped-on or used the Off-Hook Voice Over feature to alert a busy station user of a waiting call or message. The camped-on station may respond to the caller via the canned, custom, or silent response text (LCD) messages. Text messages display on the calling party LCD Display.

While receiving a Camp-On, or OHVO call:

The called party may press a pre-programmed Text Message button with a specific message [633+XX]. Example: [633] + [38] means a telephone calling the station receives the message WHO IS IT ?

Additional messages (with their codes listed below) can also be sent as a text response:

[31] = I Will Take Call	[42] = Is It Important?
[32] = Take Message	[43] = Is It Urgent?
[33] = Transfer To Secretary	[44] = Send Call To Voice Mail
[34] = Put Call On Hold	[45] = Park Call
[35] = Call Back	[46] = Out Of Office
[36] = One Moment Please	[47] = Put Call Through
[37] = I Will Call Back	[48] = I Am Busy
[38] =Who Is It?	[49] = O.K.
[39] =Is It Long Distance?	[50] = No
[40] =Is It Personal?	[51] = Yes
[41] =Is It An Emergency ?	

Conditions

- If the station receiving the text message response was doing a camp-on, it receives a short burst of tone on the speaker, then the display shows the message that was activated by the called station.
- If the station receiving the text message response is on an OHVO call, no tone is received.
- All canned and custom messages may be used to respond to a calling party.
- Text response messages automatically clear when the calling station (station receiving the messages) goes on-hook.
- A station can receive only one message at a time.
- Text messages may be chained (i.e., multiple messages sent to one caller).
- Text message responses appear on the calling station and the called station (station activating text responses) LCD displays.
- If the calling station is a non-LCD telephone, the called station receives error tone when responding via text messaging.
- The called station may press a flex button programmed as a Text Message button, [633+#]. Press this flex button and dial the 2-digit message number (31–51) to respond to the calling station. DTMF digits are not heard by either party.
- When silent messaging is used to respond to a call, the existing call of the called station is not disconnected while the messages are sent to the calling station.
- The calling station must remain off-hook to receive silent messages.
- If the called station responds with a text message, the text message displays on the LCD.
- Each message may be programmed onto a flexible button, including a flex button on a DSS/BLF console.

The calling station must be a display telephone and the called station must be a keyset.

Uniform Call Distribution (UCD)

Eight Uniform Call Distribution (UCD) groups can be programmed, each containing up to eight 3-digit station numbers. Each group is assigned a pilot number. When this number is dialed, the first available agent in that group is rung. Calls are routed to the station that has been on-hook for the longest period of time.

UCD Calls In Queue Display

From an idle display key telephone:

1. Dial [567] on the dial pad, followed by the UCD group number (55X),

   -or-

   Press pre-programmed flex button. ON/OFF button LED lights steady.

   - This idle display prompts a Supervisor that a group is having problems answering their calls.
   - The display tells the agent and their supervisor how many calls are in queue, how many agents are available or logged into the group, and the time (in minutes) that the oldest call has been in queue.
   - The agent automatically receives the calls in queue display whenever there is a call in queue.
2. Hang up handset or press ON/OFF button to terminate the display.

This feature cannot be used with a call in progress. The station is considered busy for incoming calls during this operation.

UCD Overflow Station - Forwarding Assignments

The UCD Overflow Station Forwarding feature enables UCD calls reaching an Overflow Station to be forwarded.

1. Lift the handset or press ON/OFF button.
2. Press the FWD button or dial [640].
3. Dial the desired code:

   [6] = All Calls

   [7] = No Answer Calls

   [8] = Busy Calls

   [9] = Busy and No Answer Calls
4. Dial the destination number where to forward calls (Station, Voice Mail, UCD groups, or Hunt group). Confirmation tone is heard.
5. Replace handset or press ON/OFF button.

Removing Call Forwarding

1. Lift handset or press ON/OFF button.
2. Press the FWD button. A confirmation tone is heard and the FWD LED extinguishes.

Conditions

An overflow station may be assigned to route callers in queue to a designated station after a specified time. A queued call is one that has been answered by a recorded announcement device or transferred into the group.

Universal Day/Night Answer (UDA/UNA)

Incoming CO lines can be programmed for Universal Day Answer (UDA) or Universal Night Answer (UNA). UDA/UNA assigned CO lines can also signal over the external page port(s). If External Day programming is enabled and the system is in the day mode, the assigned external page port(s) present a ringing signal. UDA/UNA is established on a per CO line basis in admin programming.

When the system is in Day or Night mode and you hear an outside line ringing at another station, and wish to answer it:

Dial [#5] on the dial pad. The connected outside line can be transferred or disconnected.

Each telephone utilizing Universal Day/Night Answer must have a loop button appearance if the ringing outside line does not display at their phone.

Conditions

- During the Day mode, all common CO lines ring when programmed for UDA ringing.
- CO lines not programmed for UDA ringing do not participate in common audible ringing.
- If External Day ring is disabled, or the system is not in the day mode, external page ringing is disabled.
- Ringing CO lines not assigned CO line group access for a particular SLT may be answered in a UDA service. Dialing privileges are unavailable on CO lines to which an SLT does not have access. CO lines without UDA status may not be answered or accessed via UDA procedures.
- If two single-line telephones attempt to retrieve one ringing CO line simultaneously, one user is connected to the incoming CO line and the other user receives intercom busy tone.
- The special ring mode is treated as day mode.

Voice Mail Groups (VM)

Forwarding Callers to Your Mailbox

Intercom and Transferred CO callers may be routed directly to your mail box by forwarding your phone to a voice mail group. Callers are then greeted by your personal voice mail greeting, if available. (Refer to Call Forward - Voice Mail Operation.)

Retrieving Voice Messages

If your Message Waiting button or programmed Voice Mail Group button is flashing, you may have a voice message waiting. To enter the voice mail system to check for mail:

1. Dial the Voice Mail Group number [440-447],

   -or-

   Press the pre-programmed Voice Mail group button or flashing Message Wait button.
2. When prompted, enter the mailbox password.

VM Transfer with ID Digits

The VM Transfer with ID Digits feature lets an Attendant or station user transfer a caller directly into a voice mail box. This allows entry of the station identification digits by the transferring party. A caller using this feature can transfer to a voice mail box when: 1) a station user on the system is not forwarded to VM, or 2) the destination Voice Mail Box owner is not a station user.

When a caller wants to be transferred into a user's Voice Mail box and that user's station is not forwarded into voice mail, the Attendant or a station user may initiate a Voice Mail Transfer as follows:

1. The initiating station presses the TRANS button.
2. Dial the Voice Mail Group number,

   -or-

   Press the pre-programmed VM group button.

3. Dial the desired party's VMID (Mail Box location) and go on-hook. The system makes the connection to an available Voice Mail port and sends the Leave Mail Prefix (if any) plus the digits dialed as the VMID number, then the Leave Mail Suffix digits (if any). The system then cuts through the transferred caller.

The VMID (mail box location) can be any number between 000 through 999. If 4-digit VMID (Flash 09) is enabled, the range is between 0000 through 9999.

-or-

1. The initiating system presses the Voice Mail button.
2. Press DSS button to transfer desired party's Voice Mail ID.

Conditions

- CO Trunks and Internal Calls may be transferred into Voice Mail using this feature.
- If no VMID digits are dialed by the transferring station, the identification digits of the transferring station are sent to VM.

VM Tone Mode Calling Option

VM Tone Mode Calling feature lets the Voice Mail system override a called station's H or P intercom settings.

The VM system must be programmed when placing a call to a station and Tone Ringing is desired.

1. Dial [6#] on the dial pad.
2. Dial the station extension (call tone rings station).

Volume Control Bar (DKT)

There is a volume control bar below the keypad to control the ringing, handset, and speakerphone volumes.

Display Messages

While using these function/features, Digital Key Telephones display the following messages:

Listening to Background Music ...

```
SPEAKER BGM          [#########]
MMM DD YY             HH:MM am
```

Using the speakerphone on a Intercom call ...

```
SPEAKER CALL         [#########]
MMM DD YY             HH:MM am
```

Using the handset on a Intercom call ...

```
HANDSET ICM          [#########]
MMM DD YY             HH:MM am
```

Using the speakerphone on a CO call ...

```
SPEAKER CALL         [#########]
MMM DD YY             HH:MM am
```

Using the handset on a CO call ...

```
HANDSET CO           [#########]
MMM DD YY             HH:MM am
```

Receiving a page announcement ...

Receiving an incoming tone ringing Intercom or CO call ...

7 Single Line Telephone Operation

This chapter of the manual contains the following types of information on Single Line Telephones (SLTs):

- Illustrations of the 2700 SLT models.
- SLT Numbering Plan listing the available features and their codes.
- Step-by-step instructions for using the SLTs in the system.
- Operating instructions for single line users.

Literature similar to the operating instructions was prepared for customer use in the form of a *Single Line Telephone User Guide*.

Introduction

Features pertaining to the Single Line Telephones are listed and described in alphabetical order. The following illustrations show the various SLT models available:

2705 Model

Figure 7-1: 2700 Series SLT Telephones

2701 Type

2702 Type w/ Message Waiting Lamp

2703 Type with Message Waiting Lamp

2704 Type with Flash Key

Figure 7-1: 2700 Series SLT Telephones

Table 7-1: SLT Numbering Plan

Account Code Enter	627	Line Queue	621
ACD* Agent Help	574	Message Wait	623
ACD* Agent Login (Primary Grp)	572+[5UU]	Message Wait Return	663
ACD* Agent Login (Secondary Grp)	582+[5UU]	Name in Display Programming	690
ACD* Agent Logout (Primary Grp)	571	Page - All Call (Int and Ext)	700
ACD* Agent Logout (Secondary Grp)	581	Page - External All Call (All Zones)	76+[0]
ACD* Group Member Status	573	Page - External Zones	76+[P]
ACD* Group Pilot Numbers	5+[UU]	Page - Internal All Call	709
ACD* Available/Unavailable	566	Page - Internal Zones 1-8	701-708
ACD* Overflow Sta Available/Unavailable	578	Page - Meet Me (Answer)	770
Attendant	0	Personalized Messages	633+[ZZ]
Call Back	622	Personalized Messages (Clear)	633+[00]
Call Forward - All	640+[6]	SLT Clear - Call Forward, DND	662
Call Forward - Busy	640+[8]	SLT Conference w/Personal Park	664
Call Forward - Busy/No Answer	640+[9]	SLT Flash Command to CO Line	660
Call Forward - Follow Me	642	SLT Speed Dial Access	668+[YYY]
Call Forward - No Answer	640+[7]	(000-019 Sta) (020-999 Sys)	
Call Forward - Off-Net	640+[✳]	SLT Sta Speed Dial Programming	661+[YYY]
Call Park Location - Personal	438	Tone Mode Ring Option	6#+[XXX]
Call Park Location - System	43+[C]	UCD Group Pilot Numbers	55+[U]
Call Park Location - Station	439+[XXX]	Universal Day/Night Answer	#5
Call Park Pickup (Key and SLT)	#43+[C]	Voice Mail Group Pilot Numbers	44+[V]
Camp-On	620		
CO Line Direct Access	88+[LLL]	---------- *LEGEND* ----------	
CO Line Group (LCR if 911 active)	800		
CO Line Group 1-24	801-823	*C = Call Park Location (0-7)*	
Directed Call Pick Up (SLT)	#1+[XXX]	*G = Volume Control (0-9)*	
Do Not Disturb	631	*H = Hunt Group Number (0-7)*	
Executive Override	625	*LLL = Line Number*	
Extension Numbers - *Triad 1/2*	100-171	*(001-048 Triad 1/2, 001-144 Triad 3)*	
Extension Numbers - *Triad 3*	100-351	*P = 1 or 2*	
Group Call Pick Up (Key and SLT)	#0	*U = UCD Grp Number (0-7)*	
Handset Receiver Gain	638+[G]	*UU = ACD (50-65)*	
Handset Receiver Gain Increase	638+[#]	*V = Voice Mail Group Number (0-7)*	
Hunt Group Pilot Numbers	45+[H]	*XXX = Intercom Station Numbers*	
LCR or CO Line Grp 1 (if LCR enabled)	9	*YYY = Speed Dial Bin Numbers*	
LCR Queue Cancel	626	*ZZ = Personalized Messages*	

** Features available with optional software*

Account Codes

SLT stations can enter an account code to identify the call or calling station.

Entering Account Code (before a call)

1. Lift the handset.
2. Dial [627] on the dial pad.
3. Dial the account code.

   If the account code contains fewer than 12 digits, dial [✳] to return to intercom dial tone.
4. Dial [9] or CO Access code and the desired number.

Entering Account Code (during a call)

1. Press the hookswitch momentarily. Your call is placed on Executive Hold while you enter your account code.
2. Dial [627] on the dial pad.
3. Dial the account code.

   If account code contains fewer than 12 digits, dial [✳] to automatically return to the call.

Automatic Call Distribution (ACD)

The ACD feature is available with optional software. When purchased, Uniform Call Distribution (UCD) is not used and is replaced by the ACD functions identified in the following. Sixteen Automatic Call Distribution (ACD) groups can be programmed, each containing up to 252 station numbers.

Agent Login/Logout

The Agent Login/Logout feature allows an agent to log into primary and secondary ACD Groups to receive calls. To be placed into an active ACD state, the agent must first login.

Primary Group

- Dial LOGIN CODE **[572]** on the dial pad, followed by ACD Group Number (5XX) desired.

  Enter unique AGENT ID code (0000–9999). A confirmation tone is heard and the agent is logged onto the ACD group.

- Dial LOGOUT CODE **[571]** on the dial pad to logout of the primary group.

  When an agent logs in or out of an ACD Group, an ACD login/logout event is sent to the SMDR port, if active.

If a member is assigned to a specific ACD group and uses the login-logout codes to enter and exit an ACD group other than their assigned group, the database is changed to reflect the different group.

Secondary Group

- Dial LOGIN CODE **[582]** on the dial pad, then the ACD Group Number (5XX) desired.
- Dial LOGOUT CODE **[581]** on the dial pad to logout of the secondary group.

Conditions

- If an agent logs into an ACD group from a station that is logged into another ACD group, the station is automatically removed from the previous ACD group.
- An agent may log out while in wrap-up, or unavailable.
- An agent logging in is placed in wrap-up mode before receiving an ACD call.
- If an agent attempts to log into an ACD group that already has 60 members (*Triad 1/2*) or 252 members (*Triad 3*), that agent receives an error tone.
- An agent may not logon to the same group as a primary and secondary member.

  The *Triad 1/2/3* System does not verify agents ID codes, except four-digit ID entry.

ACD Agent HELP

The ACD Agent HELP feature provides a means for an ACD agent to signal their assigned supervisor for assistance.

While on a call-in-progress, the agent:

After hook-flashing, dials the HELP code [574] on the dial pad. The agent must hook-flash again to return to their call after the code is dialed. If no supervisor is logged in, the agent receives one-burst of error tone.

Conditions

- Up to five messages can be left at any supervisor station.
- The supervisor can cancel the HELP request signal by pressing the flashing HELP button. A call is placed to the agent requesting HELP. If the agent is on a call, the supervisor can press their barge-in button to monitor the call or give assistance on the call.

ACD/UCD Available/Unavailable Mode

An ACD agent may place their station in Available mode to receive ACD calls, or block ACD calls by placing their station in the Unavailable mode.

Making a Station Available

Dial [566] on the dial pad. A confirmation tone is heard. (ACD calls are received.)

Making a Station Unavailable

Dial [566] on the dial pad. A confirmation tone is heard. (ACD calls are blocked.)

Conditions

SLTs receive a stutter dial tone when unavailable.

Automatic Line Access

SLTs may have their station programmed to access a particular CO Line, such as a private line or a line from a Group of CO lines, upon going off-hook. This is useful in Centrex or PBX applications when station users have dedicated or individual lines. Outside line dial tone is received just by going off-hook, without dialing access codes.

Call Back

When you call a station and receive a busy signal:

1. Briefly press and release the hookswitch.
2. Dial [622] on the dial pad.
3. Replace handset.

Only one Call Back request can be left at a station; the second request converts to Message Waiting Request.

Call Brokering

Call Brokering enables SLT user on a CO call to Hook-Flash and make another CO call. Once this other call is established, the SLT user can Hook-Flash to move back and forth between parties. Hook-Flash timer may require adjustment for proper operation.

Call Forward

Forwarding Calls to Another Station

1. Lift handset.
2. Dial [640] on the dial pad.
3. Dial the appropriate forwarding condition code:

   [6] = All Calls

   [7] = Call Forward No Answer

   [8] = Call Forward Busy

   [9] = Call Forward Busy/No Answer

   [✳] = Call Forward Off-Net (via system speed dial)
4. Dial the extension number or speed bin number where calls are to be forwarded. A confirmation tone is heard.
5. Replace handset.

Removing Call Forwarding

1. Lift handset, a stutter dial tone is heard.
2. Dial [640] on the dial pad or [662] on the dial pad. A confirmation tone is heard.
3. Replace the handset.

Call Forward - Follow-Me

The Call Forward/Follow-Me feature enables a user who is away from their station, activate/deactivate call forwarding from another station in the system. This lets the user forward their calls to their current location or into Voice Mail, ACD/UCD, Hunt Groups, or to any other station in the system. When this call forward is activated, all calls presented to the forwarded station forward to the destination station immediately.

Activating Follow-Me Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Dial the Follow-Me Forward code [642] on the dial pad.
3. Dial the station number of the station from which forwarding is desired.
4. Dial the appropriate forwarding condition code.

   [6] = All Calls

   [7] = No Answer

   [8] = Busy

   [9] = Busy/No Answer
5. Dial the three-digit destination number where calls are to be forwarded. Station, Voice Mail, ACD/UCD, or Hunt Groups.)
6. Replace handset or press ON/OFF button.

Removing Follow-Me Call Forwarding

1. Lift the handset or press ON/OFF button.
2. Dial the Follow-Me Forward code [642] on the dial pad.
3. Dial the station number of the station that forwarding is to be cancelled.
4. Dial [6] (regardless of the forward condition).
5. Redial the same station number. A confirmation tone sounds and the FWD LED extinguishes.

Conditions

- If a Call Forward mode is currently active at the station where forwarding is desired, the new forward becomes active and cancels the previous forward.
- Both internal and external calls to the affected station forward to the designated location.
- Call forwarding must be allowed in programming for the affected station.
- When remote forward is activated the forwarding is immediate.
- When a key telephone is forwarded remotely, the key stations forward button lights. The station user may cancel the forwarding at their station by pressing ON/OFF, then the FWD button. SLT users can cancel forwarding by going off hook and dialing the forward code.
- DISA callers entering the code and making a mistake are given an error tone for 3 seconds, silence for 2 seconds, then the dial tone is returned.

Calling Station Tone Mode Option

The Calling Station Tone Mode feature enables a calling station to override a called station's H or P intercom settings. Use from VM port.

Calling a Station and Tone Ringing Desired

1. Dial [6#] on the dial pad.
2. Dial the extension number,

   -or-

   Press DSS button of desired station (call tone rings station).

Call Park - Personal

While Connected to First Call:

1. Press the hookswitch momentarily. Intercom dial tone is heard.
2. Dial [438] on the dial pad (call is placed in personal park).
3. Dial desired number for second call.
4. Press the hookswitch momentarily. Intercom dial tone is heard.
5. Dial [438] on the dial pad (first call is returned and second call is placed in Personal Park).

The user can alternately connect to the other call by doing a hook-flash and dialing [438] as many times as necessary.

Call Park (by Station Number)

While connected to an outside line:

1. Press TRANS button.
2. Dial [439] + XXX (station number).

Retrieving a Station Park Call

Dial [# 6] + XXX (user's station number, while at the user's telephone or from any telephone in the system).

-or-

Dial [438] from the user's station.

Conditions

- A flex button may be assigned to Call Park feature code 439. The user can press the specified flex button and dial a station number on the dial pad.
- The directed call pickup code for 8-button telephones is eliminated. 8-button telephones must assign a pickup button on the telephone to have the pickup feature.
- Only one call can be in a park location at a time. Multiple calls to the same station park location is not possible.

- The #6 code is flexible and can be assigned in Flash 52 programming.
- The call will be placed in the Station's Personal Park location.

Call Park (System)

The Call Park feature enables an outside call to be placed on hold and consult with, page, or call an internal party prior to transfer.

While connected to an outside line:

1. Press and release the hookswitch. The caller is put on Exclusive hold.
2. Dial parking location (430 to 437) on the dial pad. A confirmation tone is heard.
3. If you hear busy tone, press and release the hookswitch to re-establish contact with the called station, and press and release the hookswitch again prior to dialing another parking location.

Retrieving a Parked Call

1. Lift handset.
2. Dial [#] on the dial pad.
3. Dial parking location (430 to 437) where the call was parked.

Call Pick-up Directed

Upon hearing an unattended telephone ring:

1. Lift handset.
2. Dial [#1] on the dial pad.
3. Dial station number of ringing telephone. You are connected to intercom, incoming, recalling, or transferred outside line.

Call Pick-Up Group

Upon hearing an unattended telephone ringing:

1. Lift the handset.
2. Dial [#0] on the dial pad. You are connected to intercom, transferred or recalling outside line call.

You must be in the same Pickup group.

Call Transfer

Making an Unscreened Transfer

1. Briefly press and release the hookswitch.
2. Dial desired intercom number.
3. Hang up to complete the transfer.

Making a Screened Transfer

1. Briefly press and release the hookswitch.
2. Dial desired telephone number. Announce the call.
3. Hang up to complete the transfer.

Camp-On

After receiving intercom busy tone:

1. Briefly press and release the hookswitch.
2. Dial [620] on the dial pad.

Receiving a Camp-On Warning Tone (through handset)

Choose desired call (hang up present call and take the new one, or ignore the Camp-On signal). Also refer to Personal Park.

Clear Call Forward, DND, Personalized Messages

A convenient code [662] is incorporated to cancel either Call forwarding, DND, or Personalized Messages when the SLT user forgets which code was programmed on the phone

Cancelling Call Forward, DND, Personalized Messages

1. Lift handset. Notification tone is heard.
2. Dial [662] on the dial pad. A confirmation tone is heard.
3. Replace the handset.

CO Line Direct Access

1. Lift handset.
2. Dial [88]+XXX (where XXX=specific CO Line desired)

CO Line Queuing

1. Dial outside line access code. Receive busy tone.
2. Briefly press and release the hookswitch.
3. Dial [621] on the dial pad. A confirmation tone is heard.

Conference

You may set up a conference of one external and one other internal station.

1. Lift handset.
2. Make outside call.
3. Briefly press and release the hookswitch to put the call on hold.
4. Dial number of internal station to add.
5. When that station answers, briefly press and release the hookswitch again and all three parties are connected.

Conference With Personal Park

While connected to an outside line:

1. Press the hookswitch momentarily. Intercom dial tone is heard.
2. Dial [438] on the dial pad (first call is placed in personal park).
3. Dial desired number for second call.
4. Press the hookswitch momentarily. Intercom dial tone is heard.
5. Dial [664] on the dial pad. All three parties are conferenced.
6. Hang up to terminate conference.

Direct Outside Line Access

1. Lift handset.
2. Dial access code (9, 81–87, 88+LLL) on dial pad.
3. Dial desired telephone number.

Do Not Disturb (DND)

Activating Do Not Disturb

1. Lift handset.
2. Dial [631] on the dial pad.
3. Replace handset.

Cancelling Do Not Disturb

1. Lift handset.
2. Dial [631] on the dial pad or [662] on the dial pad.
3. Replace handset.

Handset Receiver Gain

The Handset Receiver Gain feature allows an SLT user to increase/ decrease the handset volume while on a CO or intercom call.

1. Hookflash and dial the Handset Receiver Gain code [638] on the dial pad.
2. Dial a valid number (0=lowest through 9=highest) on the dial pad,

   -or-

   Press [#] to increase or [✳] to decrease the gain, one level at a time.
3. Hookflash again to return to call.
4. Repeat above procedures, if necessary.
5. Replace the handset to end the call.

Intercom Calling

Ringing is heard if called station is in T answering mode; or two bursts of tone if called station is in the H or P position.

Placing an Intercom Call

1. Lift the handset.
2. Dial the intercom number.
3. Converse after the two tone bursts stop.
4. Replace the handset to end the call.

Answering an Intercom Call

1. Lift handset to converse.
2. Replace handset to end call.

Conditions

Off-Hook Preference may affect this feature. (Refer to *Off-Hook Preference* for more information.)

Least Cost Routing (LCR)

Placing an Outside Call (when LCR enabled)

1. Lift the handset.
2. Dial [9] on the dial pad.
3. Dial the desired telephone number.
4. Wait for an answer, then converse.

   If all lines available are busy, remain off-hook for four seconds to automatically be queued onto LCR for an available line.

If an LCR Queue Call Back is activated:

Answer call when telephone is signaled, the desired telephone number is automatically redialed.

Only one LCR Queue Call Back request may be initiated by a station. When a second request is made, the first request is cancelled.

If the 911 feature is enabled, the LCR access code is 80 instead of 9.

Cancelling an LCR Queue Call Back

1. Dial the LCR Queue Cancel code [626] on the dial pad.
2. Replace the handset.

Meet Me Page

Requesting a Party to Meet You on a Page

1. Dial the desired paging code.
2. Request that party meet you on the page.
3. Do not hang up; wait for the requested party to answer. As soon as the paged party answers and is connected to you, the page circuit is released.

Answering a Meet Me Page

Go to the nearest telephone and dial [770] on the dial pad. You are connected to the party that paged you.

Message Waiting

Leaving a Message Waiting Indication

1. Lift handset.
2. Dial desired intercom station. (No Answer or DND tone is received.)
3. Briefly press and release the hookswitch.
4. Dial [623] on the dial pad.
5. Replace handset.

Answering a Message Waiting Indication

A message waiting lamp is flashing or a stutter dial tone is received when the handset is lifted.

1. Lift handset.
2. Dial [663] on the dial pad. (Station that left the message rings.)

Off-Hook Preference

If your phone was programmed for Off-Hook Preference, an outside line dial tone is heard when lifting the handset.

When this operation is enabled, you may not have access to all features described in this document. However, consult your Centrex or PBX User's Guide for additional features you may have.

This feature eliminates intercom dial tone when going off-hook.

Personalized Messages

Each station can select a pre-assigned message to display on the LCD of any key telephone calling that station. To select from available messages:

1. Dial [633] on the dial pad.
2. Dial desired message code.

00 = (clears messages)	06 = On Trip
01 = On Vacation	07 = In Meeting
02 = Return AM	08 = At Home
03 = Return PM	09 = On Break
04 = Return Tomorrow	10 = At Lunch
05 = Return Next Week	

3. Replace the handset. (Activating DND or Call Forwarding cancels selected message.)

Paging

1. Lift handset.
2. Dial the paging code. (Wait for page warning tone.)

   [700] = All Call - Internal and External

   [701-708] = Internal Zone 1-8

   [709] = Internal All Calls

   [76]+[0] = External All Calls (All Ext Zones)

   [76]+[P] = External Zones (1-2)

   (Stations off-hook or in DND do not hear the internal page announcement.)

When making a Zone Page or All Call Page and the zone is busy, the page initiator receives ringback tone until the zone becomes available. You then hear a warning tone and can make the page announcement.

3. Use Flash, depress hookswitch or replace handset to terminate page.

Programming Names - LCD Display

Every SLT extension has the capability to program the users name so that people using display telephones see the name instead of the station number.

1. Lift handset.
2. Dial [690] on the dial pad.
3. Enter the name (up to 7 characters may be entered) by using keys on the dial pad as shown in chapter 6, *Figure 6-3: Key Pad - Dial By Name*.
4. Press the hookswitch to complete the programming process.

Speed Dial - Station

1. Lift handset.
2. Dial [668] on the dial pad.
3. Dial desired station speed bin number (000-019).

Speed Dial - Storing Station Numbers

1. Lift handset.
2. Dial [661] on the dial pad.
3. Dial desired station speed bin number (000-019).
4. Dial telephone number to store.
5. Briefly press and release the hookswitch. (A confirmation tone is heard.)

Line Group 1 is programmed along with SLT speed numbers and thus, Line Group 1 is used when activating station speed dial from an SLT.

Speed Dial - System

1. Lift handset.
2. Dial [668] on the dial pad.
3. Dial desired system speed bin number (020–999).

Transfer (PBX/Centrex)

To initiate a Transfer command from an SLT while connected to a PBX or Centrex line:

1. Briefly press and release the hookswitch. Intercom dial tone is heard.
2. Dial [660] on the dial pad. A Flash command is presented to the PBX or Centrex line.
3. PBX or Centrex stutter tone is heard. Dial number of desired extension.
4. Replace handset to complete transfer.

Universal Day/Night Answer (UDA/UNA)

Upon hearing an incoming signal:

1. Lift handset.
2. Dial the UDA/UNA access code [#5] on the dial pad. You are connected to ringing outside line.

Voice Mail Operation

Receiving a Voice Mail Message Wait

To receive a message waiting indication that a voice message is waiting, the Voice Mail system must be programmed to provide the indication.

After the voice mail system receives a voice message for a station user, the voice mail must go off-hook.

1. Dial the Voice Mail Message Wait code [420] on the dial pad.
2. Dial the extension number of the station user who received a voice message.

Turning the Message Waiting Lamp Off

When a station user retrieves the voice messages from the voice mail system, the voice mail system must be programmed to go off-hook.

1. Dial the Message Cancel code [421] on the dial pad.
2. Dial the extension number of the station user who received a voice message.

Conditions

Only VM extensions are allowed to turn ON/OFF VM message wait indications.

8 Digital Attendant Operations

This chapter is intended for use in conjunction with the Station Operation chapter to provide step-by-step instructions for operating the Attendant(s) Digital Telephone(s) in the system. Visual and audible cues that accompany the various feature operation steps are also included.

**A FlexButton must be programmed for designated features to operate. Refer to Chapter 6, Table 6-3: Digital Station - Flex Button Programming Codes.*

Digital Attendant features are an addition to digital station features. An *Attendant User's Guide* is also available that provides detailed operating instructions.

Introduction

Each *Triad 1/2/3* System provides the following keys, indicators and features:

Handset and Speaker are located at the left side of the front panel. A handset is provided to allow confidential conversation when desired. Lifting the handset from its cradle (going off-hook) disengages the station's built-in speaker.

The speaker is located directly below the center portion of the handset. The station may be operated with the handset on-hook. When this occurs, audio is transmitted to the station user through the station's speaker.

Flexible Buttons access idle outside lines, provide DSS/BLF for internal stations, access speed dial numbers and activate features. These buttons can be programmed by the individual station user. The default flex feature buttons are described as follows:

- CALL BACK button lets you initiate a call back request to another busy station. As soon as that station becomes idle, the station that left the call back request is automatically signaled. A flex button must be assigned to use this feature.
- PICK-UP button lets you pickup a tone ringing intercom call, transferred, incoming, or recalling outside line call to a specific unattended station by group or directed call pick-up.
- DND (DO NOT DISTURB) button. On Attendant stations, this button becomes the system Night Mode button. A flex button must be assigned to use this feature.
- LINE QUEUE button lets you queue onto an outside line when all lines in a group are busy. Your station is placed in queue awaiting a line in the same group to become available.

Fixed Feature Buttons function as follows:

- VOLUME BAR lets the user adjust ringer, speakerphone and handset volume.
- H-T-P lets the user select the ICM Signaling Mode, handsfree tone, or privacy.
- FLASH button terminates an outside call and restores dial tone without hanging up the handset. It also transfers calls behind a PBX or Centrex within those systems.
- CAMP-ON button lets you alert a busy party that an outside line is on hold and waiting for them.
- MSG (MESSAGE WAIT) button lets you initiate a message waiting indication at stations that are busy, unattended, or in Do Not Disturb. Message Waiting Callback request left at your station is indicated by a flashing MSG WAIT LED.
- SPEED button gives you access to speed dialing, save number redial and last number redial. This button also accesses flex button programming.
- TRANS (TRANSFER) button transfers an outside call from one station to another.
- CONF (CONFERENCE) button establishes and builds conference calls.
- FORWARD (FWD) button lets you forward your calls to another station.
- ON/OFF button lets you make a telephone call without lifting the handset. It turns the telephone on and off when using the speakerphone.
- MUTE button lets you switch the built-in microphone on or off when using the speakerphone, or the handset microphone when using the handset.
- HOLD button lets you place an outside caller on hold.

Outside Calls are announced by a tone signal repeated every 3.2 seconds. The corresponding outside line indicator flashes slowly.

Intercom Calls can be tone ringing or voice announce. If it is voice announced, the receiving station receives two bursts of tone prior to the announcement. If it is a tone ringing call, the receiving station hears a tone ring every 2.4 seconds.

Figure 8-1: Attendant Digital Display Telephone

Table 8-1: Digital Attendant Numbering Plan

911 Attendant Alert Clear	608
ACD* Agent Help	574
ACD* Agent Login (Primary Grp)	572+[5UU]
ACD* Agent Logon (Secondary Grp)	582+[5UU]
ACD* Agent Logout (Secondary Grp)	581
ACD* Agent Logout (Primary Grp)	571
ACD* Call Factor (requires button)	580+[5UU] +[FFF]
ACD* Call Qualifier	570+[YYY]
ACD* Group Member Status	573
ACD* Group Pilot Numbers	5+[UU]
ACD* Available/Unavailable	566
ACD* Calls in Queue Display	567+[5UU]
ACD* Overflow Sta Avail/Unavail	578
ACD* Supervisor Login	576
ACD* Supervisor Logout	575
ACD* Supervisor Queue Status Disp	577
Attendant Clear T-1 Alarm	606
Attendant Override	601
Attendant Unavail. (Alt Position)	607
Background Music	632+[0,1,2]
Call Forward - All	[FWD]+[6]
Call Forward - Busy	[FWD]+[8]
Call Forward - Busy/No Answer	[FWD]+[9]
Call Forward - No Answer	[FWD]+[7]
Call Forward Override	5#
Call Forward - Off Net	[FWD]+[✳]
Call Park Location - Personal	438
Call Park Location - System	43+[C]
Call Park Pickup (Key and SLT)	#43+[C]
CO Line Direct Access	88+[LLL]
CO Line Group (0-23)	800-823
CO Line Off-Net Forward	603
Custom Message(s) Program Code	694+[XX]
Day/Night/Special (Attendant only)	631
Dial By Name	6✳
Directory Dial	680
Directory List Program Code	693
Disable Outgoing CO Line Access	602
Distinctive Ringing	695+[XX]
Executive Override/Monitor Barge-In	625
Extension Numbers - *Triad 1/2*	100-171
Extension Numbers - *Triad 3*	100-351
Group Call Pick Up (Key and SLT)	#0
Headset Mode	634
Hunt Group Pilot Numbers	45+[H]
ICLID Display (Answered Calls)	659
ICLID Unanswered Calls Display	635
Keyset Mode	648+[#,✳]
Last Number Redial	[SPEED]+[#]
LCR or CO Line Grp 1 (if LCR disabled)	9
LCR Queue Cancel	626
Loop Key (requires button)	89
Message Wait	623
Modem via DISA Access or Tfr	499
Name in Display Programming	690
Off-Hook Preference Programming	691+[BB]
OHVO Enable	628
Page - All Call (Int and Ext)	700
Page - External All Call (All Zones)	76+[0]
Page - External Zones	76+[P]
Page - Internal All Call	709
Page - Internal Zones 1-8	701-708
Page - Meet Me (Answer)	770
Personalized Messages	633+[ZZ]
Personalized Messages - Clear	633+[00]
Save Number Redial	[SPEED]+[✳]
Software Version Display	605
Speed Dial Access (000-019 Sta) (020-099 Sys)	[SPEED]+[YYY]
Station Relocate	636+[XXX]
Time and Date Programming (first programmed Attendant)	692
Tone Mode Ring Option	6# [XXX]
UCD Group Pilot Numbers	55+[UUU]
Unanswered CO Call Transfer	639
Universal Day/Night Answer	#5

LEGEND –

BB = Button Number (1-24)
C = Call Park Location (0-7)
FFF = \\ACD Call Factor (000-999)*
H = Hunt Group Number (0-7)
LLL = Line Number
(001-048 Triad 1/2, 001-144 Triad 3)
P = External Page Zone Number (1-2)
U = UCD Group Number (0-7)
UU = ACD Group (50-65)*
V = Voice Mail Group Number (0-7)
XXX = Intercom Station Number
YYY = Speed Dial Bin Number
ZZ = Personalized Message

** ACD features are available with optional software.*

Attendant Unavailable (Alternate Position)

The Attendant Unavailable feature lets Attendant stations have a button that places their station in an Unavailable Mode. When the station is in the Unavailable Mode, the next Attendant station receives incoming and dial 0 calls. All other available Attendants receive recalls. This feature is based on the three programmed Attendant stations.

1. When the (first programmed) Attendant presses the pre-programmed UNAVAILABLE flexible button,

   -or-

   Dials the Attendant Unavailable code [607] on the dial pad, the following results occur:

   - The LED on the flexible button lights solid, if programmed.
   - Recalls ringing at first Attendant station now ring at the second.
   - If the second Attendant places their phone in unavailable, the third Attendant takes recalls.
2. When the first Attendant *repeats the process* (using Unavailable button or code 607), the following results occur:
   - The LED on the flexible button, if programmed, extinguishes.
   - The first Attendant resumes normal operation.
   - The second Attendant does not receive recalls or dial 0 calls.

Conditions

- This feature lets the programmed Attendant stations receive Attendant recalls only. No other Attendant type functions are given to this station when the station is in the Attendant mode.
- If Attendant A (first programmed) is available, incoming calls and recalls are directed to this station regardless of other Attendant stations status.
- The special ring mode can be set so the alternate Attendant does not receive an incoming CO ring until the main Attendant places their phone in special and unavailable modes.
- If all Attendants in the system are unavailable, no Attendants are available for internal/external callers.

- Recalls are directed to all programmed available Attendants.
- If only one Attendant is programmed in the system, and that Attendant is unavailable, users dialing zero hear an error tone.

Call Hold

- If your system is programmed for System Hold Preference, press HOLD button once for System Hold and twice for Exclusive Hold.
- If your system is programmed for Exclusive Hold Preference, press HOLD button once for Exclusive Hold and twice for System Hold.

Call Park

Parking an Outside Call (to consult/page/call internal party)

While connected to an outside line:

1. Press TRANS button. The caller is put on hold.
2. Dial parking location (430 to 437). A confirmation tone is heard.
3. If busy tone received, press TRANS twice and dial another park location.

Retrieving a Parked Call

1. Lift handset or press ON/OFF button.
2. Press the [#] button.
3. Dial parking location (430 to 437) where the call was parked.

CO Lines Off-Net Forward - Incoming (via Speed Dial)

The CO Lines Off-Net Forward feature lets the first Attendant station forward incoming CO calls to an off-net location.In a speed dial bin, store the number of the off-net location where calls are to forward. Follow instructions provided for storing station or system speed dial numbers.

1. Dial [603] on the dial pad,

   -or-

   Press pre-programmed* CO OFF-NET FORWARD button.

2. Press CO LINE button for an individual CO Line for Off-Net Forward,

   -or-

   Dial the CO group access code of the group to be forwarded:

   [801-823] = CO Group 1-23

   [824] = All CO Groups
3. Dial the speed bin number that contains the number where calls are to forward. A confirmation tone is heard.

Canceling Off-Net Forwarding

1. Dial [603] on the dial pad,

   -or-

   Press pre-programmed* CO Off-Net Forward button.
2. Dial the CO group access code,

   -or-

   Press the CO Line button.
3. Dial [#] on the dial pad. A confirmation tone is heard.

Conditions

- When CO lines are off-net forwarded, these lines display unique flash rates at the Attendant station.
- * A Flex Button must be programmed for this feature to operate.

Day/Night/Special Mode

Any designated Attendant can place the system into Night Service:

1. Press the pre-programmed* NIGHT SERVICE button (DND by default) once to activate the night mode (LED is lit solid).
2. Press the DND button again to activate the special mode (LED flashes @ 240 ipm).
   - The DND button (by default) acts as a toggle in this manner, starting in the day mode, night mode, and special mode.
   - When one Attendant activates this mode, other Attendant stations' DND buttons are lit accordingly.

Directory Dialing

Directory Dialing allows station users to obtain a directory of station users and have the system dial the extension that is currently displayed. The *Triad 1/2/3* System provides locations for up to 200 names. Directory Dialing also includes the following functions:

- Allows users to program a name with a speed dial bin for later locating a speed dial number. When prompted, the system displays the name associated with a speed dial number on the LCD display. The user may then have the system dial the number.
- Enables users to associate a name with an entry in the local number/name translation table. When prompted, the system displays the name associated with the table on the LCD display. The user may then have the system dial the number.
- Directory Dialing list may be programmed and maintained at the first assigned Attendant station. However, this admin routine lets the system programmer maintain the list locally (at Attendant) or remotely via modem access.
- May be used to transfer a call from one station to another.

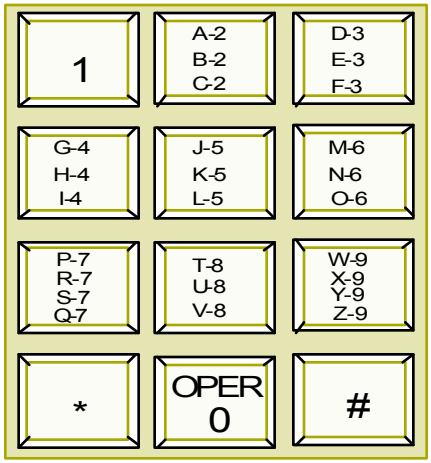
Viewing the Directory List

1. Dial the Directory List dial code [680] on the dial pad,

   -or-

   Press flex button programmed as a directory dialing button.
2. Press a button on the key pad, once, twice or three times, that represents the letter of the alphabet to begin viewing the list of names (e.g., when 2 is first pressed, it produces names starting with A. When 2 is pressed a second time, names that start with B display.

Pressing 2 a third time displays names that start with C). The alphabet is represented on the key pad as shown below.



Names beginning with the letter chosen display on the LCD display.

If there are no names in the Directory List beginning with the desired letter, a name with the next higher letter displays on the LCD display.

3. Dial [✳] to scroll up (next entry) through the list,

   -or-

   Dial [#] to scroll down (previous entry) through the list,

   -or-

   Press another key to view the list for a different letter of the alphabet.
4. When the desired name displays on the LCD, press the SPEED button to automatically dial the destination station or outside phone number (via speed dial).

Conditions:

- If the desired party is an intercom station, that station is signaled according to their intercom selector switch (SLT stations tone ring).
- If the desired party is associated to a speed dial bin, the system selects a CO line and dials the number programmed into the speed dial bin. Call progress tones are then heard.

Transferring a Call using Directory Dialing

While on a call:

1. Press the TRANS button.
2. Dial the Directory Dial Code [680] on the dial pad,

   -or-

   Press flex button programmed for directory dialing.
3. Press the SPEED button to automatically dial the destination station.
4. Hang up to complete the transfer.

Calls may be transferred to internal stations only. An attempt to transfer a call off-net (via a Speed dial bin) results in the call recalling upon going on-hook.

Programming Options

METHOD 1 -- The Directory List is used to enter, edit, and erase names in the Directory List for stations or speed dial numbers.

Dial the Directory List program code [693] on the dial pad. The HOLD button is lit.

The first entry (000) in the Directory List displays on the phone as follows:

```
DIR LST AAA BIN/ICM:XXX
nnnnnnnnnnnnnnnnnnnnnnn
```

AAA = Directory List entry number (000-199)

XXX = Station, Sys Speed Dial Bin, or Local Number/Name Translation Table number

nnn = Programmed Name (blank if none)

Selecting a Different Entry in the Directory List

1. Enter a valid number (000-199) on the dial pad,

   -or-

   Dial [✳] to scroll up (next entry) through the list,

   -or-

   Dial [#] to scroll down (previous entry) through the list.
2. Press the TRANS button to select the entry.

Entering or Changing the Current Name Shown on the Display

1. Press the MUTE button.
2. Enter the name (up to 24-characters) by using keys on the dial pad as shown in Chapter 6, *Figure 6-5: Other Key Pad Codes (Name)*.
3. Press the SPEED button when finished. A confirmation tone is heard and the display updates.
4. Press HOLD, use [✳] or [#] to scroll to next entry.

Associating an Intercom Number with a Name

1. Press the TRANS button.
2. Enter the 3-digit station intercom number.
3. Press the SPEED button to save the entry. A confirmation tone is heard and the display updates.
4. Press HOLD, use [✳] or [#] to scroll to next entry.

Clearing an Entry

1. Select the desired entry using the *Method One* procedure.
2. Press the FLASH button to erase the entry.
3. Press the SPEED button. A confirmation tone is heard and the entry is erased.

METHOD 2 -- The Local Number/name Translation Table is used to enter names associated with the Local Number/Name Translation Table ONLY.

Dial the Directory List program code [693] on the dial pad. The HOLD button is lit. The first entry (000) in the Directory List displays on the phone as follows:

```
DIR LST AAA BIN/ICM: XXX
nnnnnnnnnnnnnnnnnnnnnnn
```

AAA = Directory List entry number (000-199)

XXX = Station, System Speed Dial Bin, or Local Number/Name Translation Table numbers

nnn = Programmed Name (blank if none)

Selecting a Different Entry in the Directory List

1. Enter a valid number (000-199) on the dial pad,

   -or-

   Dial [✳] to scroll up (next entry) through the list,

   -or-

   Dial [#] to scroll down (previous entry) through the list.
2. Press the TRANS button to select the entry.

Entering a Name with Local Nbr/Name Translation Table Number

1. Press the TRANS button.
2. Dial a valid local number/name translation table number (600-799) that represents the telephone number.
3. Press the SPEED button. A confirmation tone is heard and the entry is stored.
4. Press HOLD, use [✳] or [#] to scroll to next entry.

Entering or Changing the Current Name Shown on the Display

1. Press the MUTE button.
2. Then enter the name (up to 24-characters may be entered) by using keys on the dial pad as shown in Chapter 6, *Figure 6-5: Other Key Pad Codes (Name)*. The display updates as the name is entered.
3. Press the SPEED button when finished. A confirmation tone is heard.
4. Press HOLD, use [✳] or [#] to scroll to next entry.

The Local Number/Name Translation Table can be used to enter additional speed dial numbers used for directory dial or dial by name. The name entered into the local number/name translation table is irrelevant when used with directory dialing and dial by name. Note that the numbers entered into this table are limited to 14 digits and are covered by toll restriction rules.

METHOD 3 -- A System Speed Dial Bin is used to enter names associated to a System Speed Dial Bin ONLY.

Dial the Directory List program code [693] on the dial pad. The HOLD button is lit. The first entry (entry 000) in the Directory List then displays on the phone as follows:

```
DIR LST AAA BIN/ICM: XXX
nnnnnnnnnnnnnnnnnnnnnnnn
```

AAA = Directory List entry number (000-199)

XXX = Station, System Speed Dial Bin, or Local Number/Name Translation number

nnn = Programmed Name (blank if none)

Selecting a Different Entry in the Directory List

1. Enter a valid entry number (000–199) on the dial pad,

   -or-

   Dial [✳] to scroll up (next entry) through the list,

   -or-

   Dial [#] to scroll down (previous entry) through the list.
2. Press the TRANS button to select the entry.

Entering a Name with a System Speed Dial Bin

1. Select the desired entry using *Method Three* procedure.
2. Dial the system speed dial bin location (020-999).
3. Press the SPEED button. A confirmation tone is heard and the entry is saved.
4. Press HOLD, use [✳] or [#] to scroll to next entry.

Entering or Changing the Current Name Shown on the Display

1. Press the MUTE button.
2. Enter the name (up to 24 characters may be entered) by using keys on the dial pad as shown in Chapter 6, *Figure 6-5: Other Key Pad Codes (Name)*.
3. Press the SPEED button when finished. A confirmation tone is heard and the display updates.
4. Press HOLD, use [✳] or [#] to scroll to next entry.

ICLID Answered Call Management Table

An Answered Call Management Table with 100 entry capacity is maintained in the system. The calling number/name information pertaining to any answered call is placed in this table at the time the system determines the call was answered.

This table may be accessed from any user station display phone so the answered calls may be reviewed and handled by the end user. Any Attendant station(s) can delete a table entry, one entry at a time. Upon entering the review process, the functions available to a phone are:

Table 8-2: ICLID Answered Call Management

Function	Button
Go to beginning of table	Dial Code 659
Review next item in table entry	MUTE
Step to next table entry	HOLD
Delete table entry (Attendant only)	FLASH
Exit table review function	ON/OFF
Step to previous table entry	TRANSFER
Call Back	SPEED

ICLID Unanswered Call Management Table

An Unanswered Call Management Table with 100 entry capacity for the *Triad 1/2/3* System is maintained. The calling number/name information pertaining to any unanswered call is placed in this table at the time the system determines the call was abandoned.

This table may be accessed from any station display phone so that the unanswered calls may be reviewed and handled by the end user. Upon entering the review process, the functions available to a phone are:

Table 8-3: ICLID Unanswered Call Management

Function	Button
1. Go to beginning of table	Dial Code 635
2. Review next item in table entry	MUTE
3. Step to next table entry	HOLD
4. Delete table entry	FLASH
5. Exit table review function	ON/OFF
6. Step to previous table entry	TRANSFER
7. Call Back	SPEED

Reviewing ICLID Unanswered Call Management Table

1. Dial access code [635] on the dial pad from any station in the system.
2. When the desired table entry is displayed on the LCD, press the SPEED button to automatically dial the table entry.

For Next Item in this Entry:

1. Press the MUTE button to toggle to the next item.
2. Press the ON/OFF button to exit the review function.

For Next Table Entry:

Press the HOLD button.

For Previous Table Entry:

Press the TRANS button.

Messages - Custom

The Custom Message feature lets the system administrator enter up to ten messages for use by system station users. These messages may be specified and customized by the customer on a system-wide basis.

The system administrator (Station 100) programs the ten custom messages at the first Attendant station as follows:

1. Dial the Custom Message program code [694] on the dial pad. The following message displays:

```
ENTER MSG NO
MMM DD YY                HH:MM am
```

2. Enter a valid message bin number [21–30]. The following message displays after the bin # has been selected.

```
mmmmmmmmmm...
ENTER MSG:
```

3. Enter the custom message using the dial pad keys to enter the letters as shown in Chapter 6, *Figure 6-5: Other Key Pad Codes (Name)*.
   - Up to 24 alphanumeric characters may be entered for the custom message (this represents 48 digits entered). The actual characters display as the digits are being entered while programming the messages.
   - The Attendant must go idle after programming a message before another message may be programmed.
   - The Attendant then presses the HOLD button to enter the message and a confirmation tone is heard.

Conditions

- The telephone receiving the message or programming must be a display telephone.
- Key telephones and SLTs can leave a message. SLTs are notified that they left a message with a warning tone when going off-hook.

- Incoming and outgoing calls are not inhibited with a message displayed.
- When a message is displayed by a key telephone, the DND button LED flashes at the 15 ipm rate.
- When DND is invoked on the telephone, the message is canceled.
- Message Access (with desired message) may be assigned to a flex button.
- The Message Access function is assigned to a station flex button in database administration.
- A station user may store any of the available messages under a flex button assigned as a Message Access button.
- The ten Custom Messages display in a similar fashion as Canned messages. The idle station display shows the message that was activated at the station and a calling station receives the STA XXX or name-in-display followed by the programmed custom messages.
- This feature is not available for use at Attendant stations.

Outgoing Access - Attendant Disable

The Attendant station can disable CO lines, preventing outgoing CO calls.

1. Lift handset or press ON/OFF button.
2. Dial [602] on the dial pad. A confirmation tone is heard.
3. Press the line button(s) of the CO Line(s) to disable. A confirmation tone is heard and the CO Line button(s) LED is flashing.
4. To reactivate the CO Line(s), repeat the steps to disable it.

Override

If Attendant Override is allowed, Attendant(s) stations may override or call stations that are busy or in Do Not Disturb to alert them of a call.

Calling a Station Busy on a CO Call

1. Press the pre-programmed* ATTN OVERRIDE button [601]. Three short tone bursts are presented to the called party.
2. After five (5) seconds, the station's CO line is automatically placed on hold and the Attendant is cut-through.

Calling a Station in Do Not Disturb Mode

Press the pre-programmed* ATTN OVERRIDE button. The station is signaled with a Camp-On tone.

Outside Call - Answer

1. Lift handset.
2. Press slow flashing outside line button. (If your telephone is programmed with Preferred Line Answer, you may answer an outside line by lifting the handset.)

Outside Call - Place

1. Press OUTSIDE LINE button. ON/OFF LED lights and dial tone is heard.
2. Dial desired party.

Recall

When outside line is on hold for extended time period, a real ring is heard.

Press OUTSIDE LINE button flashing at a very fast rate.

Conditions

Recall does not apply to intercom calls placed on hold.

Release Button

The Release Button feature lets the station user disconnect calls while off-hook (on handset, not speakerphone), speeding up call handling time.

While off-hook (on handset, not speakerphone) on an intercom call, transfer sequence, page announcement, or CO call:

Press the pre-programmed* RELEASE button to terminate intercom call, transfer sequence, page announcement or CO call.

Setting System Time and Date

The System Time/Date must be set by the first programmed Attendant.

1. Dial [692] on the dial pad. A confirmation tone is heard.
2. Enter date and time as follows: YYMMDDHHMM

YY	=	Year 00-99	HH	=	Hour 00-23
DD	=	Day 01-31	MM	=	Minute 00-59
MM	=	Month 01-12			

When correct number of digits are entered, a confirmation tone is heard.

3. Press the ON/OFF button to OFF to update the display.

Software Version Display

The current system software can be viewed by the first programmed Attendant. The display shows the version number and level of software. At the first Attendant station:

Dial the S/W Display code [605] on the dial pad. The top line of the LCD continues to show the same data as it currently displays, while the bottom line of the LCD shows the following in place of the time/date information:

STARPLUS BASIC

STARPLUS ACD

Conditions

The station must be an LCD type to view the information.

Speed Dial - System Storing

System Speed numbers must be entered by the first programmed Attendant. If no Attendant is specified, enter at Station 100.

1. Press SPEED once, then press desired outside line key or select an outside line automatically by pressing the SPEED button a second time.
2. Dial the System Speed bin location (020-999).
3. Dial telephone number.
4. Press the SPEED button.
5. Hang up.

- Pressing the TRANS button during number entry initiates a Pulse-To-Tone switchover.
- Pressing the HOLD button during number entry inserts a Pause.
- Pressing the FLASH key inserts a Flash into the speed number.
- Pressing the TRANS button as the first entry in the speed bin inserts a no-display character causing the numbers stored in the bin not to display on the Digital Telephones when the bin is accessed.

  Speed Bin numbers 060-099 ARE NOT monitored by Toll Restriction.

9 Liquid Crystal Displays

This chapter consists of the Calling and Called LCD displays based on the function performed.

Introduction

Each display is arranged into **upper** and **lower** fields.

- The **upper** field shows the current activity of the telephone.
- The **lower** field is divided into two sections:
  - The *left* section of the **lower** field shows the date, speed bin number, connected intercom station, or outside line number.
  - The *right* section of the **lower** field shows the current time or elapsed time on an outside call.

This table shows LCD displays based on the function performed.

Table 9-1: Liquid Crystal Displays (LCD)

Function	CALLING Station Display	CALLED Station Display
Idle Station	STATION XXX MMM DD YY HH:MM am STA XXXNAME MMM DD YY HH:MM am	STATION XXXNAME MMM DD YY HH:MM am
Manually Dialing Outgoing Calls	18005551212 LINE XXX HH:MM:SS	
Recalling Line from Hold	LINE XXX RECALLING MMM DD YY HH:MM am	
Recalling Line from Another Station	RECALL FROM STA XXX LINE XXX HH:MM:SS	RECALL FROM ..(name).. LINE XXX HH:MM:SS

** Features available with optional software*

Table 9-1: Liquid Crystal Displays (LCD)

Function	CALLING Station Display	CALLED Station Display
Connected to an Incoming CO line		STATION XXX LINE XXX 00:00:10
Intercom Call	CALL TO STA XXX MMM DD YY HH:MM am CALL TO ..(name).. MMM DD YY HH:MM am	CALL FROM STA XXX MMM DD YY HH:MM am CALL FROM ..(name).. MMM DD YYY HH:MM am
Camp-On	CALL TO STA XXX MMM DD YY HH:MM am CALL TO ..(name).. MMM DD YY HH:MM am	CAMP-ON BY STA XXX MMM DD YY HH:MM am CAMP-ON BY ..(name).. MMM DD YY HH:MM am
Conference	CONFERENCE MMM DD YY HH:MM am	CONFERENCE MMM DD YY HH:MM am
Internal Page	INTERNAL PAGE ZONE X HH:MM am	PAGE FROM STA XXX MMM DD YY HH:MM am PAGE FROM ..(name).. MMM DD YY HH:MM am
External Zone Page and External All Call Page	EXTERNAL PAGE ZONE X HH:MM am EXTERNAL PAGE MMM DD YY HH:MM am	

** Features available with optional software*

Table 9-1: Liquid Crystal Displays (LCD)

Function	CALLING Station Display	CALLED Station Display
All Call Page	ALL CALL PAGE MMM DD YY HH:MM am	PAGE FROM STA XXX MMM DD YY HH:MM am
Meet Me Page	ALL CALL PAGE MMM DD YY HH:MM am CALL FROM XXX MMM DD YY HH:MM am	PAGE FROM XXX MMM DD YY HH:MM am CALL TO XXX MMM DD YY HH:MM am
Station Call Forward (originating station and name in display)	FORWARDED TO STA XXX MMM DD YY HH:MM am FORWARDED TO ..(name).. MMM DD YY HH:MM am	
Station No-Answer Call Forward (originating station)	NO ANS FWD TO STA XXX MMM DD YY HH:MM am NO ANS FWD TO ..(name).. MMM DD YY HH:MM am	
Station Busy/ No-Answer Call Forward (originating station)	BSY/NA FWD TO STA XXX MMM DD YY HH:MM am BSY/NA FWD TO ..(name).. MMM DD YY HH:MM am	

** Features available with optional software*

Table 9-1: Liquid Crystal Displays (LCD)

Function	CALLING Station Display	CALLED Station Display
Station Busy Call Forward (originating station)	BUSY FWD TO STA XXX MMM DD YY HH:MM am BUSY FWD TO ..(name).. MMM DD YY HH:MM am	
Forwarded Call (name in display)	FORWARDED TO STA XXX VIA STA XXX HH:MM am FORWARDED TO ..(name).. VIA STA XXX HH:MM am	CALL FROM STA XXX VIA STA XXX HH:MM am CALL FROM ..(name).. VIA STA XXX HH:MM am
Forwarded Intercom Call	FORWARDED TO STA XXX VIA STA XXX HH:MM am	CALL FROM STA XXX VIA STA XXX HH:MM am
Station Forwarded to VoiceMail Group (station idle)	FORWARDED TO VOICE MAIL MMM DD YY HH:MM am	
Station Forwarded to ACD* or UCD Group (station idle)	FORWARDED TO ACD 55X MMM DD YY HH:MM am	
Preset Forward		FORWARD RING LINE XXX HH:MM am
Station Call to Station Forwarded to a Voice Mail Group*	FORWARDED TO VOICE MAIL VIA STA XXX HH:MM am	FORWARDED TO VOICE MAIL MMM DD YY HH:MM am

** Features available with optional software*

Table 9-1: Liquid Crystal Displays (LCD)

Function	CALLING Station Display	CALLED Station Display
Call Pick-Up	CALL TO STA XXX PICKED UP BY STA XXX HH:MM am	CALL TO STA XXX FROM STA XXX HH:MM am TRANSFER FROM STA XXX LINE XXX HH:MM am
Exclusive Hold	LINE HOLDING LINE XXX HH:MM am	
Do Not Disturb	DO NOT DISTURB STA XXX MMM DD YY HH:MM am DO NOT DISTURB ..(name).. MMM DD YY HH:MM am	STA IN DO NOT DISTURB MMM DD YY HH:MM am
Call Back	CALL BACK FROM STA XXX MMM DD YY HH:MM am CALL BACK FROM ..(name).. MMM DD YY HH:MM am	CALL FROM STA XXX MMM DD YY HH:MM am CALL FROM ..(name).. MMM DD YY HH:MM am
Outside Line Transfer	TRANSFER FROM STA XXX LINE XXX HH:MM am TRANSFER FROM ..(name).. LINE XXX HH:MM am	
Message Waiting		MSG: XXX XXX XXX XXX XXX MMM DD YY HH:MM am

** Features available with optional software*

Table 9-1: Liquid Crystal Displays (LCD)

Function	CALLING Station Display	CALLED Station Display
Reply to a Message Waiting	CALL TO STA XXX MMM DD YY HH:MM am CALL TO ..(name).. MMM DD YY HH:MM am	CALL BACK FROM STA XXX MMM DD YY HH:MM am
Programmed Flash Command (F)	F*1	
Programmed Pause Command (P)	950777P1234567 SPEED XX HH:MM am	
Programmed Pulse-To-Tone Switchover (S)	950777S1234567 SPEED XX HH:MM am	
CO Line Queuing	PLACED IN QUEUE FOR LINE XXX HH:MM am QUEUE CALL BACK LINE XXX HH:MM am	
Hunt Groups	CALL TO STA XXX VIA HUNT HH:MM am CALL TO ..(name).. VIA HUNT HH:MM am	

** Features available with optional software*

Table 9-1: Liquid Crystal Displays (LCD)

Function	CALLING Station Display	CALLED Station Display
ACD* or UCD Groups	CALL TO STA XXX VIA ACD HH:MM am CALL TO ..(name).. VIA ACD HH:MM am	
Ringing CO Lines		LINE RINGING LINE XXX HH:MM am
Display Security	DISPLAY SECURITY LINE XXX HH:MM:SS	
Station Forwarding Off-Net	FORWARDED TO SPEED XX MMM DD YY HH:MM am	
Call to Station Forwarded Off-Net (before and after a call is answered)	FORWARDED OFF NET LINE XXX CALLED 102 2331234 LINE XXX HH:MM:SS	FORWARDED TO SPEED XX MMM DD YY HH:MM am
Calls in Queue (supervisor)	55X: CIQ: XX AGENT(S): XX OLDEST CALL HH:MM:SS	
Calls in Queue (using dial code) ACD* or UCD	ACD 55X 02 CALLS IN QUEUE MMM DD YY HH:MM am	

** Features available with optional software*

Table 9-1: Liquid Crystal Displays (LCD)

Function	CALLING Station Display	CALLED Station Display
Unavailable Mode (Agent Station) ACD* or UCD	UNAVAILABLE ACD * XXX * MMM DD YY HH:MM am	
Station Call to VoiceMail Group Pilot Number	CALL TO VOICE MAIL MMM DD YY HH:MM am	
Dial By Name	DIAL NAME: MMM DD YY HH:MM pm	
Off-Hook Voice Over (OHVO)	ANNOUNCE TO STA XXX MMM DD YY HH:MM am	ANNOUNCE FROM STA XXX MMM DD YY HH:MM am
Executive Override	MONITORING STA XXX MMM DD YY HH:MM am	
Voice Mail* Transfer with ID Digits	CALL TO VOICE MAIL VIA XXX MMM DD YY ENTER VM ID: MMM DD YY HH:MM pm	
Repeat Redial	ENTER RPT REDIAL TIMER XXX 066-999 RPT REDIAL CALLBACK: MMM DD YY HH:MM pm	

** Features available with optional software*

Table 9-1: Liquid Crystal Displays (LCD)

Function	CALLING Station Display	CALLED Station Display
Call Coverage Station (after call is answered at coverage station)	CALL TO STA XX MMM DD YY HH:MM am CALL TO STATION XXX FROM STA YYY HH:MM am	
Name/Number Display at Idle	STA YYYXXXXXXXX MMM DD YY HH:MM pm	
Scrollable Canned Messages	XXXXXXXXXXXXXXX NEXT=# PREV=* SAVE=HOLD	
ACD* Transfer Display	TRANSFER FROM ACD 55X LINE XXX HH:MM am	
ACD* Overflow Station receives Overflow Call	TRANSFER VIA ACD 55X LINE XXX HH:MM am	
Answering Machine Emulation (when a call rings the station in ring mode)	VM SCREENING RING MMM DD YY HH:MM pm	
Answering Machine Emulation (when station monitors caller in VM)	VM SCREENING MMM DD YY HH:MM pm	

** Features available with optional software*

10 Triad 1/2 System Configuration

This chapter describes the basic and optional equipment to be used with the *Triad 1/2* Systems. System specification tables have also been provided.

Triad 1/2 General Description

The *Triad 1/2* Systems are fully Digital Hybrid Key Telephone Systems, designed to meet the telecommunication needs of medium-sized business offices. The *Triad 1/2* Systems incorporate state of the art digital technology for command processing and voice switching, using a Pulse Code Modulation/Time Division Multiplexing (PCM/TDM) distributed switching matrix. The system supports *MU* law encoding based on the requirements of local regulations. The *Triad 1/2* Systems achieve a high level of flexibility by:

- Employing a Universal Card Slot architecture with a small Basic, Basic and Expansion cabinet to house plug-in Printed Circuit Boards.
- Providing support for different types of instrumentation.
- Utilizing the same common control and peripheral cards.

System Hardware Preferences

The *Triad 1/2* Systems can accommodate a variety of hardware as follows:

- Basic and Expansion KSUs are wall-mounted cabinets that house the back plane and contains card slots for the system power supply, CO Line/Key Station/SLT Interface boards, and other optional PCBs.
- Station, CO Line, SLT and option boards are installed in any of the five (5) system card slots up to the system's maximum configuration.
- MISU can be installed only in Slot #7 of the Basic KSU.
- Digital Station/Line cards are installed in the following slots:

  Triad 1 uses Slots 0 thru 2, 6 or 7, as well as any of the four (4) slots in the EKSU. The T1IB card can only be installed in Slots 0, 1, and 2.

  Triad 2 uses Slots 1 thru 7 of the Basic KSU and any of the four (4) slots in the EKSU. The T1IB card can only be installed in the BKSU Slots 0-5.

System Control and Flexibility

The system architecture has been designed to allow a high level of software control over the system's hardware. The software incorporates a vast array of features and capabilities including PC Database Administration, ACD, etc.

The *Triad 1/2* Systems support a combination of Digital Keysets and Electronic Keysets as well as single line devices. With the keysets, commonly used features are activated by direct button selection. Many functions may be accessed by dialing specific codes or optionally, by assigning these dial codes to flexible buttons on the keyset. In addition to key telephones, an array of optional terminals are also available, including DSS/DLS consoles.

With the flexibility of the *Triad 1/2* extensive feature content, and the capability to use an array of instruments, the *Triad 1/2* Systems can be tailored to meet the short and long term needs of the most demanding customer requirements.

Triad 1 Common Control Equipment

Basic Key Service Unit (BKSU)

The BKSU is wall mounted. It is of metal construction with a backplane motherboard that has 6 card slots. The first slot (right to left) is for the Master Processor Board (MPB) which is a common control card. The second slot can be used for the Miscellaneous Interface Service Unit board (MISU) or a station/CO card. The remaining 4 slots are for peripheral cards. Both systems are installed using industry standard blocks, jacks and skinny wire cabling. This combined with the ability to program the system using a digital display telephone reduces installation cost and maintenance requirements.

A no. 12 AGW copper wire should be used to connect a ground between the ground source and the KSU (25 feet maximum). A ground lug is located on the lower right corner of the BKSU.

Expansion Key Service Unit (EKSU)

The EKSU is wall mounted. It is of metal construction with a backplane motherboard that has 4 card slots. The 4 slots are for peripheral cards.

Power Supply (PSU)

The system KSU is powered by a single power supply that is mounted inside the cabinet. The power supply provides the system with 24V and 5V power. The power supply is plugged into a 120V AC circuit.

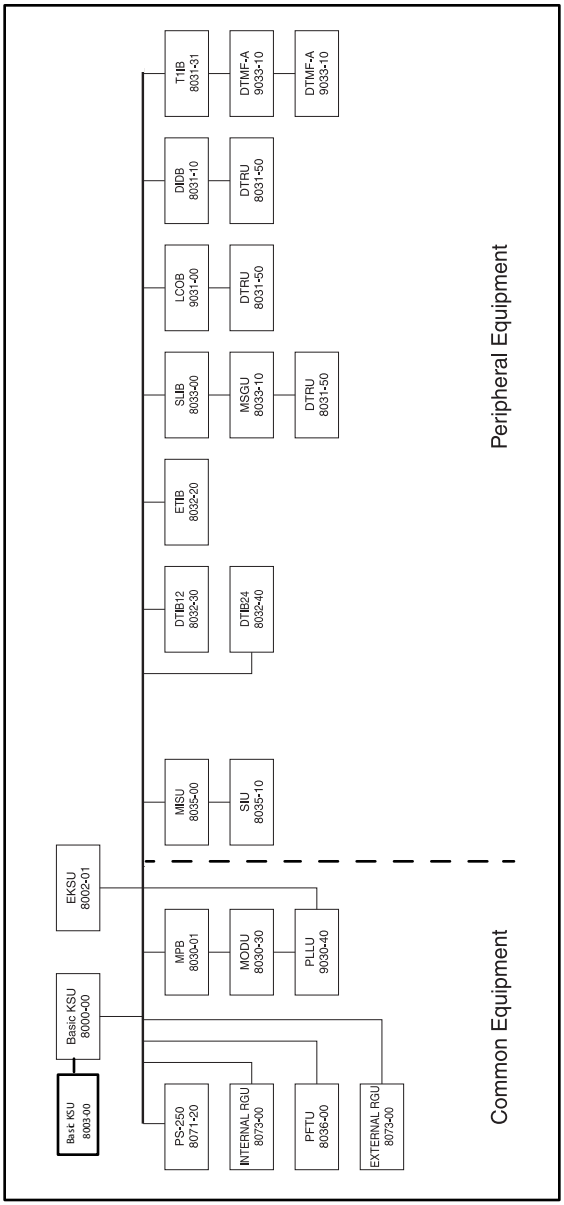
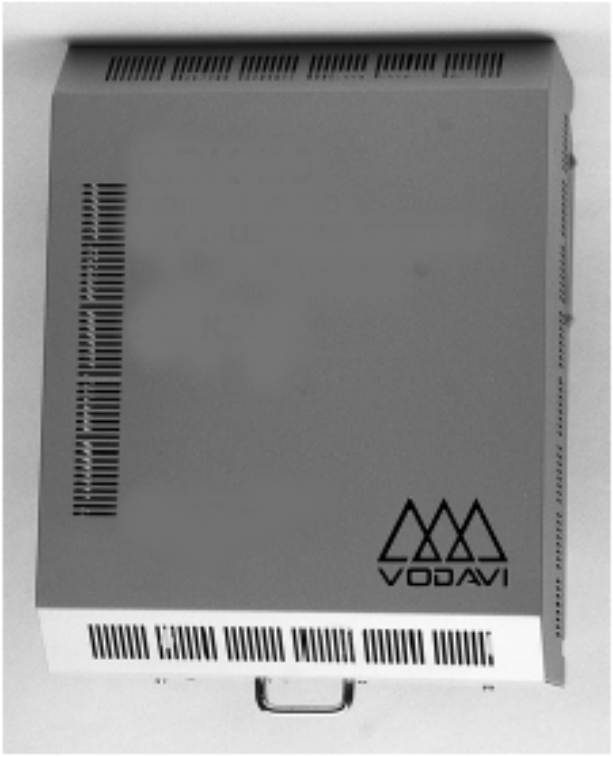


Figure 10-1: *Triad 1* System Diagram

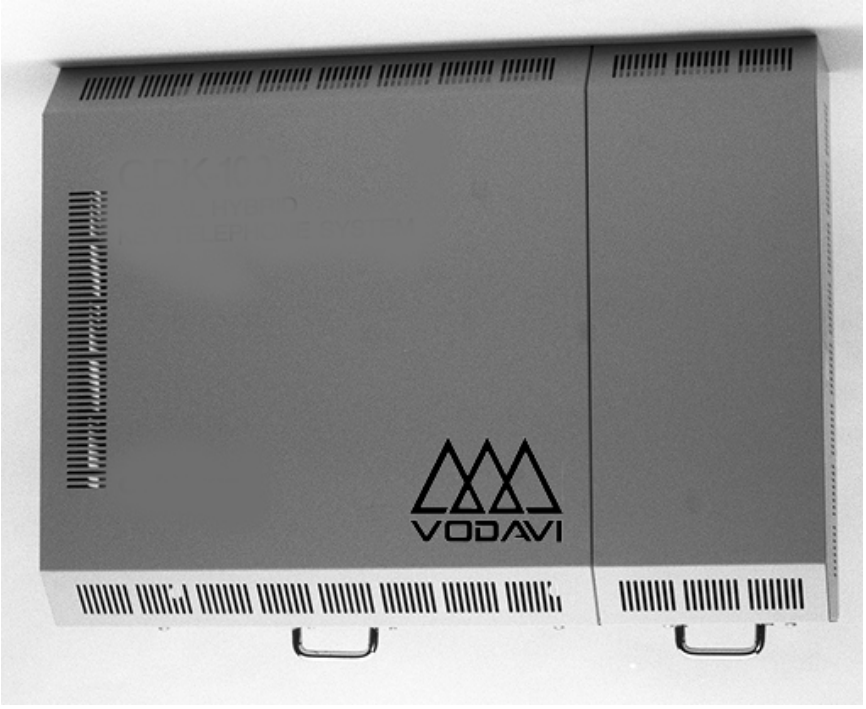


DEFAULT CARD LAYOUT

SLOTS

0	1	2	6	7	MPB
DTIB	DTIB	DTIB	LCOB	NONE	MPB

Figure 10-2: *Triad 1* Default Card Layout



DEFAULT CARD LAYOUT

SLOTS

0	1	2	6	7	MPB
DTIB	DTIB	DTIB	LCOB	NONE	MPB

Figure 10-3: *Triad 2* Default Card Layout

Triad 2 Common Control Equipment

Basic Key Service Unit (BKSU)

The BKSU is wall mounted. It is of metal construction with a backplane motherboard that has 9 card slots. The first slot (right to left) is for the Master Processor Board (MPB) which is a common control card. The second slot can be used for the Miscellaneous Service Unit Board (MISU) or a station/CO card. The remaining 7 slots are for peripheral cards. This system is installed using industry standard blocks, jacks and skinny wire cabling. This combined with the ability to program the system using a key terminal (digital display telephone) reduces installation cost and maintenance requirements.

A no. 12 AGW copper wire should be used to connect a ground between the ground source and the KSU (25 feet maximum). A ground lug is located on the lower right corner of the BKSU.

Expansion Key Service Unit (EKSU)

The EKSU is wall mounted. It is of metal construction with a backplane motherboard that has 4 card slots. The 4 slots are for peripheral cards.

Power Supply (PSU)

The system KSU is powered by a single power supply that is mounted inside the cabinet. The power supply provides the system with 24V and 5V power. The power supply is plugged into a 120V AC circuit.

Common Control Cards

The common control cards are the plug-in PCB's that are necessary for basic system operation or require direct interface to the system bus. These cards can only be installed in the basic cabinet.

Master Processor Board (MPB)

The MPB card controls all system activity. The MPB contains the main microprocessor a 16-bit (68302), the real time clock, and all support circuitry. The MPB is responsible for all control functions, execution of all logic operations, and control of system modules. The MPB also provides software and hardware support to ensure the following:

- Watch dog timer and recovery.
- State/event software design.
- Battery backup of customer database RAM memory.

There is one RS-232 (DB9 connector) input/output port on the MPB. The MPB can support a total of three (3) RS232 ports. The other serial ports are accessed by installing an optional SIU module on the MISU board. There is also a provision for an optional 2400 baud modem. There is a push button reset (halt) switch located on the front of the PCB.

System software is provided in EPROM memory and is installed on the MPB. The MPB can contain up to 1 MB of EPROM memory storage and up to 512K of RAM. Refer to *Optional Units* for additional information.

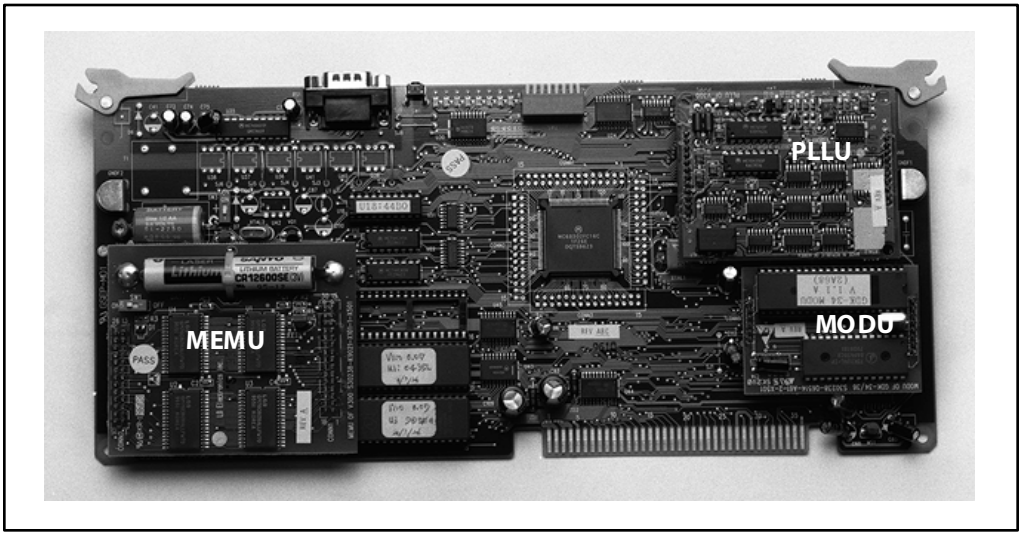


Figure 10-4: MPB (Master Processor Board)

Miscellaneous Service Unit (MISU)

The MISU provides the circuitry to interface miscellaneous type inputs/outputs. This board is optional and installs in the peripheral card slot next to the MPB. This board also supports additional serial ports by installing an optional SIU module.

Wiring / Pinouts / Connections -- The MISU contains the circuitry to support 2 external page ports, 4 relay contacts, and 2 external music sources. Refer to *Optional Units* for additional information.

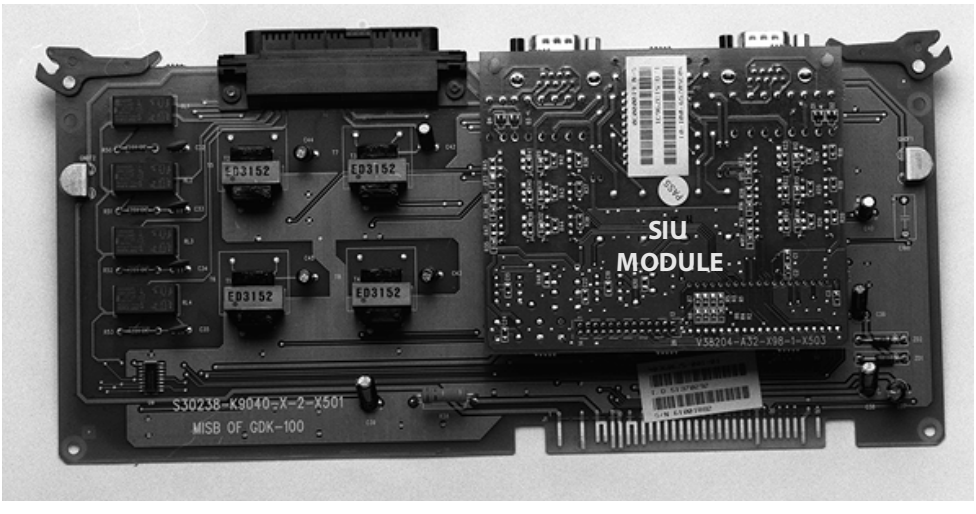


Figure 10-5: MISU (Miscellaneous Service Unit)

Peripheral Boards

Peripheral boards provide the interface from system PCM ports to stations or the switching network. The peripheral cards may be placed in any universal card slot in either the Basic Cabinet or Expansion Cabinet. These cards are described as follows:

CO Line Interface Board - Loop Start (LCOB)

The LCOB interfaces six (6) loop start CO lines to the system and can be plugged into any designated peripheral slot.

LED/Indicators -- This board has 6 red LEDs to provide the status of each CO line on the board. The LED is lit when in use and unlit when idle.

Line/Station Interfaces -- The board has three (3) RJ14 modular connectors on the front edge. These provide the interface from the circuits on the board to the MDF.

No peripheral boards can be inserted/removed when power is on.

Refer to *Optional Units* for additional information.

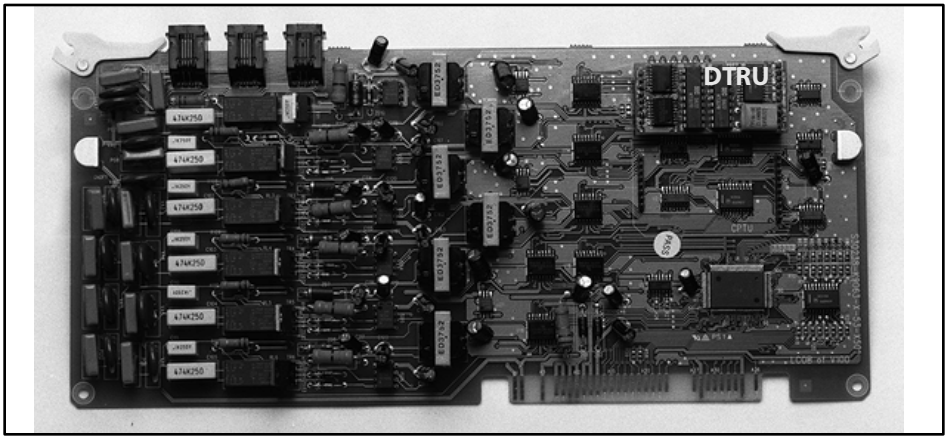


Figure 10-6: LCOB (CO/FX/WATS Trunk Board)

DID Trunk Board (DIDB)

The DIDB board provides the interface for up to four (4) direct inward dial circuits from the telephone company. The circuitry supports immediate, wink, and delay type signaling. This board can be plugged into any designated peripheral slot.

Wiring/Pinouts/Connections – The board has four (4) red LEDs to monitor each circuit on the board. The LED lights red when the circuit is busy and not light when idle. The board also has two (2) RJ14 modular connectors on the front edge of the card. These provide the interface the DID circuits to the MDF. Refer to *Optional Units* for additional information.

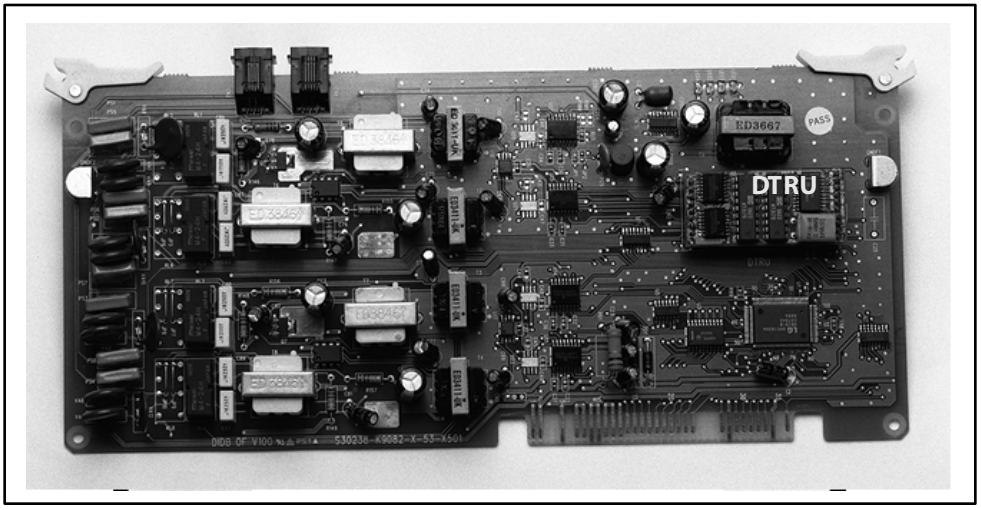


Figure 10-7: DIDB (Direct Inward Dialing)

T-1 Interface Board (T1IB)

The T1IB board provides one (1) 24-channel 1.544Mbps T-1 interface from the telephone company. The board requires an external CSU device to operate. The board handles Loop, Ground, and DID type signaling. On the *Triad 1* System, this board can be installed into Slots 0 thru 2. On the *Triad 2* System, this board can be installed into Slots 0 thru 5.

Wiring/Pinouts/Connectors -- The board contains a 64180 CPU on board to control all board functions. The board can accept two DTMF-A units to provide DTMF receivers for certain applications. Refer to *Optional Units* for additional information.

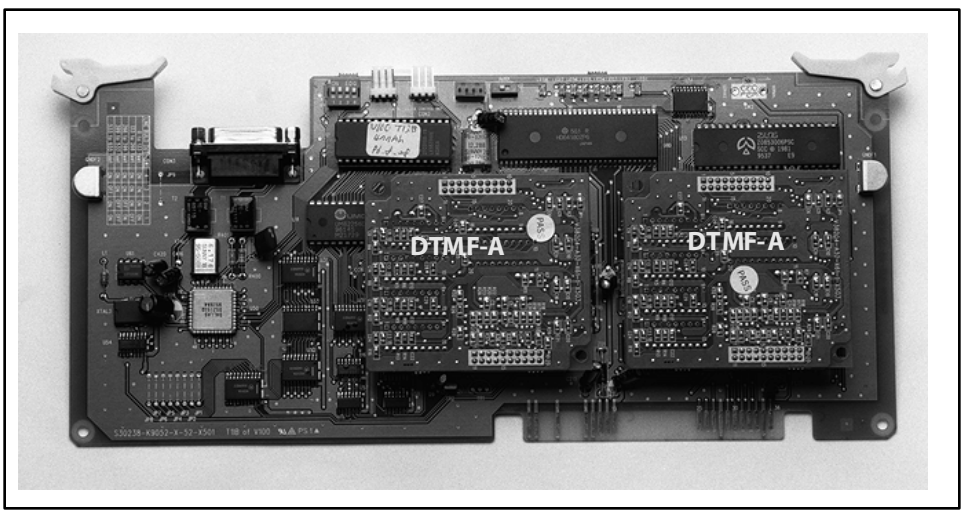


Figure 10-8: T1IB (T-1 Interface Board)

Primary Rate Interface Board (PRIB)

This interface provides one Primary Rate Interface circuit. Each circuit contains 23 bearer and one data channel (23B+D). When a PRIB card is programmed into the *Triad 1/2* system, the system interprets all B channels as trunks. Thus, one PRIB which contains 23B+D circuits provides 23 line appearances to the *Triad 1/2* system. A maximum of two PRIB boards may be installed into the system. The PRIB card uses 24 time slots when installed.

The PRIB must be used in conjunction with a Channel Service Unit (CSU). Connection is made via a DB15 from the PRIB to the CSU.

The PRIB accepts two DTMF-A boards.

When ordering PRI lines from the telephone company, specify ESF framing and B8ZS line coding. PRI only supports National ISDN 2 (NI-2). No other standards are supported.

Vodavi has successfully integrated its PRI ISDN with the Lucent 5 ESS, Siemens, Stromburg Carlson, and the DMS100 Central Offices. Vodavi ISDN should work with all Central Office switches, but this has not been verified. Therefore, some delays in service may be experienced.

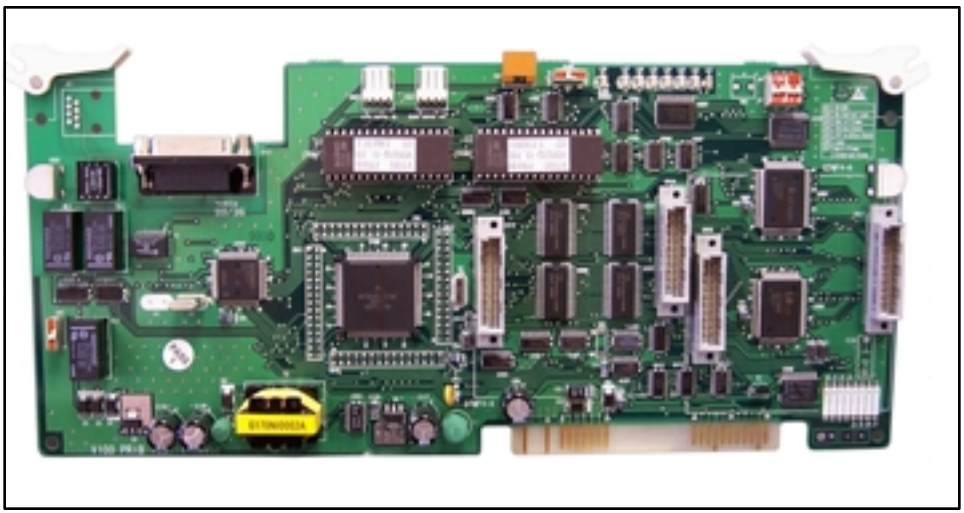


Figure 10-9: PRIB (Primary Rate Interface Board)

Basic Rate Interface Board (BRIB)

This interface provides four Basic Rate Interface circuits. Each circuit is comprised of two bearer (64Kbps each) and one data (16Kbps) channels (2B+D). When a BRIB is programmed into the *Triad 1/2* system, the system interprets all B channels as trunks. Thus, one BRIB which contains four 2B+D circuits provides eight line appearances to the *Triad 1/2* system. A maximum of five BRIBs can be installed into the system (40 B channels).

The BRIB uses the U interface of the BRI standard. Connection to the network is made via RJ45 connectors on the front edge of the board. No NT1 device is requires to connect to the central office. The BRIB card uses eight time slots when installed.

When ordering BRI lines from the telephone company, specify Capability P as the ordering code. National ISDN 1 (NI-1) is supported. No other standards are supported.

Vodavi has successfully integrated its BRI ISDN with the Lucent 5 ESS Central Office. Vodavi ISDN should work with all Central Office switches, but this has not been verified. Therefore, some delays in service may be experienced.

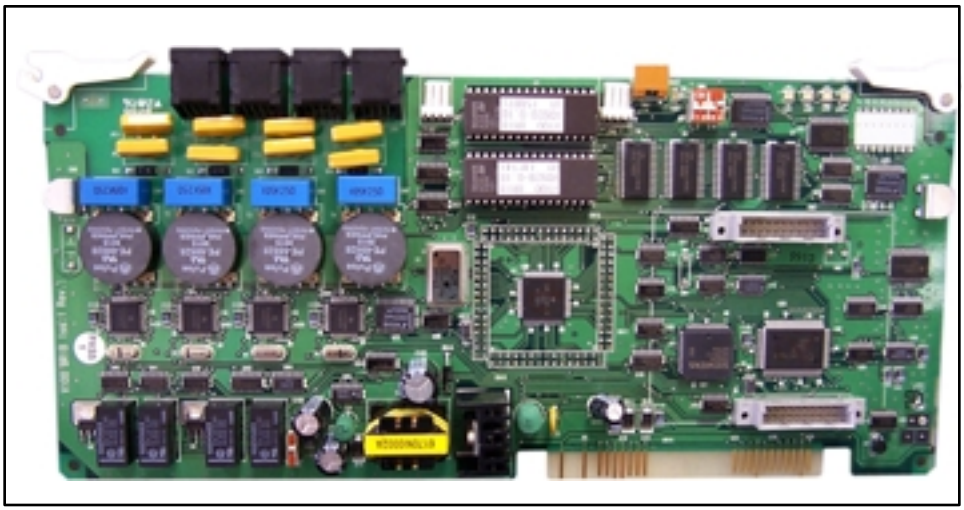


Figure 10-10: BRIB (Basis Rate Interface Board)

Analog Station Boards

Electronic Key Telephone Interface Board (ETIB)

The ETIB provides the interface to 12 electronic telephones or DSS/BLF stations.

- The ETIB board has one red LED indicator for line status. The LED lights red when the circuit is busy and not light when idle.
- The station connections are via one (1) 50-pin female champ (amphenol type) connector located on the front edge of the card.
- The card ejector tabs are color coded green.

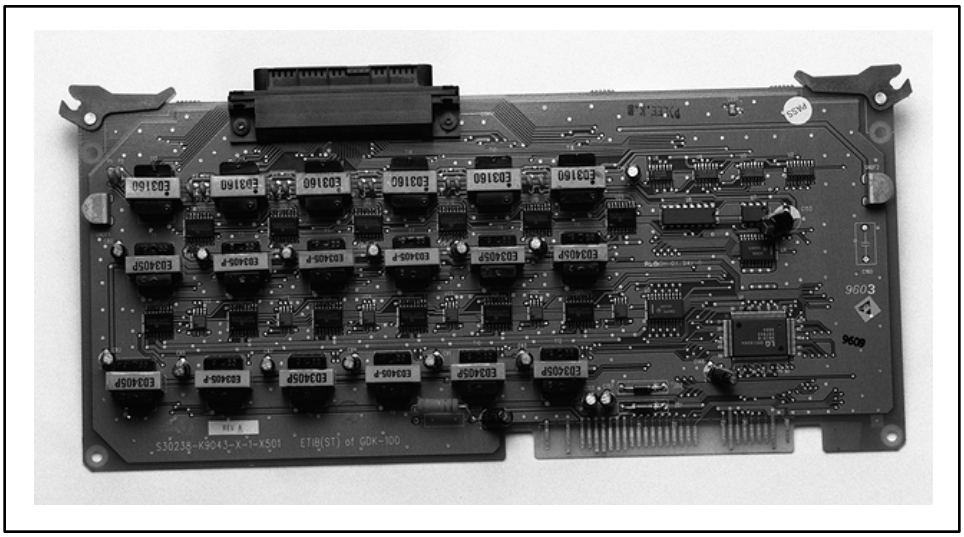


Figure 10-11: ETIB (Electronic Telephone Interface Board)

Single Line Interface Board (SLIB)

The SLIB board provides the interface for six (6) 2500 type single line telephones. This board can be plugged into any designated peripheral slot. The board also supports message waiting with the message wait module. The board can accept one (1) DTRU unit to provide two (2) DTMF receivers for certain applications.

LED/Indicators -- This board has one red LED indicator for line status. The LED lights red when the circuit is busy and does not light when idle.

Line/Station Interfaces -- The board has three (3) RJ14 modular jacks on the front edge. These provide the interface from the circuits on the board to the MDF. Refer to *Optional Units* for additional information.

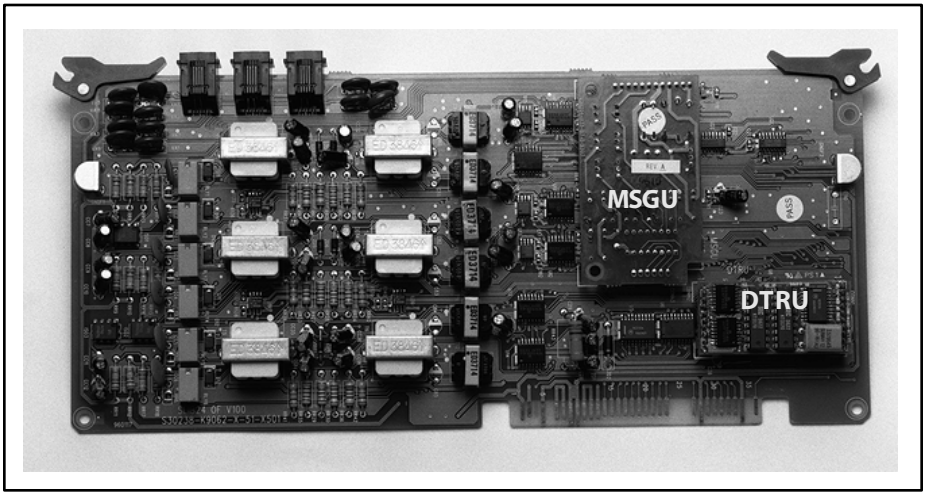


Figure 10-12: SLIB (Single Line Interface Board)

Digital Station Boards

Digital Telephone Interface Board (DTIB)

The DTIB provides the interface to the digital telephones in the system. This board can be plugged into any peripheral slot and is provided in two (2) capacity versions, a twelve (12) circuit, and a twenty-four (24) circuit.

LED/Indicators -- This board has one red LED indicator for line status. The LED lights red when the circuit is busy and is not lit when idle.

Line/Station Interfaces -- The 12/24-circuit boards have one (1) female 50-pin amphenol connector on the front edge. This provides the interface the circuits on the board to the MDF.

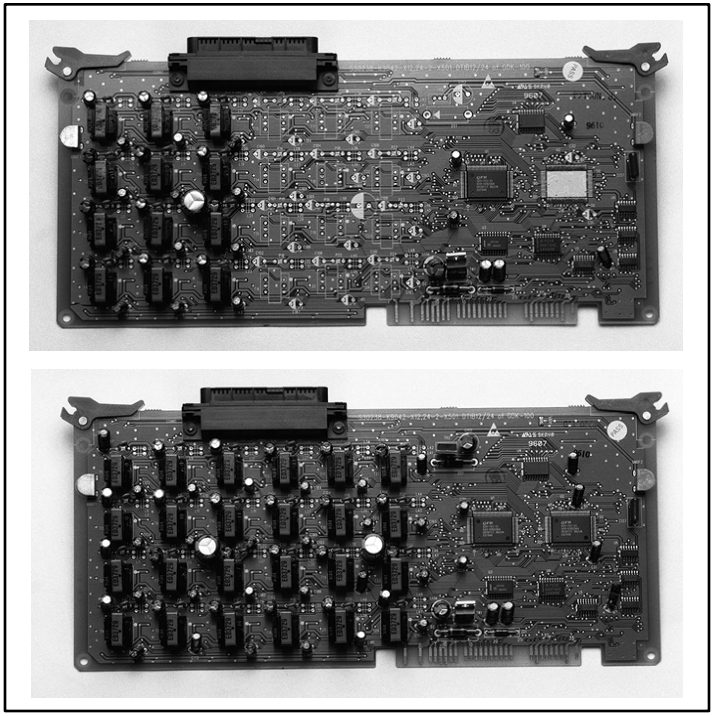


Figure 10-13: DTIB12 & DTIB24 (Digital Telephone Interface Board)

Analog Station Instruments

Enhanced Electronic Key Telephone (EKT)

The *STARPLUS* Enhanced Electronic Telephone is a fully modular instrument with 8 fixed feature/function and 22 flexible buttons that can be flexibly assigned as either CO/PBX/Centrex lines, Station DSS, or feature/function buttons.

This telephone also features an integrated speakerphone, call announce with handsfree intercom, two (2) Volume Controls, Intercom select switch, and long life LED's.

Figure 10-14: Enhanced Electronic Key Telephone (EKT)

Executive Electronic Key Telephone (EKT)

The *STARPLUS* Executive Key Telephone is a fully modular instrument with 8 fixed feature/function and 22 flexible buttons that can be flexibly assigned as either CO/PBX/Centrex lines, Station DSS, or feature/function buttons. This set also features an integrated 48 character LCD display, and integrated speakerphone, call announce with handsfree intercom, two (2) volume controls, an intercom mode select switch, and long life LEDs.

Figure 10-15: Executive Electronic Key Telephone (EKT)

Electronic DSS/DLS Console

The station port used for a DSS/ DLS Console can be assigned as a Direct Station Select or Direct Line Select depending on customer need. The bottom two rows of buttons on the DSS/DLS Console contain 6-8 flexible buttons (depending on MAP chosen) which can be assigned by the station user in the same manner and functions as the flexible buttons on the keyset. Refer to *Chapter 4, DSS/DLS Features* for an explanation of the 5 DSS/DLS mapping options.

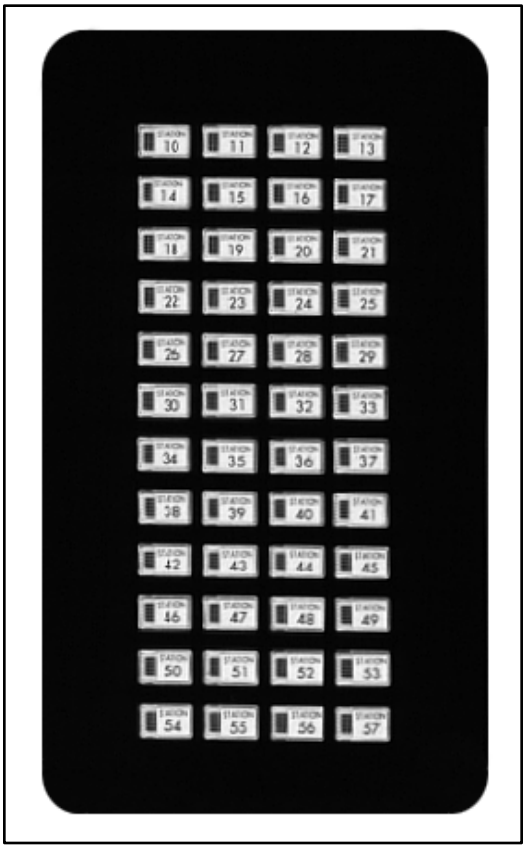


Figure 10-16: Electronic DSS/DLS Console

Digital Station Instruments

30-Button Elite Digital Telephone

The large display telephone has 11 fixed-feature buttons and 30 flexible buttons that can be assigned as CO/PBX/Centrex lines, Station DSS, or feature/function buttons. This telephone also features an integrated speakerphone, call announce with handsfree intercom, a volume control bar, a 7-line by 16-character LCD with 10 softkeys, and long life LEDs. Twenty four of the flexible button LEDs are red/green, six buttons are red only.

Figure 10-17: Large Display Digital Telephone (30-Button)

24-Button Executive/Enhanced Digital Telephones

The *STARPLUS* Executive/Enhanced 24-Button Digital Telephones are fully modular instruments with 11 fixed feature/function buttons and 24 flexible buttons that can be assigned as CO/PBX/Centrex lines, Station DSS, or feature/function buttons. This telephone also features an integrated speakerphone, call announce with handsfree intercom, a volume control bar, and long life LED's.

Figure 10-18: Executive Digital Telephone (24-Button)

12-Button Executive Digital Telephones

The *STARPLUS* Executive 12-Button Digital Telephones are fully modular instruments with 11 fixed feature/function buttons and 12 flexible buttons that can be assigned as CO/PBX/Centrex lines, Station DSS, or feature/function buttons. This telephone also features an integrated speakerphone, call announce with handsfree intercom, a volume control bar, and long life LED's.

Figure 10-19: Executive Digital Telephone (12-Button)

8-Button Enhanced Digital Telephones

The *STARPLUS* Enhanced 8-Button Digital Telephones are fully modular instruments with 5 fixed feature/function buttons and 8 flexible buttons that can be assigned as CO/PBX/Centrex lines, Station DSS, or feature/function buttons. This telephone also features an integrated speakerphone, call announce with handsfree intercom, a volume control bar, and long life LED's.

Figure 10-20: Enhanced Digital Telephone (8-Button)

Digital DSS/DLS Console

The station port used for a DSS/DLS Console can be assigned as a Direct Station Select or Direct Line Select depending on customer need. All forty-eight (48) buttons on the unit can be assigned as DSS, or flexible buttons. Refer to *Chapter 4, DSS/DLS Features* for an explanation of the 5 DSS/DLS mapping options.

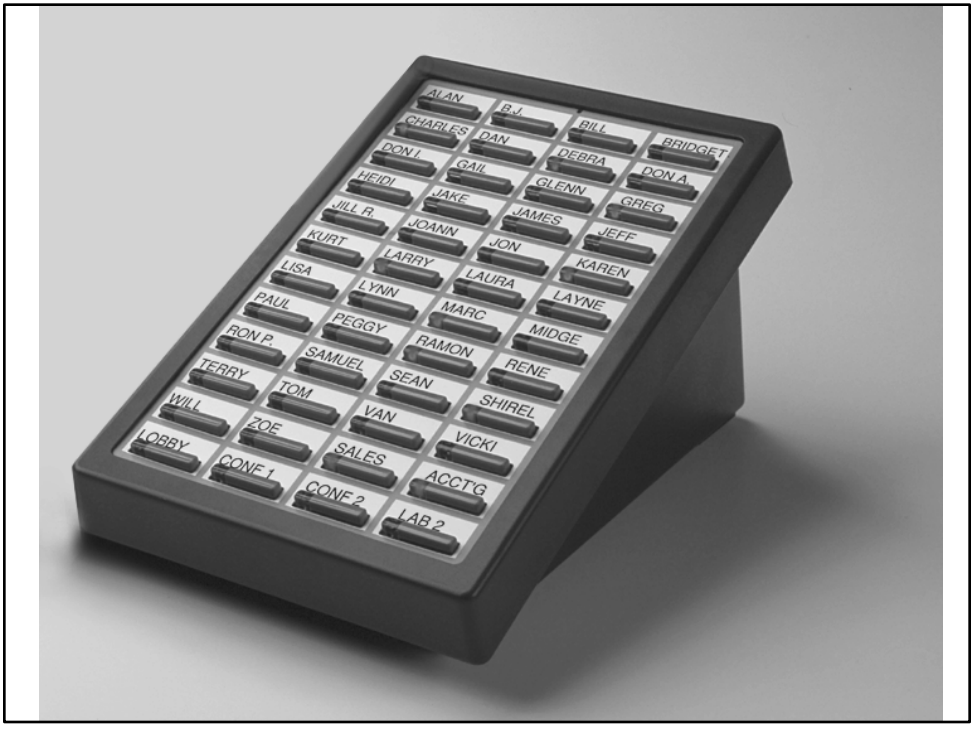


Figure 10-21: Digital DSS/DLS Console

Single Line Adapter (SLA)

The optional SLA device converts standard digital telephone circuits into 2500-type single line telephone interfaces. The device is a standalone type that can accommodate up to two digital station ports and convert them into two 2500 DTMP-type SLT circuits.

Wiring / Pinouts / Connections -- The SLA has screw-type connectors for both the digital (DTIB) and analog (SLT) interfaces.

Figure 10-22: SLA (Single Line Adapter)

Optional Units

DTMF Receiver Unit (DTRU)

The DTRU board provides two (2) DTMF receivers for system use. This board is optionally installed on the DID, LCOB and SLIB boards. The system software allocates the receivers as needed.

Wiring / Pinouts / Connections -- The board has molex connectors that connect it to the peripheral board.

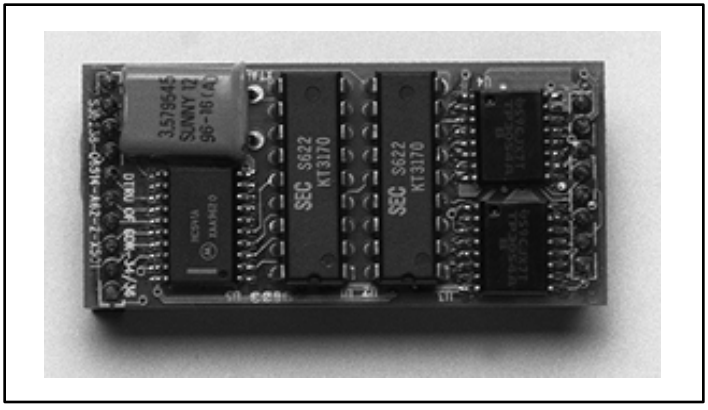


Figure 10-23: DTRU (DTMF Receiver Unit)

DTMF Receiver Unit (DTMF-A)

The optional DTMF-A unit can be added to the T1IB board to increase the number of DTMF receivers in the system.

- Each unit has four (4) DTMF receivers installed on it.
- This board mounts as a daughter board type arrangement.

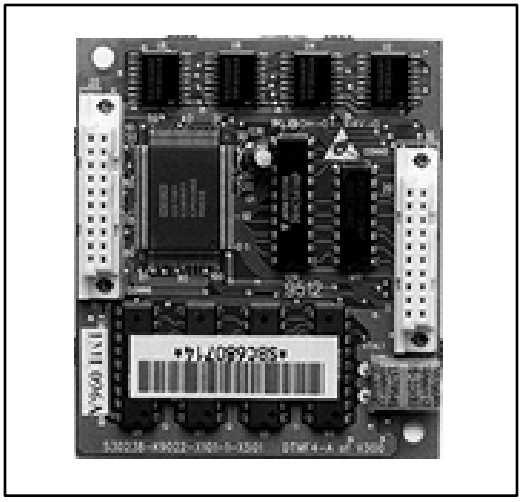


Figure 10-24: DTMF-A (DTMF Receiver Unit)

Serial Interface Unit (SIU)

The SIU2 provides 2 additional RS232 ports for system use. This board installs on the MISU board.

Wiring/Pinouts/Connections – The SIU2 provides two (2) DB9 connectors. One connector for each of the serial ports on the board.

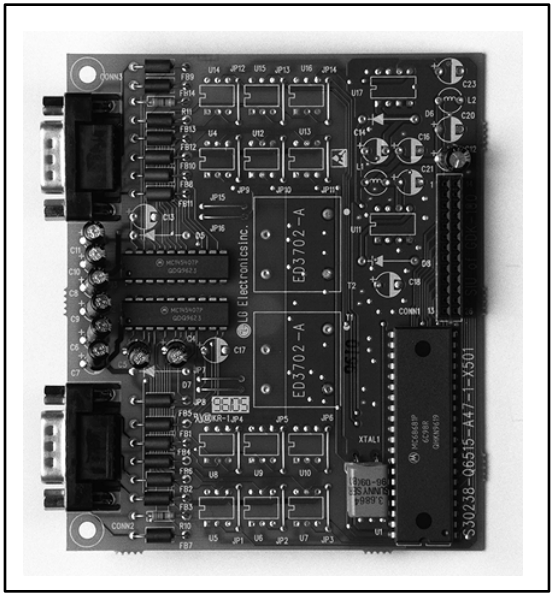


Figure 10-25: SIU (Serial Interface Unit)

Power Failure Transfer Unit (PFTU)

The PFTU provides the relay contacts for transfer of six (6) CO Lines to SLTs in the event of a power or processor failure. The PFTU is equipped with a manual switch that activates the Power Failure Transfer mode for testing purposes.

Line/Station Interfaces -- The unit has one female 50-pin amphenol connector on the front edge of the board. The amphenol connector interfaces the PFTU circuits to the MDF.

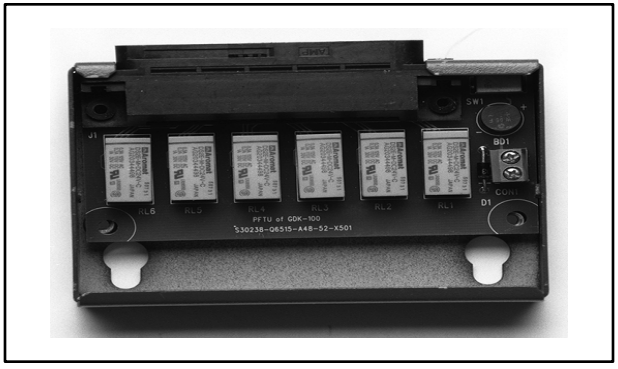


Figure 10-26: PFTU (Power Failure Transfer Unit)

Ring Generator Unit (RGU)

The RGU provides the ring voltages to the SLIB circuits to ring the SLTs. Also, the RGU provides the input to the Message Wait source on the SLIBs. The output of the RGU is 90V AC, 20Hz or 25Hz. There are two (2) versions of the RGU, internal and external. The internal RGU can support up to two (2) SLIB boards. For 3 or more SLIBs, the external RGU must be used.

Wiring / Pinouts / Connections -- The RGU is mounted inside of the BKSU and connect via a wiring harness.

Figure 10-27: RGU (Ring Generator Unit)

Modem Unit (MODU)

The MODU provides an asynchronous modem for access to the system database and fault reporting features from a remote site. The Module is optionally installed on the MPB and incorporates a 2400 Baud modem. The modem may be connected to a pre-selected CO Line through the system switching matrix. The local port may be connected to any CO Line via an external modem or to a terminal. The MODU port is independent of the SIU standard RS232C port, allowing system database access, etc. without the need to interrupt the SMDR output.

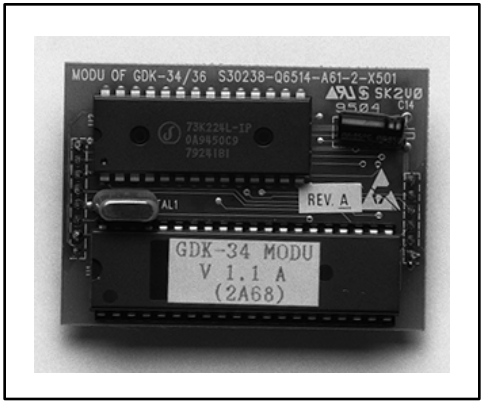


Figure 10-28: MODU (Modem Unit)

Phase Lock Loop Unit (PLLU)

This unit must be added to the MPB board whenever a T-1 board is installed in the system. This board regulates the T-1 clock signals from the T-1 board to the network.

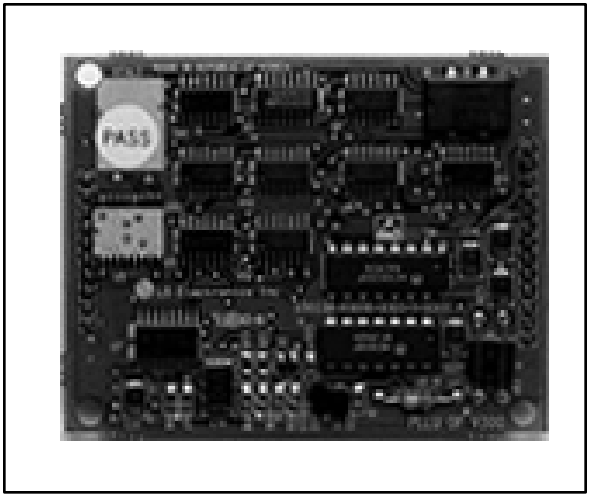


Figure 10-29: PLLU (Phase Lock Loop Unit)

System Configuration Tables

Table 10-1: Digital System Capacity

Triad 1 **Ports**	
CO/PBX/Centrex Lines	36 Lines Max. (6 per LCOB Board)
DID Lines	36 Lines Max. (4 per DIDB Board). DTMF or dial pulse signalling.
T-1 Trunks	48 Trunks Max. (24 per T1IB Board)
Stations	
Analog Stations	48 Max. (12 per ETIB Board)
Digital Telephones	60 Max. (12/24 per DTIB Board)
Single Line Telephones	48 Max. (6 per SLIB Board)
Triad 2 **Ports**	
CO/PBX/Centrex Lines	36 Lines Max. (6 per LCOB Board)
DID Lines	36 Lines Max. (4 per DIDB Board). DTMF or dial pulse signalling.
T-1 Trunk	48 Trunks Max. (24 per T1IB board)
Stations	
Analog Stations	48 Max. (12 per ETIB Board)
Digital Telephones	60 Max. (12/24 per DTIB Board)
Single Line Telephones	48 Max. (6 per SLIB Board)
DTMF Receiver	Each DTMF Receiver Module (DTRU) contains 2 DTMF receivers. The DTRU Board mounts as a daughter board on the LCOB, DIDB, and SLIB. Each DTMF Receiver Module (DTMF-A) contains 4 DTMF receivers. The DTMF-A Board mounts as a daughter board on the T1IB.
DTMF Sender	Unlimited
I/O Ports	3 (Max.) per system. (One RS-232C included on MPB)
Conference	
Circuits	5 Conferences per system.
Parties	8 parties per conference, of which 5 can be external.
DISA Circuits	Unlimited number of CO lines may be programmed simultaneously.
Attendants	Up to 3 stations can be designated as Attendants.

Table 10-1: Digital System Capacity

Digital DSS/DLS Units	48 Max. Each DSS/DLS unit requires 1 station port and reduces station capacity by 1. DSS/DLS maps may not be duplicated at one station. One station may have up to three DSS/DLS units associated with it.
Loop Supervision Disconnect	700 msec. duration (CO or Internal call to SLT)
Page Zones Internal Paging External Paging (one/two-way)	 8 max. (software controlled) 2 max. (On MISU Board)
Hunt Groups Groups Members Types	 Software supports up to 8 Groups Software supports up to 8 stations in each group. Station, Pilot Hunting, or Pilot Ring All
Voice Mail Groups Groups Members (ports) Integration Method VM Message Wait VM Disconnect Signal	 Software supports up to 8 Groups. Software supports up to 24 stations In-Band signaling (DTMF). Programmable 12-digit (DTMF) string. If no digits programmed, 15 sec. of silence are followed by busy tone.
ACD Groups Groups Members RAN Announcements Calls in Queue	 Software supports up to 16 Groups Software supports up to 252 stations in each group. Eight RAN Announcements per system, 3 per ACD Group. All CO Lines may be queued for an ACD Group.
UCD Groups Groups Members RAN Announcements Calls in Queue	 Software supports up to 8 Groups Software supports up to 8 stations in each group. Eight RAN Announcements per system, 3 per UCD Group. All CO Lines may be queued for an UCD Group.

Table 10-2: Electrical Specifications

AC Input to Power Supply	117 VAC ±10%, 60Hz single phase
Power Consumption	416 watts
Power Supply Fuse - AC Input	6A/125V
Longitudinal Balance	60 db from 200 Hz to 1,000 Hz 40 db from 1000 Hz to 4000 Hz
Idle Channel Noise	Less than 15 dbrnco for all connections
Cross Talk Attenuation	Greater than 80 dbm Station to CO and Station to Station
Single Frequency Distortion (300 - 3400 Hz)	Station to CO Line and station to station: Better than 2.0% or 34 db for an Output level -30 dbm to 0 dbm
Ringing Sensitivity	16 Hz to 30 Hz at 40 VRMS minimum 30 Hz to 67 Hz at 50 VRMS minimum
CO Line Signaling - DTMF	Frequency pair at -5 dbm ±5dbm Frequency tolerance ±1.5%
CO Line Signaling - Dial Pulse	10 pps and 20 pps programmable
Input Level Range	+10 db maximum
Music Source Music On Hold input Background Music input	 600Ω input at Ødbm maximum from music source 600Ω input at Ødbm maximum from music source
Contact Rating Multi-Purpose Relay	 1Amp @ 24Vdc (4 on MISU Board)
External Page Port Output Impedance Output Power w/o Compression	 600Ω @ 0dbm 5 milli-watt max
CSA File Number (NRTL/C)	LR57228

Table 10-3: Environmental Specifications

Operating Temperature	32° to 104° F (0° to 40° C)
Optimum Temperature	60° to 80° F (15° to 26° C)
Storage Temperature	-40° to 140° F (4°to 60° C)
Relative Humidity	5% to 90% non-condensing
Heat Dissipation (BTUs)	1418 BTU/Hour

Table 10-4: Loop Limits

Analog Electronic Telephone	Maximum length of station loop: 1000 feet of 24 AWG (4 wire, inside wiring, twisted cable)
Digital Telephones	Maximum length of station loop: 1000 feet of 24 AWG (2-wire, inside wiring, twisted cable)
Single Line Telephones	2000 feet of 24 AWG or 2500 feet of 22 AWG.

Table 10-5: Dialing Specifications

DTMF Dialing	
Frequency Deviation	±1.5%
Rise Time	5 msec.
Duration of DTMF Signal	70-100 msec.
Inter-digit Time	100-130 msec.
Pulse Dialing	
Pulse Dialing Rate	10 or 20 pps
Pulse Break/Make Duration	60/40 or 66/33
CO Type	Loop Start, 600 ohm, current sensing

Table 10-6: FCC Registration Numbers

For Systems configured as a key system (button appearance)	DLPKOR-24039-KF-E
For Systems configured as a hybrid system (dial access codes)	DLPKOR-24026-MF-E

Table 10-7: Trunk Ordering Info: Public Network Lines

System Port Identification, Facility Interface and Service Order Codes			
Interface Card	**Ringer Equivalent Number (REN)**	**Facility Line Interface**	**Jack Type**
Loop Start (LCOB)	1.3B	02LS2	RJ14
Direct Inward Dial (DIDB)	1.3B	02RV2-T	RJ14
T1 Port (T1IB)	6.OP	04DV9-B	RS45

Table 10-8: Physical Dimensions and Weight

Item	Height	Width	Depth	Weight
Triad 1 Small Basic Key Service Unit	16.5 in.	13.0 in.	7.4 in.	26.7 lbs.
Triad 2 Basic Key Service Unit	16.5 in.	15.7 in.	7.4 in.	33.3 lbs.
Triad 2 Expansion Key Service Unit	16.5 in.	6.4 in.	7.4 in.	10.2 lbs.
Analog Exec/Enh Electronic Telephone	3.5 in.	8.0 in.	9.125 in.	3 lbs.
Analog DSS/DLS Console	3.0 in.	7.625 in.	9.625 in.	2 lbs.
Exec/Enh (24-Btn) Digital Telephone	9.3 in.	7.6 in.	3.3 in.	3.3 lbs.
Exec (12-Btn) Digital Telephone	9.3 in.	7.6 in.	3.3 in.	2 lbs.
Digital DSS/DLS Console	9.3 in.	4.9 in.	3.3 in.	2 lbs.

Table 10-9: Miscellaneous Specifications

Memory Programmable Read-Only Memory (EPROM) Random Access Memory (RAM)	 512K expandable to 1 Megabyte 256K expandable to 512 Kilobytes
Telephone Transmitter	Electret MIC compatible
Talk Paths CO/PBX/Centrex Paths: ***Triad 1/2*** Intercom Paths	 36 CO/PBX/Centrex talk paths (non-blocking) Non-Blocking
Music Channels Music-On-Hold/Background Music	 2 Channels per system -- 1 MOH, 1 BGM (different sources)
Account Codes Number of digits per account code Number of Account Codes- Unverified Number of Account Codes - Verified	 Up to 12 unverified digits Unlimited 250 Account Codes
Dialing Memory Station Speed Dialing System Speed Dialing Total System Speed Dial	 20 Bins per station ((24-digits) 980 Bins per system (24-digits) 2000 Bins per system (24-digits)

Table 10-10: Electronic Telephone Audible Signals

Type of Signal	Frequency	Signal Duration
Electronic Telephone Signals		
Incoming CO Line	440+480	0.2 on/0.4 off/0.6 on/3.0 off; Repeated
Intercom Tone Ringing	440+480	0.8 on/2.8 off; Repeated
Intercom Call Announce (H-P modes)	440	0.8 on/0.8 off (3 bursts)
Transferred CO Line	440+480	0.8 on/2.8 off; Repeated
CO Line Recall	440+480	0.8 on/2.8 off; Repeated
Message Wait Call Back	440+480	0.8 on/2.8 off; Repeated
CO Queue Call Back	440+480	0.8 on/2.8 off; Repeated
Camp-On	440	0.2 on (1 burst)
Paging Alert Tone	440	1 sec. on
Electronic Telephone Confidence Tones		
Intercom Ringback	440+480	0.8 on/2.8 off
Transferred CO Line	440+480	0.8 on/2.8 off
Call Announce	440	0.8 on/0.8 off (3 bursts)
Busy Tone	480+620	0.5 on/0.5 off; Repeated
Error Tone	480+620	0.2 on/0.2 off; Repeated
Intercom Dial Tone	350+440	Steady
DND Tone	350+440	0.4 on/0.4 off/0.2 on/0.2 off/0.2 on; Repeated
Paging Confirmation Tone	350+440	1 sec. on
Conference Time-out/Re-Enter Tone	440	Programmable Steady Tone
Confirmation Tone	350+440	0.8 on/8 off (3 bursts)

Table 10-11: Single Line Audible Signals

Type of Signal	Frequency	Signal Duration
Single Line Signals		
Incoming CO Line	20Hz 90 VAC	0.8 on/2.8 off; Repeated
Intercom Tone Ringing	20Hz 90 VAC	0.2 on/0.4 off/0.6 on/3.0 off; Repeated
Transferred CO Line	20Hz 90 VAC	0.8 on/2.8 off; Repeated
CO Line Recall	20Hz 90 VAC	0.2 on/0.2 off/0.2 on/0.2 off
CO Queue Call Back	20Hz 90 VAC	1 Sec on/2 Sec off; Repeated
Single Line Confidence Tones		
Intercom Ringback	440+480	0.8 on/2.8 off; Repeated
Transferred CO Line	440+480	0.8 on/2.8 off; Repeated
Call Announce	440	0.8 on/2.8 off; Repeated
Busy Tone	480+620	0.5 on/0.5 off; Repeated
Error Tone	480+620	0.2 on/0.2 off; Repeated
Intercom Dial Tone	350+440	Steady
DND Tone	350+440	0.4 on/0.4 off/0.2 on/0.2 off/0.2 on; Repeated
Paging Confirmation Tone	350+440	1 sec on
Conference Time-out Tone	440	Programmable Steady Tone
Confirmation Tone	350+440	0.8 on/0.8 off (3 bursts)

Table 10-12: Digital Station Visual Signals - CO Line Buttons

Feature/Function	Flash Rate	LED Color
Incoming CO Ringing	30 ipm Flash	Red
Transferred CO Ringing	120 ipm Flash	Red
CO Line Recalling	480 ipm Flutter	Red
System HOLD	60 ipm double wink	Red
Exclusive HOLD (I-Hold)	120 ipm Flash	Green
I-HOLD (System)	60 ipm wink	Green
CO Line Queue Call Back	480 ipm Flutter	Red
CO Line in Use	ON Steady	Red
CO Line Idle	OFF	OFF
Exclusive Hold (other stations)	ON Steady	Red

Table 10-13: Digital Station Visual Signals - DSS/BLF Buttons

Feature/Function	Flash Rates	LED Color
Off-Hook (Busy)	ON Steady	Red
Incoming Intercom Ring	120 ipm Flutter	Red
Call Announce (H or P Mode)	Steady	Red
Message Waiting Call Back	120 ipm Flutter	Red
Station in Do Not Disturb	60 ipm Double Flash	Red
Camp On (by station)	120 ipm Flash	Red
Automatic Call Back	120 ipm Flash	Red
Station Unavailable (ACD/UCD)	60 ipm Flash	Red

Table 10-14: Digital Station Visual Signals - Feature/Function Buttons

Feature/Function	Flash Rates	LED Color
Call Forward (active)	30 ipm Flash	Red
Message Wait (active)	Steady	Red
Camp On (active)	120 ipm Flash	Red
Call Back (active-initiator)	120 ipm Flash	Red
CO Line Queue (active)	480 Flutter	Red
DND (active)	Steady	Red
Mute	Steady	Red
On/OFF	Steady	Red
Conference	Steady	Red
Speed (moment on until bin address dialed)	Steady	Red
Personalized Messages	15 ipm Flash	Red
Tone Intercom Call (hold button)	15 ipm Flash	Red
Loop	same as CO	Green/Red
Pool	same as CO	Green/Red
Transfer	None	None

Table 10-15: Signals to CALLED Station (Digital Station)

Feature (Indication)	Sound In Hz	Occurrence (Cadence)
Incoming CO Line	(*User Selectable)	.8 on/2.4 sec off; Repeated
Intercom Tone Ringing	(*User Selectable)	.4 sec on/.4 sec off/.4 sec on/2 sec off, Repeated
Intercom Call Announce (H & P)	935	.2 sec on/.2 sec off; 2 bursts
Transferred CO Line	(*User Selectable)	.8 sec on/2.4 sec off; Repeated
CO Line Recall	(*User Selectable)	.2 sec on/.6 sec off; Repeated
Message Waiting Call Back	(*User Selectable)	.4 sec on/.4 sec off/.4 sec on/2 sec off, Repeated
Queued CO Line Call Back	(*User Selectable)	.2 sec on/.6 sec off; Repeated
Camp On	935	.2 sec burst
Alarm Tone - Repeated	701/857	1.0 sec on/.25 sec off; Repeated
Alarm Tone - Single (Continuous)	701/857	1.0 sec on; once (every 30-60 seconds until the alarm is reset)

** Only one (1) tone can be selected by a station at a time. This tone is used for all signaling that uses the User Selectable tone.*

Table 10-16: Signals to CALLING Station (Digital Station)

Feature (Indication)	Sound in Hz	Occurrence (Cadence)
	Station	
Intercom Ring Back Tone	1215/1471	.5 sec on/2.5 sec off; Repeated
Intercom Call Announce	935	.2 sec on/.25 sec off; three (3) times
Busy Tone	701	.5 sec on/.5 sec off; Repeated
Error Tone	701	.25 sec on/.25 sec off; Repeated
Intercom Dial Tone	420	Continuous
DND Tone	701	.2 sec on/.2 sec off; three (3) times, Pause, Repeated
Paging Confirmation Tone	935	1 second burst
Conference Time Out Warning Tone	420	1 second burst
Programming Confirmation Tone	1471	1 second burst
Programmed Error Tone	1471	.25 sec on/.25 sec off; Six (6) times
Call Waiting	735	.5 second burst

Table 10-17: Voice Mail Confidence Tones

VM Condition Action	Tone Received	Sound in Hz	Occurrence (Cadence)
Off Hook	Internal Dial Tone (no stutter tone)	350/440	Continuous
Calls an Internal Station (idle)	Ring Back Tone	440/480	1 sec on/3 sec off; Repeated
Initiate a Transfer (hook-flash)	Internal Dial Tone (no stutter tone)	350/440	Continuous
Calls an internal station (busy) *Call back not allowed	Busy Tone	480/620	0.5 sec on/0.5 sec off; Repeated
Calls an internal station (DND)	Busy Tone	480/620	0.5 sec on/0.5 sec off; Repeated
Calls an internal station (programmed/not equipped)	Busy Tone	480/620	0.5 sec on/0.5 sec off; Repeated
Calls an internal station (not programmed/not equipped)	Re-Order Tone	480/620	0.2 sec on/0.2 sec off; Repeated
Dials an invalid digit/FACODE/ station	Re-Order Tone	480/620	0.2 sec on/0.2 sec off; Repeated
Calling Party Disconnects (Internal or External call)	Silence or (Disconnect Digits)	0 or (DTMF Digits)	Continuous or (as programmed)

11 Triad 3 System Configuration

This chapter describes the basic and optional equipment to be used with the *Triad 3* System. System specification tables have also been provided.

Triad 3 General Description

The *Triad 3* System is a fully Digital Key Telephone System, designed to meet the telecommunication needs of medium-sized business offices. The system incorporates state of the art digital technology for command processing and voice switching, using a Pulse Code Modulation/Time Division Multiplexing (PCM/TDM) distributed switching matrix. The system supports *MU Law Encoding* based on the requirements of local regulations. The *Triad 3* system achieves a high level of flexibility by:

- Employing a Universal Card Slot architecture with a small Basic, Basic and Expansion cabinet to house plug-in Printed Circuit Boards.
- Providing support for different types of instrumentation.
- Utilizing the same common control and peripheral cards.

System Hardware Preferences

The *Triad 3* system can accommodate a variety of hardware as follows:

- Basic and Expansion KSUs are wall mounted cabinets that house the back plane and contain card slots for the system power supplies, CO Line/Key Station/SLT Interface boards, and other optional PCBs.
- Station, CO Line, SLT, and option boards are installed in any of the system card slots up to the system's maximum configuration.
- Digital Line cards and T1IB/PRIB boards can be installed from Slot 0 to Slot 8 of the Basic KSU.
- The system maximum capacity is 112 Loop CO line and 252 digital terminals. (Alternately, 144 T-1 lines can be installed with 240 digital terminals.)

System Control and Flexibility

The system architecture has been designed to allow a high level of software control over the system's hardware. The software incorporates a vast array of features and capabilities including PC Database Administration, ACD, etc.

The system supports a combination of Digital Keysets and Electronic Keysets as well as single line devices. For Keysets, commonly used features are activated by direct button selection. Many functions may be accessed by dialing specific codes or optionally, by assigning these dial codes to flexible buttons on the keyset. In addition to key telephones, an array of optional terminals are available including DSS/ DLS consoles.

With the flexibility of the system extensive feature content, and the capability to use an array of instruments, the system can be tailored to meet the short and long term needs of the most demanding customer requirements.

Common Control Equipment

Basic Cabinet (BKSU)

The system consists of a maximum of four cabinets that can be stacked together. The first cabinet, or Basic KSU houses the common equipment boards and peripheral equipment boards. The card slots (0-8) in this cabinet are totally universal.

Expansion Cabinet (EKSU1)

The EKSU1 mounts directly above the BKSU. The card slots in Expansion Cabinet 1 houses only peripheral boards. Any arrangement of CO lines, stations, etc., is permitted. The system size is limited to the ports available and can be configured in to customer requirements.

Expansion Cabinet (EKSU2)

The EKSU2 mounts to the right of the BKSU and EKSU1. The card slots in Expansion Cabinets 2 and 3, house only peripheral boards. Any arrangement of CO lines, stations, etc., is permitted. The system size is limited to the ports available and can be configured to customer requirements.

Battery Charging Unit (BCU)

The optional BCU provides the charging circuitry for a 24 VDC battery package. The charging is 28 VDC at 0.5 Amp. The BCU installs in the DCCU.

DC/DC Converter Unit (DCCU)

The DCCU converts the unregulated 24 volts DC power into regulated logic voltages (+5v, -5v, +12v) which the system needs to operate. The DCCU is required for system operation and also provides -48vdc to support specialty cards (i.e.: DIDB). Up to 1 amp of -48v dc per cabinet can be supplied by the DCCU. One DCCU per BKSU/EKSU1 is required.

PS-10/PS15 Power Supply (PS)

The power supply is housed in the Basic KSU (BKSU) and Expansion KSU (EKSU1) cabinets. Each BKSU and EKSU1 cabinets can house up to two (2) power supplies. The power supplies converts 117V ac to 24V dc and connects to the DC/DC converter unit (DCCU) located in each Basic cabinet. The power supply has a output rating of 10A or 15A.

Ring Generator Unit (RGU)

The RGU is enclosed in its own housing and is externally wall mounted. It provides 90VAC ring voltage for ringing SLTs and lighting of MSG Waiting lamps. This unit connects to the BKSU and EKSU1. One (1) is required for single line telephone (SLT) operation per BKSU and EKSU1.

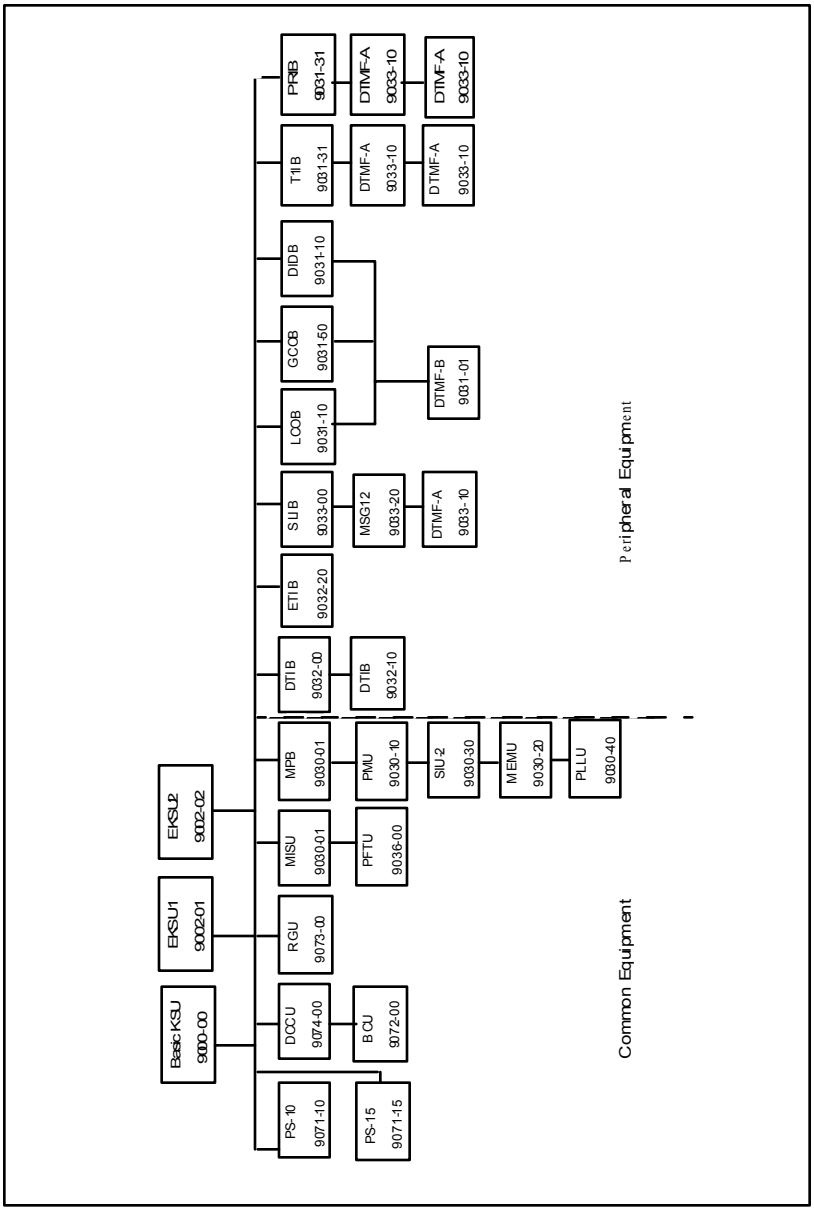


Figure 11-1: *Triad 3* System Diagram

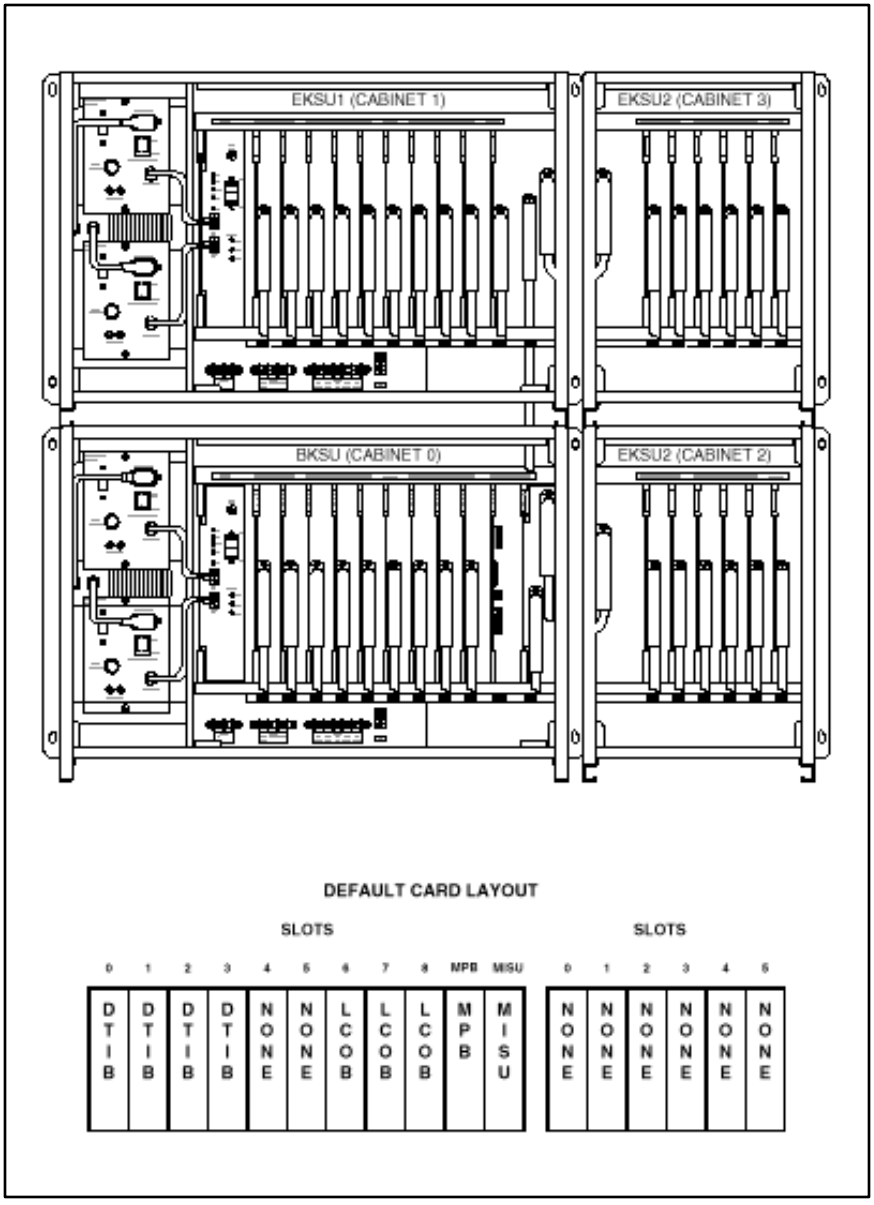


Figure 11-2: *Triad 3* Default Card Layout

Common Control Cards

The common control cards are the plug-in PCB's that are necessary for basic system operation or require direct interface to the system bus. These cards can only be installed in the basic cabinet.

Master Processor Board (MPB)

The MPB controls the system. It is powered from the backplane and has access to the system bus and signaling (HDLC) bus. It also controls the PCM bus.

The MPB circuitry includes:

- Microprocessor, Memory Management, EIA channels, System Clock, Reset circuitry, Bus Error circuitry, Interrupt circuitry, and On-Board Memory.
- The card has LED indicators for identifying the system status and self diagnostics. It also contains an 8-function DIP switch for setting system options.
- The MPB has one (1) RS-232C connector permanently mounted to provide interface for Database Administration, SMDR output, and other I/O functions. An optional Serial Interface Unit (SIU2) can be added to provide two (2) additional RS232C ports (RJ48). The MPB also has an On-Board 2400 Baud modem.
- The MPB contains 512K of RAM. Memory can be increased to a maximum of 2 Meg by adding the Memory Expansion Unit (MEMU).
- The card ejector tabs are color coded yellow.
- One (1) card per system is required.

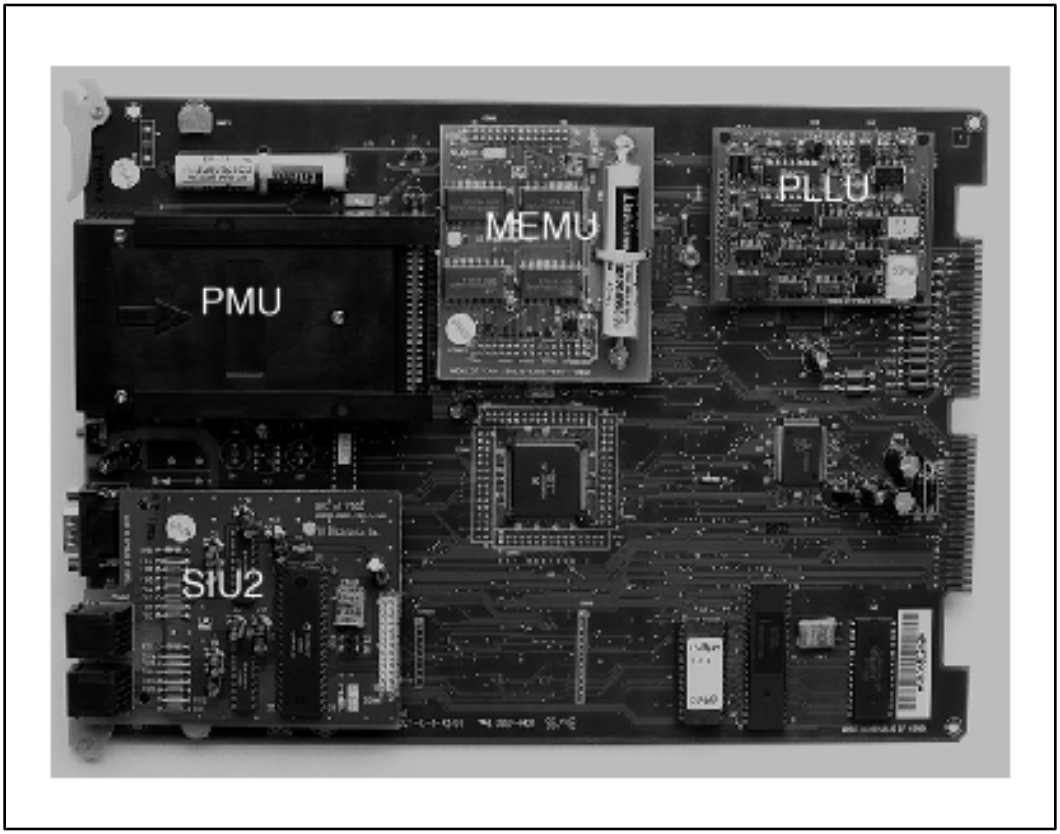


Figure 11-3: MPB (Master Processor Board)

Miscellaneous Service Unit (MISU)

The MISU board provides the interface to support miscellaneous items.

The MISU also provides:

- Two (2) channels of Background Music/Music On-Hold
- Two (2) External Page Ports
- Two (2) DTMF Receiver circuits
- Six (6) independent relays
- Card ejector tabs are color coded violet
- One (1) card can be installed per system
- PFTU Connector (optional PFTU unit)

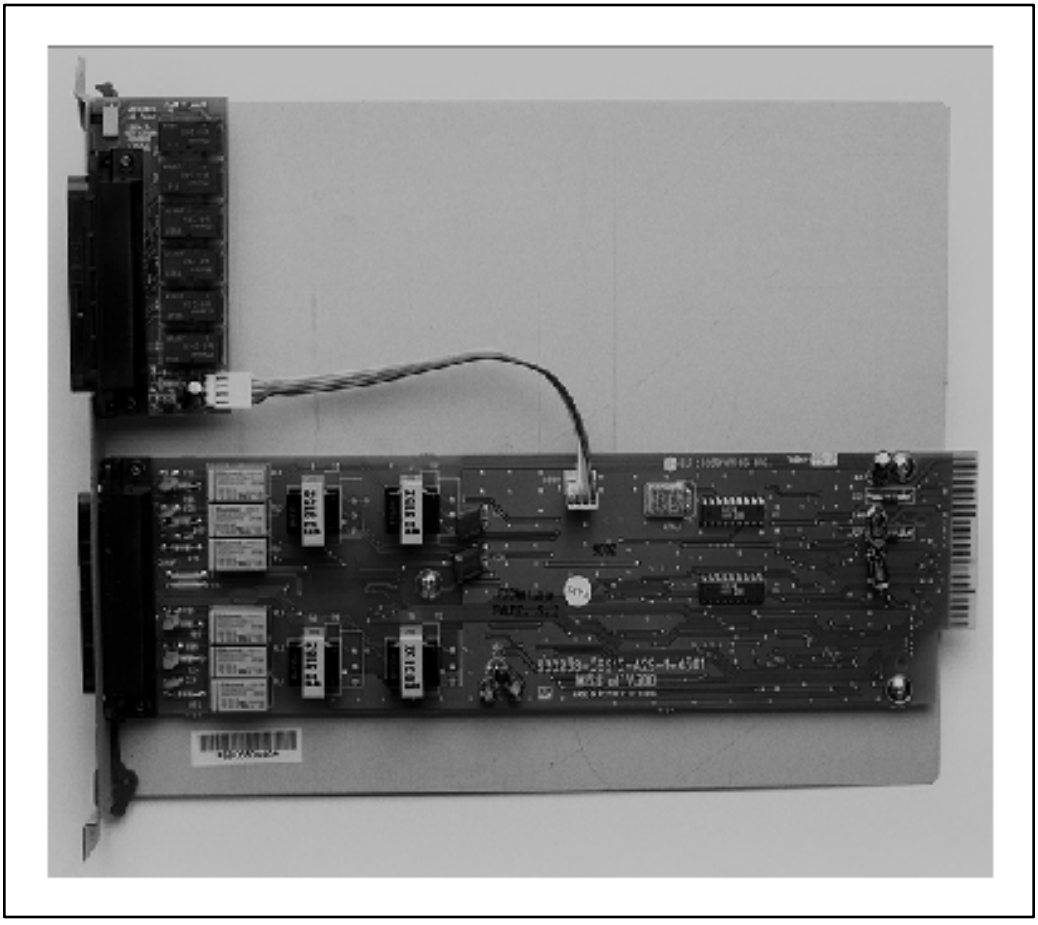


Figure 11-4: MISU (Miscellaneous Service Unit Board)

Peripheral Boards

These boards provide the interface from system PCM ports to stations or the switching network. The peripheral cards may be placed in any universal card slot in either the Basic Cabinet or Expansion Cabinet. These cards are described as follows:

Loop Start (LCOB) Trunk Board

The LCOB board provides the interface to eight CO, FX, or WATS trunks.

- Each trunk circuit contains a hybrid, 2-wire interface circuit and control circuitry.
- The operation for Pulse Dialing or DTMF signaling can be done on a per circuit basis.
- Each circuit has an LED indicator that gives trunk status.
- Each trunk circuit can be disabled as well as the card.
- A Normal/Service switch located toward the top of the card allows the card to be inserted or removed from the system while under power.
- The CO lines are connected via a 50-pin male amphenol connector located on the front edge of the card.
- The card can accept a DTMF-B unit in a daughter board type arrangement.
- The card ejector tabs are color coded white.

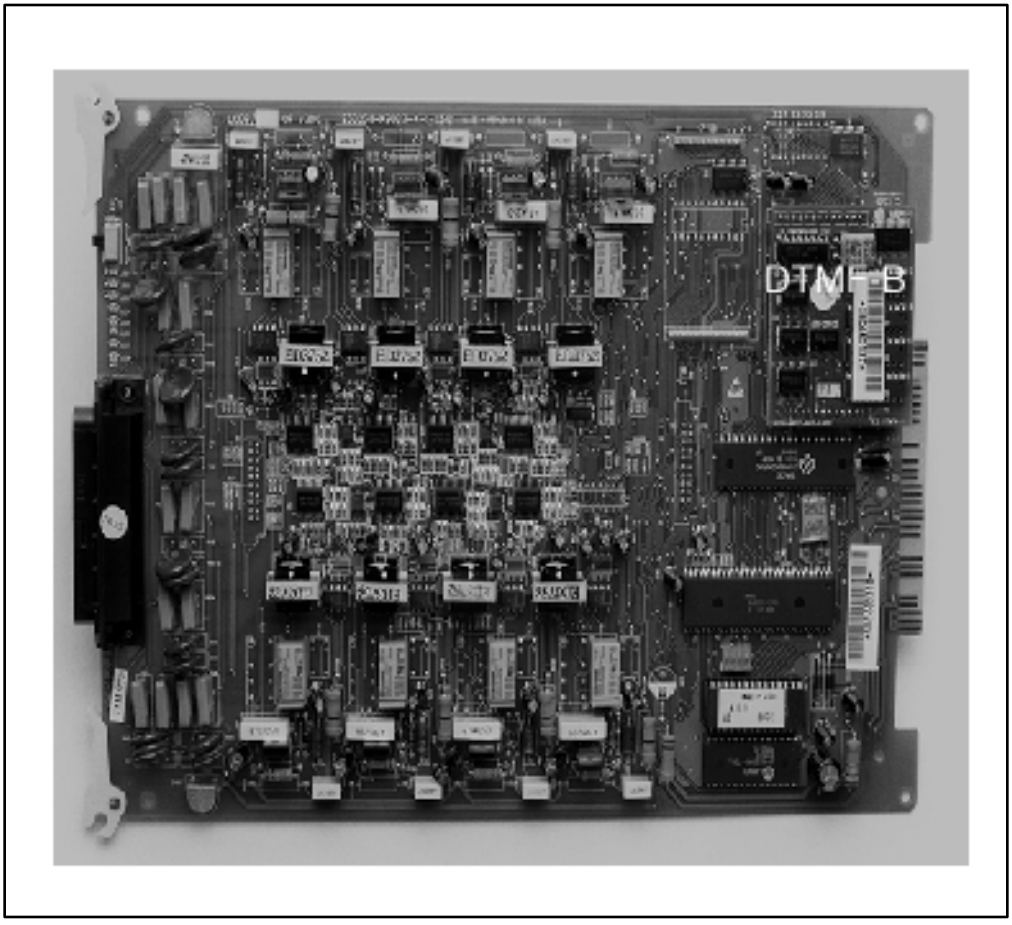


Figure 11-5: LCOB (CO/FX/WATS Trunk Board)

Ground Start (GCOB) Trunk Board

The GCOB board provides the interface to eight CO, FX, or WATS trunks.

- Each trunk circuit contains a hybrid, 2-wire interface circuit and control circuitry.
- The operation for Pulse Dialing or DTMF signaling can be done on a per circuit basis.
- Each circuit has an LED indicator that gives trunk status.
- Each trunk circuit can be disabled as well as the card.
- A Normal/Service switch located toward the top of the card allows the card to be inserted /removed from the system while under power.
- The CO lines are connected via a 50-pin male amphenol connector located on the front edge of the card.
- The card can accept a DTMF-B unit in a daughter board type arrangement.
- The card ejector tabs are color coded white.

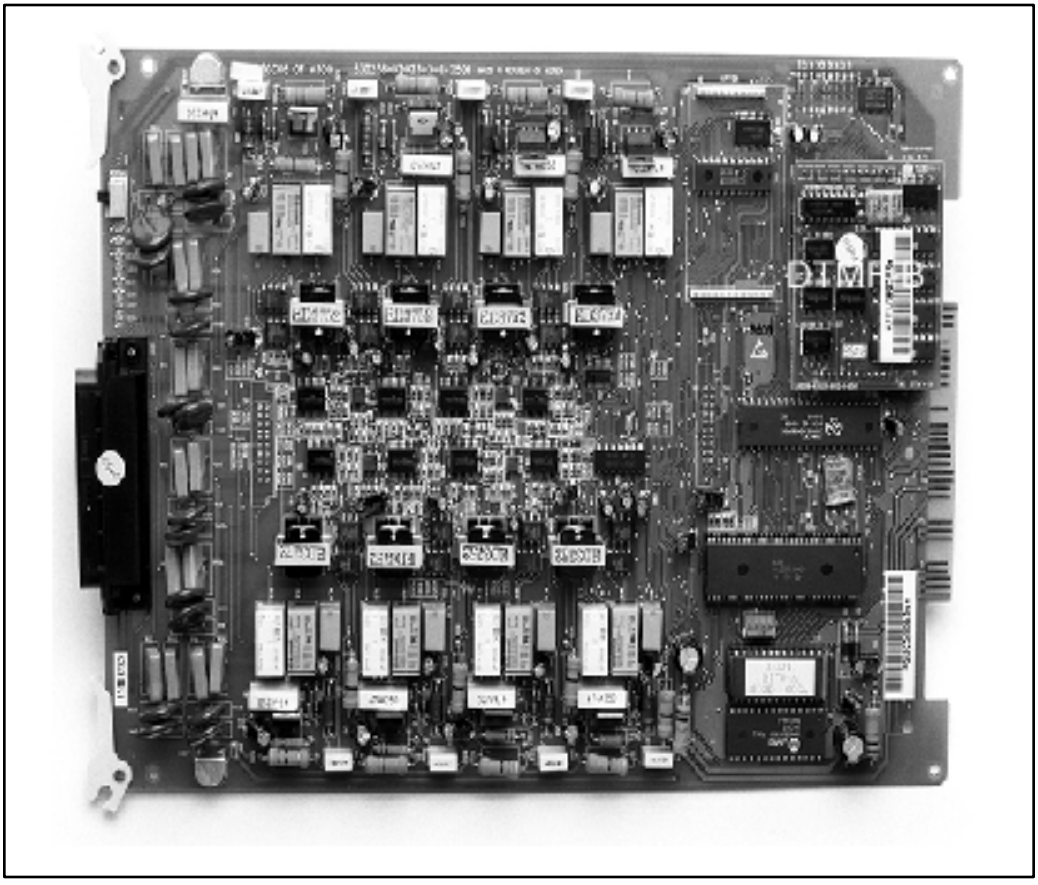


Figure 11-6: GCOB (CO/FX/WATS Trunk Board)

DID Trunk Board (DIDB)

The DIDB board provides the interface to eight (8) loop Direct Inward Dialing (DID) trunks.

- Each of the trunk circuits contain a hybrid, 2-wire interface circuit, and control circuitry.
- The operation for Pulse Dialing or DTMF signaling can be done on a per circuit basis.
- Each CO Line circuit has an LED indicator that gives trunk status.
- A Normal/Service switch located toward the top of the card allows the card to be inserted or removed from the system while under power.
- Each trunk circuit can be disabled as well as the card.
- The CO lines are connected via a 50-pin male champ (amphenol type) connector located on the front edge of the card.
- The card can accept a DTMF-B unit in a daughter board type arrangement.
- The card ejector tabs are color coded white.

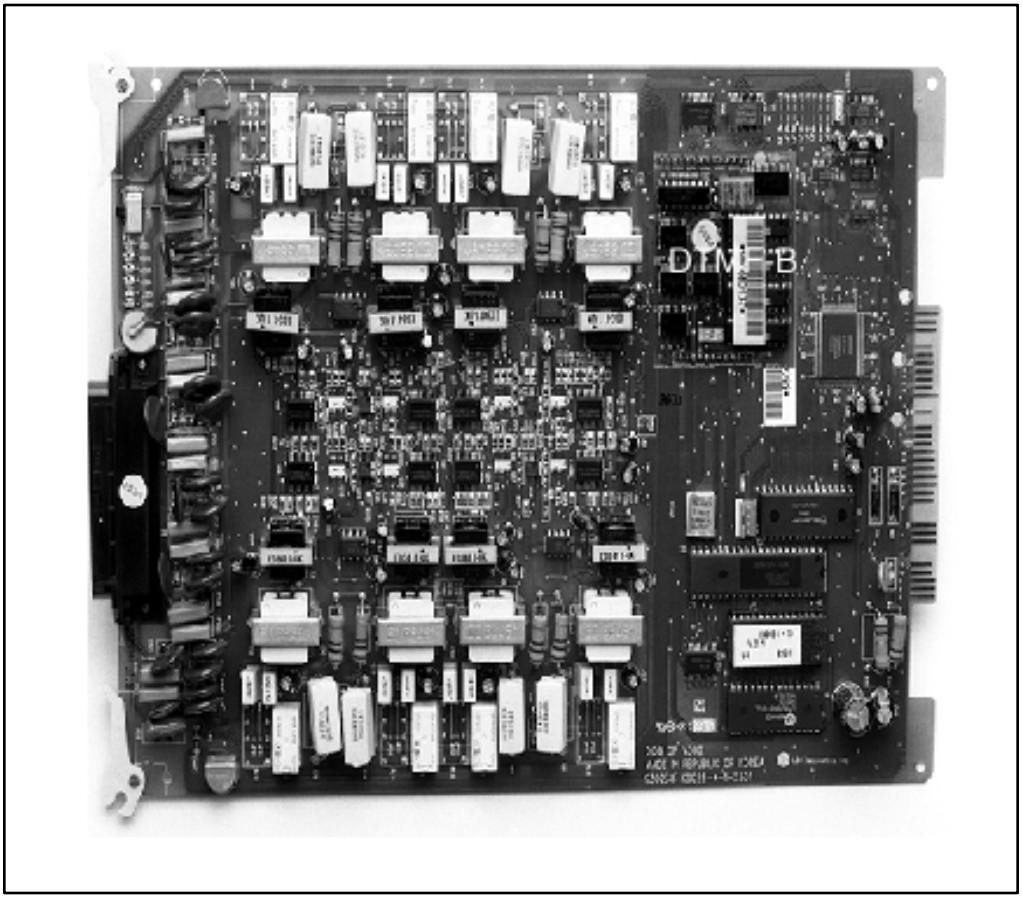


Figure 11-7: DIDB (Direct Inward Dialing Board)

T-1 Interface Board (T1IB)

The T1IB board allows the network connection to a T-1 1.544MB digital interface.

- This board supports standard D4 framing format with robbed bit signaling. Extended Super frame (ESF) format is also supported.
- The board can support TIE, Loop and Ground start signaling emulation per channel.
- The board requires an external CSU unit.
- The board has a 15-pin D-Sub connector for connection to a CSU unit.
- A Normal/Service switch located toward the top of the card allows the card to be inserted or removed from the system while under power.
- The T1IB card can accept up to two (2) DTMF-A units in a daughter board type arrangement
- The Phase Lock Loop unit (PLLU) must be installed on the MPB in order for the T1IB board to operate properly.
- The card ejector tabs are color coded white.

This board can only be installed in the Basic Cabinet (BKSU) Slots 0-8. A maximum of six (6) T1IB boards can be installed in the system.

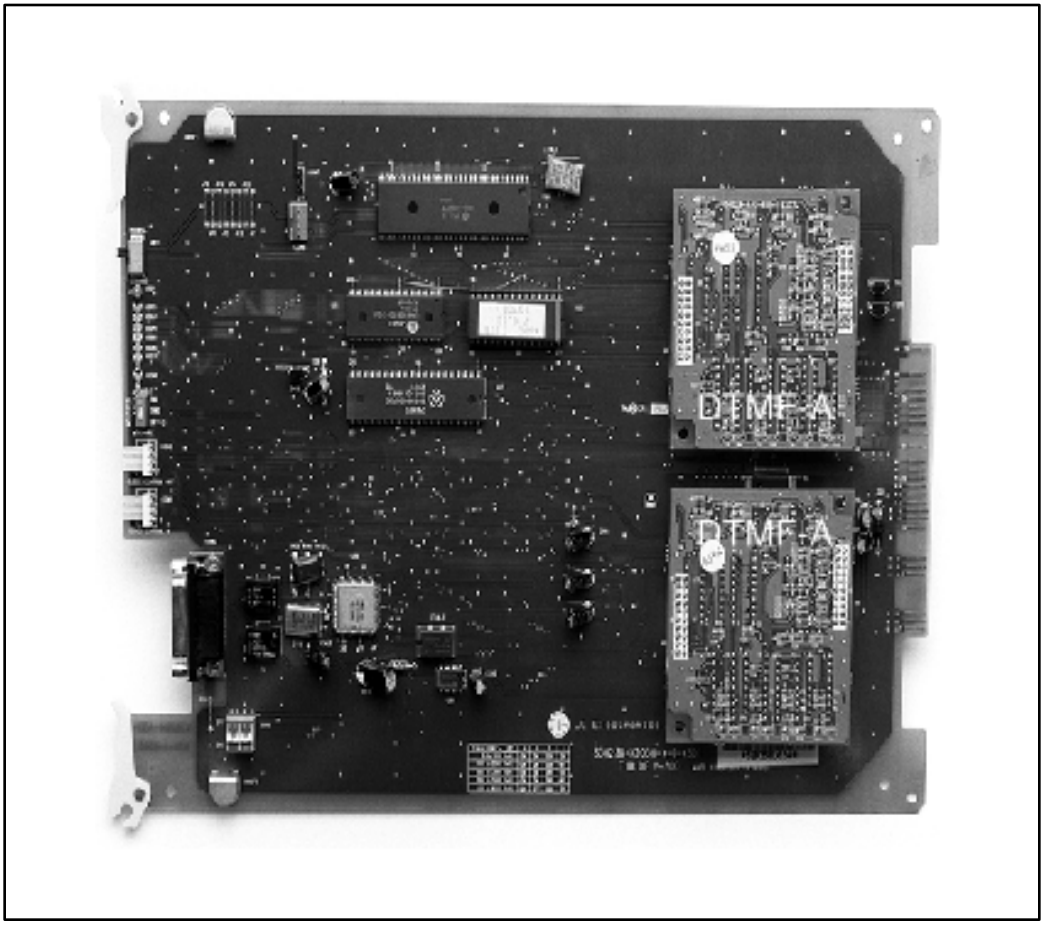


Figure 11-8: T1IB (T-1 Trunk Board)

Primary Rate Interface Board (PRIB)

The PRIB allows the network connection to a Primary Rate ISDN digital interface.

- This board supports Extended Superframe (ESF) format and B8ZS line coding.
- The board can support TIE, Loop and Ground Start signaling emulation per channel.
- The board requires an external CSU unit.
- The board has a 15-pin D-Sub connector for connection to a CSU unit.
- A Normal/Service switch located toward the top of the card allows the card to be inserted or removed from the system while under power.
- The PRIB card can accept up to two (2) DTMF-A units in a daughter board type arrangement
- The Phase Lock Loop unit (PLLU) must be installed on the MPB for the PRIB to operate properly.
- The PRIB uses 24 time slots when installed.
- The board does not support the trunk features of Paging, Reseize, Queuing, or RAN Support.
- The card ejector tabs are color coded white.

The PRI board can only be installed in the Basic Cabinet (BKSU) Slots 1-8. A maximum of six PRI boards can be installed in the system (138 B channels).

The PRI board only supports the National ISDN 2 (NI-2) standards.

Vodavi has successfully integrated its PRI ISDN with the Lucent 5 ESS, Siemens, Stromburg Carlson, and the DMS 100 Central Offices. Vodavi ISDN should work with all Central Office switches, but this has not been verified. Therefore, some delays in service may be experienced.

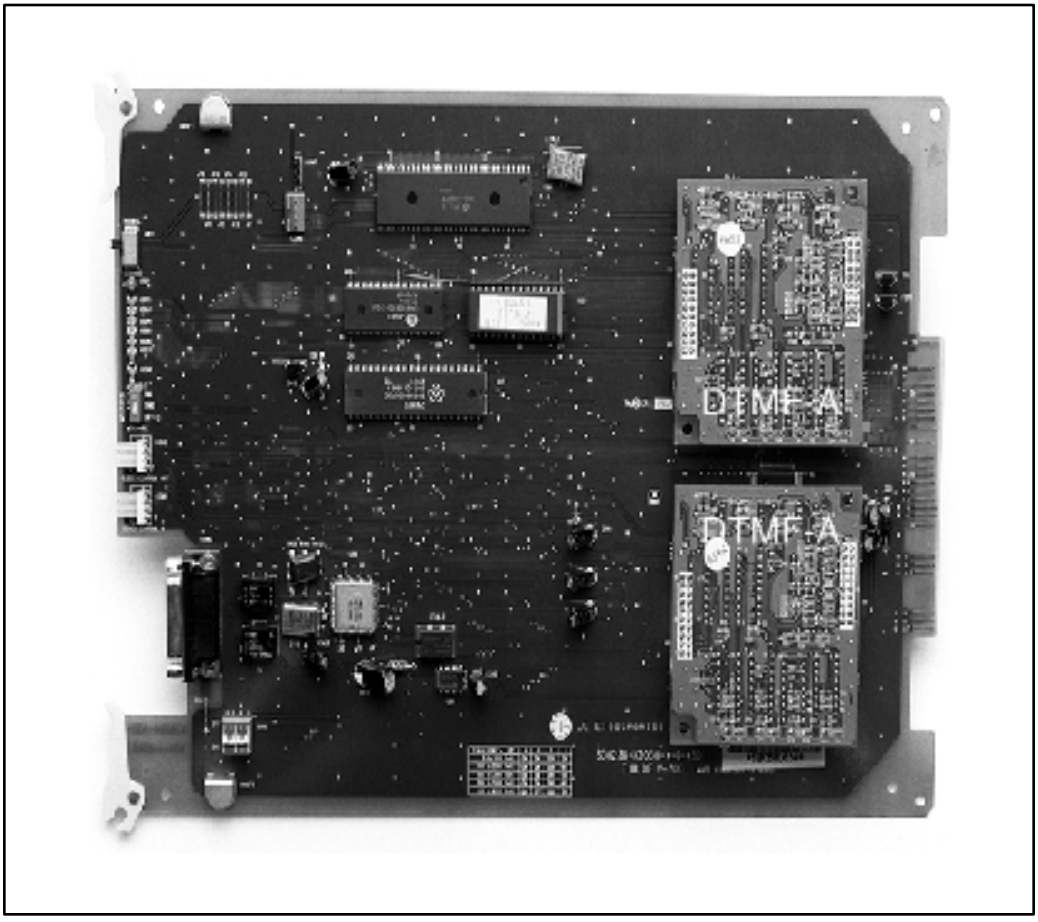


Figure 11-9: PRIB (PRI Trunk Board)

Basic Rate Interface Board (BRIB)

The BRIB allows the network connection to a Basic Rate ISDN digital interface.

- The board can support TIE, Loop and Ground Start signaling emulation per channel.
- The board uses the U interface of the BRI standard.
- Connection to the network is made via RJ45 connectors on the front edge of the board. No NT1 device is required to connect to the central office.
- A Normal/Service switch located toward the top of the card allows the card to be inserted or removed from the system while under power.
- The BRIB card can accept up to two (2) DTMF-A units and one BRIB-E in a daughter board type arrangement.
- The Phase Lock Loop unit (PLLU) must be installed on the MPB for the BRIB to operate properly.
- The BRIB uses eight time slots when installed.
- The board does not support the trunk features of Paging, Reseize, Queuing, or RAN Support.
- The card ejector tabs are color coded white.

The BRIB can only be installed in the Basic Cabinet (BKSU) Slots 1-8. A maximum of eight BRI boards can be installed in the system (64 B channels).

The BRI board only supports the National ISDN 1 (NI-1) standards.

Vodavi has successfully integrated its BRI ISDN with the Lucent 5 ESS Central Office. Vodavi ISDN should work with all Central Office switches, but this has not been verified. Therefore, some delays in service may be experienced.

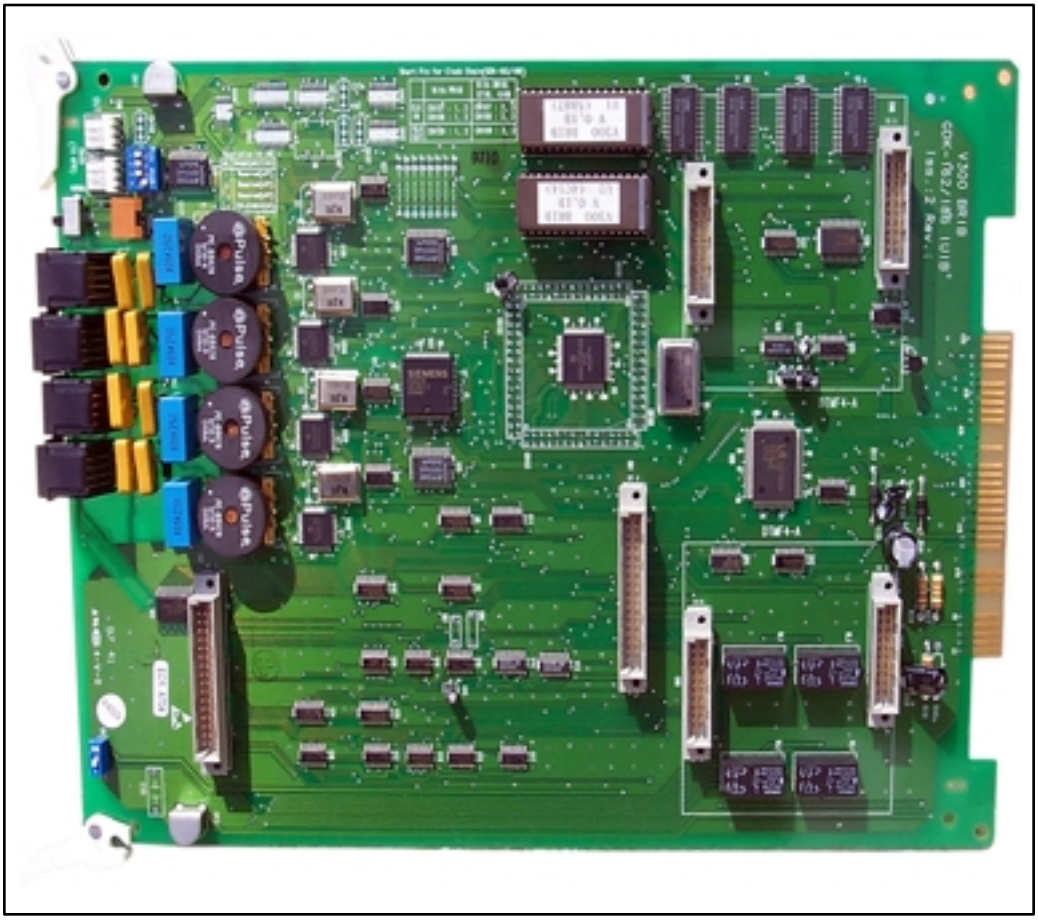


Figure 11-10: BRIB (BRI Trunk Board)

Basic Rate Interface Expansion Board (BRIB-E)

- Installs as a daughter-board on the BRIB to provide an additional four Basic Rate Interface circuits. A BRIB/BRIB-E assembly provides 16 line appearances for the *Triad 3* system.
- A maximum of four BRIB/BRIB-E assemblies can be installed into the system.
- The BRIB-E uses the U interface of the BRI standard.
- Connection to the network is made via RJ45 connectors on the front edge of the board.
- The BRIB-E card uses eight time slots when installed.

When ordering BRI lines from the telephone company, specify Capability P as the ordering code.

National ISDN 1 (NI-1) is supported. No other standards are supported.

Analog Station Boards

Electronic Key Telephone Interface Board (ETIB)

The ETIB board provides the interface to 12 electronic telephones or DSS/ BLF stations.

- The ETIB board has one LED indicator for status.
- A Normal/Service switch located toward the top of the card allows the card to be inserted or removed from the system while under power and also can be used to disable all station circuits on the card.
- The station connections are via one (1) 50-pin female champ (amphenol type) connector located on the front edge of the card.
- The card ejector tabs are color coded green.

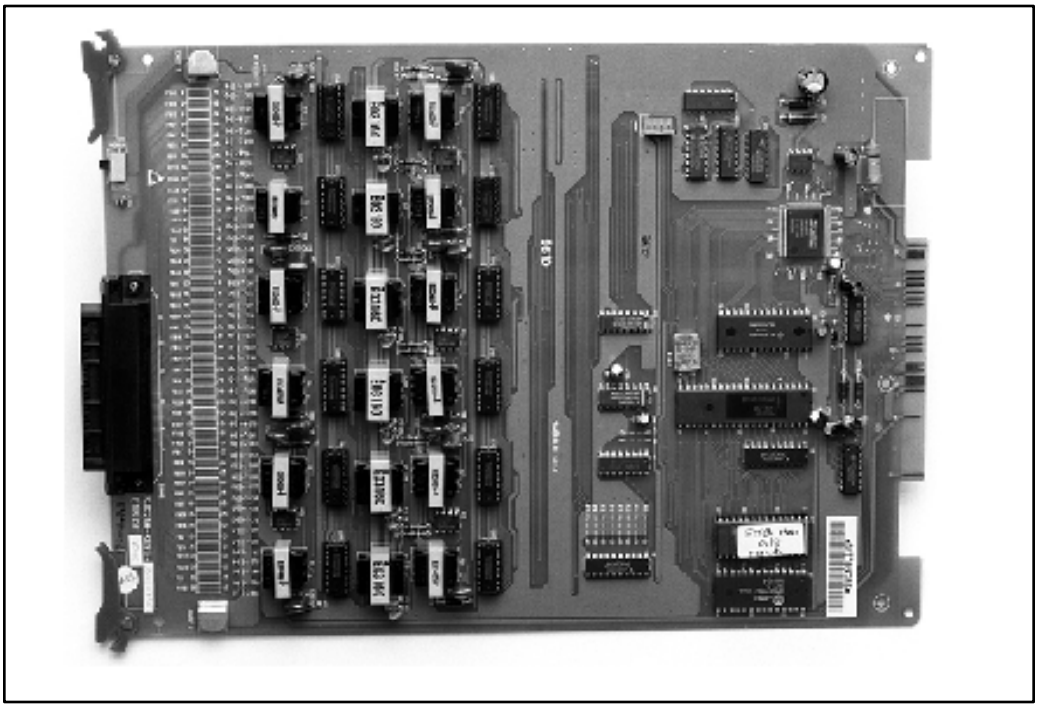


Figure 11-11: ETIB (Electronic Telephone Interface Board)

Single Line Interface Board (SLIB)

The SLIB board provides the interface to twelve (12) 2500 type telephones.

- The SLIB signal interfaces with mechanical 90V ringers and lights 90V message waiting lamps on 2500 sets as desired.
- The SLIB board has one LED indicator for status.
- The SLIB can accept one (1) DTMF-A unit in a daughter board type arrangement. The DTMF-A unit provides four (4) DTMF Receivers. 2500 sets only, providing the MSG12 unit is installed.
- A Normal/Service switch located toward the top of the card allows the card to be inserted or removed from the system while under power and also can be used to disable all station circuits on the card.
- The station connections are via one (1) 50- pin female (amphenol type) connector located on the front edge of the card.
- The card ejector tabs are color coded green.

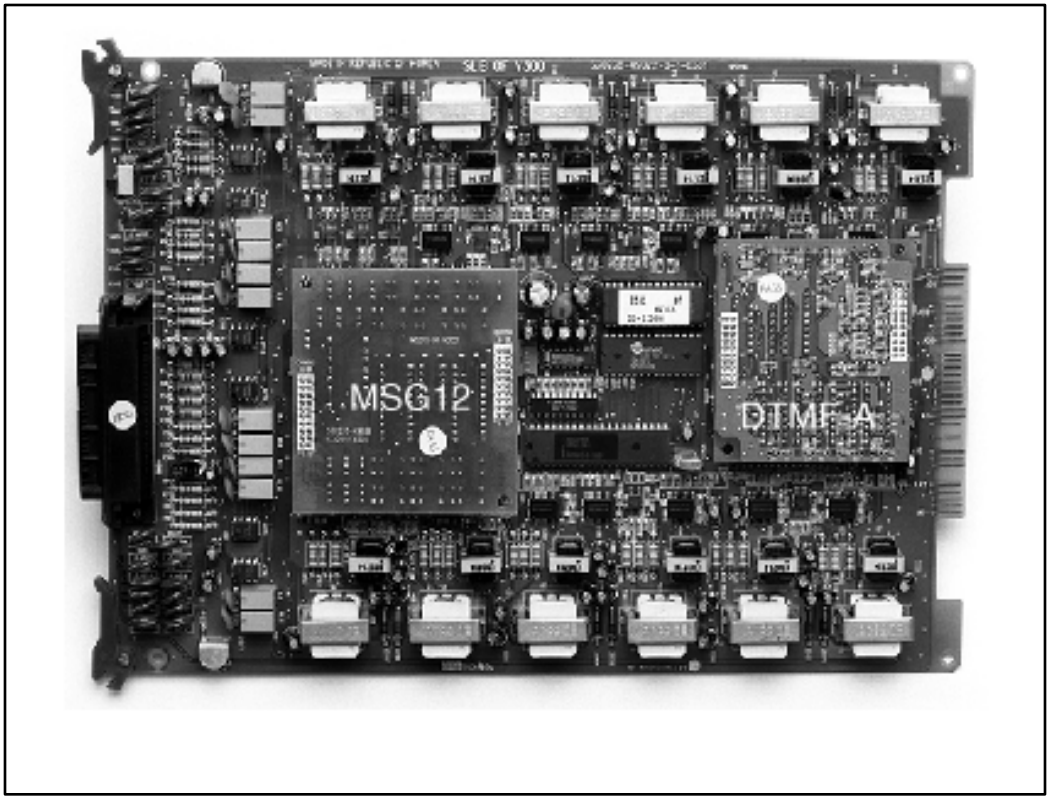


Figure 11-12: SLIB (Single Line Interface Board)

Digital Station Boards

Digital Telephone Interface Board (DTIB)

The DTIB board provides the circuitry to support twelve (12) digital phones.

- This board plugs into any peripheral slot.
- The station connections are via one (1) 50-pin female (amphenol type) connector located on the front edge of the card.
- The board has two LED indicators for status. One LED for the DTIB status, one LED for the DTIB-E status.
- A Normal/Service switch located toward the top of the card allows the card to be inserted or removed from the system while under power and also can be used to disable all station circuits on the card.
- The ejector tabs are color coded green.

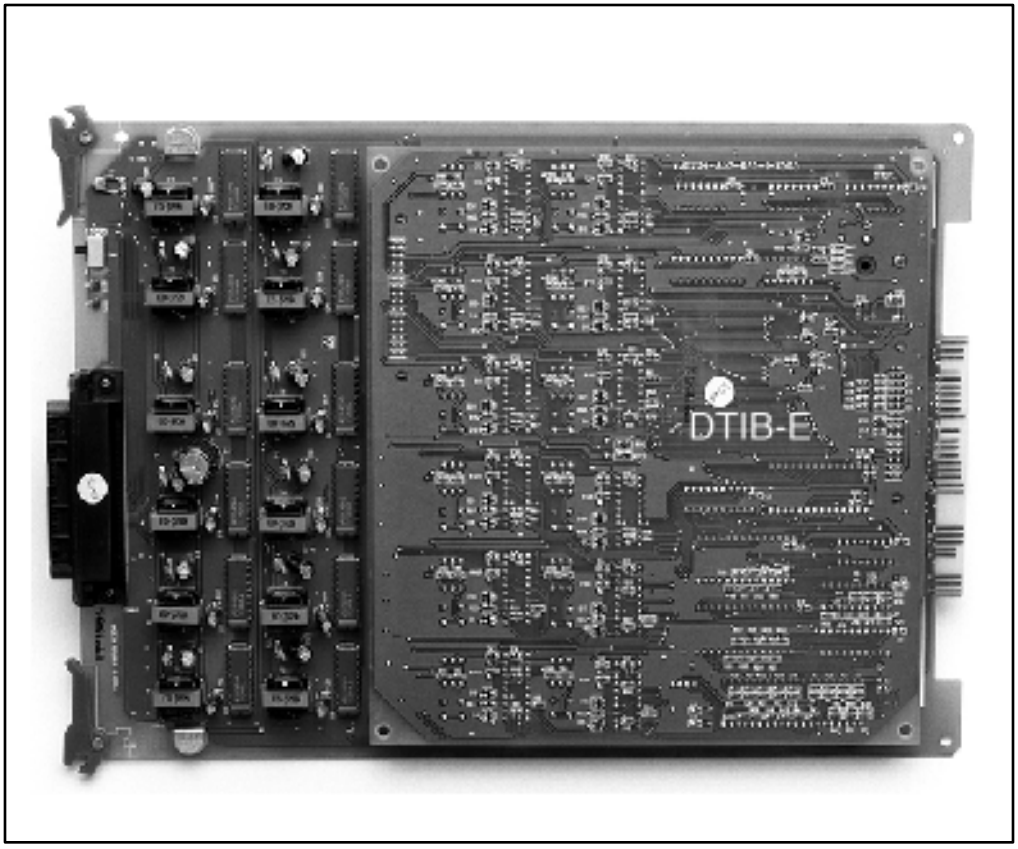


Figure 11-13: DTIB (Digital Telephone Interface Board)

Digital Telephone Interface Board Expansion (DTIBE)

The DTIBE board is installed onto the DTIB board in a daughter board type arrangement to provide an additional twelve (12) digital phones.

- The station connections are via one (1) 50- pin female (amphenol type) connector located on the Host DTIB card.
- The DTIBE requires a second power supply be installed in the BKSU.
- The DTIB board has two LED indicators for status. One LED for the DTIB status, one LED for the DTIB-E status.S

No DTIB-E cards can be installed in the upper cabinets. These are cabinets #1 and #3.

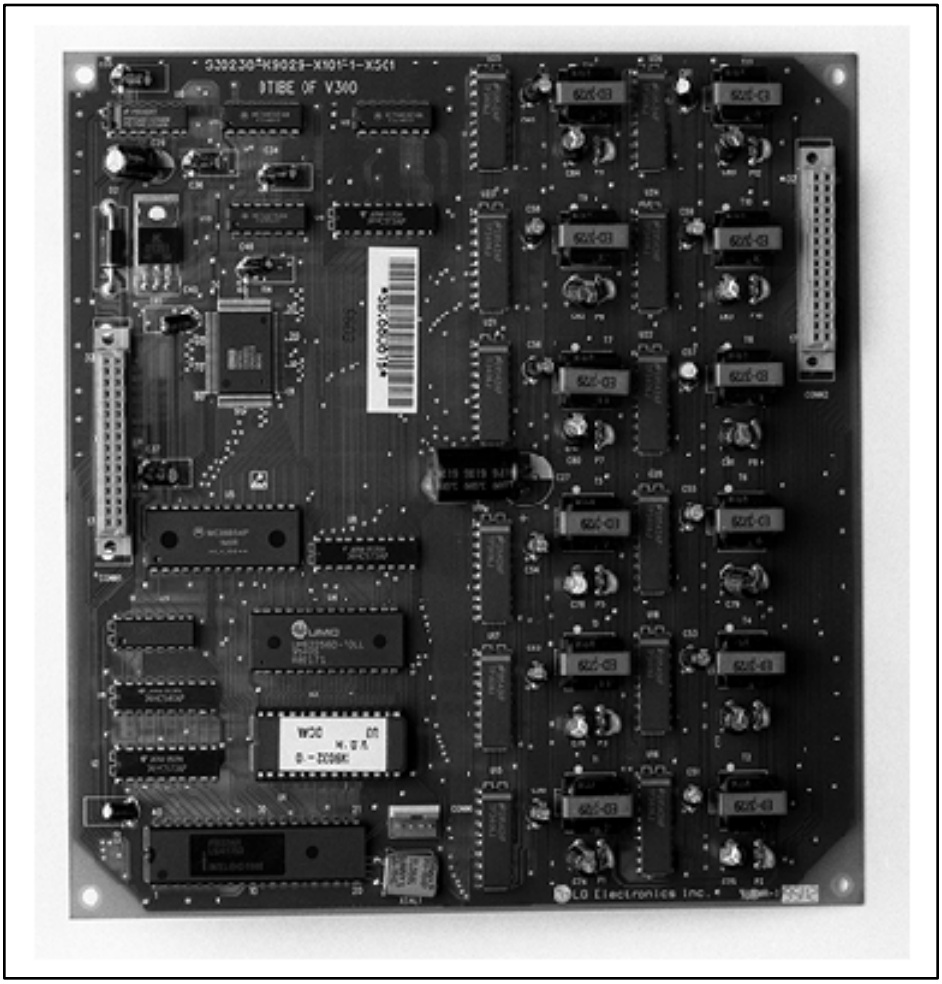


Figure 11-14: DTIBE (Digital Telephone Interface Board Expansion)

Analog Station Instruments

Enhanced Electronic Key Telephone (EKT)

The *STARPLUS* Enhanced Electronic Telephone is a fully modular instrument with 8 fixed feature/function and 22 flexible buttons that can be flexibly assigned as either CO/PBX/Centrex lines, Station DSS, or feature/function buttons.

The EKT also features an integrated speakerphone, call announce with handsfree intercom, two (2) Volume Controls, Intercom select switch, and long life LED's.

Figure 11-15: Enhanced Electronic Key Telephone (EKT)

Executive Electronic Key Telephone (EKT)

The *STARPLUS* Executive Key Telephone is a fully modular instrument with 8 fixed feature/function and 22 flexible buttons that can be flexibly assigned as either CO/PBX/Centrex lines, Station DSS, or feature/function buttons. The EKT also features an integrated 48 character LCD display, and integrated speakerphone, call announce with handsfree intercom, two (2) volume controls, an intercom mode select switch, and long life LED's.

Figure 11-16: Executive Electronic Key Telephone (EKT)

Electronic DSS/DLS Console

The station port used for a DSS/ DLS Console can be assigned as a Direct Station Select or Direct Line Select depending on customer need. The bottom two rows of buttons on the DSS/DLS Console contain 6-8 flexible buttons (depending on MAP chosen) which can be assigned by the station user in the same manner and functions as the flexible buttons on the keyset.

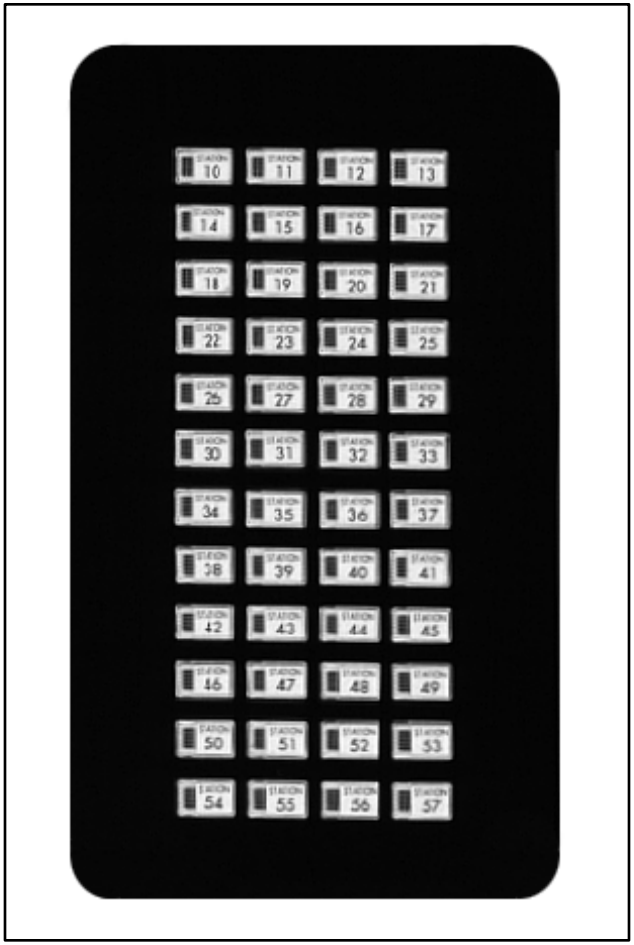


Figure 11-17: Electronic DSS/DLS Console

Digital Station Instruments

30-Button Elite Digital Telephone

The large display telephone has 11 fixed-feature buttons and 30 flexible buttons that can be assigned as CO/PBX/Centrex lines, Station DSS, or feature/function buttons. This telephone also features an integrated speakerphone, call announce with handsfree intercom, a volume control bar, a 7-line by 16-character LCD with 10 softkeys, and long life LEDs. Twenty four of the flexible button LEDs are red/green, six buttons are red only.

Figure 11-18: Large Display Digital Telephone (30-Button)

24-Button Executive/Enhanced Digital Telephones

The Executive/Enhanced 24-Button Digital Telephones are fully modular instruments with 11 fixed feature/function buttons and 24 buttons that can be flexibly assigned as CO/PBX/Centrex lines, Station DSS, or feature/function buttons. This telephone also features an integrated speakerphone, call announce with handsfree intercom, a volume control bar, and long life LEDs.

Figure 11-19: Executive Digital Telephone (24-Button)

12- Button Executive Digital Telephones

The *STARPLUS* Executive 12-Button Digital Telephones are fully modular instruments with 11 fixed feature/function buttons and 12 buttons that can be flexibly assigned as CO/PBX/Centrex lines, Station DSS, or feature/function buttons. This telephone also features an integrated speakerphone, call announce with handsfree intercom, a volume control bar, and long life LEDs.

Figure 11-20: Executive Digital Telephone (12-Button)

8-Button Enhanced Digital Telephone

The *STARPLUS* Enhanced 8-Button Digital Telephones are fully modular instruments with 5 fixed feature/ function buttons and 8 buttons that can be flexibly assigned as CO/PBX/Centrex lines, Station DSS, or feature/ function buttons. This telephone also features an integrated speakerphone, call announce with handsfree intercom, a volume control bar, and long life LEDs.

Figure 11-21: Enhanced Digital Telephone (8-Button)

Digital DSS/DLS Console

The station port used for a DSS/ DLS Console can be assigned as a Direct Station Select or Direct Line Select depending on customer need. All forty-eight (48) buttons on the unit can be assigned as DSS, or flexible buttons.

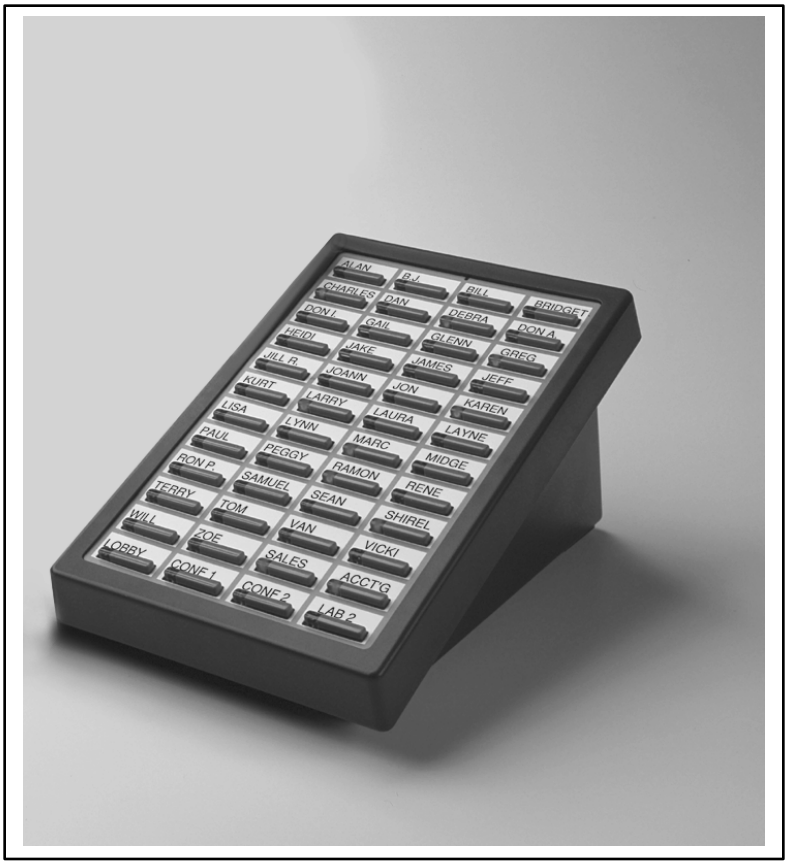


Figure 11-22: Digital DSS/DLS Console

Single Line Adapter (SLA)

The optional SLA device converts standard digital telephone circuits into 2500-type single line telephone interfaces. The device is a standalone type that can accommodate up to two digital station ports and convert them into two 2500 DTMP-type SLT circuits.

Wiring / Pinouts / Connections -- The SLA has screw-type connectors for both the digital (DTIB) and analog (SLT) interfaces.

Figure 11-23: SLA (Single Line Adapter)

Optional Units

DTMF Receiver Unit (DTMF-A)

The optional DTMF-A can be added to the SLIB, T1IB, and PRIB boards to increase the number of DTMF receivers in the system.

- Each unit has four (4) DTMF receivers installed on it.
- This board mounts as a daughter board type arrangement.

Figure 11-24: DTMF-A (DTMF Receiver Unit)

DTMF Receiver Unit (DTMF-B)

The optional DTMF-B can be added to the LCOB/GCOB, DIDB boards to increase the number of DTMF receivers in the system.

- Each unit has four (4) DTMF receivers installed on it.
- This board mounts as a daughter board type arrangement.

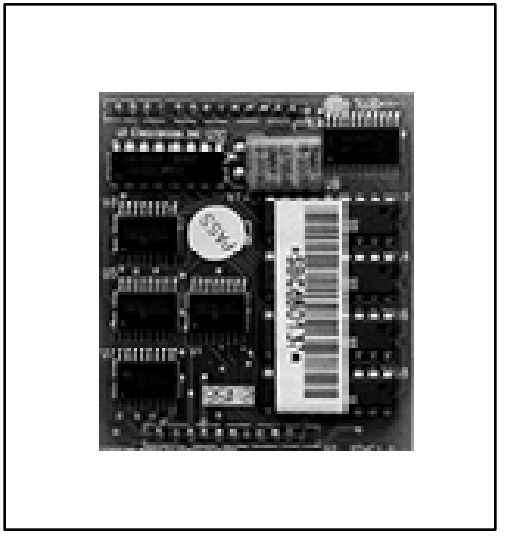


Figure 11-25: DTMF-B (DTMF Receiver Unit)

Serial Interface Unit (SIU2)

The SIU2 is added to the MPB to provide two (2) additional RS232C ports for system use. The connectors on this unit are RJ48 type connectors. There is a total of 2 connectors on this board.

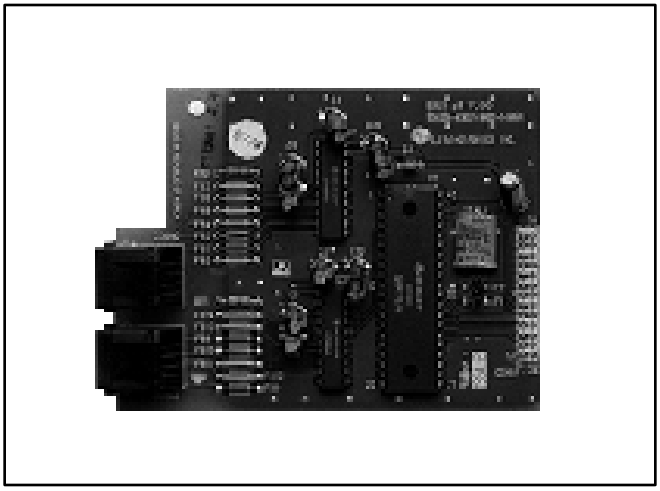


Figure 11-26: SIU2 (Serial Interface Unit)

Phase Lock Loop Unit (PLLU)

The PLLU must be added to the MPB board whenever a T-1 or PRI board is installed in the system. This board regulates the T-1/ISDN clock signals from the T-1/PRI board to the network. One (1) PLLU supports all T-1/PRI boards installed in the system.

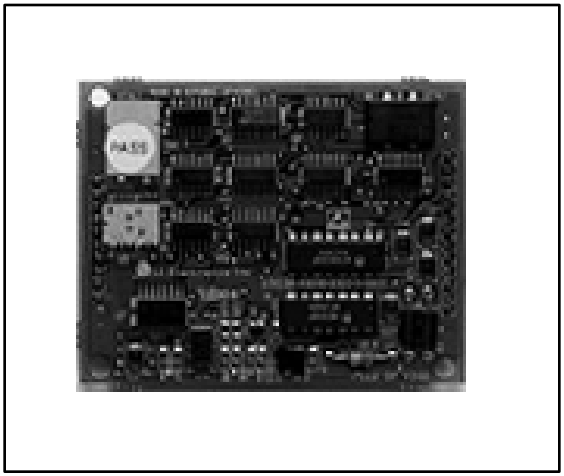


Figure 11-27: PLLU (Phase Lock Loop Unit)

Memory Expansion Unit (MEMU)

The MEMU is added to the MPB board to provide an additional 512K of RAM to the system.

The MEMU is required whenever the system capacity exceeds 48 CO Lines by 96 Stations.

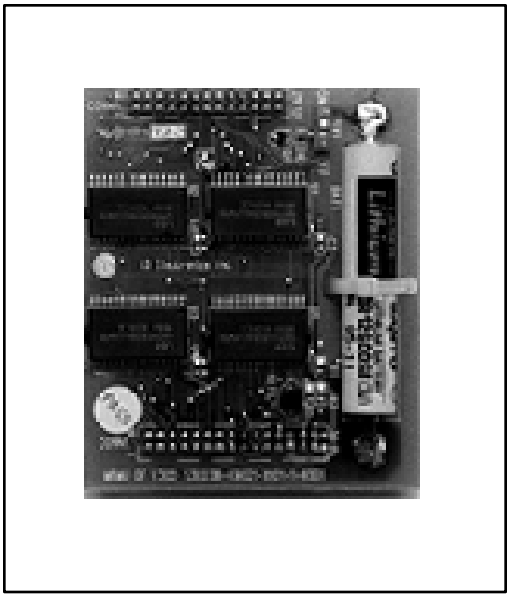


Figure 11-28: MEMU (Memory Expansion Unit)

Message Wait Board (MSG12)

The MSG12 is an optional board for the Single Line Interface Board (SLIB). The MSG12 provides message waiting voltage to SLTs connected to it.

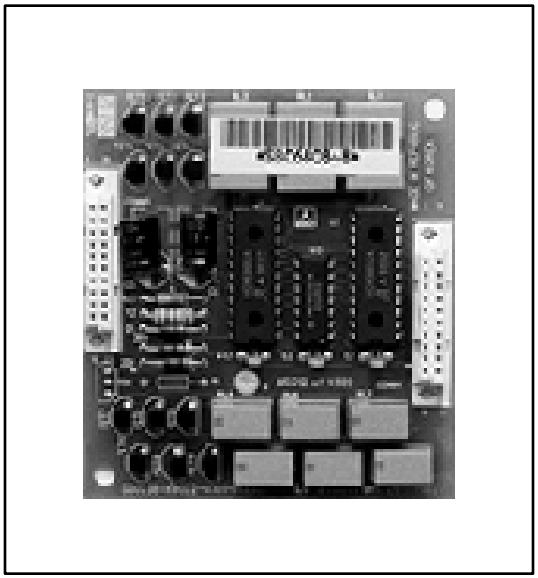


Figure 11-29: MSG12 (Message Wait Board)

Power Failure Transfer Unit (PFTU)

The optional PFTU is installed on the MISU board.

- The PFTU provides the transfer of up to 6 CO lines to 6 stations.
- A selector switch provides manual switchover of the CO lines.
- The controls are connected to the BKSU backplane.

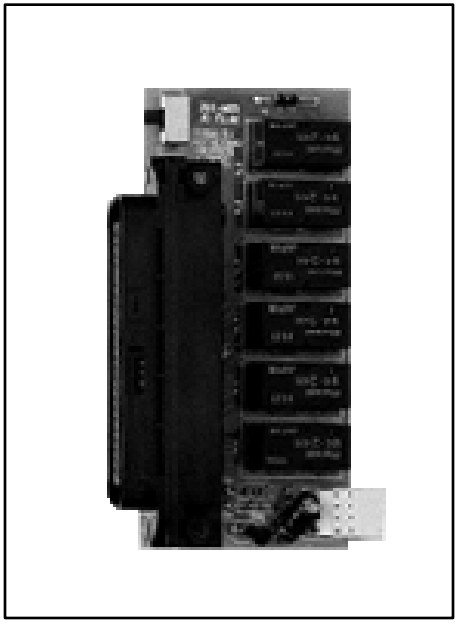


Figure 11-30: PFTU (Power Failure Transfer Unit)

Ring Generator Unit (RGU)

The RGU is used whenever SLT devices are installed on the system. This units supplies the ring voltage and message wait voltage for the operation of SLT on the system. The unit is wall mounted and connects to the BKSU. One per BKSU, EKSU1 is required for SLT operation.

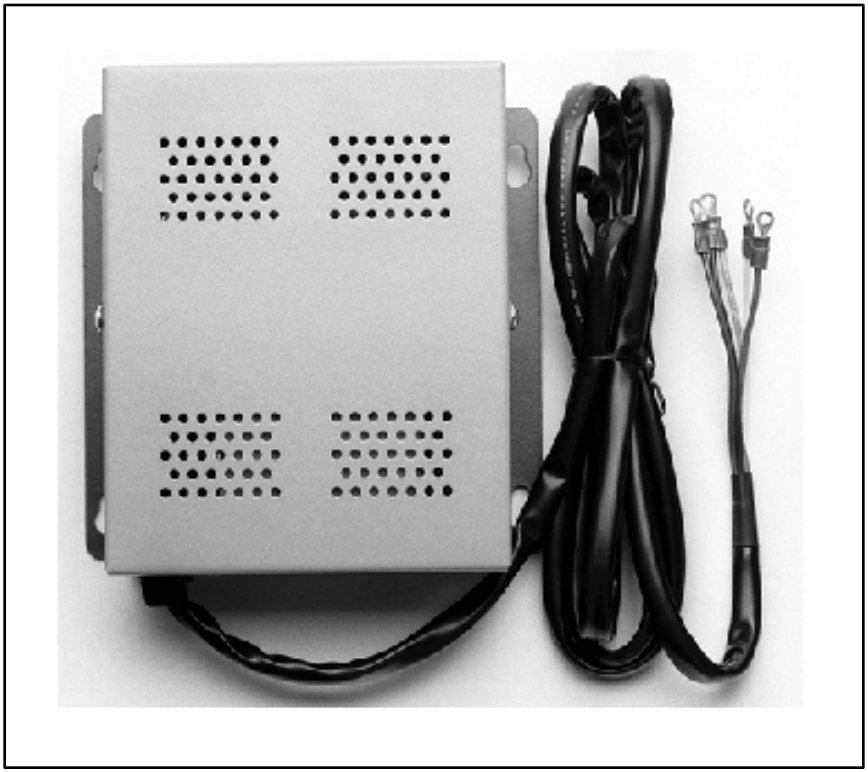


Figure 11-31: RGU (Ringer Generator Unit)

System Configuration Tables

Table 11-1: Digital System Capacity

Ports	
CO/PBX/Centrex Lines	112 max. (8 per LCOB/GCOB Board)
DID Lines	96 max. (8 per DIDB)
T-1 Trunks	144 max. (24 T-1 trunk circuits per T1IB board)
ISDN Trunks	138 max. (23 trunks per PRIB board)
Stations	
Analog Stations	252 max. (12 per ETIB Board)
Digital Telephones	252 max. (12/24 per DTIB Board)
Single Line Telephones	180 max. (12 per SLIB Board)
DTMF Receiver	26 max. (2 on MISU, 24 on peripheral boards) Each DTMF Receiver Unit (DTMF-A or DTMF-B) contains 4 DTMF receivers. The DTMF-A board mounts as a daughter board on the T1IB, PRIB, and SLIB Board. The DTMF-B board mounts as a daughter board on the LCOB/GCOB, DIDB. The dial pulse function is not available in Triad-S systems.
I/O Ports	3 (max.) per system. (One RS-232C included on MPB)
Conference	
Circuits	10 Conferences per system
Parties	8 parties per conference, of which 5 can be external
DISA Circuits	Unlimited number of CO lines may be programmed simultaneously.
Attendants	Up to 3 stations can be designated as Attendants.
Digital DSS/DLS Units	180 max. Each DSS/DLS unit requires 1 station port and reduces station capacity by 1. DSS/DLS maps may not be duplicated at one station. 1 station may have up to 3 DSS/DLS units associated with it.
Loop Supervision Disconnect	700 msec. duration (CO or Internal call to SLT)
Page Zones	
Internal Paging	8 max. (software controlled)
External Paging (1- way)	2 max. (On MISU Board)
External Paging (2-way)	2 max. (On MISU Board)
Hunt Groups	
Groups	Software supports up to 8 Groups
Members	Software supports up to 8 stations in each group
Types	Station, Pilot Hunting, or Pilot Ring All
Voice Mail Groups	
Groups	Software supports up to 8 Groups
Members (ports)	Software supports up to 24 stations
Integration Method	In-Band signaling (DTMF)
VM Message Wait	Programmable 12-digit (DTMF) string
VM Disconnect Signal	If 0 digits are programmed, 15 secs of silence are followed by a busy tone.
ACD Groups	
Groups	Software supports up to 16 Groups
Members	Software supports up to 252 stations in each group
RAN Announcements	Eight RAN Announcements per system, 3 per ACD Group
Calls in Queue	All CO Lines may be queued for an ACD Group

Table 11-2: Electrical Specifications

AC Input To Power Supply	117 VAC ±10%, 60Hz single phase
Power Consumption	10A = 330 Watts per power supply 15A = 480 Watts per power supply
Power Supply Fuse - AC Input	10A = 6.3A/250V; 15A = 8A/250V
Longitudinal Balance	60 db from 200 Hz to 1,000 Hz 40 db from 1000 Hz to 4000 Hz
Idle Channel Noise	Less than 15 dbrnco for all connections
Cross Talk Attenuation	Greater than 75 dbm Station to CO and Station to Station
Single Frequency Distortion (300 - 3400 Hz)	Station to CO Line and station to station: Better than 2.0% or 34 db for an Output level -30 dbm to 0 dbm
Ringing Sensitivity	16 Hz to 30 Hz at 40 VRMS minimum 30 Hz to 67 Hz at 50 VRMS minimum
Ringer Equivalence Number (REN)	LCOB: 0.8B; GCOB: 1.3B; DIDB: 0.0B; T1IB: 6.0P
Co Line Signaling - DTMF	Frequency pair at ±5dbm Frequency tolerance ±1.5%
CO Line Signaling - Dial Pulse	10 pps and 20 pps programmable
Input Level Range	+10 db maximum
Music Source Music-On-Hold input Background Music input	 600Ω input at Ødbm maximum from music source 600Ω input at Ødbm maximum from music source
Contact Rating Multi-Purpose Relay	 1 Amp @ 24Vdc (6 on MISU Board)
External Page Port Output Impedance Output Power w/o Compression	 600Ω @ 0dbm 5 milli-watt max
CSA File Number	(NRTL/C) LR57228

Table 11-3: Environmental Specifications

Operating Temperature	32° to 104°F (0° to 40° C)
Optimum Temperature	60° to 80° F (15° to 26° C)
Storage Temperature	-40° to 140°F (4°to 60° C)
Relative Humidity	5% to 90% non-condensing
Heat Dissipation (BTUs) (maximum per cabinet level)	EX: 3275 BTU/Hour (BKSU+EKSU, (2) 15A Power Supplies) 10A = 1125, 15A = 1637

Table 11-4: Loop Limits

Analog Electronic Telephone*	Maximum length of station loop: 1000 feet of 24 AWG (4 wire, inside wiring, twisted cable)
Digital Telephones*	Maximum length of station loop: 1000 feet of 24 AWG (2-wire, inside wiring, twisted cable)
Single Line Telephones*	2500 feet of 24 AWG or 2500 feet of 22 AWG
*All stations must be installed in the same building. Station circuitry does not contain protection to support off-premise operation.	

Table 11-5: Dialing Specifications

DTMF Dialing	
Frequency Deviation	±1.5%
Rise Time	5 msec.
Duration of DTMF Signal	70-100 msec.
Interdigit Time	100-130 msec.
Pulse Dialing	
Pulse Dialing Rate	10 or 20 pps
Pulse Break/Make Duration	60/40 or 66/33
CO Type	Loop Start, 600 ohm, current sensing

Table 11-6: FCC Registration Numbers

For a **Key System** configuration (button appearance)	DLPKOR-24039-KF-E
For a **Hybrid System** configuration (dial access codes)	DLPKOR-24026-MF-E

Table 11-7: Trunk Ordering Info: Public Network/Private Lease Lines

System Port Identification, Facility Interface and Service Order Codes			
Interface Card	**Ringer Equivalent Number (REN)**	**Facility Line Interface**	**Jack Type**
CO Port (LCOB)	0.8B	02LS2	RJ21X
Ground Start (GCOB)	1.3B	02GS2	RJ21X
Direct Inward Dial (DIDB)	0.0B	02RV2-T	RJ21X
T-1 Port (T1IB) or ISDN Port (PRIB)	6.0P	04DU9-B	RJ45

Table 11-8: Physical Dimensions and Weight

Item	Height	Width	Depth	Weight
Basic Control Cabinet (BKSU)	15 in.	26 in.	16 in.	50 lbs.
Expansion Cabinet (EKSU2)	5.5 in.	4.25 in.	16 in.	28 lbs.
Power Supply (PS-10/PS-15)	5.5 in.	4.25 in.	11.25 in.	5/6 lbs.
Exec/Enhanced Electronic Telephone	3.5 in.	8 in.	9.125 in	3 lbs.
Analog DSS/DLS Console	3.0 in.	7.625 in.	9.625 in.	2 lbs.
Exec/Enh (24-Button) Digital Telephone	9.3 in.	7.6 in.	3.3 in.	3.3 lbs.
Exec (12-Button) Digital Telephone	9.3 in.	7.6 in.	3.3 in.	2 lbs.
Digital DSS/DLS Console	9.3 in.	4.9 in.	3.3 in.	2 lbs.

Table 11-9: Miscellaneous Specifications

Memory Programmable Read-Only Memory (EPROM) Random Access Memory (RAM):	 512K expandable to 1 Megabyte 256K expandable to 512 Kilobytes
Telephone Transmitter	Electret mic compatible
Talk Paths CO/PBX/Centrex paths Intercom Paths	 144 CO/T1/PBX/Centrex talk paths (non-blocking) Non-Blocking
Music Channels Music-On-Hold/Background Music	 2 Channels per system (1 MOH, 1 BGM - different sources)
Account Codes Number of digits per account code Number of Account Codes - Unverified Number of Account Codes - Verified	 Up to 12 unverified digits Unlimited 250 Account Codes
Dialing Memory Station Speed Dialing System Speed Dialing Total System Speed Dial	 20 Bins per station ((24-digits) 980 Bins per system (24-digits) 2000 Bins per system (24-digits) (w/o MEMU) 3000 Bins per system (24-digits) (with MEMU)

Table 11-10: Electronic Telephone Audible Signals

Type of Signal	Frequency	Signal Duration
Electronic Telephone Signals		
Incoming CO Line	440+480	0.2 on/0.4 off/0.6 on/3.0 off; Repeated
Intercom Tone Ringing	440+480	0.8 on/2.8 off; Repeated
Intercom Call Announce (H-P modes)	440	0.8 on/0.8 off (3 bursts)
Transferred CO Line	440+480	0.8 on/2.8 off; Repeated
CO Line Recall	440+480	0.8 on/2.8 off; Repeated
Message Wait Call Back	440+480	0.8 on/2.8 off; Repeated
CO Queue Call Back	440+480	0.8 on/2.8 off; Repeated
Camp-On	440	0.2 on (1 burst)
Paging Alert Tone	440	1 sec. on
Electronic Telephone Confidence Tones		
Intercom Ringback	440+480	0.8 on/2.8 off
Transferred CO Line	440+480	0.8 on/2.8 off
Call Announce	440	0.8 on/0.8 off (3 bursts)
Busy Tone	480+620	0.5 on/0.5 off; Repeated
Error Tone	480+620	0.2 on/0.2 off; Repeated
Intercom Dial Tone	350+440	Steady
DND Tone	350+440	0.4 on/0.4 off/0.2 on/0.2 off/0.2 on; Repeated
Paging Confirmation Tone	350+440	1 sec on
Conference Time-out/Re-Enter Tone	440	Programmable Steady Tone
Confirmation Tone	350+440	0.8 on/8 off (3 bursts) CO/PBX

Table 11-11: Single Line Audible Signals

Type of Signal	Frequency	Signal Duration
Single Line Signals		
Incoming CO Line	20Hz 90 VAC	0.8 on/2.8 off; Repeated
Intercom Tone Ringing	20Hz 90 VAC	0.2 on/0.4 off/0.6 on/3.0 off; Repeated
Transferred CO Line	20Hz 90 VAC	0.8 on/2.8 off; Repeated
CO Line Recall	20Hz 90 VAC	0.8 on/2.8 off; Repeated
CO Queue Call Back	20Hz 90 VAC	1 Sec on/2 off; Repeated
Single Line Confidence Tones		
Intercom Ringback	440+480	0.8 on/2.8 off
Transferred CO Line	440+480	0.8 on/2.8 off
Call Announce	440	0.8 on/2.8 off (3 bursts)
Busy Tone	480+620	0.5 on/0.5 off; Repeated
Error Tone	480+620	0.2 on/0.2 off; Repeated
Intercom Dial Tone	350+440	Steady
DND Tone	350+440	0.4 on/0.4 off/0.2 on/0.2 off/0.2 on; Repeated
Paging Confirmation Tone	350+440	1 sec on
Conference Time-out Tone	440	Programmable Steady Tone
Confirmation Tone	350+440	0.8 on/8 off (3 bursts)

Table 11-12: Digital Station Visual Signals - CO Line Buttons

Feature/Function	Flash Rate	LED Color
Incoming CO Ringing	30 ipm Flash	Red
Transferred CO Ringing	120 ipm Flash	Red
CO Line Recalling	480 ipm Flutter	Red
System HOLD	60 ipm double wink	Red
Exclusive HOLD (I-Hold)	120 ipm Flash	Green
I-HOLD (System)	60 ipm wink	Green
CO Line Queue Call Back	480 ipm Flutter	Red
CO Line in Use	ON Steady	Red
CO Line	Idle	OFF
Exclusive Hold (other stations)	ON Steady	Red

Table 11-13: Digital Station Visual Signals - DSS/BLF Buttons

Feature/Function	Flash Rate	LED Color
Off-Hook (Busy)	ON Steady	Red
Incoming Intercom Ring	120 ipm Flutter	Red
Call Announce (H or P Mode)	Steady	Red
Message Waiting Call Back	120 ipm Flutter	Red
Station in Do Not Disturb	60 ipm Double Flash	Red
Camp On (by station)	120 ipm Flash	Red
Automatic Call Back	120 ipm Flash	Red
Station Unavailable (ACD/UCD)	60 ipm Flash	Red off (3 bursts)+480

Table 11-14: Digital Station Visual Signals - Feature/Function Buttons

Feature/Function	Flash Rate	LED Color
Call Forward (active)	30 ipm Flash	Red
Message Wait (active)	Steady	Red
Camp On (active)	120 ipm Flash	Red
Call Back (active-initiator)	120 ipm Flash	Red
CO Line Queue (active)	480 Flutter	Red
DND (active)	Steady	Red
Mute	Steady	Red
On/OFF	Steady	Red
Conference	Steady	Red
Speed (momenton until bin address dialed)	Steady	Red
Personalized Messages	15 ipm Flash	Red
Tone Intercom Call (Hold button)	15 ipm Flash	Red
Loop	same as CO	Green/Red
Pool	same as CO	Green/Red
Transfer	None	None

Table 11-15: Signals to Called Station (Digital Station)

Feature (Indication)	Sound in Hz	Occurrence (Cadence)
Incoming CO Line	(*User Selectable)	.8 on/2.4 sec off; Repeated
Intercom Tone Ringing	(*User Selectable)	.4 sec on/.4 sec off/.4 sec on/2 sec off, Repeated
Intercom Call Announce (H & P)	935	.2 sec on/.2 sec off; 2 bursts
Transferred CO Line	(*User Selectable)	.8 sec on/2.4 sec off; Repeated
CO Line Recall	(*User Selectable)	.2 sec on/.6 sec off; Repeated
Message Waiting Call Back	(*User Selectable)	.4 sec on/.4 sec off/.4 sec on/2 sec off, Repeated
Queued CO Line Call Back	(*User Selectable)	.2 sec on/.6 sec off; Repeated
Camp On	935	.2 sec burst
Alarm Tone - Repeated	701/857	1.0 sec on/.25 sec off; Repeated
Alarm Tone - Single (Continuous)	701/857	1.0 sec on; once (every 30-60 seconds until the alarm is reset)
* Only one (1) tone can be selected by a station at a time. This tone is used for all signaling that uses the "User Selectable" tone.		

Table 11-16: Signals to Calling Station (Digital Station)

Feature (Indication)	Sound in Hz	Occurrence (Cadence)
	Station	
Intercom Ring Back Tone	1215/1471	.5 sec on/2.5 sec off; Repeated
Intercom Call Announce	935	.2 sec on/.25 sec off; three (3) times
Busy Tone	701	.5 sec on/.5 sec off; Repeated
Error Tone	701	.25 sec on/.25 sec off; Repeated
Intercom Dial Tone	420	Continuous
DND Tone	701	.2 sec on/.2 sec off; three (3) times, Pause, Repeated
Paging Confirmation Tone	935	1 second burst
Conference Time Out Warning Tone	420	1 second burst
Programming Confirmation Tone	1471	1 second burst
Programmed Error Tone	1471	.25 sec on/.25 sec off; Six (6) times
Call Waiting	735	.5 second burst

Table 11-17: Voice Mail Confidence Tones

VM Condition Action	Tone Received	Sound In Hz	Occurrence (Cadence)
Off Hook	Internal Dial Tone (no stutter tone)	350/440	Continuous
Calls an Internal Station (idle)	Ring Back Tone	440/480	1 sec on/3 sec off; Repeated
Initiate a Transfer (hook-flash)	Internal Dial Tone (no stutter tone)	350/440	Continuous
Calls an internal station (busy) *Call back not allowed	Busy Tone	480/620	0.5 sec on/0.5 sec off; Repeated
Calls an internal station (DND)	Busy Tone	480/620	0.5 sec on/0.5 sec off; Repeated
Calls an internal station (programmed/not equipped)	Busy Tone	480/620	0.5 sec on/0.5 sec off; Repeated
Calls an internal station (not programmed/not equipped)	Re-Order Tone	480/620	0.2 sec on/0.2 sec off; Repeated
Dials an invalid digit/FACODE/ station	Re-Order Tone	480/620	0.2 sec on/0.2 sec off; Repeated
Calling Party Disconnects (Internal or External call)	Silence or (Disconnect Digits)	0 or (DTMF Digits)	(Continuous or as programmed)

A ICLID General Description

This specification provides the functional and implementation definition for the addition of the ICLID feature to the *Triad 1/2/3* Digital Key Telephone System.

System Configuration

The following illustration depicts the configuration presumed for the implementation of the ICLID feature for the system. The phones are presumed to be in an ACD or UCD group in order to allow proper operation with the system.

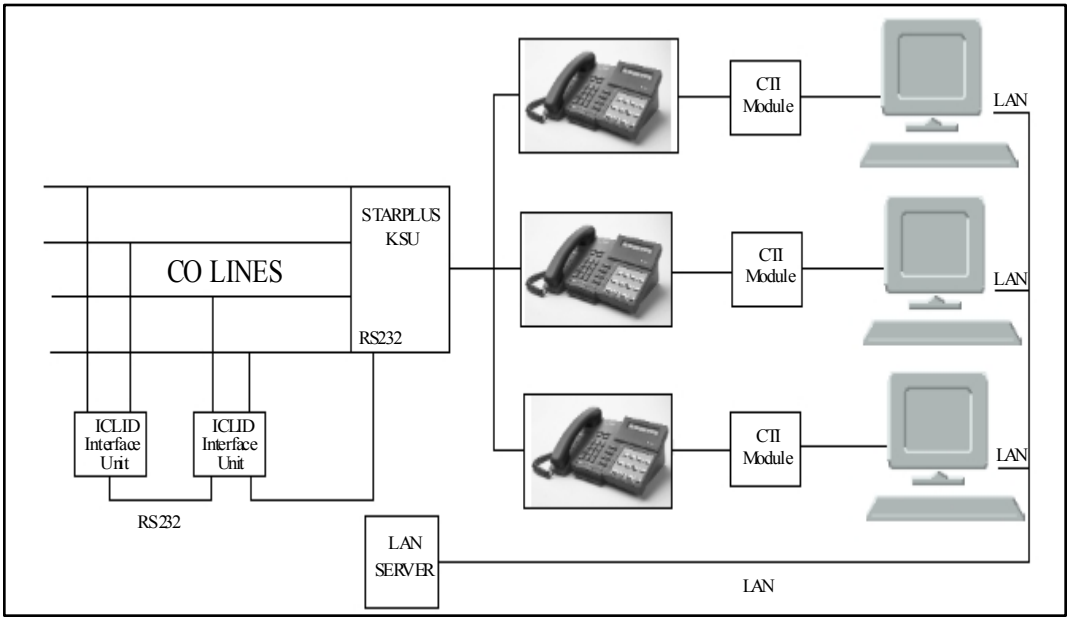


Figure 1-1: CTI System Configuration

Functional Performance

The ICLID (Incoming Calling Line IDentification) feature was added to the *Triad 1/2/3* System as a first step in providing it generally. The key system operation of this feature is dependent on the feature first being activated from the central office so that 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.

The features implemented are:

- Display of calling number/name on initial ring-in of a line on the display keysets.
- Recording of incoming call number/name on the SMDR printout.
- Management of an Unanswered Call table from a display phone with appropriate privilege level to allow tracking of unanswered calls for statistical information and return call management.
- Local translation of incoming numbers to names according to a table of number/name equivalences which can be administered by the system.

Calling Number/Name Display

The Calling Number/Name Display feature is intended as the basic offering of the ICLID service when associated with the *Triad 1/2/3* System. Essentially, whenever an incoming call is received at the system, the number received along with the ringing signal is stored in the line control tables and used at various points in the processing of the call.

The primary function is that the calling number is displayed (if available) at any point at which the LINE RINGING is displayed in the system.

If 2 lines are ringing in at the same time, the display shows the oldest line information. After 1 of the lines is answered, the display shows the information on the unanswered line.

With the availability of the Calling Name feature, if the calling name is provided, the system delivers that to the display instead of the calling number.

The specification for this feature is that the system displays its LINE RINGING message as normally implemented and alter that display to the calling number/name if the information is made present on the line.

This allows the normal operation of the system when ICLID information is not presented or the device which intercepts it and provides the information to the KSU is missing or failed.

```
0000000001111111112222 2
1234567890123456789012 34
```

```
bbbbbNNNNNNNNNNNNNNbbbbb
```

-or-

```
XXXXXXXXXXXXXXXXXXXXXXXX
```

- If the Calling Name is available, the display is shown as above where X... represents the internal table storage of the calling name. Note that although the Central Office delivery of the calling name is 15-characters, the internal table used to store the name for translation of a received number is 24-characters in width.
- If the Central Office delivers a Name, it is positioned left justified in the 24-character field on the display. Note that if a number is received which matches a number/name translation, the translated name is used and the name delivered from the Central Office is effectively discarded.
- If No Name is available from the Central Office or a Translation Table, the delivered number is displayed as the repeated character N (14 characters).

Incoming Number/Name SMDR

As with the above feature implementation, the intent is that the system operate 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 calls.
- 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 which identifies that a following record with name identification is present.

Unanswered calls are recorded on the SMDR as a system option to allow the identification of callers for statistical and call-back purposes. These calls are identified with an indicator in the SMDR record.

Unanswered Call Management

An Unanswered Call Management Table with 50 entry capacity for the *Triad 1/2/3* Systems are maintained in the system. The calling number/name information pertaining to any unanswered call is placed in this table at the time the system has determined that the call has been abandoned. This table may be accessed from any station display phone so that unanswered calls may be reviewed and handled by the end user.

Local Name Translation

An administrable table provides a local translation from a received calling number to a name. This table can be administered by the customer from the attendant console location. In cases of conflict between the name delivered from the CO and that in the local translation table, the local translation table shall rule. 200 entries are provided for the *Triad 1/2/3* Systems.

B Part Numbers

This chapter contains the basic and optional part numbers used for *Triad 1/2/3* system hardware.

List of Equipment

Table B-1: *Triad 1/2* Part Numbers

Triad 2 Basic KSU (BKSU)	8000-00
Triad 1/2 Expansion KSU (EKSU)	8002-01
Triad 1 Basic KSU (BKSU)	8003-00
DSS Console (Off-White)	TR9010-08
DSS Console (Burgundy)	TR9010-60
DSS Console (Charcoal)	TR9010-71
Single Line Adapter (SLA)	TR9854-00
8-Button Basic (Off-White)	TR9011-08
8-Button Basic (Burgundy)	TR9011-60
8-Button Basic (Charcoal)	TR9011-71
24-Button Enhanced (Off-White)	TR9013-08
24-Button Enhanced (Burgundy)	TR9013-60
24-Button Enhanced (Charcoal)	TR9013-71
12-Button Executive (Off-White)	TR9014-08
12-Button Executive (Burgundy)	TR9014-60
12-Button Executive (Charcoal)	TR9014-71
24-Button Executive (Off-White)	TR9015-08
24-Button Executive (Burgundy)	TR9015-60
24-Button Executive (Charcoal)	TR9015-71
30-Button Elite Large LCD (Charcoal)	TR9016-71
CTI Connector Box	9020-00
Caller Identification Interface Unit (8 Port)	1480-00
Caller Identification Interface Unit (4 Port)	1440-00

Table B-1: *Triad 1/2* Part Numbers

Master Processor Board (MPB)	8030-01
Memory Expansion Unit (MEMU)	9030-20
2400 Baud Modem (MODU)	8030-30
Phase-Lock-Loop Unit (PLLU)	8030-40
6-Circuit CO Loop Start Interface Board (LCOB)	8031-00
4-Circuit Direct Inward Dialing Interface Board (DIDB)	8031-10
24-Circuit T-1 Trunk Interface Board (T1IB)	8031-31
Primary Rate Interface Board (PRIB)	TR8031-32
Primary Rate Interface Board (PRIB) with CSU	TR8031-91
Basic Rate Interface Board (BRIB)	TR8031-33
2-Circuit DTMF Receiver Unit (DTRU)	8031-50
4-Circuit DTMF Receiver Unit (DTMF-A)	9033-10
12-Circuit Electronic Telephone Interface Board (ETIB)	8032-20
12-Circuit Digital Telephone Interface Board (DTIB12)	8032-30
24-Circuit Digital Telephone Interface Board (DTIB24)	8032-40
6-Circuit Single Line Interface Board (SLIB)	8033-00
Message Wait Unit (MSGU)	8033-10
Miscellaneous Interface Service Unit (MISU)	8035-00
Serial Interface Unit (SIU)	8035-10
6-Circuit Power Failure Transfer Unit (PFTU)	8036-00
Triad 1/2 Power Supply - 250 Watt	8071-20
Ring Generator Unit (RGU) (Internal)	8073-00
Ring Generator Unit (RGU) (External)	8073-10

Table B-2: *Triad 3* Part Numbers

Triad 3 Basic KSU (BKSU)	9000-00
Triad 3 10-Slot Expansion KSU (EKSU1)	9002-01
Triad 3 6-Slot Expansion KSU (EKSU2)	9002-02
DSS Console (Off-White)	TR9010-08
DSS Console (Burgundy)	TR9010-60
DSS Console (Charcoal)	TR9010-71
Single Line Adapter (SLA)	TR9854-00
8-Button Basic (Off-White)	TR9011-08
8-Button Basic (Burgundy)	TR9011-60
8-Button Basic (Charcoal)	TR9011-71
24-Button Enhanced (Off-White)	TR9013-08
24-Button Enhanced (Burgundy)	TR9013-60
24-Button Enhanced (Charcoal)	TR9013-71
12-Button Executive (Off-White)	TR9014-08
12-Button Executive (Burgundy)	TR9014-60
12-Button Executive (Charcoal)	TR9014-71
24-Button Executive (Off-White)	TR9015-08
24-Button Executive (Burgundy)	TR9015-60
24-Button Executive (Charcoal)	TR9015-71
30-Button Elite Large LCD (Charcoal)	TR9016-71
CTI Connector Box	9020-00
Caller Identification Interface Unit (TCI)	1480-00
Caller Identification Interface Unit (TCI) 4 Port	1440-00

Table B-2: *Triad 3* Part Numbers

Master Processor Board (MPB)	9030-01
Program Module Unit (PMU)	9030-10
Memory Expansion Unit (MEMU)	9030-20
Serial Interface Unit (SIU-2)	9030-30
Phase-Lock-Loop Unit (PLLU)	9030-40
8-Circuit Loop Start CO Board (LCOB)	9031-00
4-Circuit DTMF Receiver Unit (DTMF-B)	9031-01
8-Circuit Direct Inward Dial Board (DIDB)	9031-10
24-Circuit T-1 Trunk Board (T1IB)	9031-31
Primary Rate Interface Board (PRIB)	TR9031-32
Primary Rate Interface Board (PRIB) with CSU	TR9031-91
Basic Rate Interface Board (BRIB)	TR9031-33
Basic Rate Interface Board -E (BRIB-E)	TR9031-34
8-Circuit Ground Start CO Board (GCOB)	9031-50
12-Circuit Digital Telephone Interface Board (DTIB12)	9032-00
12-Circuit Digital Telephone Interface Board Expansion (DTIB-E)	9032-10
12-Circuit Electronic Telephone Interface Board (ETIB)	9032-20
12-Circuit Single Interface Board (SLIB)	9033-00
4-Circuit DTMF Receiver Unit (DTMF-A)	9033-10
Message Wait Unit (MSG12)	9033-20
Miscellaneous Interface Service Unit (MISU)	9035-00
6-Circuit Power Failure Transfer Unit (PFTU)	9036-00
Power Supply - 10 Amp	9071-10
Power Supply - 15 Amp	9071-15
Battery Charging Unit (BCU)	9072-00
Ring Generator Unit (RGU)	9073-00
DC/DC Converter Unit (DCCU)	9074-00

C Customer Database Programming Worksheets

Use the following Customer Database Worksheets to help keep track of the system programming changes made for each individual system.

Programming Tables

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 01	**System Timers**				
	1	System Hold Recall Timer	000-300	060 sec	
	2	Exclusive Hold Recall Timer	000-300	180 sec	
	3	Attendant Recall Timer	00-60	01 min	
	4	Transfer Recall Timer	000-300	045 sec	
	5	Preset Forward Timer	00-99	10 sec	
	6	Call Forward No/Answer Timer	000-600	15 sec	
	7	Pause Timer	1-9	2 sec	
	8	Call Park Recall Timer	000-600	180 sec	
	9	Conference/DISA Timer	00-99	10 min	
	10	Paging Time-out Timer	00-60	15 sec	
	11	CO Ring Detect Timer	200-900	3=300 ms	
	12	SLT DTMF Receiver Timer	005-100	020	
	13	Message Wait Reminder Tone	000-104	000 min	
	14	SLT Hook Flash Timer	0.5-2.0	10=1 sec	
	15	SLT Hook Flash Debounce Timer	000-100	030=300 ms	
	16	SMDR Call Qualification Timer	00-60	30 sec	
	17	Automatic Call Back Timer	00-99	03 sec	
	18	Reminder Ring Timer	00-99	00 sec	
	20	Flexible Inter-Digit Time-out	01-99	5 sec	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 02	**Additional System Timers**				
	1	Repeat Redial Timer	006-999	60 sec	
	2	Attendant Display Timer	00-99	1 sec	
	3	Call Coverage Ring Timer	00-99	5 sec	
	4	Modem Answer T/O	25-99	25 sec	
	5	Pulse Dial Inter-Digit Timer	300-600	300 ms	
	6	DTMF Time Operation	100/999 ms	1=100ms	
FLASH 05	**System Features 1 Programming**				
	1	Attendant Override	Disabled/Enabled	Disabled	
	2	Hold Preference	System/Exclusive	System	
	3	External Night Ring	Disabled/Enabled	Disabled	
	4	Executive Override Warning Tone	Disabled/Enabled	Enabled	
	5	Page Warning Tone	Disabled/Enabled	Enabled	
	6	Background Music Channel	Disabled/Enabled	Enabled	
	7	Least Cost Routing	Disabled/Enabled	Disabled	
	8	Account Codes - Forced	Disabled/Enabled	Disabled	
	9	Group Listening	Disabled/Enabled	Disabled	
	10	Idle Speaker Mode	Disabled/Enabled	Disabled	
	11	Call Cost Display Feature	Disabled/Enabled	Disabled	
	12	Music-On-Hold	Disabled/Enabled	Enabled	
	13	Call Qualifier Tone Option	Disabled/Enabled	Disabled	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 06	**System Features 2 Programming**				
	1	Privacy Release Tone Option	Disabled/Enabled	Enabled	
	2	Distinctive CO Ringing	Disabled/Enabled	Enabled	
	3	Verified Account Code	Disabled/Enabled	Disabled	
	4	Call Forward Display	Disabled/Enabled	Enabled	
	5	External Day Ring	Disabled/Enabled	Disabled	
	6	Overflow Station Forward	Disabled/Enabled	Disabled	
	7	Direct Transfer Mode	Disabled/Enabled	Enabled	
	8	Station ID Lock	Disabled/Enabled	Disabled	
	9	LCR Call Progress	Disabled/Enabled	Enabled	
	10	One-Touch Recording Warning Tone	Disabled/Enabled	Enabled	
	11	Ringback on Transfer	Disabled/Enabled	Disabled	
	12	ACD Agent Recall	Disabled/Enabled	Disabled	
	13	911 Feature (Attendant Alert)	Disabled/Enabled	Disabled	
	14	E911 Feature		Disabled	
	15	VMID Station Numbers		STA #s=VMID	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 07	**Flash Rates (Programmable)**				
	1	Incoming CO Line Ringing	00-28	Red 480ipm flutter (08)	
	2	Incoming Intercom Ringing	00-28	Red 120ipm flutter (11)	
	3	Call Forward Button	00-28	Red Steady On (01)	
	4	Message Wait/VM Button	00-28	Red Steady On (01)	
	5	Message CallBack DSS/BLF	00-28	Red 120ipm flutter (11)	
	6	Do Not Disturb DSS/BLF	00-28	Red 60ipm dbl wink (04)	
	7	Auto CallBack DSS/BLF	00-28	Red 120ipm flash (10)	
	8	UCD Available/Unavailable DSS/BLF	00-28	Red 60ipm dbl wink (04)	
	9	Transfer CO Ringing	00-28	Red 120ipm flash (10)	
	10	Recall CO Ringing	00-28	Red 480ipm flutter (08)	
	11	Queued CO Ringing	00-28	Green 480ipm flutter (22)	
	12	Exclusive Hold	00-28	Green 120ipm flash (24)	
	13	System Hold	00-28	Red 60ipm dbl wink (04)	
	14	In Use Hold (I-Hold)	00-28	Green 60ipm flash (17)	
	15	Camp-On Button	00-28	Red 120ipm flash (10)	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 07	**Flash Rates (Programmable)**				
	16	Call Back Button	00-28	Red 120ipm flash (10)	
	17	Line Queue Button	00-28	Red 480ipm flutter (08)	
	18	Do Not Disturb Button	00-28	Red Steady On (01)	
	19	Intercom Hold Button	00-28	Red 15ipm flash (09)	
FLASH 09	1	MOH Assignments	Channels 3-8	None	
	2	MOH Assignments	Channels 3-8	None	
	3	MOH Assignments	Channels 3-8	None	
	4	MOH Assignments	Channels 3-8	None	
	5	MOH Assignments	Channels 3-8	None	
	6	MOH Assignments	Channels 3-8	None	
	7	Proctor 911 Power Failure		None	
FLASH 10	**Attendant Station Assignment**		100-171 or 100-351	STA 100	
FLASH 11	1	System Time And Date	MMM/DD/YY, 12/24	MMM/DD/YY, 12Hr	
FLASH 12		PBX Dialing Codes	5 (2-digits)	None	
FLASH 13	1	Executive/Secretary Pairs	Sta #, Sta #	None	
	2	Executive/Secretary Pairs	Sta #, Sta #	None	
	3	Executive/Secretary Pairs	Sta #, Sta #	None	
	4	Executive/Secretary Pairs	Sta #, Sta #	None	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 14	1	On Board Relay Programming		None	
	2	On Board Relay Programming		None	
	3	On Board Relay Programming		None	
	4	On Board Relay Programming		None	
	5	On Board Relay Programming		None	
	6	On Board Relay Programming		None	
FLASH 15	**Baud Rate Assignments**				
	1	Port #1 (On-Board MPB RS-232C)		9600 Baud	
	2	Port #2 (On-Board Baud Modem Triad 3, Optional Triad 1/2)		2400 Baud	
	3	Port #3 (SIU2 Module RS-232C)		9600 Baud	
	4	Port #4 (SIU2 Module RS-232C)		9600 Baud	
FLASH 20	**Access Codes**				
	1	DISA Access Code	100-999	100	
	2	Database Admin Password	0000-9999	3226	
FLASH 21	**Station Message Detail Recording**				
	1	SMDR Enable/Disable	Disabled/Enabled	Disabled	
	2	Long Distance/Local Assignment	LD/All	LD Only	
	3	Character Print Assignment	80/30	80	
	4	Baud Rate Display		9600	
	5	SMDR Port Assignments	1/2/3/4	Port #1	
	6	SMDR Format	2 or 3-digit CO 3 or 4-digit STA	3-digit CO 4-digit STA	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 22	**Weekly Night Mode Schedule**				
	1	Automatic/Manual Operation	Auto/Manual	Manual	
	2	Day of Week Programming	08:00–17:00 ####-####	(0-4) (5-6)	
	3	Day of Week Programming	08:00–17:00 ####-####	(0-4) (5-6)	
	4	Day of Week Programming	08:00–17:00 ####-####	(0-4) (5-6)	
	5	Day of Week Programming	08:00–17:00 ####-####	(0-4) (5-6)	
	6	Day of Week Programming	08:00–17:00 ####-####	(0-4) (5-6)	
	7	Day of Week Programming	08:00–17:00 ####-####	(0-4) (5-6)	
	8	Day of Week Programming	08:00–17:00 ####-####	(0-4) (5-6)	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 42	**Flexible CO Port Assignments**				
	1	Flexible CO Port		Ports 1-8	
	2	Flexible CO Port		Ports 9-16	
	3	Flexible CO Port		Ports 17-24	
	4	Flexible CO Port		Ports 25-32	
	5	Flexible CO Port		Ports 33-40	
	6	Flexible CO Port		Ports 41-48	
	7	Flexible CO Port		Ports 49-56	
	8	Flexible CO Port		Ports 57-64	
	9	Flexible CO Port		Ports 65-72	
	10	Flexible CO Port		Ports 73-80	
	11	Flexible CO Port		Ports 81-88	
	12	Flexible CO Port		Ports 89-96	
	13	Flexible CO Port		Ports 97-104	
	14	Flexible CO Port		Ports 105-112	
	15	Flexible CO Port		Ports 113-120	
	16	Flexible CO Port		Ports 121-128	
	17	Flexible CO Port		Ports 129-136	
	18	Flexible CO Port		Ports 137-144	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Station**		**Port**	**Flex**
		100		100	
		101		101	
		102		102	
		103		103	
		104		104	
		105		105	
		106		106	
		107		107	
		108		108	
		109		109	
		110		110	
		111		111	
		112		112	
		113		113	
		114		114	
		115		115	
		116		116	
		117		117	
		118		118	
		119		119	
		120		120	
		121		121	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Station**		**Port**	**Flex**
		122		122	
		123		123	
		124		124	
		125		125	
		126		126	
		127		127	
		128		128	
		129		129	
		130		130	
		131		131	
		132		132	
		133		133	
		134		134	
		135		135	
		136		136	
		137		137	
		138		138	
		139		139	
		140		140	
		141		141	
		142		142	
		143		143	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Station**		**Port**	**Flex**
		144		144	
		145		145	
		146		146	
		147		147	
		148		148	
		149		149	
		150		150	
		151		151	
		152		152	
		153		153	
		154		154	
		155		155	
		156		156	
		157		157	
		158		158	
		159		159	
		160		160	
		161		161	
		162		162	
		163		163	
		164		164	
		165		165	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52		**Flexible Numbering Assignments**			
	21/24	**Station**		**Port**	**Flex**
		166		166	
		167		167	
		168		168	
		169		169	
		170		170	
		171		171	
		172		172	
		173		173	
		174		174	
		175		175	
		176		176	
		177		177	
		178		178	
		179		179	
		180		180	
		181		181	
		182		182	
		183		183	
		184		184	
		185		185	
		186		186	
		187		187	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Station**		**Port**	**Flex**
		188		188	
		189		189	
		190		190	
		191		191	
		192		192	
		193		193	
		194		194	
		195		195	
		196		196	
		197		197	
		198		198	
		199		199	
		200		200	
		201		201	
		202		202	
		203		203	
		204		204	
		205		205	
		206		206	
		207		207	
		208		208	
		209		209	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52		**Flexible Numbering Assignments**			
	21/24	**Station**		**Port**	**Flex**
		210		210	
		211		211	
		212		212	
		213		213	
		214		214	
		215		215	
		216		216	
		217		217	
		218		218	
		219		219	
		220		220	
		221		221	
		222		222	
		223		223	
		224		224	
		225		225	
		226		226	
		227		227	
		228		228	
		229		229	
		230		230	
		231		231	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52		**Flexible Numbering Assignments**			
	21/24	**Station**		**Port**	**Flex**
		232		232	
		233		233	
		234		234	
		235		235	
		236		236	
		237		237	
		238		238	
		239		239	
		240		240	
		241		241	
		242		242	
		243		243	
		244		244	
		245		245	
		246		246	
		247		247	
		248		248	
		249		249	
		250		250	
		251		251	
		252		252	
		253		253	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52		**Flexible Numbering Assignments**			
	21/24	**Station**		**Port**	**Flex**
		254		254	
		255		255	
		256		256	
		257		257	
		258		258	
		259		259	
		260		260	
		261		261	
		262		262	
		263		263	
		264		264	
		265		265	
		266		266	
		267		267	
		268		268	
		269		269	
		270		270	
		271		271	
		272		272	
		273		273	
		274		274	
		275		275	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Station**		**Port**	**Flex**
		276		276	
		277		277	
		278		278	
		279		279	
		280		280	
		281		281	
		282		282	
		283		283	
		284		284	
		285		285	
		286		286	
		287		287	
		288		288	
		289		289	
		290		290	
		291		291	
		292		292	
		293		293	
		294		294	
		295		295	
		296		296	
		297		297	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52		**Flexible Numbering Assignments**			
	21/24	**Station**		**Port**	**Flex**
		298		298	
		299		299	
		300		300	
		301		301	
		302		302	
		303		303	
		304		304	
		305		305	
		306		306	
		307		307	
		308		308	
		309		309	
		310		310	
		311		311	
		312		312	
		313		313	
		314		314	
		315		315	
		316		316	
		317		317	
		318		318	
		319		319	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52		**Flexible Numbering Assignments**			
	21/24	**Station**		**Port**	**Flex**
		320		320	
		321		321	
		322		322	
		323		323	
		324		324	
		325		325	
		326		326	
		327		327	
		328		328	
		329		329	
		330		330	
		331		331	
		332		332	
		333		333	
		334		334	
		335		335	
		336		336	
		337		337	
		338		338	
		339		339	
		340		340	
		341		341	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Station**		**Port**	**Flex**
		342		342	
		343		343	
		344		344	
		345		345	
		346		346	
		347		347	
		348		348	
		349		349	
		350		350	
		351		351	
		Numbering Plan		**Fixed**	**Flex**
		911 List		608	
		Account Code		570	
		Account Code		627	
		ACD Calls In Queue		579	
		ACD Group 1		550	
		ACD Group 2		551	
		ACD Group 3		552	
		ACD Group 4		553	
		ACD Group 5		554	
		ACD Group 6		555	
		ACD Group 7		556	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Numbering Plan**		**Fixed**	**Flex**
		ACD Group 8		557	
		ACD Group 9		558	
		ACD Group 10		559	
		ACD Group 11		560	
		ACD Group 12		561	
		ACD Group 13		562	
		ACD Group 14		563	
		ACD Group 15		564	
		ACD Group 16		565	
		ACD Group Status		567	
		ACD Help		574	
		ACD Member Display		573	
		ACD Primary Login		572	
		ACD Primary Logout		571	
		ACD Secondary Login		582	
		ACD Secondary Logout		581	
		ACD Supervisor Disp		577	
		ACD Supervisor Login		576	
		ACD Supervisor Logout		575	
		ACD/UCD AVA/UNA		566	
		All Call Page		700	
		Ans Machine Ring		6540	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Numbering Plan**		**Fixed**	**Flex**
		Ans Machine Spkr		6541	
		Attendant Clear Alarm		606	
		Attendant Disable CO Line		602	
		Attendant Override		601	
		Attendant Unavailable		607	
		Background Music		632	
		Call Back		622	
		Call Coverage		647	
		Call Coverage Ring		646	
		Call Factor		580	
		Call Forward		640	
		Call Park Group 1		430	
		Call Park Group 2		431	
		Call Park Group 3		432	
		Call Park Group 4		433	
		Call Park Group 5		434	
		Call Park Group 6		435	
		Call Park Group 7		436	
		Call Park Group 8		437	
		Camp On		620	
		Cancel LCR Queue		626	
		Clear Fwd, DND, Msg		662	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Numbering Plan**		**Fixed**	**Flex**
		Clear VM Alarm		656	
		CO Line		88	
		CO Line Queue		621	
		Conference		624	
		Custom Msg		694	
		Dial By Name		6*	
		Directory Dial		680	
		Distinctive Ring		695	
		Do Not Disturb		631	
		DTMF Receiver Test		657	
		Executive Override		625	
		Ext Page Zone 1		761	
		Ext Page Zone 2		762	
		Ext Page Zone All		760	
		Flash		660	
		Group Call Pickup		#0	
		Headset Mode		634	
		HPT		667	
		Hunt Group 1		450	
		Hunt Group 2		451	
		Hunt Group 3		452	
		Hunt Group 4		453	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Numbering Plan**		**Fixed**	**Flex**
		Hunt Group 5		454	
		Hunt Group 6		455	
		Hunt Group 7		456	
		Hunt Group 8		457	
		ICLID Ans Call		659	
		ICLID Name/Number		653	
		ICLID Unanswered Call		635	
		Ignore CFW		5#	
		Int Page Zone 1		701	
		Int Page Zone 2		702	
		Int Page Zone 3		703	
		Int Page Zone 4		704	
		Int Page Zone 5		705	
		Int Page Zone 6		706	
		Int Page Zone 7		707	
		Int Page Zone 8		708	
		Int Page Zone All		709	
		Intercom Button		645	
		Keyset Mode		648	
		LCR		800	
		Loop		89	
		Mailbox Button		644	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Numbering Plan**		**Fixed**	**Flex**
		Meet Me Page		770	
		Message Preselect		633	
		Message Wait		623	
		Modem		499	
		MPB Version		605	
		Mute		629	
		Night Service		604	
		Off-Net Forward		603	
		OHVO		628	
		One Touch Record		649	
		Overflow AVA/UNA		578	
		Pause/Resume Rec		655	
		Personal Park		438	
		Pickup Park Group 1		#430	
		Pickup Park Group 2		#431	
		Pickup Park Group 3		#432	
		Pickup Park Group 4		#433	
		Pickup Park Group 5		#434	
		Pickup Park Group 6		#435	
		Pickup Park Group 7		#436	
		Pickup Park Group 8		#437	
		Pool 01		801	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Numbering Plan**		**Fixed**	**Flex**
		Pool 02		802	
		Pool 03		803	
		Pool 04		804	
		Pool 05		805	
		Pool 06		806	
		Pool 07		807	
		Pool 08		808	
		Pool 09		809	
		Pool 10		810	
		Pool 11		811	
		Pool 12		812	
		Pool 13		813	
		Pool 14		814	
		Pool 15		815	
		Pool 16		816	
		Pool 17		817	
		Pool 18		818	
		Pool 19		819	
		Pool 20		820	
		Pool 21		821	
		Pool 22		822	
		Pool 23		823	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Numbering Plan**		**Fixed**	**Flex**
		Pool All		824	
		Prime Key		691	
		Program Name		690	
		Release		641	
		Remote Call Forward		642	
		Repeat Redial		643	
		Set Clock		692	
		SLT Call Pickup		#1	
		SLT Callback		663	
		SLT Conf Park		664	
		SLT Speed Dial		668	
		SLT Speed Prog		661	
		Speed Dir		693	
		Station Call Park		439	
		Station Park Pickup		#6	
		Station Relocate		636	
		Stop Trace		658	
		Telecenter Adm		652	
		Telecenter Ext		650	
		Tone Ring		6#	
		Transfer Unanswered CO Call		639	
		UNA/UDA		#5	

Table C-1: System Parameters

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 52	**Flexible Numbering Assignments**				
	21/24	**Numbering Plan**		**Fixed**	**Flex**
		VM Message Cancel		421	
		VM Message Set		420	
		VM Message Set w/ Count		422	
		Voice Mail Group 1		440	
		Voice Mail Group 2		441	
		Voice Mail Group 3		442	
		Voice Mail Group 4		443	
		Voice Mail Group 5		444	
		Voice Mail Group 6		445	
		Voice Mail Group 7		446	
		Voice Mail Group 8		447	
		Volume		638	

Table C-2: Directory Dialing Defaults (FLASH 23)

Route	Bin	Name	Route	Bin	Name
000	100		026	126	
001	101		027	127	
002	102		028	128	
003	103		029	129	
004	104		030	130	
005	105		031	131	
006	106		032	132	
007	107		033	133	
008	108		034	134	
009	109		035	135	
010	110		036	136	
011	111		037	137	
012	112		038	138	
013	113		039	139	
014	114		040	140	
015	115		041	141	
016	116		042	142	
017	117		043	143	
018	118		044	144	
019	119		045	145	
020	120		046	146	
021	121		047	147	
022	122		048	148	
023	123		049	149	
024	124		050	150	
025	125		051	151	

Table C-2: Directory Dialing Defaults (FLASH 23)

Route	Bin	Name	Route	Bin	Name
052	152		078	178	
053	153		079	179	
054	154		080	180	
055	155		081	181	
056	156		082	182	
057	157		083	183	
058	158		084	184	
059	159		085	185	
060	160		086	186	
061	161		087	187	
062	162		088	188	
063	163		089	189	
064	164		090	190	
065	165		091	191	
066	166		092	192	
067	167		093	193	
068	168		094	194	
069	169		095	195	
070	170		096	196	
071	171		097	197	
072	172		098	198	
073	173		099	199	
074	174		100	200	
075	175		101	201	
076	176		102	202	
077	177		103	203	

Table C-2: Directory Dialing Defaults (FLASH 23)

Route	Bin	Name	Route	Bin	Name
104	204		130	230	
105	205		131	231	
106	206		132	232	
107	207		133	233	
108	208		134	234	
109	209		135	235	
110	210		136	236	
111	211		137	237	
112	212		138	238	
113	213		139	239	
114	214		140	240	
115	215		141	241	
116	216		142	242	
117	217		143	243	
118	218		144	244	
119	219		145	245	
120	220		146	246	
121	221		147	247	
122	222		148	248	
123	223		149	249	
124	224		150	250	
125	225		151	251	
126	226		152	252	
127	227		153	252	
128	228		154	254	
129	229		155	255	

Table C-2: Directory Dialing Defaults (FLASH 23)

Route	Bin	Name	Route	Bin	Name
156	256		178	278	
157	257		179	279	
158	258		180	280	
159	259		181	281	
160	260		182	282	
161	261		183	283	
162	262		184	284	
163	263		185	285	
164	264		186	286	
165	265		187	287	
166	266		188	288	
167	267		189	289	
168	268		190	290	
169	269		191	291	
170	270		192	292	
171	271		193	293	
172	272		194	294	
173	273		195	295	
174	274		196	296	
175	275		197	297	
176	276		198	298	
177	277		199	299	

Table C-3: Cabinet/Card Programming (FLASH 24)

	Cabinet 0/2	Cabinet 1/3	Board	DTIB E or Options	# Of Ports	Port Assignment, FLASH 42 and 52
SLOTS	0					
	1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
		0				
		1				
		2				
		3				
		4				
		5				
						TOTAL
PS #0						
PS #1						

Board Codes			
	01 =	ETIB	12
	02 =	DTIB	12
	03 =	DTIB w/DTIBE	24
	04 =	SLIB	12
	05 =	LCOB	8
	06 =	GCOB	8
	07 =	DIDB	8
	08 =	PRIB	24
	09 =	T1IB	24
	10 =	BRIB	8
	11 =	BRI6	8
	00 =	DELETE CARD	
	0 =	10 Amp Power Supply	
	1 =	15 Amp Power Supply	

Table C-4: Hunt Group Parameters (FLASH 30)

Program Code	Flex Btn	Function	Pilot, Pilot Ring All, or Station	Stations (Up To 8)
FLASH 30	**Hunt Groups:**			
	1	Hunt Group 1 (450)		
	2	Hunt Group 2 (451)		
	3	Hunt Group 3 (452)		
	4	Hunt Group 4 (453)		
	5	Hunt Group 5 (454)		
	6	Hunt Group 6 (455)		
	7	Hunt Group 7 (456)		
	8	Hunt Group 8 (457)		
	9	Hunt Group 9 (458)	RAN	
	10	Hunt Group 10 (459)	RAN	
	11	Hunt Group 11 (460)	RAN	
	12	Hunt Group 12 (461)	RAN	
	13	Pilot/All Ring/Circular		

Table C-5: Verified Account Codes (FLASH 31)

Entry	Default		New COS		Digits (12 Max.)	Entry	Default		New COS		Digits (12 Max.)
	D	N	D	N			D	N	D	N	
00	1	1				25	1	1			
01	1	1				26	1	1			
02	1	1				27	1	1			
03	1	1				28	1	1			
04	1	1				29	1	1			
05	1	1				30	1	1			
06	1	1				31	1	1			
07	1	1				32	1	1			
08	1	1				33	1	1			
09	1	1				34	1	1			
10	1	1				35	1	1			
11	1	1				36	1	1			
12	1	1				37	1	1			
13	1	1				38	1	1			
14	1	1				39	1	1			
15	1	1				40	1	1			
16	1	1				41	1	1			
17	1	1				42	1	1			
18	1	1				43	1	1			
19	1	1				44	1	1			
20	1	1				45	1	1			
21	1	1				46	1	1			
22	1	1				47	1	1			
23	1	1				48	1	1			
24	1	1				49	1	1			

Table C-5: Verified Account Codes (FLASH 31)

Entry	Default		New COS		Digits (12 Max.)	Entry	Default		New COS		Digits (12 Max.)
	D	N	D	N			D	N	D	N	
50	1	1				76	1	1			
51	1	1				77	1	1			
52	1	1				78	1	1			
53	1	1				79	1	1			
54	1	1				80	1	1			
55	1	1				81	1	1			
56	1	1				82	1	1			
57	1	1				83	1	1			
58	1	1				84	1	1			
59	1	1				85	1	1			
60	1	1				86	1	1			
61	1	1				87	1	1			
62	1	1				88	1	1			
63	1	1				89	1	1			
64	1	1				90	1	1			
65	1	1				91	1	1			
66	1	1				92	1	1			
67	1	1				93	1	1			
68	1	1				94	1	1			
69	1	1				95	1	1			
70	1	1				96	1	1			
71	1	1				97	1	1			
72	1	1				98	1	1			
73	1	1				99	1	1			
74	1	1				100	1	1			
75	1	1				101	1	1			

Table C-5: Verified Account Codes (FLASH 31)

Entry	Default		New COS		Digits (12 Max.)	Entry	Default		New COS		Digits (12 Max.)
	D	N	D	N			D	N	D	N	
102	1	1				128	1	1			
103	1	1				129	1	1			
104	1	1				130	1	1			
105	1	1				131	1	1			
106	1	1				132	1	1			
107	1	1				133	1	1			
108	1	1				134	1	1			
109	1	1				135	1	1			
110	1	1				136	1	1			
111	1	1				137	1	1			
112	1	1				138	1	1			
113	1	1				139	1	1			
114	1	1				140	1	1			
115	1	1				141	1	1			
116	1	1				142	1	1			
117	1	1				143	1	1			
118	1	1				144	1	1			
119	1	1				145	1	1			
120	1	1				146	1	1			
121	1	1				147	1	1			
122	1	1				148	1	1			
123	1	1				149	1	1			
124	1	1				150	1	1			
125	1	1				151	1	1			
126	1	1				152	1	1			
127	1	1				153	1	1			

Table C-5: Verified Account Codes (FLASH 31)

Entry	Default		New COS		Digits (12 Max.)	Entry	Default		New COS		Digits (12 Max.)
	D	N	D	N			D	N	D	N	
154	1	1				180	1	1			
155	1	1				181	1	1			
156	1	1				182	1	1			
157	1	1				183	1	1			
158	1	1				184	1	1			
159	1	1				185	1	1			
160	1	1				186	1	1			
161	1	1				187	1	1			
162	1	1				188	1	1			
163	1	1				189	1	1			
164	1	1				190	1	1			
165	1	1				191	1	1			
166	1	1				192	1	1			
167	1	1				193	1	1			
168	1	1				194	1	1			
169	1	1				195	1	1			
170	1	1				196	1	1			
171	1	1				197	1	1			
172	1	1				198	1	1			
173	1	1				199	1	1			
174	1	1				200	1	1			
175	1	1				201	1	1			
176	1	1				202	1	1			
177	1	1				203	1	1			
178	1	1				204	1	1			
179	1	1				205	1	1			

Table C-5: Verified Account Codes (FLASH 31)

Entry	Default		New COS		Digits (12 Max.)	Entry	Default		New COS		Digits (12 Max.)
	D	N	D	N			D	N	D	N	
206	1	1				228	1	1			
207	1	1				229	1	1			
208	1	1				230	1	1			
209	1	1				231	1	1			
210	1	1				232	1	1			
211	1	1				233	1	1			
212	1	1				234	1	1			
213	1	1				235	1	1			
214	1	1				236	1	1			
215	1	1				237	1	1			
216	1	1				238	1	1			
217	1	1				239	1	1			
218	1	1				240	1	1			
219	1	1				241	1	1			
220	1	1				242	1	1			
221	1	1				243	1	1			
222	1	1				244	1	1			
223	1	1				245	1	1			
224	1	1				246	1	1			
225	1	1				247	1	1			
226	1	1				248	1	1			
227	1	1				249	1	1			

Table C-6: CO Line Programming (FLASH 40)

Data Field	Pge Btn	CO Line Port Number								Default
		1	2	3	4	5	6	7	8	
PAGE A	15	Page A is selected by pressing PAGE A flexible button.								
DTMF/Dial Pulse Programming	A/1									DTMF
CO/PBX Programming	A/2									CO
UNA Programming	A/3									Enabled
DISA Trunk-to-Trunk	A/4									Enabled
Privacy	A/5									Enabled
Loop Supervision Programming	A/6									4=400 ms
DISA Programming	A/7									Disabled
Line Group Programming	A/8									Group 1
Class of Service Programming	A/9									COS 1
CO Line Ringing Assignments	A/10	Refer to CO Line Ringing Assignments								Sta 100
CO Line Identification Display	A/11									Line XXX
CO 1:										Line XXX
CO 2:										Line XXX
CO 3:										Line XXX
CO 4:										Line XXX
CO 5:										Line XXX
CO 6:										Line XXX
CO 7:										Line XXX
CO 8:										Line XXX
Trunk Direction	A/12									Bothway
Display Ring Assignments	A/13									None
DID/TIE Signal	A/14									Wink
911 Trunk	A/15									Disabled

Table C-6: CO Line Programming (FLASH 40)

Data Field	Pge Btn	CO Line Port Number								Default
		1	2	3	4	5	6	7	8	
PAGE B	16	Page B is selected by pressing PAGE B flexible button.								
T-1 Signaling Type Option	B/1									Loop Start
T-1 Ringback Option	B/2									Enabled
T-1 Dial Tone Option	B/3									Disabled
Transmit Volume Option	B/4									5=0 dB
Preset Call Forward Destination	B/5									None
Preset Forward Voice Mail	B/6									None
Universal Day Answer	B/7									Disabled
Music-On-Hold	B/8									Channel 1
Ring Tone	B/9									00
PAGE C	17	Page C is selected by pressing PAGE C flexible button.								
Flash Timer	C/1									10=1.0 sec
Ring Delay Timer	C/2									Disabled
Wink Timer	C/3									140 ms
Release Timer	C/4									200 ms
Reseize Timer	C/5									2.0 sec
Guard Timer	C/6									5 sec
Seize Timer	C/7									0.1 sec
Preset Forward Timer	C/8									10 sec
DID Collect Timer	C/9									150 ms
T-1 Collect Timer	C/10									150 ms

Table C-7: Miscellaneous CO Parameters & Timers (FLASH 40/41)

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 41	1	Dial Pulse Parameters	60/40, 66/33	60/40, 10 pps	
	3	DID Digits	2-7	3	
	5	DID Incoming Signaling	Dial Pulse/DTMF	DTMF	
	6	T-1 Incoming Signaling	Dial Pulse/DTMF	DTMF	
	7	T-1 Framing Type		D4SF-AMI	

Table C-8: CO Line Ringing Assignments (FLASH 40)

________ TO ________	STA	D	N	S	STA	D	N	S	STA	D	N	S
CO LINE(S)												
TYPE: ______________												
________________												
NUMBER												
________ TO ________	STA	D	N	S	STA	D	N	S	STA	D	N	S
CO LINE(S)												
TYPE: ______________												
________________												
NUMBER												
________ TO ________	STA	D	N	S	STA	D	N	S	STA	D	N	S
CO LINE(S)												
TYPE: ______________												
________________												
NUMBER												
________ TO ________	STA	D	N	S	STA	D	N	S	STA	D	N	S
CO LINE(S)												
TYPE: ______________												
________________												
NUMBER												

Btn #11 = Enter Ringing Assignments
Btn #17 = Display Ringing Assignments

Ringing Assignments:
0 = No Ringing (unassigned/ to delete a station)
1 = Day Ringing (**D**)
2 = Night Ringing (**N**)
3 = Day/Night Ringing (**DN**)
4 = Special Only (**S**)
5 = Day/Special (**DS**)
6 = Night/Special (**NS**)
7 = All Modes - Day/Night/ Special (**A**)

Table C-9: DID/ICLID Default Ringing Assignments (FLASH 43)

DID/ICLID Route	Default Destination	Ringing Assignments	DID/ICLID Route	Default Destination	Ringing Assignments
000	None		016	None	
001	None		017	None	
002	None		018	None	
003	None		019	None	
004	None		020	None	
005	None		021	None	
006	None		022	None	
007	None		023	None	
008	None		024	None	
009	None		025	None	
010	None		026	None	
011	None		027	None	
012	None		028	None	
013	None		029	None	
014	None		030	None	
015	None		031	None	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to ***none****, the call will follow Route 001.*

2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to ***none****, the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-9: DID/ICLID Default Ringing Assignments (FLASH 43)

DID/ICLID Route	Default Destination	Ringing Assignments	DID/ICLID Route	Default Destination	Ringing Assignments
032	None		049	None	
033	None		050	None	
034	None		051	None	
035	None		052	None	
036	None		053	None	
037	None		054	None	
038	None		055	None	
039	None		056	None	
040	None		057	None	
041	None		058	None	
042	None		059	None	
043	None		060	None	
044	None		061	None	
045	None		062	None	
046	None		063	None	
047	None		064	None	
048	None		065	None	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to ***none****, the call will follow Route 001.*

2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to ***none****, the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-9: DID/ICLID Default Ringing Assignments (FLASH 43)

DID/ICLID Route	Default Destination	Ringing Assignments	DID/ICLID Route	Default Destination	Ringing Assignments
066	None		083	None	
067	None		084	100A	
068	None		085	101A	
069	None		086	102A	
070	None		087	103A	
071	None		088	104A	
072	None		089	105A	
073	None		090	106A	
074	None		091	107A	
075	None		092	108A	
076	None		093	109A	
077	None		094	110A	
078	None		095	111A	
079	None		096	112A	
080	None		097	113A	
081	None		098	114A	
082	None		099	115A	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to ***none****, the call will follow Route 001.*

2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to ***none****, the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-9: DID/ICLID Default Ringing Assignments (FLASH 43)

DID/ICLID Route	Default Destination	Ringing Assignments	DID/ICLID Route	Default Destination	Ringing Assignments
100	None		116	116A	
101	None		117	117A	
102	None		118	118A	
103	None		119	119A	
104	None		120	120A	
105	None		121	121A	
106	None		122	122A	
107	None		123	123A	
108	None		124	124A	
109	None		125	125A	
110	None		126	126A	
111	None		127	127A	
112	None		128	128A	
113	None		129	129A	
114	None		130	130A	
115	None		131	131A	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to ***none****, the call will follow Route 001.*

2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to ***none****, the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-9: DID/ICLID Default Ringing Assignments (FLASH 43)

DID/ICLID Route	Default Destination	Ringing Assignments	DID/ICLID Route	Default Destination	Ringing Assignments
132	132A		149	149A	
133	133A		150	150A	
134	134A		151	151A	
135	135A		152	152A	
136	136A		153	153A	
137	137A		154	154A	
138	138A		155	155A	
139	139A		156	156A	
140	140A		157	157A	
141	141A		158	158A	
142	142A		159	158A	
143	143A		160	160A	
144	144A		161	161A	
145	145A		162	162A	
146	146A		163	163A	
147	147A		164	164A	
148	148A		165	165A	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to ***none****, the call will follow Route 001.*

2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to ***none****, the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-9: DID/ICLID Default Ringing Assignments (FLASH 43)

DID/ICLID Route	Default Destination	Ringing Assignments	DID/ICLID Route	Default Destination	Ringing Assignments
166	166A		182	182A	
167	167A		183	183A	
168	168A		184	184A	
169	169A		185	185A	
170	170A		186	186A	
171	171A		187	187A	
172	172A		188	188A	
173	173A		189	189A	
174	174A		190	190A	
175	175A		191	191A	
176	176A		192	192A	
177	177A		193	193A	
178	178A		194	194A	
179	179A		195	195A	
180	180A		196	196A	
181	181A		197	197A	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to ***none****, the call will follow Route 001.*

2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to ***none****, the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-9: DID/ICLID Default Ringing Assignments (FLASH 43)

DID/ICLID Route	Default Destination	Ringing Assignments	DID/ICLID Route	Default Destination	Ringing Assignments
198	198A		215	215A	
199	299A		216	216A	
200	200A		217	217A	
201	201A		218	218A	
202	202A		219	219A	
203	203A		220	220A	
204	204A		221	221A	
205	205A		222	222A	
206	206A		223	223A	
207	207A		224	224A	
208	208A		225	225A	
209	209A		226	226A	
210	210A		227	227A	
211	211A		228	228A	
212	212A		229	229A	
213	213A		230	230A	
214	214A		231	231A	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to ***none****, the call will follow Route 001.*

2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to ***none****, the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-9: DID/ICLID Default Ringing Assignments (FLASH 43)

DID/ICLID Route	Default Destination	Ringing Assignments	DID/ICLID Route	Default Destination	Ringing Assignments
232	232A		243	243A	
233	233A		244	244A	
234	234A		245	245A	
235	235A		246	246A	
236	236A		247	247A	
237	237A		248	248A	
238	238A		249	249A	
239	239A		250	250A	
240	240A		251	251A	
241	241A		252-499	252A-499A	
242	242A				

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to ***none****, the call will follow Route 001.*

2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to ***none****, the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-10: DID Default Table Entry (FLASH 44)

DID Table Entry	Default Route(s)	Customer Route	DID Number	Customer DID Number	Customer DID Trunk Name
_00	100		0000_00		
_01	101		0000_01		
_02	102		0000_02		
_03	103		0000_03		
_04	104		0000_04		
_05	105		0000_05		
_06	106		0000_06		
_07	107		0000_07		
_08	108		0000_08		
_09	109		0000_09		
_10	110		0000_10		
_11	111		0000_11		
_12	112		0000_12		
_13	113		0000_13		
_14	114		0000_14		
_15	115		0000_15		
_16	116		0000_16		
_17	117		0000_17		

** Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-10: DID Default Table Entry (FLASH 44)

DID Table Entry	Default Route(s)	Customer Route	DID Number	Customer DID Number	Customer DID Trunk Name
_18	118		0000_18		
_19	119		0000_19		
_20	120		0000_20		
_21	121		0000_21		
_22	122		0000_22		
_23	123		0000_23		
_24	124		0000_24		
_25	125		0000_25		
_26	126		0000_26		
_27	127		0000_27		
_28	128		0000_28		
_29	129		0000_29		
_30	130		0000_30		
_31	131		0000_31		
_32	132		0000_32		
_33	133		0000_33		
_34	134		0000_34		
_35	135		0000_35		

** Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-10: DID Default Table Entry (FLASH 44)

DID Table Entry	Default Route(s)	Customer Route	DID Number	Customer DID Number	Customer DID Trunk Name
_36	136		0000_36		
_37	137		0000_37		
_38	138		0000_38		
_39	139		0000_39		
_40	140		0000_40		
_41	141		0000_41		
_42	142		0000_42		
_43	143		0000_43		
_44	144		0000_44		
_45	145		0000_45		
_46	146		0000_46		
_47	147		0000_47		
_48	148		0000_48		
_49	149		0000_49		
_50	150		0000_50		
_51	151		0000_51		
_52	152		0000_52		
_53	153		0000_53		

** Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-10: DID Default Table Entry (FLASH 44)

DID Table Entry	Default Route(s)	Customer Route	DID Number	Customer DID Number	Customer DID Trunk Name
_54	154		0000_54		
_55	155		0000_55		
_56	001*		0000_56		
_57	001*		0000_57		
_58	001*		0000_58		
_59	001*		0000_59		
_60	001*		0000_60		
_61	001*		0000_61		
_62	001*		0000_62		
_63	001*		0000_63		
_66	001*		0000_66		
_67	001*		0000_67		
_68	001*		0000_68		
_69	001*		0000_69		
_70	001*		0000_070		
_71	001*		0000_71		
_72	001*		0000_72		
_73	001*		0000_73		

** Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-10: DID Default Table Entry (FLASH 44)

DID Table Entry	Default Route(s)	Customer Route	DID Number	Customer DID Number	Customer DID Trunk Name
_74	001*		0000_74		
_75	001*		0000_75		
_76	001*		0000_76		
_77	001*		0000_77		
_78	001*		0000_78		
_79	001*		0000_79		
_80	001*		0000_80		
_81	001*		0000_81		
_82	001*		0000_82		
_83	001*		0000_83		
_84	001*		0000_84		
_85	001*		0000_85		
_86	001*		0000_86		
_87	001*		0000_87		
_88	001*		0000_88		
_89	001*		0000_89		
_90	001*		0000_90		
_91	001*		0000_91		

** Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

Table C-10: DID Default Table Entry (FLASH 44)

DID Table Entry	Default Route(s)	Customer Route	DID Number	Customer DID Number	Customer DID Trunk Name
_92	001*		0000_92		
_93	001*		0000_93		
_94	001*		0000_94		
_95	001*		0000_95		
_96	001*		0000_96		
_97	001*		0000_97		
_98	001*		0000_98		
_99	199		0000_99		

** Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.*

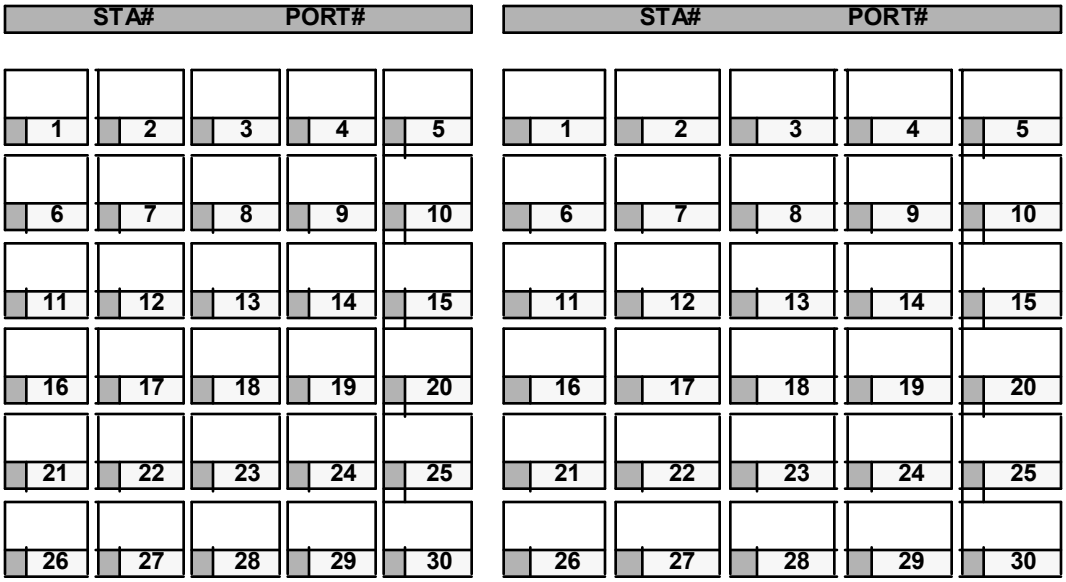
Table C-11: Station Programming (FLASH 50)

Data Field	Page /Btn	Station Numbers						Default
PAGE A	18	Page A is selected by pressing PAGE A flexible button						
Paging Access	A/1							Enabled
Do Not Disturb	A/2							Enabled
Conference Enable/Disable (per Station)	A/3							Enabled
Executive Override	A/4							Disabled
Privacy (per Station)	A/5							Enabled
System Speed Dial Access	A/6							Enabled
Line Queuing	A/7							Enabled
Preferred Line Answer	A/8							Enabled
Off-Hook Voice Over (OHVO)	A/9							Disabled
Call Forwarding	A/10							Enabled
Forced Least Cost Routing (LCR)	A/11							Disabled
ACD* Supervisor Monitor w/Barge-In	A/12							Disabled
Executive Override Blocking	A/13							Disabled
CO Line Ringing Options	A/14							Muted
Name/Number Display at Idle	A/15							Name
ACD Zap Tone	A/16							Disabled
CO Pool Loop Buttons Programming	A/17							Disabled
Admin Access	A/18							Disabled

Table C-11: Station Programming (FLASH 50)

Data Field	Page /Btn	Station Numbers						Default
PAGE B	19	Page B is selected by pressing PAGE B flexible button						
Station Identification	B/1							0 (24-Btn) 6 (SLT)
Station Day Class Of Service	B/2							1
Station Night Class Of Service	B/3							1
Speakerphone/Headset Programming	B/4							0
Pick-Up Group(s) Programming	B/5							1
Paging Zone(s) Programming	B/6							1
CO Line Group Access	B/8							1
LCR Class of Service (COS)	B/9							0
Off-Hook Preference Programming	B/10							00 (Keyset)
Flexible Button Programming	B/11	Refer to Flexible Button Programming Chart						
Keyset Mode	B/12							Inactive
Voice Mail ID Translation	B/13							VMID Digits
Cordless Key (CKTU) Button	B/17							00
*Features available with optional software.								

Table C-12: Button Assignment Chart (FLASH 50)



This chart is to be used to assign each flexible button a function.

Defaults	Buttons 1 thru 12 are assigned as Stations 100 thru 111. Buttons 13 thru 18 are assigned as CO Lines 01 thru 06. Buttons 19 is assigned as a Loop button. Button 20 is assigned as a Pool Group button. Buttons 21 thru 30 are flexible buttons with features assigned to them.
Key Station Button Programming BB = Button Number 01-24 LLL = *001-048 Triad 1/2* *001-144 Triad 3*	To assign a button as a Flexible button (user programmable) enter: BB [0] HOLD To assign a button as a CO Line button, enter: BB [1] LLL HOLD To assign a button as a Loop button, enter: BB [2] HOLD To enter a button as a Pooled Group button, enter: BB [3] G HOLD To enter a button as a Feature button, enter: BB [4] [XXX] HOLD To unassign a button, enter: BB [#] HOLD
SLT Entry (Off-Hook Preference)	When an SLT is being assigned for Off-Hook Preference, enter: 01 [1] LLL HOLD for a specific CO Line, or 01 [3] G HOLD for a CO Group Access (G = Line Group 1-7)

Table C-13: System Speed Dial Numbers

Programmed from the first Attendant Station.

BIN #	Telephone Number	BIN #	Telephone Number
Monitored by Toll Restriction (COS)			
020		040	
021		041	
022		042	
023		043	
024		044	
025		045	
026		046	
027		047	
028		048	
029		049	
030		050	
031		051	
032		052	
033		053	
034		054	
035		055	
036		056	
037		057	
038		058	
039		059	

Table C-13: System Speed Dial Numbers

Programmed from the first Attendant Station.

BIN #	Telephone Number	BIN #	Telephone Number
Overridden by Toll Restriction (COS)			
060		080	
061		081	
062		820	
063		083	
064		084	
065		085	
066		086	
067		087	
068		088	
069		089	
070		090	
071		091	
072		092	
073		093	
074		094	
075		095	
076		096	
077		097	
078		098	
079		099	
Monitored by Toll Restriction (COS)			
100-999			

Table C-14: ACD Group Parameters (FLASH 60)

Program Code	Flex Btn	Function	Data
FLASH 60	**ACD* Group 550 Programming**		
	1	Group Name	
	2	Alternate Group	
	3	Overflow Station	
	4	Supervisor	
	5	CIQ Threshold (00-99)	
	6	Wrap-Up Timer (000-999)	
	7	Primary Agent	
	8	Secondary Agent	
	9	Guaranteed RAN	
	10	Primary RAN	
	11	Secondary RAN	
	12	Transferred RAN	
	13	Overflow Timer (000-600)	
	14	Call Factor (0-999)	
	ACD* Group 551 Programming		
	1	Group Name	
	2	Alternate Group	
	3	Overflow Station	
	4	Supervisor	
	5	CIQ Threshold (00-99)	
	6	Wrap-Up Timer (000-999)	
	7	Primary Agent	
	8	Secondary Agent	
	9	Guaranteed RAN	
	10	Primary RAN	
	11	Secondary RAN	
	12	Transferred RAN	
	13	Overflow Timer (000-600)	
	14	Call Factor (0-999)	

Table C-14: ACD Group Parameters (FLASH 60)

Program Code	Flex Btn	Function	Data
FLASH 60	**ACD* Group 552 Programming**		
	1	Group Name	
	2	Alternate Group	
	3	Overflow Station	
	4	Supervisor	
	5	CIQ Threshold (00-99)	
	6	Wrap-Up Timer (000-999)	
	7	Primary Agent	
	8	Secondary Agent	
	9	Guaranteed RAN	
	10	Primary RAN	
	11	Secondary RAN	
	12	Transferred RAN	
	13	Overflow Timer (000-600)	
	14	Call Factor (0-999)	
	ACD* Group 553 Programming		
	1	Group Name	
	2	Alternate Group	
	3	Overflow Station	
	4	Supervisor	
	5	CIQ Threshold (00-99)	
	6	Wrap-Up Timer (000-999)	
	7	Primary Agent	
	8	Secondary Agent	
	9	Guaranteed RAN	
	10	Primary RAN	
	11	Secondary RAN	
	12	Transferred RAN	
	13	Overflow Timer (000-600)	
	14	Call Factor (0-999)	

Table C-14: ACD Group Parameters (FLASH 60)

Program Code	Flex Btn	Function	Data
FLASH 60	**ACD* Group 554 Programming**		
	1	Group Name	
	2	Alternate Group	
	3	Overflow Station	
	4	Supervisor	
	5	CIQ Threshold (00-99)	
	6	Wrap-Up Timer (000-999)	
	7	Primary Agent	
	8	Secondary Agent	
	9	Guaranteed RAN	
	10	Primary RAN	
	11	Secondary RAN	
	12	Transferred RAN	
	13	Overflow Timer (000-600)	
	14	Call Factor (0-999)	
	ACD* Group 555 Programming		
	1	Group Name	
	2	Alternate Group	
	3	Overflow Station	
	4	Supervisor	
	5	CIQ Threshold (00-99)	
	6	Wrap-Up Timer (000-999)	
	7	Primary Agent	
	8	Secondary Agent	
	9	Guaranteed RAN	
	10	Primary RAN	
	11	Secondary RAN	
	12	Transferred RAN	
	13	Overflow Timer (000-600)	
	14	Call Factor (0-999)	

Table C-14: ACD Group Parameters (FLASH 60)

Program Code	Flex Btn	Function	Data
FLASH 60	**ACD* Group 556 Programming**		
	1	Group Name	
	2	Alternate Group	
	3	Overflow Station	
	4	Supervisor	
	5	CIQ Threshold (00-99)	
	6	Wrap-Up Timer (000-999)	
	7	Primary Agent	
	8	Secondary Agent	
	9	Guaranteed RAN	
	10	Primary RAN	
	11	Secondary RAN	
	12	Transferred RAN	
	13	Overflow Timer (000-600)	
	14	Call Factor (0-999)	
	ACD* Group 557 Programming		
	1	Group Name	
	2	Alternate Group	
	3	Overflow Station	
	4	Supervisor	
	5	CIQ Threshold (00-99)	
	6	Wrap-Up Timer (000-999)	
	7	Primary Agent	
	8	Secondary Agent	
	9	Guaranteed RAN	
	10	Primary RAN	
	11	Secondary RAN	
	12	Transferred RAN	
	13	Overflow Timer (000-600)	
	14	Call Factor (0-999)	

Table C-14: ACD Group Parameters (FLASH 61 & 62)

Program Code	Flex Btn	Function	ALT (9)	OVR (10)	RAN (11)	SUPV (12)	Stations (Up to 16)	
FLASH 61	1	ACD Ring Timer	000-300				060	
	2	ACD Message Interval Timer	000-600				060	
	3	ACD Overflow Timer	000-300				060	
	4							
	5	ACD No-Answer Recall Timer	000-300				000	
	6	ACD No-Answer Retry Timer	000-999				300	
	7	Guaranteed Message Timer	000-300				05	
FLASH 62	**ACD RAN Announcement Tables**							
	1	Announcement Table #1	YXXXMMM				None	
	2	Announcement Table #2	YXXXMMM				None	
	3	Announcement Table #3	YXXXMMM				None	
	4	Announcement Table #4	YXXXMMM				None	
	5	Announcement Table #5	YXXXMMM				None	
	6	Announcement Table #6	YXXXMMM				None	
	7	Announcement Table #7	YXXXMMM				None	
	8	Announcement Table #8	YXXXMMM				None	

**Features available with optional software.*

Table C-15: UCD Group Parameters

Program Code	Flex Btn	Function	ALT	OVR	RAN	Stations (Up to 16)
FLASH 60	**UCD Group Programming**					
	1	UCD Group 0 (550)				
	2	UCD Group 1 (551)				
	3	UCD Group 2 (552)				
	4	UCD Group 3 (553)				
	5	UCD Group 4 (554)				
	6	UCD Group 5 (555)				
	7	UCD Group 6 (556)				
	8	UCD Group 7 (557)				

Program Code	Flex Btn	Function	Format	Default	Customer Data
FLASH 61	**UCD Timers**				
	1	UCD Ring Timer	000-300	060	
	2	UCD Message Interval Timer	000-600	060	
	3	UCD Overflow Timer	000-600	060	
	4	UCD Wrap-up Timer	000-999	004	
	5	UCD No-Answer Recall Timer	000-300	000	
	6	UCD No-Answer Retry Timer	000-999	300	

Table C-16: Voice Mail Group Parameters

Program Code	Flex Btn	Function	ALT	LV	RTV	Extensions
FLASH 65	1	Voice Mail Group 0 (440)		0	1	
	2	Voice Mail Group 1 (441)		None	None	
	3	Voice Mail Group 2 (442)		None	None	
	4	Voice Mail Group 3 (443)		None	None	
	5	Voice Mail Group 4 (444)		None	None	
	6	Voice Mail Group 5 (445)		None	None	
	7	Voice Mail Group 6 (446)		None	None	
	8	Voice Mail Group 7 (447)		None	None	
FLASH 66	**Voice Mail In-Band Signaling**					
	1	Voice Mail Outpulsing Table 0			[0] Prefix P7	
					[1] Suffix None	
	2	Voice Mail Outpulsing Table 1			[0] Prefix P7	
					[1] Suffix ✳	
	3	Voice Mail Outpulsing Table 2			[0] Prefix	
					[1] Suffix	
	4	Voice Mail Outpulsing Table 3			[0] Prefix	
					[1] Suffix	
	5	Voice Mail Outpulsing Table 4			[0] Prefix	
					[1] Suffix	
	6	Voice Mail Outpulsing Table 5			[0] Prefix	
					[1] Suffix	
	7	Voice Mail Outpulsing Table 6			[0] Prefix	
					[1] Suffix	
	8	Voice Mail Outpulsing Table 7			[0] Prefix P7	
					[1] Suffix ✳	
	9	Voice Mail Disconnect Table 8			Disconnect	
FLASH 67	**Voice Mail In-Band Features**					
	1	Voice Mail In-Band Digits			Enabled	
	2	Voice Mail Transfer/Forward			Enabled	
	3	VM Broker			Enabled	
	4	VM ID Digits			3	

Table C-17: Mailbox Table (FLASH 68)

Index	Group	ID Digits	Index	Group	ID Digits
00	440		18	440	
01	440		19	440	
02	440		20	440	
03	440		21	440	
04	440		22	440	
05	440		23	440	
06	440		24	440	
07	440		25	440	
08	440		26	440	
09	440		27	440	
10	440		28	440	
11	440		29	440	
12	440		30	440	
13	440		31	440	
14	440		32	440	
15	440		33	440	
16	440		34	440	
17	440		35	440	

Table C-17: Mailbox Table (FLASH 68)

Index	Group	ID Digits	Index	Group	ID Digits
36	440		51	440	
37	440		52	440	
38	440		53	440	
39	440		54	440	
40	440		55	440	
41	440		56	440	
42	440		57	440	
43	440		58	440	
44	440		59	440	
45	440		60	440	
46	440		61	440	
47	440		62	440	
48	440		63	440	
49	440		64	440	
50	440		65	440	

Table C-17: Mailbox Table (FLASH 68)

Index	Group	ID Digits	Index	Group	ID Digits
66	440		85	440	
67	440		86	440	
68	440		87	440	
69	440		88	440	
70	440		89	440	
71	440		90	440	
72	440		91	440	
73	440		92	440	
74	440		93	440	
75	440		94	440	
76	440		95	440	
77	440		96	440	
78	440		97	440	
79	440		98	440	
80	440		99	440	
81	440		100	440	
82	440		101	440	
83	440		102	440	
84	440		103	440	

Table C-17: Mailbox Table (FLASH 68)

Index	Group	ID Digits	Index	Group	ID Digits
104	440		118	440	
105	440		119	440	
106	440		120	440	
107	440		121	440	
108	440		122	440	
109	440		123	440	
110	440		124	440	
111	440		125	440	
112	440		126	440	
113	440		127	440	
114	440		128	440	
115	440		129	440	
116	440		130	440	
117	440		131	440	

Table C-17: Mailbox Table (FLASH 68)

Index	Group	ID Digits	Index	Group	ID Digits
132	440		151	440	
133	440		152	440	
134	440		153	440	
135	440		154	440	
136	440		155	440	
137	440		156	440	
138	440		157	440	
139	440		158	440	
140	440		159	440	
141	440		160	440	
142	440		161	440	
143	440		162	440	
144	440		163	440	
145	440		164	440	
146	440		165	440	
147	440		166	440	
148	440		167	440	
149	440		168	440	
150	440		169	440	

Table C-17: Mailbox Table (FLASH 68)

Index	Group	ID Digits	Index	Group	ID Digits
170	440		184	440	
171	440		185	440	
172	440		186	440	
173	440		187	440	
174	440		188	440	
175	440		189	440	
176	440		190	440	
177	440		191	440	
178	440		192	440	
179	440		193	440	
180	440		194	440	
181	440		195	440	
182	440		196	440	
183	440		197	440	

Table C-17: Mailbox Table (FLASH 68)

Index	Group	ID Digits	Index	Group	ID Digits
198	440		217	440	
199	440		218	440	
200	440		219	440	
201	440		220	440	
202	440		221	440	
203	440		222	440	
204	440		223	440	
205	440		224	440	
206	440		225	440	
207	440		226	440	
208	440		227	440	
209	440		228	440	
210	440		229	440	
211	440		230	440	
212	440		231	440	
213	440		232	440	
214	440		233	440	
215	440		234	440	
216	440		235	440	

Table C-17: Mailbox Table (FLASH 68)

Index	Group	ID Digits	Index	Group	ID Digits
236	440		246	440	
237	440		247	440	
238	440		248	440	
239	440		249	440	
240	440		250	440	
241	440		251	440	
242	440		252	440	
243	440		253	440	
244	440		254	440	
245	440		255	440	

Table C-18: Exception Tables (FLASH70)

Allow Table A		Allow Table B	
BIN 1		BIN 1	
BIN 2		BIN 2	
BIN 3		BIN 3	
BIN 4		BIN 4	
BIN 5		BIN 5	
BIN 6		BIN 6	
BIN 7		BIN 7	
BIN 8		BIN 8	
BIN 9		BIN 9	
BIN 10		BIN 10	
BIN 11		BIN 11	
BIN 12		BIN 12	
BIN 13		BIN 13	
BIN 14		BIN 14	
BIN 15		BIN 15	
BIN 16		BIN 16	
BIN 17		BIN 17	
BIN 18		BIN 18	
BIN 19		BIN 19	
BIN 20		BIN 20	
Deny Table A		**Deny Table B**	
BIN 1		BIN 1	
BIN 2		BIN 2	
BIN 3		BIN 3	
BIN 4		BIN 4	
BIN 5		BIN 5	
BIN 6		BIN 6	
BIN 7		BIN 7	
BIN 8		BIN 8	
BIN 9		BIN 9	
BIN 10		BIN 10	

Table C-18: Exception Tables (FLASH70)

Special Table 1

Area Code		
Office Codes		

Special Table 2

Area Code		
Office Codes		

Special Table 3

Area Code:		
Office Codes		

Special Table 4

Home Area Code:		
Office Codes		

Table C-19: Least Cost Routing (FLASH 75)

CO Line Groups						
1	**2**	**3**	**4**	**5**	**6**	**7**

Daily Start Time Table		
Start Time	**Default Time**	**Changed Time**
1	0800	
2	1700	
3	2300	
4	####	

Weekly Schedule Table							
Start Time (From Daily Start Table)	**Time Period Route List**						
	MON	TUE	WED	THU	FRI	SAT	SUN
1							
2							
3							
4							

Toll Information Route List Table	Default 00	

Table C-20: Route List Table

	Route 00-15)	Time (1-4)	Cost	Group (1-7)	Insert/Delete (00-19)	LCR COS
1 + 10 Digits LD Toll Route	00	1				
		2				
		3				
		4				
7-Digit Local Route	01	1				
		2				
		3				
		4				
1+7 Digits Toll Route	02	1				
		2				
		3				
		4				
Defined By Default	03	1				
		2				
		3				
		4				
	04	1				
		2				
		3				
		4				
	05	1				
		2				
		3				
		4				
	06	1				
		2				
		3				
		4				
	07	1				
		2				
		3				
		4				

Table C-20: Route List Table

	Route 00-15)	Time (1-4)	Cost	Group (1-7)	Insert/Delete (00-19)	LCR COS
Defined By Default	08	1				
		2				
		3				
		4				
	09	1				
		2				
		3				
		4				
	10	1				
		2				
		3				
		4				
	11	1				
		2				
		3				
		4				
	12	1				
		2				
		3				
		4				
	13	1				
		2				
		3				
		4				
	14	1				
		2				
		3				
		4				
	15	1				
		2				
		3				
		4				

Table C-21: Insert/Delete Tables

Table			Digits Dialed
00	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
01	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
02	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
03	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
04	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
05	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
06	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
07	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
08	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
09	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	

Table C-21: Insert/Delete Tables

Table			Digits Dialed
10	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
11	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
12	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
13	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
14	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
15	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
16	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
17	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
18	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
19	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	

Table C-22: 3-Digit Area/Office Code Route List Table

Non-Leading (0) Leading (1)	Code (NNN)	Route (RR)	No. of Digits	6-Digit (Y/N)	Non-Leading (0) Leading (1)	Code (NNN)	Route (RR)	No. of Digits	6-Digit (Y/N)
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				

Table C-23: 6-Digit Area Code/Routing Table

Area Code	Route					

Table C-24: 6-Digit Office Code Table

Code #	Exception Codes (XX)	Route (00-15) (RR)	Code #	Exception Codes (XX)	Route (00-15) (RR)
1			11		
2			12		
3			13		
4			14		
5			15		
6			16		
7			17		
8			18		
9			19		
10			20		

Index

Numerics

A

B

C

D

E

N

O

P

R

S

T

U

V

Z

WE'RE TALKING
TECHNOLOGY

www.vodavi.com

8050-11