Xplus100 Installation & Maintenance Manual

Record of Revision

Release Date	Version	Supersedes	Description
May 2008	Initial		Initial Release

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1 Introduction

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This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used properly, that is, in strict accordance with the instruction manual, may cause interference to radio and television reception. This equipment has been tested and found to comply with the limits for a Class A computing device in Subject J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference by one or more of the following measures:

1. Reorient the receiving antenna,
2. Relocate the key service unit and key telephones with respect to the receiver,
3. Move the equipment from the receiver,
4. Plug the key service unit into a different outlet so that the equipment and receiver are on different branch circuits.

FCC Information

Provide the Telephone Company with the following FCC information:

TABLE 1.1 FCC Information

ITEM	Specification
Type of Service	The system is designed for use with standard telephone lines. Direct connection to party lines or coin-operated phones is prohibited.
FCC Registration Number	
Ringer Equivalence	0.0B
Network Address Signaling	Code E
Service Order Code	9.0F
Facility Interface Code	02LS2
Required Network Interface	Code RJ11C

About this manual

This manual provides installation instructions for the System. The following table summarizes the sections in this manual:

TABLE 1.2 Chapters

Chapter	Title	Purpose
1	Notices and FCC	
2	System Configuration	Provides an overview of the system's components, including part numbers, model numbers, and various configuration
3	Specifications	Provides systems specification.
4	Installation	Describes physical installations requirements, module installation, and wiring for the system.
5	Telephone Operation	Provides feature codes, and feature operation for digial and analog telephones
6	Database Administration	Describes the process of programming the system software and customizing the database to meet customer requirements. Including the Menu Bypass Code (MBC) Table See "Menu Bypass Codes" on page 152.

Related Documents:

Quick Reference Card - SLT and Digital Telephone

User Guide - SLT and Digital Telephone

Quick Reference Card

2 Components

This Hybrid Telephone System has a modular dual cabinet flat-pack design, which comes configured with 3 Central Office Lines by 8 Digital Extensions and can expand to a 24 Central Office lines by 48 Digital Extensions and 8 analog extension ports. In addition, the system comes equipped to receive Caller ID from the telephone company, if it is supplied, and any analog telephone with Caller ID capability will also receive Caller ID.

On the Central Control Board (CCB) there are two Music-on-Hold inputs one External Paging Port, one Loud Bell Contact and two RS232c ports one for SMDR and the other one for Remote Programming. There are two different voice mail systems, a 12 port hard drive and an 8 port flash voice mail system.

The following is a list of available models and their corresponding model numbers:

TABLE 2.1 Part Numbers and Descriptions

Part Number	Model	Description
8510-01	308 Communications Server 1	Xplus100 Primary Communications Server 1
8520-01	308 Communications Server 2	Xplus100 Expansion Communications Server 2
8540-00	4SLT	4 Port Analog Module
8550-08	8EKT	8 Port Digital Expansion Module
8560-00	Modem	2400 bps Modem Module
8531-03	3CO with CID	3 Port CO Line Module with CID
8550-08	8 CO with CID	8 Port CO Line Module with CID (VS1 Only)
8580-00	Flash VPS	8 Port Flash Voice Processing System
8585-00	Hard Drive VPS	12 Port Hard Drive Voice Processing System

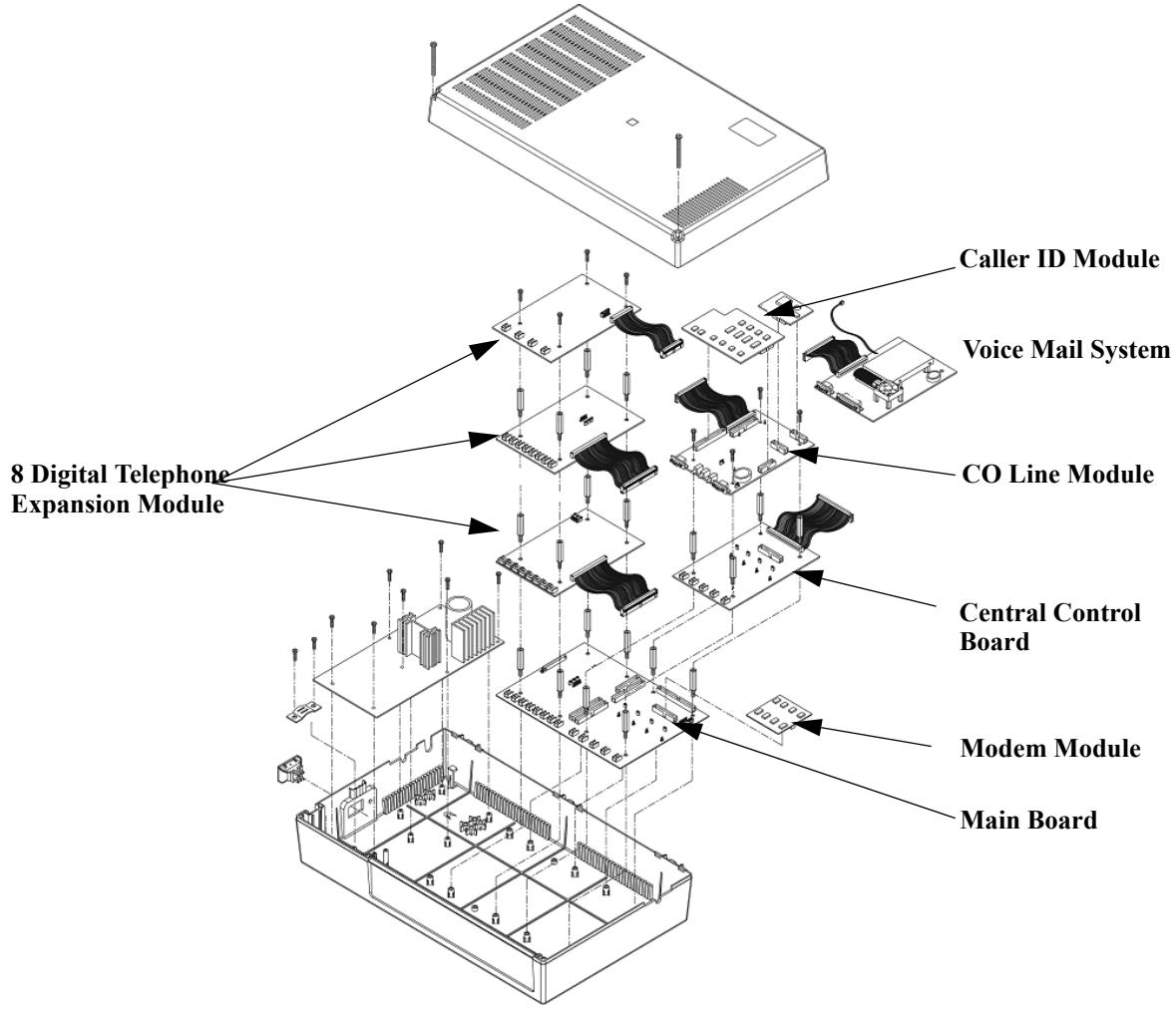
System Hardware

KSU

The communications server is a dual flat pack, modular system, which can grow from 3 CO Lines and 8 digital extensions to 20 CO Lines and 48 digital extensions with both cabinets. Each module connects to the Central Control Board using a special "Mate Lock" connector and flat ribbon cable. Once powered up, the system will automatically identify each additional cabinet and module that is installed.

Figure 1. shows how the additional modules are installed.

FIGURE 1. **Installing Additional Modules**



Configuration Matrix

At default, the system comes equipped with 3 Central Office Lines, 8 Digital digital extensions, but because of the modular design the system can be equipped with affordable modules to increase the system size to a maximum of 20 Central Office Lines, 48 Digital Extensions and 8 Analog Extensions. In addition, There are two different voice processing systems, a 12 port hard drive and an 8 port flash voice mail system.

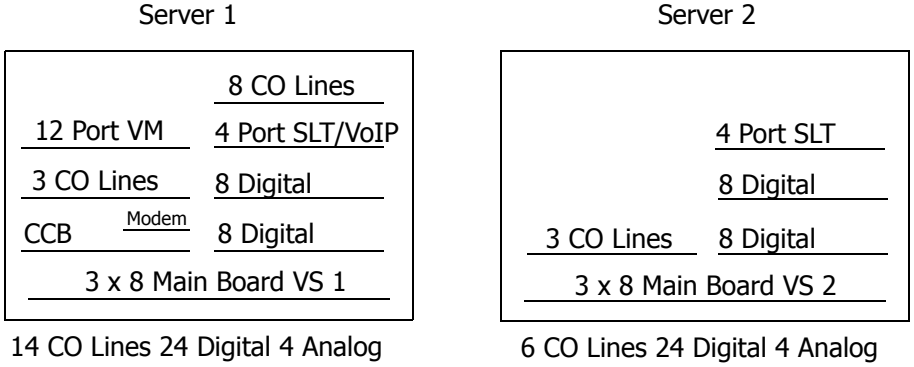
The Extension Configuration Matrix is a quick way to determine what components are needed to achieve a specific configuration. Use the Gray lines below to see the possible configurations for the communications server CS1 and CS2. For Example, VS1 and VS2 can both achieve the same number of Digital Ports. Use the gray lines to see what combinations are possible in each Communications Server.

Note: *Each VS1 and VS2 can have a maximum of 24 digital extensions.*		VS1			
			Main Board	1 - 8EKT	2 - 8EKT
VS2			8	16	24
	Main Board	8	16	24	32
	1 - 8EKT	16	24	32	40
	2 - 8EKT	24	32	40	48

The CO Line Configuration matrix works the same way. Select the total CO Lines required, and then select the components needed.

Note: *The 8 port CO Line Module and the VoIP Module only work in VS1*		VS1				
			Main Board	3 Port Expansion	11 Port Expansion	3 & 11 Port Expansion
VS2			3	6	11	14
	Main Board	3	6	9	14	17
	3 Port Expansion	6	9	14	17	20

Find the hardware requirements on the configuration matrix to determine the best configuration to use. For example, if the configuration is 11 CO Lines and 24 digital extensions. This configuration can be accomplished with or without the CS2. However, to eliminate added costs, it would be best to use just CS1, with 2 - 8 port EKT modules and 1 - 3 port and 1 - 8 port expansion modules.



14 CO Lines 24 Digital 4 Analog

6 CO Lines 24 Digital 4 Analog

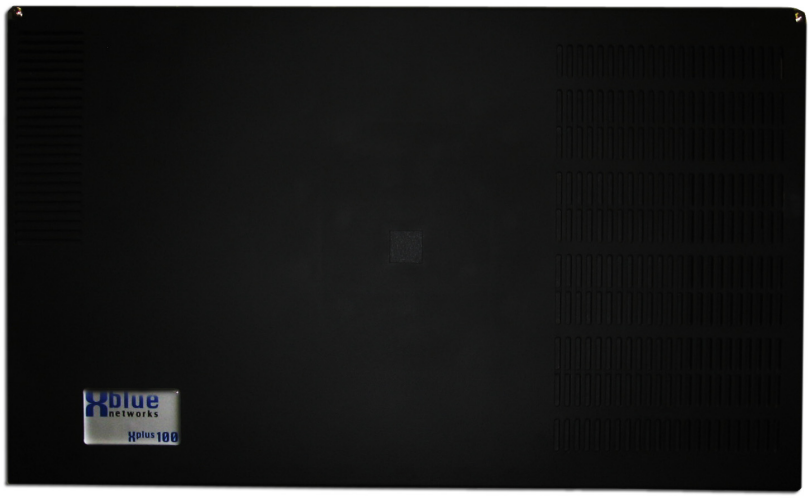
Communications Server 1

The basic system comes with a power supply, and a motherboard configured as a 3 x 8. The Motherboard has an integrated Main Distribution Frame (MDF), designed to eliminate costly ancillary products, such as M66 split blocks, and is used like a patch panel. Each module is connected via ribbon cable to the main board, and mounts on top of the previous module.

Available module are:

- 4 Port Analog Module
- 8 Port Digital Module
- 3 CO Line Module
- 8 CO Line Module
- VoIP Gateway Module
- Flash Voice Mail System
- Hard Drive Voice Mail System

The Main Xplus100 Voice Server



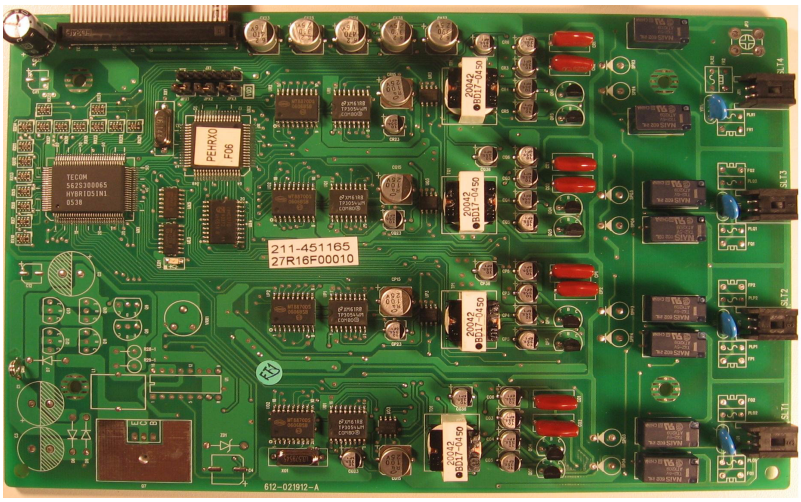
Module Placement

Modules are added, when needed, and usually placed on top of the existing modules. Each module plugs into the Central Control or Main board and comes equipped with a unique sized "mate and lock" connector which is specifically sized for that module. Return power to the system once connected, and the modules will "self identify" and become operational.

Analog Extension Module 4 Port

The analog extension module is equipped to accommodate 4 standard 2500 analog devices such as a FAX machine, wireless or non-wireless telephones. Each server (CS 1 and CS 2) can accommodate 1 additional 4 port analog card for a total of 8 analog devices. However, if the VoIP module is used, the CS1 will not accommodate any analog devices.

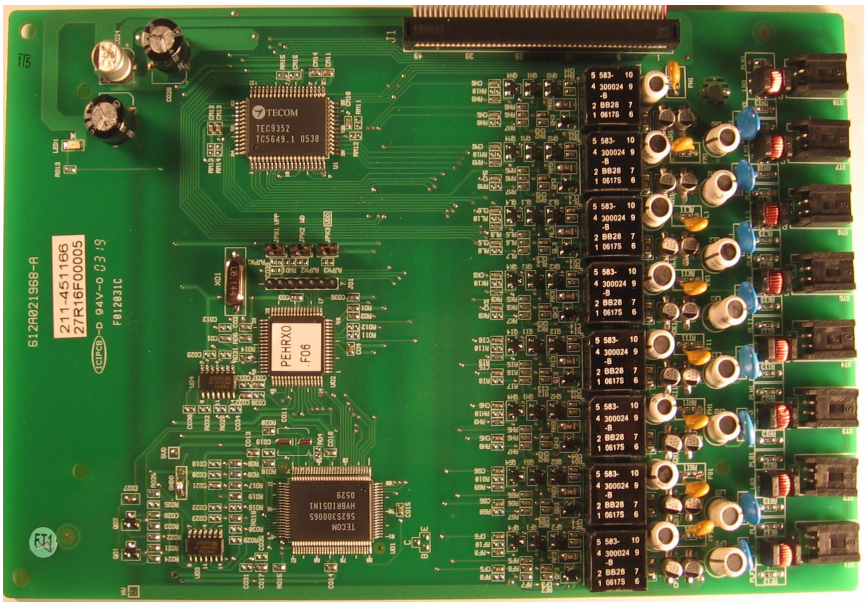
4 Port Analog (SLT) Module



Digital Expansion Module 8 ports

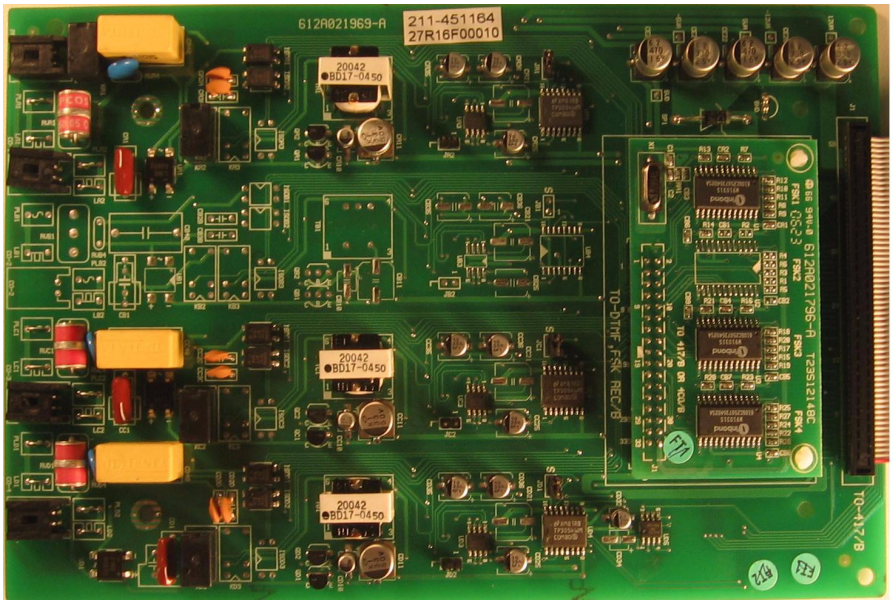
The Digital Expansion module is equipped with 8 digital extension ports which will accommodate 8 digital devices such as display telephones. The 8-port digital card comes with a built in "Patch Panel" MDF, which eliminates costly peripheral equipment. Each server (CS 1 and CS 2) comes configured with 8 digital ports and can accommodate 2 additional 8 port digital devices or a total of 48 ports.

8 Port Digital Telephone Module



3 Port CO Line interface

This 3 port CO line interface will accommodate an additional 3 loop start - analog CO Lines and comes equipped to accept type 1 FSK both Name and Number Caller ID. Each server (CS 1 and CS 2) comes configured with 3 analog CO Lines and can accommodate 1 additional 3 loop start analog CO Lines or a total 12. For larger configurations see 8 port CO Line interface module.

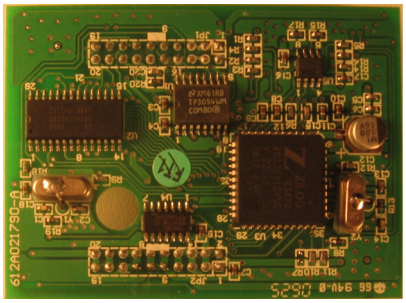


8 Port CO Line interface

This 8 port CO line interface will accommodate an additional 8 loop start - analog CO Lines and comes equipped to accept type 1 FSK both Name and Number Caller ID. Each server (CS 1 and CS 2) comes configured with 3 analog CO Lines, but only CS 1 can accommodate 1 additional 8 loop start analog CO Line or a total 14 in the first server and 6 in the second for a total of 20 analog CO Lines.

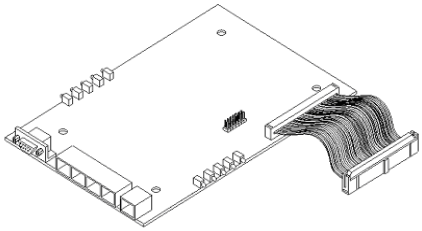
Modem Module

The modem module can be added to allow remote programming of system features and supports 2400 bps.



VoIP Gateway

An integrated VoIP gateway can be used to connect multiple systems together, SIP Trunks, or remote extensions. In addition, the VoIP Module will support FAX transmission protocol. The VoIP gateway has programmable encoders used to minimize call band width.



Voice Processing System

The Integrated Voice Processing System (VPS) can be added to the main cabinet to provide Voice Mail functionality as well as Automated Attendant.

3 System Specifications

Specifications

Power Requirements

TABLE 3.1 Power

A.C. Power	110 or 220 V AC (Selectable)
Frequency	60 Hz
Power Consumption	100 Watts max
Battery Draw	Input 0.5A Output: 2.5A
Current Rating (Max)	1 Amp AC, 3 Amp DC
Loud Bell Contact	1 Amp DC (Do not use AC!)

Dimensions

TABLE 3.2 System Dimensions - Measurement in Inches

KSU - widest dimension	19 7/8 L x 12 1/8 W x 5 3/8 H

Mounting

TABLE 3.3 Mounting Methods

Mounting Methods	Wall Mount Table Mount

Operating Environment:

TABLE 3.4 Environmental Conditions

Temperature	32° to 85° degrees Fahrenheit
Relative Humidity	5 to 90 percent Non-Condensing

Wiring:

TABLE 3.5 Cable Layout

Digital Telephone	2 Wire - Star Type
Single Line Telephone	2 Wire - Star Type

Maximum System Configurations:

TABLE 3.6 System Maximums

CO Lines (Analog Type)	3 on main board 3 on each Expansion Module (Maximum of 2) in each Communications Server 17 Maximum CO Lines in both CS1 and CS2
Voice over Internet Protocol (VoIP)	4 VoIP SIP Channels which can be used to connect a remote extension or to connect multiple systems together.
Digital Telephones	8 on main board in CS 1, and 8 on the main board in CS 2. 8 on Each Expansion Module, a maximum of 2 additional modules in each KSU. 48 maximum digital extensions using 8 port modules both CS1 and CS2.
Single Line Telephone Ports	8 Analog ports can be added to the system. 4 in CS1 and 4 in CS2. If the VoIP module is used in CS1, Analog ports will only be available in CS2.
Voice Mail	1 12-Port Hard drive or 1 8-port Flash Voice Processing System may be installed in the system.

CO Line Interface Specifications:

TABLE 3.7 CO Line Interface Specifications

Analog Signaling	DC Loop
Dialing	DTMF (Touch Tone)
Loop Impedance	600 / 900 Ohms
Ring	18~40 Hz, 30~105V AC
Loop Length	0.5K Ohms
Loop Current	20-100 mA

Switching Technology:

TABLE 3.8 Switching Matrix

Digital	Time Division Multiplex (TDM), Pulse Code Modulation (PCM)

Extension Interface Specifications:

TABLE 3.9 CO Line Interface Specifications

Dialing	DTMF (Touch Tone)
Loop Impedance	600 / 900 Ohms
Loop Length	80 Ohms for SLT Maximum 60 Ohms for Digital Key Telephone
Ringer	70 V AC, 35 Hz SLT

Transmission Specifications

Idle Channel Noise	<-70 dB
TX Reference Level	-48 dB
RX Reference Level	90~46 dB
Trunk to Extension Loss	<2dB
Return Loss	>14 dB
Longitudinal Balance	>60 dB
CrossTalk Attenuation	>70 dB

Maximum Cable Length:

TABLE 3.10 Digital Extension Wiring

26 AWG	650 Ft.
24 AWG	1133 Ft.
22 AWG	1586 ft.

TABLE 3.11 Single Line Telephone Extension Wiring

26 AWG	850 Ft.
24 AWG	1416 Ft.
22 AWG	1983 Ft.

Station Message Detail Recording (SMDR)

Station Message Detailed Recording, monitors and reports, via serial printer or call accounting software, telephone calls, which can be either inbound, outbound or both, for desired extensions.

TABLE 3.12 SMDR Output

O	104	701	3671153	00:00	09/21	13:16:49	00:30:36	
L	101	700	14802224587	00:00	09/21	16:49:37	00:03:25	
L	101	700	7939669	00:00	09/21	17:25:19	00:00:21	
O	101	701	16507883687	00:00	09/22	09:37:30	00:00:51	
O	105	700	3675303	00:00	09/22	10:40:33	00:00:16	123
O	109	705	6217951555	00:00	09/22	11:06:48	12:06:00	
O	101	702	17706578898	00:00	09/22	11:14:12	22:45:09	
O	105	704	14802245665	00:00	09/22	13:27:07	33:09:55	123
I	108	703	1653282658	00:00	09/23	09:00:01	03:55:38	
I	108	703	Girl, Scouts USA	00:00	09/23	09:00:01	03:55:38	
I	112	701	6541287	00:00	09/23	09:10:14		
I	112	701	Williams, Mark	00:00	09/23	09:10:14		

Field	Field Position	Description
Direction	1	"O" Indicates an outgoing call "H" Indicates an outgoing call that was transferred "I" Indicates an incoming call "L" Indicates a conference call "A" Indicates an outgoing call that was transferred by the attendant
Extension Number	3~6	The last user connected to the call
Trunk Number	8~11	The outside line on which the call was made or received
Telephone Number	13~32	The dialed number for an outgoing call. The calling party's number as provided by Caller ID service for an incoming call. This field will remain blank on incoming calls if no caller ID is received or the system is not equipped for incoming Caller ID.
Ringing Duration	34~38	The duration of the ring is shown in mm:ss where mm=minutes and ss=seconds. The duration reflects the total time that the call rang.
Start Date	40~44	The date is shown in MM/dd format, where MM=month and dd=day.
Start Time	46~53	The start time is shown in hh:mm:ss format where hh=hours, mm=minute, and ss=seconds
Duration	55~62	The duration of the call is shown in hh:mm:ss format, where hh=hour, mm=minutes and ss=seconds
Account Code	64~71	Any Account Code (05-02 Password) entered to place the call.
Detection	74	"$" indicates the system detected the Polarity reversal (PR) signal.

4 Installation

Installation

Basic Tools and Supplies

1. Minimum of Category 3 - 3 or 4 twisted pair cable run from the MDF to each telephone terminal device, in a Star Topology.
2. 4 or 6 conductor modular jack assemblies for all extension terminals.
3. Uninterrupted Power Supply (UPS) system to protect the system in the even of a voltage spike.
4. Standard telephone hand tools and mounting hardware for the KSU, MDF backboard, terminal blocks, modular jack assemblies, etc.

Product safety and safety guidelines

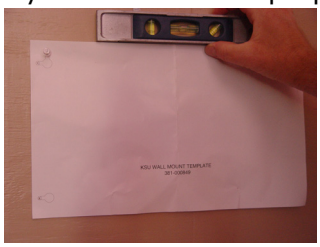
1. Never perform any wiring in a wet location or while standing in water.
2. Do not perform telephone wiring during a lightning storm.
3. To maintain the system in good operation, an isolated, dedicated outlet for the system is needed. The outlet should be AC power supply with 120 ~ 240V ± 10% at 50 ~ 60Hz.
4. The install location should be well ventilated, have an optimum temperature range of 40° ~ 85° F and a relative humidity range of 20 ~ 80%.
5. For cooling purposes, ample air space should be provided for the KSU, the KSU should not be exposed to direct sunlight, heat or dust.
6. Do not install the system in a strong magnetic field, such as those generated by heavy motors, television, copy machine or some kitchen appliances.
7. The system should be located in an electrically noise-free environment to avoid interference.
8. To reduce interference, use independent wiring for extensions connected to this system.
9. Do not include connections for antenna, power supplies and/or internet connections in the same sheath (cable).
10. Earth ground for the KSU should less than 3 Ohms.
11. It is strongly recommended that the system be plugged into a UPS, with a 24 V battery source in or to maintain system operation during a power failure. When both cabinets are connected, separate UPS Systems will ensure minimal down time.

Note:

The manufacturer warranty does not cover damage caused by power line surges or lightning damage.

Installation Planning

1. The system should be located within 5 feet of the isolated dedicated 120 ~ 240V ± 10% at 50 ~ 60Hz, and connected to a UPS. Do not use an extension cord!
2. Locate the Telephone Company demarcation point and extend them to the MDF.
3. The system (MDF) should be mounted on a painted (white or black) 3/4 inch plywood back board. Be sure that the back board is level and at least 24, but less then 60 inches off the floor. Also, be sure that it is large enough for the system and all of the peripheral equipment.



4. Locate a suitable, known good, earth ground such as a cold water pipe - preferably within 10 feet of the MDF. It is suggested that a cold water pipe, when used as a ground, is traced to its point of origin to ensure that there is no non-metal sections, which may compromise the ground.

5. It may be easier to install all expansion modules into the system before mounting it on the Back-board.

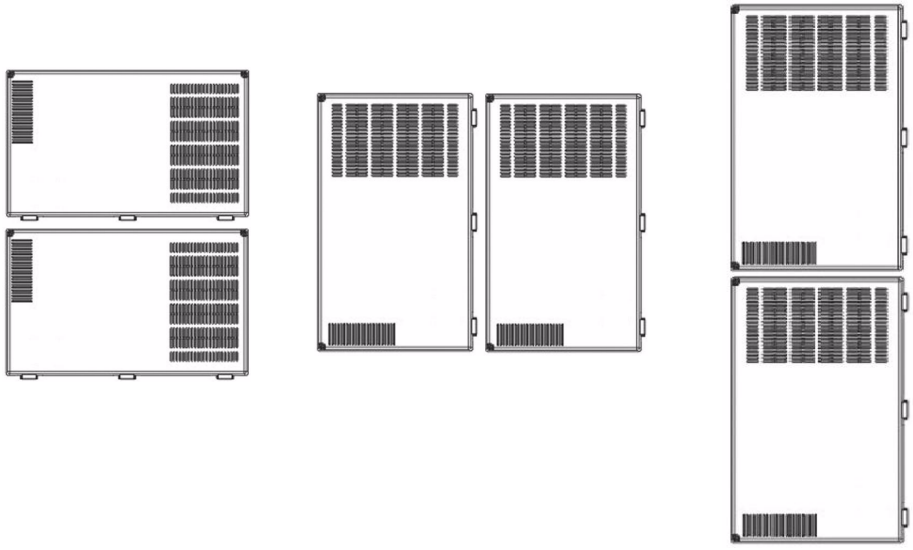
Installing Communications Servers

TABLE 4.1 KSU Specifications

AC Power Source	90~240V AC - 50~60 Hz
Output Voltage	24V DC (24~35VDC) - 4A
Charging Voltage	26.2~27 V DC - .0A
Consumption of Charging Voltage	0.5A
Battery Back up	24V DC - 20 AH
Ringer Voltage	65 Vrms
Outside Dimension of each Cabinet at the base	18 3/4 L x 10 5/8 W x 3 7/8H

1. Locate the supplied template
2. Place it on the pre-installed back board
3. Remember to leave enough room for both cabinets

4. The Cabinet is designed to be mounted in one of three configurations. Select the one that best fits on your back board.



5. For each cabinet, screw the provided, number 10 pan head screws, into the back board using the template.
6. Place the cabinet on the screws and anchor the unit.

Main Board

The main board provides the interface for up to 3 loop start CO Lines and 8 digital extension ports. In addition, it comes equipped with connectors to add additional modules to a maximum of 17 analog loop start CO Lines, 40 digital extension ports, and 8 analog ports as well as an optional VoIP modules.

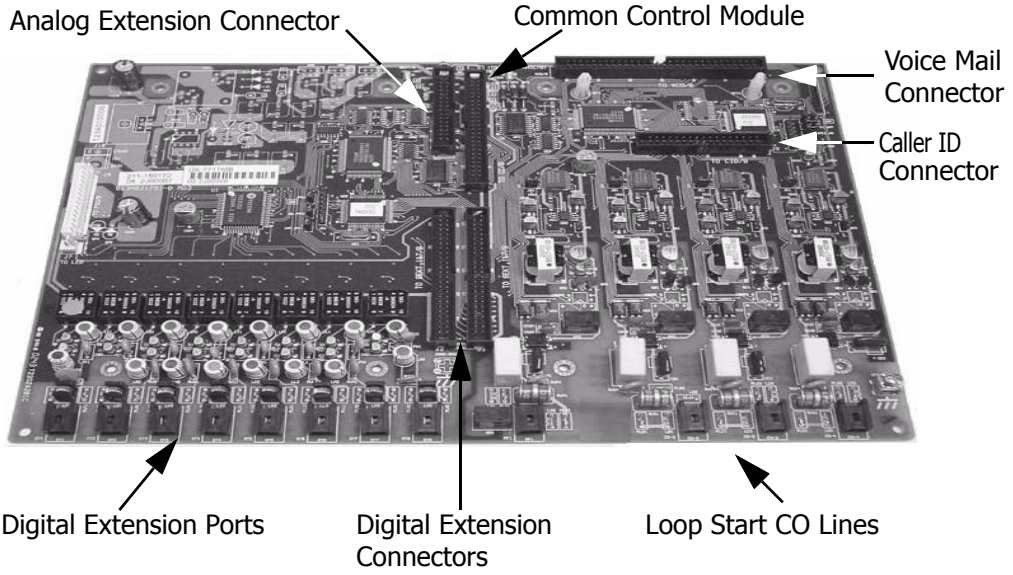
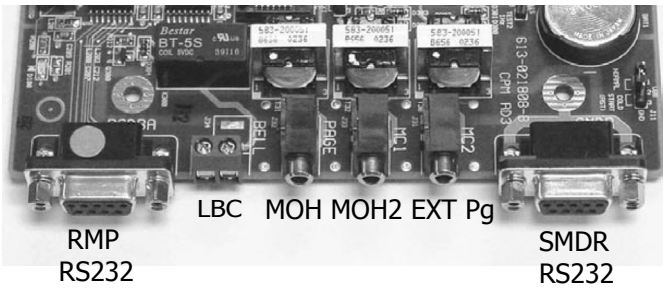


TABLE 4.2 Digital Extension Directory Numbers

Communications Server 1		Communications Server 2	
Server 1	Extension Numbers 101 - 108	Server 2	Extension Numbers 141 - 148
8 Port Digital Module	Extension Numbers 109 - 116	8 Port Digital Module	Extension Numbers 149 - 156
8 Port Digital Module	Extension Numbers 125 - 132	8 Port Digital Module	Extension Numbers 165 - 172

Central Control Board



The Central Control Module, also known as the Common Control Board, is used to control all digital voice switching and call processing. The CCB provides a ribbon cable that extends to the main board located in system. In addition, connection sockets are provided to integrate the following components:

- 8/12 Port voice mail and auto attendant
- Modem module for remote programming
- Connector for communications server 2
- Other connections found on the CCB:

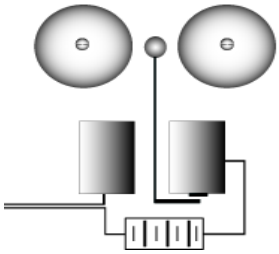
- 2 RS232c 9 pin serial ports (1 for SMDR, 1 for Remote Programming Software)
- 2 Music On Hold (MOH) Connectors for MOH and Background Music
- Loud Bell Contact (DC ONLY)
- External Page relay - for ancillary distributed or individual paging devices

Adding Loud Bell Control

One "dry-contact" (rated at 24VDC/1A) is provided on the CCB for use with external ringing devices, which may be programmed to activate the dry contact whenever programmed CO Lines ring.

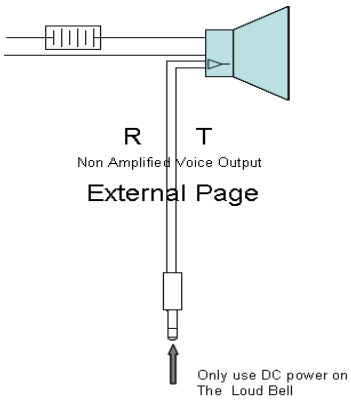
Caution

DO NOT USE AN AC Power supply, the bell will ring continuously.



Adding an External Page

The External Page Port is designed to receive an external paging unit (amplifier) to allow voice paging over external speakers. The amplifier interface should be 600 ohms.



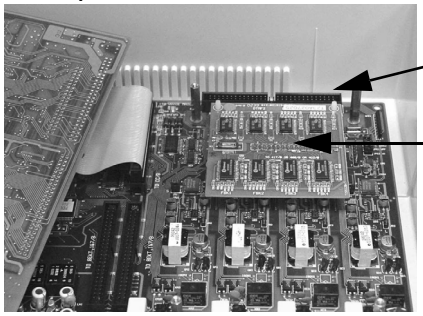
Module Installation

CO Line Modules

TABLE 4.3 CO Line Directory Numbers

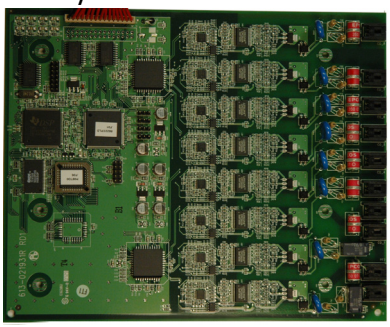
Communications Server 1		Communications Server 2	
Server 1	CO Numbers 700 - 702	Server 2	CO Numbers 706 - 708
3 Port CO Module	CO Numbers 703 - 705	3 Port CO Module	Extension Numbers 709 - 711
8 Port CO Module	CO Numbers 712 - 719		

3 Port Analog CO Line Expansion Modules



1. Remove the cover.
2. Remove the Common Control Module (CCB)
3. Locate the pin connector socket at the back of the main board.
4. Insert the module, but before securing it, plug the ribbon cable into the pin connector socket.
5. Use the supplied stand-offs to secure the CO Line module to the CCB.
6. Replace the CCB and secure it with the previously removed screws.
7. Replace the cover, and power the system up.

8 Port Analog CO Line Expansion Modules



1. Remove the cover.
2. Locate the pin connector socket on the Common Control Module (CCB).
3. Insert the module, but before securing it, plug the ribbon cable into the pin connector socket.
4. Use the supplied stand-offs to secure the CO Line module to the CCB.
5. Replace the CCB and secure it with the previously removed screws.
6. Replace the cover, and power the system up.

Analog Extension Module

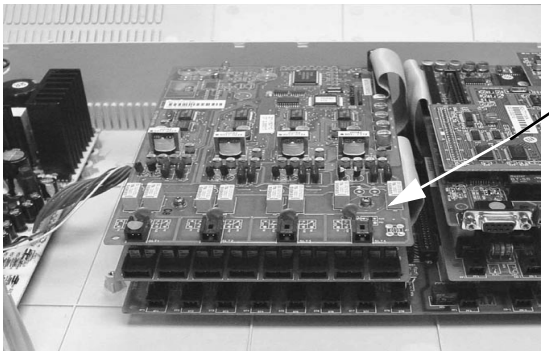
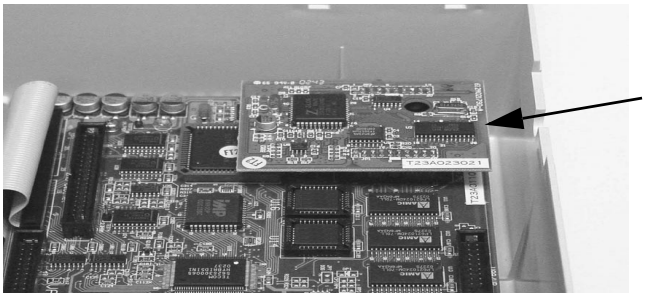


TABLE 4.4 Analog Extension Directory Numbers 4-Port Module

Communications Server 1		Communications Server 2	
4 Port Analog Module	Extension Numbers 181 - 184	4 Port Analog Module	Extension Numbers 185 - 188

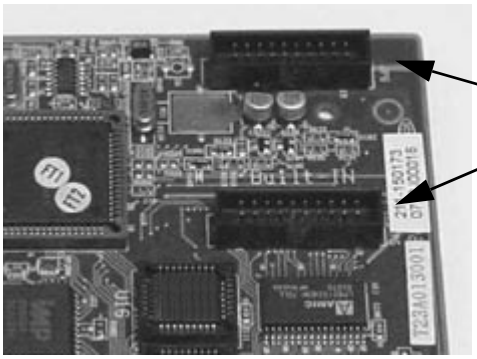
1. Remove the KSU cover
2. Remove the screws from the motherboard, and replace them with the brass-colored stand-off posts supplied with the Analog Extension Module.
3. Insert the Module, and plug the ribbon cable into the pin connector socket labeled "SLT/Analog".
4. Place the previously removed screws into the top of the stand-offs to secure the Option Module or place the standoffs that are supplied with the Voice Mail system.
5. Replace the cover, and power the system up.

Modem Module



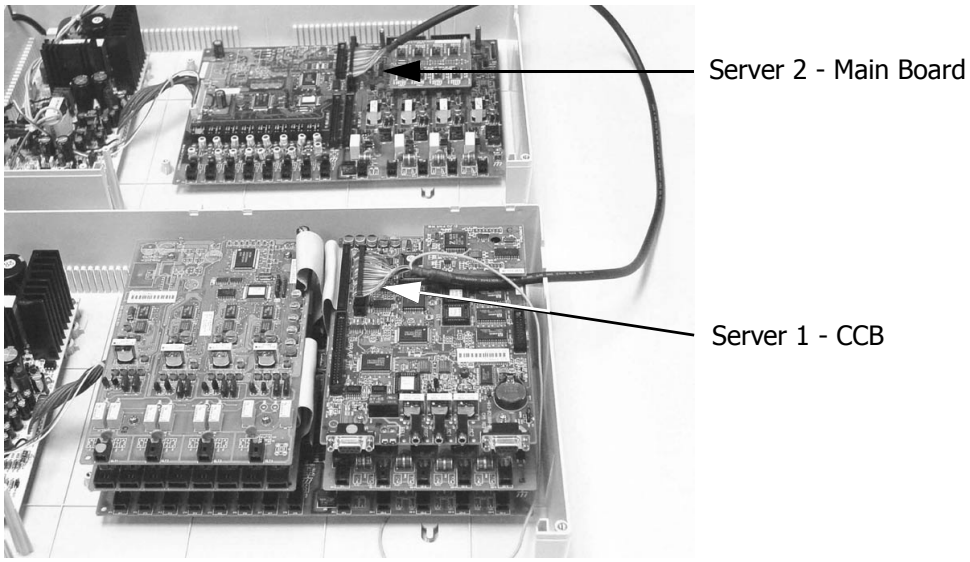
1. Remove the KSU Cover

2. Locate the Connector labeled "Modem", which is located on the Common Control Module.

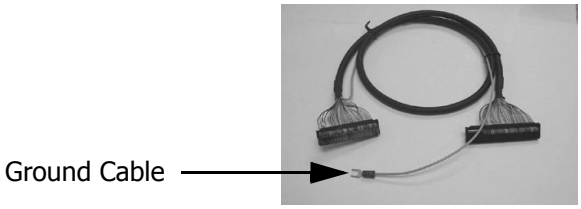


3. Press the modem in firmly.
4. Replace the cover, and power the system up.

Connect from Server 1 to Server 2

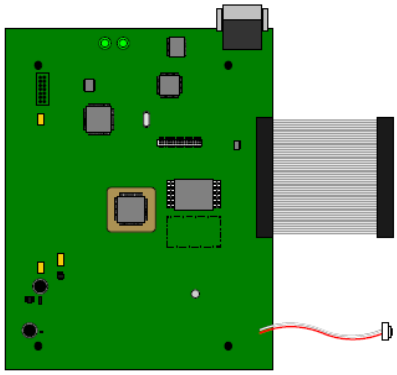


1. Open both servers
2. Locate the connector on the CCB.
3. Connect the cable that comes with server2, from the "CCB" connector in server2 to the CCB in server1.
4. Be sure to connect the ground cable.



5. Replace the cover, and power the system up.
6. Both cabinets will begin running simultaneously.

Voice Processing System

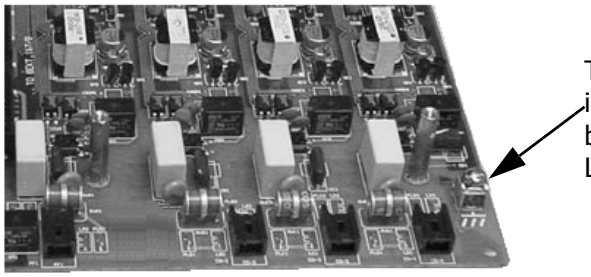


1. The Voice Processing System is installed on top of the CCB module.
2. Insert the brass-colored stand-off posts, which are supplied with the voice mail system.
3. Remove the plastic protective cover from inside the KSU.
4. Insert the Module, and plug the ribbon cable into the pin connector socket labeled "VM/B".
5. Place the previously removed screws into the top of the stand-offs to secure the Module.
6. Replace the cover, and power the system up.

The fully integrated voice mail will be fully operational, within minutes of system being powered up. Therefore, to maintain proper database integrity it is important to understand the proper shutdown procedure.

1. From any digital telephone enter Feature # 0
2. Followed by the attendant password (at Default the password is 9 9 9 9)
3. Press back
4. The display will update SHUT DOWN VM
5. Press show
6. Press Go
7. When the display returns to SHUT DOWN VM
8. The system can be safely powered down

System Grounding



The Grounding Lug is located on the main board next to the CO Line Connectors.

A good earth ground is necessary to ensure proper operation of the system. Carefully check that the system is connected to a reliable grounding path. Generally, the gauge of the ground wire

should directly correlate with the distance from the ground source (i.e., a greater distance from the grounding source requires a larger gauge of grounding wire).

The ground wire should be connected to the ground lug located on the motherboard in the cabinet. The distance of ground wire should be kept as short as possible.

Lightning Protection

It is good practice to protect all CO Lines and Extensions with proper lightning surge arrestors, such as gas discharge tubes, which guards against damaging surges caused by non-direct lightning strikes. Failure to provide proper lightning protection may cause damage to the system.

Central Office (CO) Line Installation

The system connects to the telephone company lines using a two-wire (single pair) cable, connected to a RJ11 or RJ21X, then connected to the built in MDF Patch Panel on the motherboard.

Surge Protection Considerations

Transitory voltage spikes, if induced onto CO lines, can travel through the cable and into the common equipment. The telephone company offers basic protection against this condition, but it is usually designed to protect the CO circuits and should, therefore, not be relied upon for total protection. To help protect the system from external voltage surges, the manufacturer recommends that gas discharge tubes, or similar primary protection devices, be installed and properly grounded on all lines.

Adding a Music Source

A music source can be connected to the MOH/BGM (External Music) port using the supplied 3.5 mm connector.

Wiring and Connectors

Maximum Cable Length

TABLE 4.5 Digital and Door Phone Extension Wiring

26 AWG	650 Ft.
24 AWG	1133 Ft.
22 AWG	1586 ft.

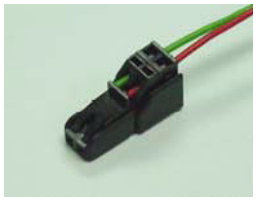
TABLE 4.6 Single Line Telephone Extension Wiring

26 AWG	850 Ft.
24 AWG	1416 Ft.
22 AWG	1983 ft.

Wiring Procedure 2 – Single Pair

All CO Lines and Digital and Single Line extensions connect to the system using the supplied connectors. These connectors incorporate a MDF Patch Panel that makes Moves, Adds and Changes quick and easy. Use the following steps to connect the extensions to the system.

1. Terminate wires into the Jumper



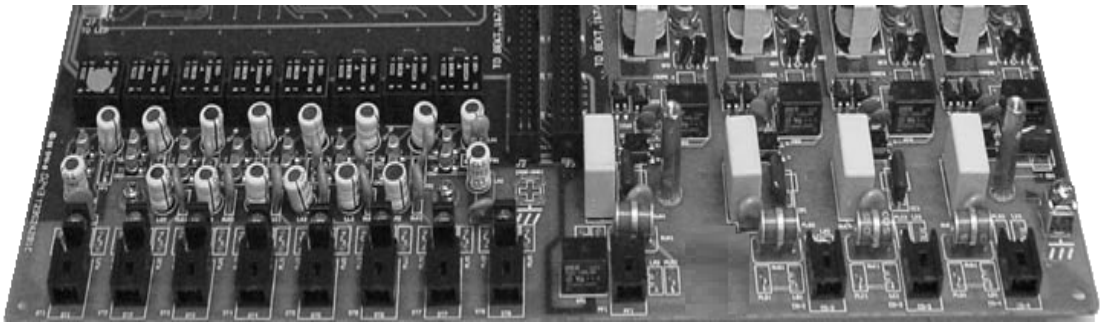
2. Press wires firmly inside the jumper by pliers. Pressing too firmly may cause damage to the wire.

3. Complete Wiring

4. Connect Jumper to the Port

Connecting Extensions

Digital Extensions

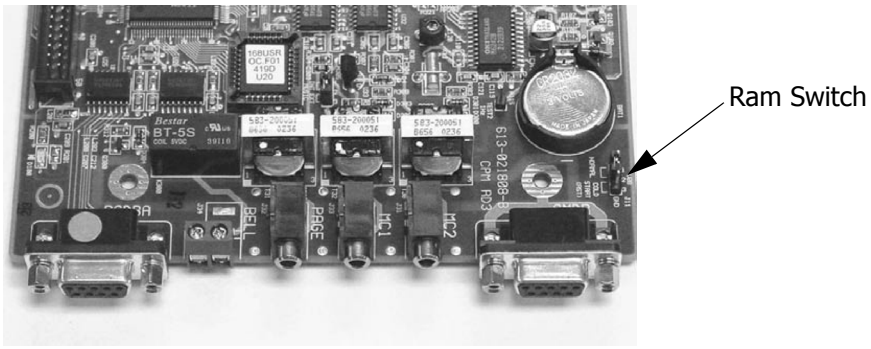


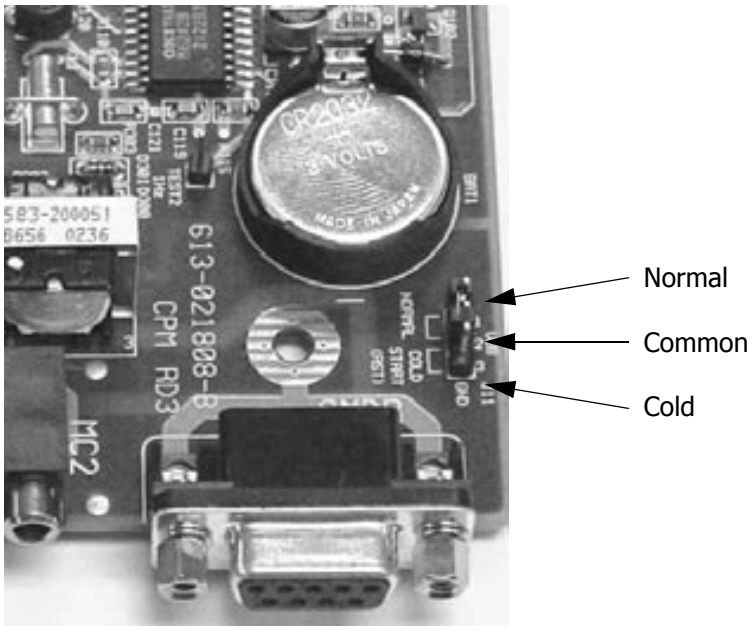
Insert the connector into the correct extension port. Port 1 is extension 101, port 2 is 102, port 3 is 103 etc.

Initialization and Start up Procedure

Once all of the Modules are installed into the system, and it is properly mounted, grounded and cross connected it is time to initialize and power the system up. It is important to initialize the system to ensure the integrity of the database.

1. Make Sure that the power is turned off.
2. Locate the "RAM" switch on the Call Control Module and place the jumper in the "COLD" position. If the RAM switch is already in the Cold position, skip directly to step 3.
3. Leave the RAM Switch in the Cold position for 30 seconds and then place in to the "Normal" position.





4. The system has now been restored to factory default.
   - All CO Lines will ring extensions, including SLT extensions.
   - All extensions can take and place calls and the Toll Restriction is at Default

5 Telephone Operation

Introduction

The XBLUE telephone is a high quality, full featured, speakerphone with programmable feature buttons, which allows the user to customize the operation of their telephone.

Telephone Basics

Navigation Keys

The Navigation Keys, located at the right of the Display, allows quick access to commonly used features. There are 4 navigation keys which circle the activation key. For example, to use the Navigation keys, begin by pressing the Right navigation key, to access Call Log, and then press the down navigation key to view incoming and the up navigation key to view outgoing calls. Press the center activation key to dial the displayed telephone number.

Press the left navigation key to scroll forward, and the right to scroll backwards through the navigation feature list.

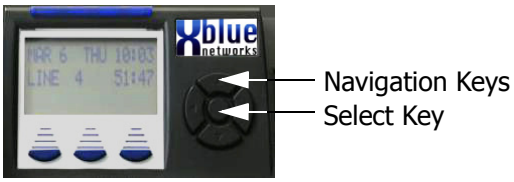


TABLE 5.1 Navigation Buttons

Feature	Navigation Key	Result
Call Log	Up - Outgoing Numbers	Press the Select Key to dial the displayed telephone number.
	Down - Incoming Numbers	
System Speed Dial	Up - Access Bins 699 - 600	Press the Select Key to dial the displayed telephone number.
	Down - Access Bins 600 - 699	
Feature Code List	Up - End of feature list	Press the Select Key to select between Directory and Feature. Press down button to scroll forward, and the up button to scroll backwards through the selected list.
	Down - Beginning of feature list	
Call Extension	UP - Scroll from highest to lowest extension number	Press the Select Key to dial the displayed telephone number.
	Down - Scroll from lowest to highest extension number	
Page	Up - All Call Page	Press the Select Key to page the displayed Page Group or All Call Page.
	Down - Page Groups 1 - 6	

Feature Codes

Feature codes may be dialed at the time of operation or they may be stored on a programmable feature button. Once stored, the feature can be easily accessed by pressing the button. If applicable, the associated LED will light, indicating that the feature is currently operational. For example, Program Do Not Disturb on a feature button, when pressed the associated LED will illuminate, indicating that the extension is in DND mode.

Description	Display Phone	Analog/SLT	Page
Account Codes (aaa = account code)	82 + aaa	82 + aaa	Page 41
Alarm Clock - Extension (hh = hour: mm = minutes) Deactivate	Feature 92 Feature*92	#92 + hh:mm 1=once, 2 daily	Page 42
Alarm Key (Diagnostic Only)	Feature 62		Page 43
Answer Machine Emulation	Feature 64		Page 44
Attendant	0	0	Page 46
Attendant Administration	Feature #0 + 9999		Page 46
Auto Selection (Auto Line Select) (ccc= CO line) Deactivate	Feature 95 Feature*95	#951 + line group e.g. #9519 Dial 9 #952 + ccc #950	Page 51
Automatic Hold Deactivate	Feature 94 Feature*94		Page 50
Automatic Redial	Feature 78		
Background Music 1	421		Page 53
Background Music 2	422		Page 53
Busy Call Forward (ext = extension: icm = intercom: co = central office) Deactivate	Feature 2	#21 + ext 1-icm or 2 co/icm or 3 co #*21	Page 62
Busy Ring Allow/Deny	Feature#2		Page 56
Call Back (Suffix Code) Ext must be ringing		ext + #	Page 60
Call Back Cancel		ext + ##	Page 57
Call Park and Pick-up (Requires a Button)	Feature 73 + ext		Page 70
Call Park Pick-up (SLT)		#73 + ext	Page 71
Call Pickup - Directed (Suffix Code)	ext + *6	ext + 6	Page 71
Call Pickup - group	*	*	Page 72
Camp On (Suffix Code)		ext + 4	Page 74
CO Line - Direct Access	700 - 751	700 - 751	Page 75
CO Line Flash	Feature 3	#3	Page 75

Description	Display Phone	Analog/SLT	Page
CO Lines - VoIP	744 - 747	744 - 747	
Conference (Supervised)	Feature 60		Page 78
Conference (Unsupervised)	Feature 77		Page 78
Conference Room (Meet Me)	890 - 897	890 - 897	Page 78
Day, Night and Service Modes (Attendant only)	Feature 63		Page 80
DB Programming	Feature#* + pswd		Page 81
Default Set	Feature 69	#69*	Page 82
Dial Pad Touch Tone (On/Off)	Feature#1		Page 83
Direct Call Forward Deactivate	Feature 2	#22 + ext 1-icm or 2 co/icm or 3 co #*22	Page 62
Directory Number for Optional Modem	100		Page 84
Directory Number for Telephones	101 - 164		Page 84
Directory Number for Voice mail (8-Port Flash 189 - 195)	12-Port HD 189 - 200		Page 84
Distinctive Ring - Extension	Feature#7		Page 85
Do Not Disturb (DND)	Feature 4	#4	Page 86
Extension Feature Status	Feature #8		Page 90
External Call Forward (Num = external number) Deactivate	Feature 2		Page 62
External Page	460	460	Page 93
Feature Directory Look up	Feature#5		Page 94
Feature Key Programming (Programming Flexible Button)	Feature#3		Page 95
Feature Key Reset	Feature 58		Page 93
Follow Me (FM) Call Forward Deactivate	Feature 2	#23 + 1-icm or 2 co/icm or 3 co #*23	Page 62
Follow To: Call Forward Deactivate	Feature 2	#25 + 1-icm or 2 co/icm or 3 co #*25	Page 62
Forced Intercom Call Forwarding (while ringing)	Feature 4		Page 87
Forced Intercom Tone Ring (Suffix Code)	ext + *	ext + *	Page 100
Forced Release (Conference)	Feature 74		Page 78

Description	Display Phone	Analog/SLT	Page
Get Held CO Line	f7*	#7*	Page 101
Headset Mode Deactivate	Feature 9# Feature*9#		Page 102
Hidden Code (Requires a Flexible Button)	Feature 61+Number		Page 103
Hold	Hold	Flash	Page 104
Hold Exclusive	Hold		Page 104
Hot Dial Key Pad (On/Off)	Feature #6		Page 106
Hot Line Deactivate	Feature 9* + ext or Speed bin 500/600 Feature*9*	#9* + ext or Speed bin 500/600 Flash #*9*	Page 107
Intercom Key (Requires a Button)	Feature 65		Page 109
Intercom Mode Selection (HF/Tone)	Feature 98		Page 109
Intrusion (Suffix Code) - Cannot be busy fwd		ext + 8	Page 112
Last Number Redial	Feature 8	#8	Page 113
Loud Bell Number	429	429	Page 114
Memo Pad Must be on a call to enter a new number - dial a saved number from an idle telephone.	Feature 5*		Page 114
Message Wait (Suffix Code)		ext + 9	Page 115
Messages - Call Me, Text, Voice	Feature 90		Page 118
Messaging - Text Type (Call Me, Call Operator, Call Home, etc.)	Feature 96		Page 118
Monitor (Suffix Code)		ext + 1	Page 119
Mute Key	Feature 76		Page 120
No Answer Call Forward Deactivate	Feature 2	#24 + 1-icm or 2 co/icm or 3 co #*24	Page 62
One Touch Record (Enable Record Allow)	Feature 67		Page 122
Page All Extensions/Tenants	409	409	Page 124
Page Allow/Deny	Feature #9		Page 125
Page Group Numbers	401 - 408	401 - 408	Page 126
Page - All Call Tenant Group 1	400	400	Page 126
Paging Answer Key (Meet Me Page)	Feature 59		Page 127
Paging Receive (Meet Me Page) after page	#	#	Page 127

Description	Display Phone	Analog/SLT	Page
Pause (Insertion Speed Dial)	Feature 70		Page 128
Phone Lock/Unlock	Feature 97 + pswd		Page 130
Pick Up Group	410 - 417		Page 132
Private Talk (Supervised Conference Only)	Feature 57		Page 78
Programming DSS Feature Buttons	Feature #4		Page 95
Programming Feature Buttons	Feature #3		Page 95
Pulse to Tone Conversion	*	*	Page 100
Release Key	Feature 52		Page 135
Room Status	Feature 7#		Page 135
Saved Number Redial	Feature 51		Page 140
SLT Message Waiting Indication Deactivate		#96 #*96	Page 141
Speed Dial Bin Numbers - Station	500 - 549	500 - 549	Page 84
Speed Dial Bin Numbers - System	600 - 699	600 - 699	Page 84
Speed Dial Programming (Ext SB=500-549)	Feature 1	#1 + Ext SB	Page 143
Status Message	Feature 90		Page 118
Transfer and Answer (Requires a Button - One Button Operation)	Feature 68		Page 144
Transfer Beep Enabled	Feature 56		Page 145
UCD Agent Log Off (Log On Toggle)	Feature 91		Page 146
UCD Group Numbers	430 - 452 453 - VM	430 - 452 453 - VM	Page 84
Virtual Numbers	850 - 879	850 - 879	Page 84
Volume Beep	Feature 53		

Feature Code Operation

Account Codes

Feature Code: 89 + ccc

ccc = account code

Description

Account codes can be forced, which requires an extension to enter the account code before placing a CO Line call, or unforced, allowing the user to decide if/when they will enter the account code.

Default Settings:

Account Code is disabled

Operation

Setup Account code

1. Press 82.
2. If using a display telephone, the display will update, enter a valid Account Code:

3. A CO line will automatically be selected and a call may be placed.

Operational Notes

- A valid account code must be programmed. To program account codes enter the MBC 05-02
See " Account Codes" on Page 277
- Account codes will be recorded on SMDR.

Alarm Clock (Reminder)

Feature Code: Feature 92, #92 SLT

Description

Each extension has a private Alarm Clock, also called "wakeup", which can be programed to alert them of a special event, once or daily. Once the alarm has been reached the extension will ring until the "Extension Alarm Play Time" timer has expired. An alarm indication is displayed until the acknowledge "ack" button is pressed, or the telephone is activated.

The attendant and alternate attendant may set any extension's Alarm/wakeup time.

Default Settings:

No Alarm is active

Operation

Setup Attendant Alarm Clock (wakeup)

1. Press Feature 92 and #92 on SLT telephones. Jump to step 3.
2. The attendant display will update:

3. The Attendant enters the extension number 101 - 188. All extensions will display "REMINDER:"

4. The Attendant enters the alarm/wakeup time in 24 hour format.

5. The Attendant select "one" for one time, and "always" for every day at the same time. The display will update:

Setup Analog (SLT) Telephone Alarm Clock (wakeup)

1. Dial #92 on SLT telephones.
2. Enter the desired alarm/wakeup time in 24 hour format:
3. Dial 1 for one time, and 2 for "always" every day at the same time.

Operational Notes

- The Alarm Play Timer is set using the MBC 03-20 See "Alarm Play (Wakeup Call)" Page 219.
- The Alarm plays every day, if always is selected.
- SMDR Does not record the alarms
- On a digital telephone, the alarm plays even if it is busy.
- The Alarm Rings in the extension's distinctive tone.
- The Alarm must be set at least 1 minute in advance of the current time.
- An Analog telephone receives dial tone when going off-hook
- An Analog Telephone will not ring, or receive notification, if it is busy (Off-Hook) at the time the Alarm time has been activated.

Alarm Key

Feature Code: N/A

Default Settings:

No Alarm key is set

Operation

Setup Alarm Key

The alarm key is designed for diagnostic purposes and has no practical application.

Operational Notes

- The Alarm Key must be programmed on a Flexible Button.
- Alarms are reported by a flashing light, and updates in the display.

Answering Machine Emulation

Feature Code: Feature 6 4

Description

Answering Machine Emulation, also called "Voice Mail Monitor" allows the extension user to listen to a new voice mail message while it is being recorded in their mailbox. The Extension user can pick up the caller or let the caller continue to leave a message. This requires a voice mail system.

Default Voice Mail Answering Machine Emulation Button

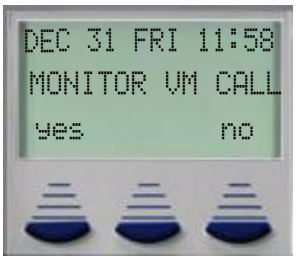
Default Settings:

At default the bottom flexible button is preprogrammed as a voice mail button and it operates as the Answering Machine Emulation button. In addition, when a new message is left in a voice mailbox, this button LED will flash.

Operation

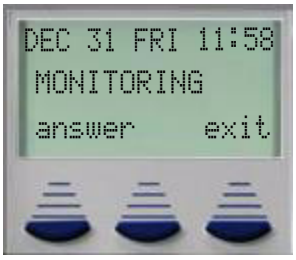
Setup Answering Machine Emulation

1. By default the button is already programmed. When a call is forwarded to Voicemail, the ringing extension's "Voicemail" button LED turns Green.
2. Press the button, while the LED is flashing Vivid Blue and the following is displayed:



3. Press "yes" to monitor the call. Press "no" to exit monitor mode.

4. If "yes" is pressed, the extension user can monitor the call and the display updates:



5. If "answer" is pressed, the extension answer the call, removing it from Voicemail. If no is pressed, the telephone goes back to idle, and the caller has no idea that the call was monitored.

Operational Notes

- Answering Machine Emulation requires an integrated voice mail system.
- When a caller is removed (answered) by the extension user, the recording stops and the message is delivered.
- The calling party is unaware that the call is being monitored.

Attendant Administration

Feature Code: Feature #0

Description

Attendant Administration is used to set or modify the features; Service Mode (Day/Noon/Night/Time), Auto Attendant Messages (optional Auto Attendant Module required), Temporary Mode and System Speed Dial, CFW AUXI Lamp, Shutdown Voice Mail. Attendant Administration can be performed at any user extension, but the assigned Attendant Extension user password is required.

Settings include:

TABLE 5.2 Attendant Administration Mode

System Mode	Description
SVC Mode Change	Service mode is used to toggle the system between; Day, Night, Noon, or Timed Modes.
Auto_A Message	N/A - Requires the Auto Attendant module
Temp. Mode	N/A - Requires the Auto Attendant module
System Speed No.	There are a total of 1000 speed bins, 100 of which are system speed bins, which are used for frequently dialed telephone numbers that are used by multiple extensions on the system.
CFW Auxi Lamp	At the top of each speakerphone is a Vivid Light auxiliary light bar, which illuminates differently depending on the "state of the telephone". For example, once the user forwards their calls to another destination, the AUXI Lamp will be lit solid. This setting will turn off the lamp. See "Auxiliary Lamp / LED Status Bar" Page 53
Shut down VM	It is a good idea to shutdown the voice mail system, before powering the voice server down.

Default Settings:

N/A

Operation

1. Any Digital Speakerphone may enter the Administrative Code Feature #0.
2. Enter the Tenant Group number to be Administered. (Valid Groups are 1, 2, and 3)
3. Press the softkey beneath SAVE.
4. Enter the password for this Tenant Group Attendant (default for the Tenant Group 1 Attendant is 9999).

5. Press the softkey beneath show. The first Administrative item (SVC MODE CHANGE) displays.

6. Press the softkey beneath next to move to the next Administrative item or press the softkey beneath show to show the current service mode (DAY/ALT/EVE/TIME).

To change Service Mode:

1. Press the softkey beneath show
2. Press the softkey beneath chg to toggle and set the service mode. Options are Day, Night, Noon, or Time

- Time mode automatically puts the system into Day or Night mode, based on the programmed timed schedule found in Time Switching (MBC - 08-15).
- Day Mode is when it is not night, as defined in Time Switching.
- Night Mode is all other times, not defined as day mode in Time Switching
- Noon Mode ***Requires VAA Card***. If no VAA Card is installed the system retains the Day mode parameters, but it will say "Noon" in the display when it is "Noon" as defined in the Time Switching programming parameter.

3. Press the Hold button to exit SVC MODE CHANGE and return to the previous menu.
4. Press the softkey beneath next. The Administrative item AUTO_A MESSAGE displays.

To change Auto Attendant Messages: Requires VAA Card

1. Press the softkey beneath show.
2. Press the softkey beneath back or the softkey beneath next to toggle the ten (10) programmable greetings and messages. These are: 1. DAY GREETING, 2. ALT GREETING, 3. EVE GREETING, 4. WAITING MSG., 5. INVALID MSG., 6. BUSY MSG., 7. NO_ANS. MSG., 8. BYE MSG., 9. INQUIRY MSG., 10. TEMP MSG.
3. Press the softkey beneath back or the softkey beneath next until the appropriate greeting/message displays.

4. Press the softkey beneath show for selected greeting/message to record a new greeting/message, play the current greeting/message, or change the maximum record time for that greeting/message. The current record time for the selected message displays.
5. Press the softkey beneath chg to set or change the record time of the greeting/message.
6. Dial 1 - 99 to set the maximum seconds allowed to record the specific greeting/message. (Keep in mind that the maximum length of all auto-attendant greetings/messages is 120 seconds.)
7. Press the softkey beneath save. The new maximum record time for this greeting/message is now stored.
8. Press the softkey beneath play to hear the current greeting/message.
9. Press the Hold button to return to the previous Administrative level.
10. Press the softkey beneath record to record this greeting/message.
11. Press the softkey beneath stop to end recording.
12. Continue this process for each Automated Attendant greeting/message.
13. When finished recording greetings/messages, exit Administration by pressing the s button twice or return to the previous Administrative level by pressing the Hold button.
14. Press the softkey beneath next. The Administrative item TEMPORARY MODE displays.

To change Temporary Mode: Requires VAA Card

Temporary Mode is available for special circumstances that may arise such as holidays and bad weather days so that callers can be informed of unusual business hours adjustments. While active, Temporary Mode "Y" plays the Temporary Greeting in place of the "DAY," "ALT" and "EVE" Greeting.

15. Press the softkey beneath chg To toggle between "Y" for yes, and "N" for no, to enable and disable Temporary Mode.
16. Press the softkey beneath next. The Administrative item SYSTEM SPEED NUMBER displays.

To change System Speed Numbers:

17. Press the softkey beneath show
18. Dial a valid System Speed Dial directory number (600 - 699).
19. Press the softkey beneath show to view the current System Speed Dial number. Display will read EMPTY if no number is currently programmed.
20. Press the softkey beneath chg to change the current number.
21. Dial the telephone number to store in this speed dial directory number.
22. Press the softkey beneath save
23. Press the softkey beneath next or the softkey beneath back to return to additional System Speed Number programming.

24. When finished making changes, exit Administration by pressing the s button twice. Or return to the previous Administrative level by pressing the Hold button.
25. Press the softkey beneath NEXT. The future Administrative item FORWARD AUXILIARY LAMP displays. (Future Feature)

Operational Notes

Service Mode:

- If the system is placed into "Day or Night" mode manually, it will continue to operate in that mode until it is placed back into "Time" mode.

Auto_A Message:

- Requires the VAA Card to be installed
- Noon Mode works only with the VAA Card. If the system does not have the VAA Card installed, all of the extension parameters will continue to operate as though the system were in Day mode. However, the bottom line on display telephones, will read "Noon".

Temporary Mode:

- Requires the VAA Card to be installed.

Speed Dial:

- To enter a CO Line Flash ("hook-flash") in a System Speed number, press Feature 3. A stored "hook-flash" is indicated by a "/" character. For example to enter FLASH-1389 in a system speed number the entry would be: "Feature 3 + 1389 + the softkey beneath save." The displayed system speed number would be "/1389".
- To enter a Pause in a System Speed Dial, press Feature 70. A stored pause is indicated by a P character. For example to enter "9pause18008778000" into a system speed number the entry would be 9 + Feature + 70 + 18008778000 + the softkey beneath save. The displayed system speed number would be "9P18008778000."
- To chain one speed dial number to another, press Feature 1 + the speed dial number location to dial. For example; if a very long telephone number will not fit into one speed number location, split the number into two locations. To store the number "123-456-7890-123-456-7890-123-456-7890" into locations 600 and 601, enter into location 600: 123-456-7890 + Feature + 1 + 601 + the softkey beneath save (where 601 is the second speed number location). Enter into 601: 123-456-7890-123-456-7890. The display will read "600@601". Simply dial "600" to execute both speed dial bins.
- When placing a Speed Dial on a Flexible (Programmable) button, use Dial code 600 - 699

CFW AUXI LAMP:

- Enables/Disable the AUXI LAMP (status bar) when an extension is forwarded. This allows extensions to turn off the status bar, freeing it up to be used with other features such as Mute.

Shutdown Voice mail:

- It is a good idea to shutdown the voice mail system before powering down the system.

Automatic Hold

Feature Code: Feature 9 4

Description

The *Auto Hold* feature automatically places the current call on hold when the extension user presses another outside line button. For example, if the user were on first CO line and presses the second line, the call on the first line will automatically be placed on *Exclusive Hold*. Similarly, if the user were on an intercom call with another extension and presses an outside CO line button, the intercom call will automatically be placed on *Exclusive Hold*. There is no need to press Hold button unless the extension user would rather place the call on *System Hold*.

A call placed on Exclusive Hold can only be accessed by the extension placing it on Exclusive Hold. Whereas System Hold allows all users the ability to access the held line.

Default Settings:

Auto Hold Disabled

Operation

Setup Auto Hold

1. Press Feature 9 4.
2. A confirmation tone is heard and the display shows:

3. The extension returns to an idle state.

Enable Auto Hold

1. While connected to an intercom or outside line call, press another outside line button, if programmed.
2. The current connection is placed on hold and the next connection is established.

Cancel

1. Press Feature *9 4 A confirmation tone is heard and the display shows:

2. The extension returns to an idle state.

Operational Notes

- The Feature Code F94 can be programmed under a flexible button on a Digital Speakerphone. To enable/disable the feature, toggle the Feature/DSS Button.
- If you access an idle line and skip to another line before dialing, the first line will not be automatically placed on Hold. (A line must be connected with an active call; either you dialed a number or answered a ringing line.)
- Auto Hold places a call on Exclusive Hold.
- If you have the Auto Hold feature programmed on a Feature/DSS Button, the Feature/DSS Button LED will light when the feature is enabled.

Automatic Line Select

Feature Code: Feature 9 5

Feature Code: Analog # 9 5 + 0 for Intercom, 1 for line group or 2 for specific CO Line

Description

Automatic Line Select allows the user to select how their extension will act when the speaker button is pressed, or the handset is removed. There are three selections, specific CO Line, CO Line Group or the default ICM.

Default Settings:

Automatic Line Selection is set to "ICM" (Intercom)

Operation

1. Press the feature button followed by 9 5 and the display will read:

2. Select "icm" and the extension accepts the input and returns to idle.
3. Select "trk" and the display updates:

4. Enter a valid Trunk number 700 - 719, 744 - 747, the press save.
5. Press "route" to enter the "CO Line Group" to access, the display will update:

6. A valid entry would be "9" for the group 1 default group.

Single Line Telephone Codes

TABLE 5.3 Single Line Telephone Auto Line Select Codes

Off Hook	Dial code	Description
#95	0	Off Hook to intercom dial tone
#95	1 + lg	lg=Line Group, i.e. 9= group 1-8
#95	2 + LN	LN=Line Number 700-719, 744-747

Operational Notes

- When an extension is ringing, the ringing line is always answered when the extension goes off hook.
- To avoid answering the ringing line the extension user must select a CO Line prior to going off hook.
- To bypass the automatic line selection, place an intercom button on the telephone. See "Intercom Key (Intercom Calling)" Page 109

Auxiliary Lamp / LED Status Bar

Feature Code: N/A

Description

Each digital speakerphone is equipped with a special visual indicator called a status bar. This status bar, is used to indicate the status of the telephone. For example, if the extension is in Do Not Disturb, then the status bar will be lit solid.

TABLE 5.4 Auxiliary Lamp / LED Status Bar

Function	Fast	Flicker	Slow	Lit Solid
Ringing - CO Line	◆			
Ringing - Extension	◆			
Voice Recording		◆		
Auto Recording		◆		
New Voice Mail Indication			◆	
Message Waiting Indication			◆	
Database Programming			◆	
DND/Station Call Forward Enabled				◆
Mute Active				◆
Speaker or Headset Active				◆

Background Music (BGM)

Feature Code: GHI 4 ABC 2 1 - GHI 4 ABC 2 ABC 2

Description

Toggle Background Music (BGM) by entering one of two music channels, which allows users to monitor music at the extension. An External music source is required. To toggle between background music source or on and off, reenter the code.

While the extension is idle enter the music channel you want to monitor:

421 for Music Channel 1

422 for Music Channel 2

Operational Notes

- Background Music automatically suspended when a call is made or received.
- The music returns when the telephone becomes idle.

Battery Back - up (Memory)

Feature Code: N/A

Description

The system is equipped with a Lithium Ion battery for a "Watch Dog" Battery back-up which will maintain volatile system database programming and extension programming during commercial AC power interruption. The memory back-up will maintain the database programming, time and date, personal and system speed dial numbers, feature button programming, etc., for 1 month (30) days of continuous AC power loss. When system AC power is restored within this time frame, the system will resume normal operation.

During AC power interruption, the system will not operate unless the system is equipped with a UPS system or battery back-up.

When the "Cold/Normal" option strap located at JE1 on the CCB is in the "Cold" position, and the AC power is turned off, the watch dog battery back-up is removed from the volatile memory circuit. This will initialize the system's database and restore all programmable data back to the factory default.

A new system is shipped with the "Cold Start/Normal" option strap in the "Cold" position. For the system to operate correctly, and before installing a new system, be sure to move this strap to the "Normal" position.

Notes:

> *It is recommend that the system power be restored in a timely manner since the Lithium Ion battery is not recharging. Continued discharging of the Lithium Ion battery will render the battery inoperable for the intended purpose. Considering normal system use and periodic loss of commercial AC power, the Lithium Ion battery life expectancy is approximately 3 years. When necessary, replace with an Energizer 2032 3V dc or like battery.*

Default Settings:

N/A

Operation

N/A

Battery Back-up (System) - Optional

Feature Code: N/A

Description

An external UPS (Uninterrupted Power Supply) (Optional) may be installed to connect between the KSU and a dedicated 110V AC outlet. The approximate time, in back-up hours, will be determined by size (amp/hour rating) of UPS installed. In the event of a commercial power outage, the UPS will provide the necessary system voltage to allow full system operation until AC power is restored or the UPS battery voltage reaches minimum voltage thresholds and is automatically disconnected to avoid battery damage.

Busy Lamp field - Direct Station Select

Feature Code: N/A

Description

Any programmable Feature (Flexible) button can be programmed as a Direct Station Select (DSS), also known as a Busy Lamp Field (BLF), which will monitor an extension's status. When an extension is off hook or on the handset, the programmed BLF button LED, for that extension, lights solid.

When that extension is in Do-Not-Disturb (DND), the LED will flash. This same button is used as a one-button Direct Station Selection (DSS) call button for quick transfer of calls or intercom calling.

Also See "Flexible (Feature) button inquiry and programming" Page 95

Default Settings:

N/A

Operation

1. Press *Feature* #3.
2. Press the Feature/DSS button that is to be programmed. The current function displays.
3. With in three seconds, press the softkey beneath chg to change the function.
4. Select the softkey beneath dir via the LCD interactive button.

5. Enter the directory number of the extension that is to be programmed on this feature button and press the softkey beneath SAVE.
6. Press the s button twice to exit programming and return to idle condition.

To use:

1. Press the programmed button to call an extension.
2. Speak hands free or lift the handset to talk privately.
3. Hang up when the conversation is completed.

Operational Notes

- DSS/BLF buttons may be assigned to any of the Flexible (Programmable Feature) buttons.
- Extensions in *DND* mode will cause the LED associated to that extension to flash.
- Extensions that are using their handset and off-hook will cause the LED associated to that extension to light steady.
- Most features, when programmed on a flexible button, will act as a toggle on/toggle off; even if they have different enable and disable codes.
- The DSS function can be used to transfer calls to other extensions.
- Each Digital Speakerphone has a default feature button mapping.

Busy Ring (Allow/Deny)

Feature Code: Feature #ABC2

Description

Busy Ring allow, allows additional calls to ring at a busy extension. The ring tone will be muted. Busy Ring deny, will eliminate this low (busy) ring entirely.

Default Settings:

N/A

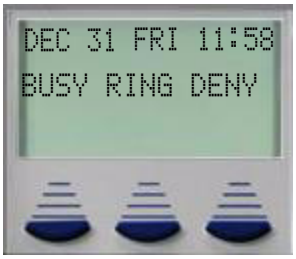
Operation

Cancel (Deny) Busy Ring

Press Feature #2. The display shows:

Activate (Allow) Busy Ring

Press Feature #2. The display shows:



Operational Notes

- This feature can be programmed Feature #2 for a Feature/DSS Button. No LED's will be in use and the button can be depressed and toggled to allow/deny this feature.

Call Back - Cancel All

Feature Code: Feature ##

Description

This feature allows you to cancel all Call Backs on an extension or CO Line with one command.

Default Settings:

N/A

Operation

Prior to receiving Call Back Alert Ringing, press Feature #4#

Operational Notes

- If you press the softkey beneath del during the *Call Back* Alert ringing, the *Call Back* will be cancelled and the LCD will display: CBCK DELETE XXX. Your extension will return to an idle status.
- To invoke a *Call Back* at an extension that is in the *Voice Announce* mode (Hands Free), you must first Force Tone Ringing (*).
- If the *Call Back* is not answered during the reply alert ringing, the response message will be displayed until you press either the softkey beneath reply, or the softkey beneath del.
- The *Call Back* process begins when both your extension and the called party's extension are in an idle, on-hook mode.

Call Back (CO Line)

Feature Code: N/A

Description

The Call Back feature allows you to queue a busy outside line for use when it becomes available.

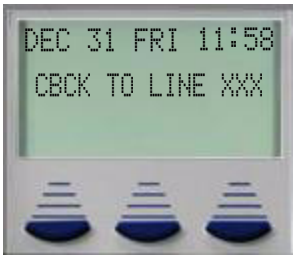
Default Settings:

N/A

Operation

1. Press a busy, programmed outside line button (LED is lit solid) or outside line group button, or dial an outside line access group number (9, 700–734, 744-747). You will hear busy tone and the display will read:

2. Press the softkey beneath cbck Interactive Soft Button or Dial # on the dial pad.
3. You will hear a confirmation tone and the display will read:



4. A few moments later, the display will return to an idle state.
5. When the selected outside line, or an outside line in the selected outside line group, becomes available, you will hear fast ringing at the extension and the display will read:

6. Press the softkey beneath `reply` to be connected to the available outside line and dial as usual

Or...

7. Press the softkey beneath `del` to delete the outside line callback.

Operational Notes

- During call back alert tones, lifting the handset will directly connect the extension user to the selected CO Line calling back.
- Every extension may *Call Back* only one busy CO line at the same time.
- The *Call Back* Alerting Ring Time is 10 seconds. If the call back goes unanswered during the 10 seconds ring time the *call back* is canceled.
- CO lines that have *Call Back* requests will recall the *Call Back* initiator. The *Call Back* CO line will become available to other extensions if the *call back* extension doesn't answer within 10 seconds.
- During the time that the *Call Back* is recalling the initiator, a new incoming call will take precedence over *Call Back* and will be answered when the extension goes off hook.

Call Back (Extension)

Feature Code: Analog Telephone

Suffix Code - EXT + #

Description

When calling an extension that is busy, in Do Not Disturb, or idle, the user can use the Call Back-Extension feature to queue the call, so that it will be placed as soon as the extension is available.

Default Settings:

N/A

Operation

1. Dial the extension number of the busy extension.
2. If the dialed extension is in Tone Ringing Mode, the display shows:

3. If the extension you are calling is busy, the display shows:

4. Press the softkey beneath cbck

5. You will hear a confirmation tone and the display will read:

6. Your extension will return to idle status.

To Answer a Call Back:

1. When the call back begins, your extension will ring a special call back alert ring for 30 seconds and the display shows:

   a. Lift the handset or press s

   Or…

   b. Press the softkey beneath `reply` to activate *Call Back*.

To cancel all active call backs prior to receiving Call Back Alert ringing:

1. Press Feature ##

Operational Notes

- If you press the softkey beneath `del` during the Call Back Alert ringing, the Call Back will be cancelled and the display will show:

- To activate a Call Back at an extension that is in the Voice Announce (Hands free) mode, you must first Force Tone Ring (*).

- If the call back is not answered during the reply alert ringing, the response message will be displayed until you press either the softkey beneath reply, or the softkey beneath del.
- The call back process begins when both your extension and the called party's extension are in idle.

Call Forward (Extension)

Feature Code:

Digital Speakerphone: Feature 2

Single Line Telephone

Forward Type	Entry	Disable
Busy	#21 + (Dest) + (CO/ICM)	#*21
Direct	#22 + (Dest) + (CO/ICM)	#*22
Follow from	#23 + (CO/ICM) + (frmpswd)	#*23 + (Dest) + (frmpswd)
No Answer	#24 + (Dest) + (CO/ICM) + t	#*24
Follow to	#25 + (CO/ICM)	#*25
Dest = Destination - Enter a valid Extension or UCD Group, for 453 for voice mail CO/ICM = Type of calls to be forwarded. 1=CO only, 2=Both CO and Intercom, 3=Intercom only. t = Time = After this time expires calls will be fowarded to the new destination. frmpswd = Extension password where calls are forwarded from		

Description

Extension users may select from six different extension call forward options. Each option has a unique code which the extension user dials to enable or disable the selected forwarding option. Additionally, the extension user can select to forward just intercom or CO Line calls or both Intercom and CO Line calls.

Busy - The Busy Call Forward will forward any call that is presented to the extension only while it is busy. No Answer calls will not be forwarded.

Direct (All Call) - Direct Call Forward will forward any call that is presented to the extension regardless of it's current state (busy or no answer). The extension will receive a quick tone burst indicating that a call was forwarded.

External (Off Net) - External Call Forward will forward transferred CO Line calls to a remote destination such as a Cellular or home telephone number.

Follow Me (Remote) - Follow Me Forward allows an extension user to forward their telephone to a remote destination from the remote destination. This will require the extension password.

Follow To (Preset) - Follow To Forward allows an extension user to forward their extension to a remote destination before going to the remote destination. This will require the extension password.

No Answer - No Answer Call Forward will forward a call that goes unanswered at an extension. If the extension is busy, and Busy Ring (Feature #2) is enabled, the extension user will hear a muted ring; if Busy Ring (Feature #2) is disabled, the call will systemically ring, and then forward. See "Busy Ring (Allow/Deny)" Page 56

Default Settings:

N/A

Operation

Digital Speakerphone

1. Dial the Forward Code f2

2. Select Direct or Busy call forward, or next for more options:

3. Select n_ans, ext (ECF must be enabled) or follow:

Direct Call Forward:

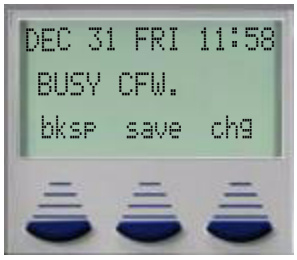
1. Select Direct to forward all calls:

2. Enter the destination, for example, voice mail would be 453, press save:

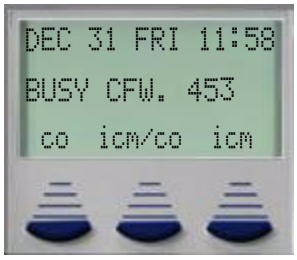
3. Select from CO Line calls, Intercom calls, or both Intercom and CO Line calls.

Busy Call Forward:

1. Select Busy to forward all calls when the extension is busy:



2. Enter the destination, for example, voice mail would be 453, press save:



3. Select from CO Line calls, Intercom calls, or both Intercom and CO Line calls.

Press Next:

1. Select next for more options:

No Answer:

1. Select No Answer to forward unanswered calls:

2. Enter the destination, for example, voice mail would be 453, press save:

3. Select from CO Line calls, Intercom calls, or both Intercom and CO Line calls.
4. Enter the time, in seconds (between 10 and 50) that an Intercom call should ring before it is sent to the forwarded destination:

5. Enter the time, in seconds (between 10 and 50) that a CO Line call should ring before it is sent to the forwarded destination:

6. the speaker button to exit the forward programming.

EXT - External (Off-net) - if enabled:

1. Select ext to external forward all transferred CO Line Calls:

2. Select ext to external forward all transferred CO Line Calls:

4. Press save to complete the programming

Follow Me

1. Select follow to have call follow the user to another destination:

Preset

2. Select between Preset and Remote:

3. The Extension user selects preset when programming forwarding a call from their extension to another destination:

4. Enter the destination, that the calls will be forwarded to:

5. Press Save to retain the programming.

OR

Remote

6. The Extension user selects remote when forwarding from a remote extension to their present location. Select del to delete the currently programmed remote extension or set to set a location:

7. The extension user enter their extension number, so that calls can follow them to this new location. Press save:

8. If set is selected, the extension user can select from CO Line calls, Intercom calls, or both Intercom and CO Line calls

9. Enter the extension password, of the extension to be forwarded:

10. Select del to delete a currently programmed remote forwarding:

11. Enter the extension password, of the extension to be deleted:

To Exit Extension Call Forwarding:

1. Press the soft button under CFW:

2. Press the del key to delete/cancel any call forwarding.

Operational Notes

- All extension forwarding options, take precedence over any of the database forwarding options.
- Extensions that are call forwarded will receive stutter dial tone when accessing intercom dial tone
- Extension Call Forward and Do Not Disturb can not be active at the same time.
- When an extension is call forwarded, the center of the display will have CFW.
- The third extension within a chain cannot forward their telephone. For example, if extension 102 forwards to 103, which is forward to 104, extension 104 cannot be forwarded.
- Follow me forwarding must be cancelled from the extension that initiated the forwarding option.

Call Park/Call Park Answer

Feature Code: Feature 7 3 + Ext

SLT Code: #73 + Ext

Description

The Call Park/Call Park Answer feature allows you to "park" a call at any extension. It is also used to retrieve a parked call from any extension. You can park and retrieve calls by dialing the Call Park code Feature 7 3 followed by the extension number where the call is to be/has been parked.

Default Settings:

N/A

Operation

1. While connected to an outside line call, press Feature 7 3 or press pre-programmed Feature/DSS Button designated as Call Park (if programmed).
2. Dial the extension number where this call is to be parked, or press the Feature/DSS Button of the extension where this call is to be parked.
3. The outside line call is parked at that extension.
4. Hang up the phone.

Call Park Answer

1. To retrieve or answer the parked call. While the phone is idle, press Feature 7 3 or press the pre-programmed Feature/DSS Button designated as Call Park.
2. Dial the extension number where this call is to be parked, or press the Feature/DSS Button of the extension where this call is parked. You are connected to the call.

Operational Notes

- Each telephone/extension has one personal extension number used to park one CO line call.
- From your telephone you can park a call at any active extension number.
- The Call Park feature code may be programmed on any placed on any Flexible Feature/DSS Button.
- Calls can be retrieved from any extension.
- Calls that are parked follow the XFR_B Timer (MBC 03-12) and will ring the initiating extension when that timer has elapsed.

Call Pick-up - Directed

*Feature Code: Suffix Code Ext + * 6*

The * is only needed if the called extension is in hands free mode.

Description

When an extension is audibly ringing, another extension can pickup that call by dialing the extension number, when a busy signal is heard, dial the directed call pickup code 6 or * 6 if the called extension is in hands free mode.

Default Settings:

N/A

Operation

Options at a Digital Speakerphone

1. Dial the ringing Extension:

2. Dial the Directed Call Pickup Code, the call is connected:
3. If the pickup fails, there will be a double ring tone and the display will update:

Operational Notes

- The ringing telephone can not be busy, direct or external call forwarded. (Feature 2).
- The call must be audibly ringing when the Pickup code is dialed.

Call Pickup Group

*Feature Code: **

Description

There are nine (9) Pickup Groups; all extensions are assigned to one of the nine groups. Any Extension within a Pickup Group can dial * to pick up a ringing call within that group. It is important to know that the first ringing call or any call ringing in the group will be answered by dialing this code, so directed call pick up may be the better option.

Default Settings:

All Extensions are assigned to pickup group 1

Operation

1. Dial * to answer any call that is ringing in the pickup group.

Operational Notes

- When doing a group call pickup, there is no way to guarantee which ringing call will be answered.

Caller ID

Feature Code: N/A

Description

The Caller ID feature requires a Caller ID (CID) service subscription from the telephone company. The system will receive Type 1 Caller ID (FSK) data from the telephone company on all outside lines and will display this data on the any ringing speakerphone and any ring Caller ID equipped Single Line Device. Digital extension users may review the last fifty (50) calls which rang at the extension by pressing the center interactive button, or by press the right navigation key and then the down navigation key for inbound and up for outbound calls.

Default Settings:

N/A

Operation

Options at a Digital Speakerphone

1. From an Idle telephone press the center interactive button, labeled "cid"

2. All digital speakerphones, which are programmed to ring will be presented with caller ID. This requires a subscription to the telephone company's caller ID service. The display will update:

3. Use the navigation keys, up or down to scroll through the list of calls.
4. Press the select navigation button or press a CO Line to dial the displayed telephone.

Operational Notes

- Proper programming of Local Area Code (MBC 03-29) and Long Distance Prefix (MBC 03-28) are required to assure accurate redial of CID numbers from the Caller ID Review Table.
- If no name is delivered from the telephone company, the number only will be displayed.
- Any Digital Speakerphone user can review the Caller ID Table.

Camp On (Extension)

Analog Feature Code: Ext + 4

Description

When calling an extension that is busy, the caller can select to use the Camp On feature. Camp on, sends a audible tone, which alerts the busy extension user of the waiting call.

Default Settings:

N/A

Operation

1. Call a busy extension.
2. Press the softkey beneath next. The bottom line on the display changes to:

3. Press the softkey beneath camp. The user of the busy extension hears the Camp On alert tone and the display shows:

4. When the busy extension goes on hook or places the current call on hold, the extension rings.

Operational Notes

- Extensions cannot receive more than one camp on at a time.
- While waiting for a busy extension the caller hears music.

CO Line and SLT Flash

Feature Code: Feature 3

Description

Reference the feature: Flash – CO Line. When a Single Line Telephone must generate a Flash command to the connected CO Line (typically applicable to PBX circuits and Centrex® features of CO Lines) the SLT – CO Line Flash command must be used.

Default Settings:

N/A

Operation

Sending a Flash to a Connected CO Line from an SLT:

- While connected on a CO Line and conversation, operate the single-line telephone hook-switch flash.
- Dial the code Feature 3. The system sends the hook-switch flash command to the connected CO Line.
- Dial whatever code is required to complete the hook-flash initiated PBX/Centrex® feature.

Operational Notes

The successful operation of the connected device features (PBX/Centrex®) is dependant upon proper operation of that product's features. Refer to the information provided with the connected equipment for more information.

CO Line Calling & I Use Indication

Feature Code: N/A

Description

CO Line calling is the placement of a telephone call on the Public Switched Telephone Network. CO Line calling includes: dialing local, national long distance and international telephone numbers. Placing a CO Line call can be done in several ways:

- CO Line Button
- CO Line Group Access Code
- CO Line Group Button
- Speed Dial

When you are using an intercom or CO line the associated lamp will light green and flash at a double wink rate at your telephone. This LED condition is referred to as I-Use Indication (the indication that you are using this CO Line.) DSS/BLF Lamps for the same CO Line that you are using will light steady at all other digital speakerphones.

Calls placed on CO Lines are checked against the CO line and extension COS (Class(es) of Service). The conditions that apply, to the associated COS, govern the call connection. If the dialed number is not granted, but the conditions set in the COS, the call is denied. If the Call passes the COS check, the call is allowed.

Default Settings:

CO Lines 1-6 are pre-programmed on all digital extensions. All CO Lines and Extensions are assigned Class of Service 0, which allows all digits to be dialed.

Operation

To access a CO Line:

1. Press an idle CO Line button.
2. Dial a CO Line Group Access Code (9, 700-734, 744-747).
3. Press a CO Line Group Button
4. Dial a Speed Dial location (500-549 or 600-699) that has a stored telephone number.

Operational Notes

- If a CO Line is busy when the access attempt is made, busy tone is heard. Digital Speakerphone have the option to press the cbck (call back) feature. When the CO line becomes available, the extension is alerted by a special ring tone, and the CO line is reserved for that extension. Press the "Reply" interactive button to access the line.
- Busy CO Lines may be queued for use. (See CO Line Queueing*)*

CO Line Queuing /Call Back

Feature Code: N/A

Description

CO Line Queuing allows a user to request use of a busy CO line. When the CO Line goes idle (current user hangs up), that CO Line rings the user that queued the line. While the line is ringing at the extension, it is unavailable for access by other users. If the extension that queued the CO Line does not respond to the queue callback within 8 seconds, the queue is cancelled and the line becomes available for other users.

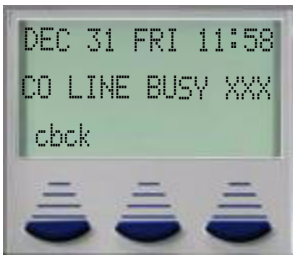
Default Settings:

N/A

Operation

Queue:

1. Press a CO Line that is busy or dial access to a CO Line Group (9, 700-719, 744-747). The display shows:



2. Press the softkey beneath cbck. The display shows: CBCK TO LINE XXX momentarily and then goes idle.

Queue Callback Answer

1. When the CO Line queued becomes idle, it will Callback ring the extension. The display shows:

2. The user may lift the handset, press the speaker button to activate speakerphone or press the softkey beneath reply to answer the *Queue Callback*. The CO Line is ready to make a call. However, all toll restrictions remain in place.

Operational Notes

- The extension must have access to the CO Line in "Line Assignment" (MBC 01-ext-23) to queue on a busy CO Line.

Conference

Feature Code:

Supervised Feature 60

Forced Release Feature 74

Private Talk Feature 57

Unsupervised Feature 77

Conference Room (Meet Me Conference) 890 - 897

MBC:

TRK_Conf - 03-01

Conf Tone - 03-24

Conf Talk_T - 03-38

Unspv Conf_T - 03-39

Description

There are three types of conference; supervised, unsupervised and conference rooms (meet me conference). The system can accommodate eight four-member conferences simultaneously. When the initiator of a conference remains on the call, it is considered a supervised conference.

- At any time the initiator can "Force Release" a participant by dialing the Forced Release code.
- To speak privately to an extension the initiator dial the "Private Talk" code.

If the initiator dials the unsupervised conference code, and releases the conference it is considered an unsupervised conference, which is governed by a timer. A conference room is a directory location (dial code) where up to 4 internal or 3 external parties can meet by dialing a conference room number (890 - 897). Because a conference room does not require an initiator, it will be governed by the unsupervised timer.

Default Settings:

N/A

Related Programming:

Trunk line conference (MBC 03-01) is set to 2LNS(2Lines), press chg to toggle through NO (No lines), 2LNS or 3LNS.

Conference tone (MBC 03-24) is set to "Y" yes. Press chg to toggle between "Y" for Yes and "N" for No.

Conf Talk_T (MBC 03-38) is set to 0, giving unlimited time. Press the chg button to toggle through the timer settings from 0 to 120 minutes.

Unspv Conf_T (MBC 03-39) is set to 0, giving unlimited time. Press the chg button to toggle through the timer settings from 0 to 129 minutes.

Operation

Supervised and Unsupervised Conference

Up to 4 parties (one must be internal) can be joined in a conference by an internal party, known as the initiator.

1. Answer an incoming or place an out going call.
2. Push the hold button.
3. Place remaining calls.
4. Press the pre-programming conference button or dial the conference code Feature 60. The display will update and show conferenced briefly

5. The display will update for the remainder of the conference:

5. To create an Unsupervised Conference, just dial Feature 77, the display will update, and the calls are released:

Conference Room (Meet Me Conference)

1. Internal extensions dial 890-897, CO line calls can be transferred directly into the conference room 890-897:

Operational Notes

- A conference that uses analog trunks (CO Lines) may experience a small volume loss.
- The conference rooms compensate for volume loss, allowing all parties to hear each other.
- The conference timer can be extended by dialing 0#. The timer is extended by the length of the original time.
- The conference can be disconnected by dialing 0*.
- Digital Speakerphones can force a disconnect by pressing the "Forced" button, and speak privately to party, they press "Private".
- External calls, that are in a conference room cannot be placed on hold or transferred.
- Each time a conference is established, the conference tone is heard by all participants.
- Calls that are waiting to join a conference are on exclusive hold at the initiators extension.
- If the initiator exits the conference without dialing the unsupervised conference timer, another extension will become the conference controller.

Day, Night, Service Modes (Attendant Only)

Please See "Night Mode/Active" Page 121

Database Programming

Feature Code: Feature #* + password. Default password is 0 0 0 0 0 0 0 0

Description

The database programming parameter is used to make changes to a customers' database. Any digital speakerphone can enter programming and make changes to the database.

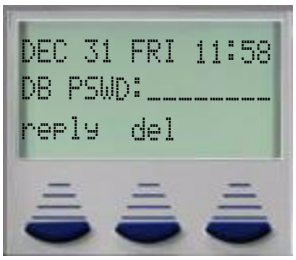
Default Settings:

N/A

Operation

1. Enter Feature #* followed by the system password:

2. The Default password is 8-0 or 0 0 0 0 0 0 0 0



3. Press show:

4. This blank screen used to enter the Menu Bypass Code (MBC), which allows the programmer to jump directly to a programming parameter. Once in programming press the

Volume up or down key to return to the MBC screen. Please refer to the MBC guide in the Installation Manual.

Operational Notes

- The MBC allows the programming to jump directly to a programming parameter. Once there, press next to continue or the volume up or down key to enter a new MBC.

Default Extension

Feature Code: Feature 6 9

Description

The Default extension is used to clear all active settings at an extension (Call Forward, DND, etc.)

Default Settings:

N/A

Operation

1. Press Feature 6 9.
2. The display shows the following screen to confirm the intention:

3. Press 9o to invoke the operation.
4. A confirmation tone will be played.

Operational Notes

The following extension parameters are reset to the value shown:

LNR = empty

SNR = No Saved Number

Memo = No Saved Number

Telephone Lock = No

Auto Hold = No

Page Receive = Yes

Busy Ring = Yes

Auto Line Select = Null (none)

Hot Line = NULL (none)

Dial Pad Confirmation / Touch Tone

Feature Code: Feature #1

Description

Dial Pad Confirmation, or Touch Tone is a tactile response tone that confirms dial pad button operations. Whenever a dial pad button is pressed while this feature is enabled (default) a low-volume tone is emitted through the telephone speaker indicating that this dial pad button has been pressed.

This feature code allows the function to be disabled if necessary.

Default Settings:

Tone-ON

Operation

1. While the telephone is idle, press Feature #1. You hear the confirmation tone and the display indicates the current status.

2. Momentarily the display returns to idle.

Operational Notes

N/A

Directory Numbers

TABLE 5.5 Directory Numbers

Number	Description of Default Directory Numbering
100	Modem Number
101 ~ 164	Digital Extension Numbers
181 ~ 188	SLT Extension Numbers
189 ~ 189	Flash Voice Mail Extension Numbers (8 ports)
189 ~ 199	Hard Drive Voice Mail Extension Numbers (12 Ports)
500 ~ 549	Extension Speed Bin Numbers
600 ~ 699	System Speed Bin Numbers
430 ~ 452	UCD Group Numbers
453	Voice Mail Group Number
850 ~ 879	Virtual Ringing Locations

Distinctive Ringing Extension

Feature Code: Feature #7

Description

Distinctive Ringing – Extension provides a means for denoting one ringing extension from another. There are four (4) choices are available for an extension to choose.

Default Settings:

Distinctive Ringing is set to 1. (Range is 1-4.)

"CO Ring Type" (02-LN-11) is set to 0 for all CO Lines. (Range is: 0-4.)

Operation

1. Press the Distinctive Ringing Tone code Feature #7. The current Tone is heard and the setting displays:

3. Press the softkey beneath chg until the appropriate tone is heard and displayed.

Operational Notes

- CO Line – Distinctive Ringing overrides an extensions Distinctive Ringing setting.
- The Distinctive Ringing code may be programmed on any available Feature button.

Do Not Disturb (DND)

Feature Code: Feature 4

Description

The Do Not Disturb (DND) feature blocks all incoming calls, which includes intercom calls, recalls and CO line calls from ringing at an extension. Extension users can use the DND feature to force an intercom ringing call to the pre-programmed forwarded destination - this is referred to as Forced Intercom Call Forwarding. The Do Not Disturb feature can be activated while an extension is busy or idle. Extensions with a higher Class Of Service can override the active Do Not Disturb condition.

When Do Not Disturb is active, and the extension user goes off hook a special intercom (short stutter tone followed by continuous dial tone) reminder tone is heard. If one of the flexible buttons is programmed with Do Not Disturb, it will light whenever the feature is active.

Default Settings:

Do Not Disturb - Not Active

Operation

Set Do Not Disturb

1. While your extension is idle (no other call activity), press Feature 4. Do Not Disturb is activated, and the display momentarily shows:

2. When the display reverts back to idle condition, the set condition shows in the bottom row of the display:

3. Calling an extension in DND

Cancel Do Not Disturb

2. Do Not Disturb is deactivated, and the display momentarily shows:

3. When the display reverts back to idle condition, DND is removed from the display.

Operational Notes

- An Extension can have either Do Not Disturb or station call forwarding, but not both at the same time.
- At any time while your Digital Speakerphone is idle, you can immediately divert an incoming tone ringing intercom call to the attendant by using the Do Not Disturb feature – Forced Intercom Call Forward.
- Extensions with a DSS/BLF button of an extension that is in DND, the button will flash.
- The Do Not Disturb feature code can be programmed on a flexible programmable Button, which will light steady whenever Do Not Disturb is active.

Do Not Disturb (On Call)

Feature Code: Feature 4

Description

The On Call Do Not Disturb feature allows the user to block a ringing outside line while engaged on a call. At the end of the call, the user must remember to dial the DND code Feature 4 to turn the DND feature off.

Default Settings:

N/A

Operation

1. While connected on a call, it is possible for an additional call to ring at the extension. To cancel ringing for this call, press a pre-programmed Feature/DSS Button designated as "DND" or press Feature 4.
2. Do Not disturb (On Call) is activated.

Operational Notes

- The Do Not Disturb (On Call) feature code may be programmed on a Feature/DSS Button.
- A Feature/DSS Button programmed for the Do Not Disturb code will flash at a fast rate while Do Not Disturb is active.

Do Not Disturb (Override)

Description

The Do Not Disturb – Override feature allows extensions with a more privileged Class of Service to override a station that is in Do Not Disturb.

Do Not Disturb-Override is available only if Intrusion Active (MBC 01-xxx-11) is active on the calling extension and the calling stations must have a more privileged COS.

Default Settings:

N/A

Operation

Calling an Extension in Do Not Disturb

1. Place intercom call to the extension in Do Not Disturb. The Do Not Disturb tone is heard, the calling parties display updates and allows the DND override:

2. Press the softkey beneath override
3. The called extension begins to ring.

Operational Notes

- An extension in DND that has been overridden may invoked Forced Intercom Call Forward.
- The calling extension must have Intrusion Active (MBC 01-xxx-11) set to "Y" for Yes.
- By default all extensions are assigned a Class of Service (COS) of "0", which is the most privileged, COS. A COS of 9, for example, is the least privileged.

Drop call In (Call Duration)

Feature Code: N/A

Description

The Drop Call In features is used in conjunction with the Warning time (MBC 03-10), incoming call (Timer) and monitors the length of all incoming calls. When enabled, any incoming CO line call that exceeds the pre-programmed timer will automatically be disconnected. This is a great way to limit the amount of time an extension can remain on an incoming call.

Default Settings:

5 minutes

Operation

N/A

Operational Notes

- The extension user will hear a Warning Tone, 10 seconds before the call is disconnected.
- There is no way to extend this timer.

Drop Call Out (Call Duration)

Feature Code: N/A

Description

The Drop Call Out features is used in conjunction with the Warning Time (MBC 03-10), outgoing call (Timer) and monitors the length of all outgoing calls. When enabled, any outgoing CO line call that exceeds the pre-programmed timer will automatically be disconnected. This is a great way to limit the amount of time an extension can remain on an outgoing call.

Default Settings:

5 minutes

Operation

N/A

Operational Notes

- The extension user will hear a Warning Tone, 10 seconds before the call is disconnected.
- There is no way to extend this timer.

Extension Feature Status

Feature Code: Feature #8

Description

The Extension Feature Status allows the extension user to review the current status of features on their telephone.

Press Feature #8 to review the following features:

```
LNR :empty
SNR :No Saved Number
Memo:No Saved Number
Telephone Lock:N
Auto Hold:N
Page Receive:Y
Busy Ring :Y
Hotline to :NULL
Position:X-XX-XX
Tenant Group:X
Pickup Group:X
Paging Group:X
Day COS :0
Night COS:0
Monitor COS:5
Warning Tone:N
Drop Call Out:N
Drop Call In:N
Intrus. Active:Y
```

```
Intrus. Accept:Y
Intrus. Tone:Y
ECF Operation:N
SMDR Output:Y
ICM Mode:VC-HF
Forced LCR:N
```

Default Settings:

N/A

Operation

1. Press Feature #8.
2. The display first shows the contents of LNR (Last Number Redial).
3. Use the right Interactive button next to advance through all of the various features.

Operational Notes

- The telephone must be idle.

Extension Password

Feature Code: Feature 97

Description

All extensions have an associated User Passwords which are used to activate/deactivate Phone Lock, Call Forward Remote and Attendant features. Valid passwords are four digits in length, ranging from 0000 to 9999.

Default Settings:

All extensions, with the exception of the Attendant, have the same default password, 0000. The Attendant's, which by default is extension 101, default password is 9999.

Operation

Change Your Password

1. Press Feature 9 7

2. Enter the current password and then press show.

3. Press pswd.

4. Enter the new password and then press save.

Operational Notes

- The use of this feature could block calls to 911 - DO NOT use this feature in common areas such as lobbies.

External Paging

Feature Code: 460

Description

The system provides one external one-way, dedicated paging interface, to connect a paging amplifier or multi-zone one-way page controller. The External Paging Zone may be accessed individually or with all eight (8) Internal Paging Zones as an All Call Page.

The External Page access code may be programmed on any feature button.

Operation

Any Extension on the system can dial the External Paging Code 460 to access the external paging unit.

Operational Notes

- A Pre-Amplified ancillary paging device is needed.

Feature/DSS Button Reset

Feature Code: Feature 58

Description

This feature is used to reset all Feature/DSS Buttons to factory settings.

1. While the extension is idle, press Feature 58. The display prompts for the password:

2. Enter the extension password and then press [show]. The display prompts for confirmation:

3. Press go to complete the operation. A confirmation tone will be played.

Operational Notes

- This will default all of the programmed feature buttons back to factory default. The Code Feature #3 is used to reprogram the buttons.
- Each Flexible (Programmable) button can be defaulted individually.

Feature - Directory - Suffix Code Look-up

Feature Code: Feature #5

Description

The Directory/Suffix Code Lookup feature is used to find the directory number, Feature Codes, and Suffix Codes required to operate system features.

Default Settings:

N/A

Operation

1. While the telephone is idle, press Feature #5. The display shows:

   a. Press dir to find a system Directory Number.

b. Press feat to find a system Feature Access Code.

c. To find a Suffix Code, press suffix. The list displays digits dialed after system resource directory numbers.

2. Use the interactive buttons below back and next to navigate through the display categories.

3. Use Hold to return to a previous menu level.

Operational Notes

- When using a "DIR" feature, dial only the number given, there is no need to press the *Feature* button.
- When using a ""feat" feature, remember to press the Feature button before dialing the listed code.
- The "suffix" code is always dialed after the telephone extension number.
- The codes are listed in numerical order.

Flexible (Feature) button inquiry and programming

Feature Code: Feature #3

Description

There are 18 flexible (programmable) feature buttons on the digital speakerphone, which can be programmed by the user, with the most used features. All flexible buttons have a dual color LED used to indicate the operational state of the feature programmed on the button.

Any feature code can be programmed on one of these buttons. There are two categories of feature codes "Dir" and "feat". A "Dir" feature code only requires the number to be programmed, whereas a "feat" feature requires that the feature key is pressed before dialing the intended feature code.

This code is also used to review the button programming. The following table shows how the digital speakerphone is programmed at default.

Default Settings:

Line 6		101
		102
Line 5		103
		104
Line 4		105
		106
Line 3		107
		108
Line 2		109
		110
Line 1		Record
		Voice Mail

Operation

Inquiry:

1. Press Feature #3. The display will show:

2. Press the Button to view its contents (code). For example, press button 1 (upper Right) to view the extension 101, which is displayed for 3 seconds.

3. Press the softkey beneath show. The name/designation of the feature/directory number displays for 3 seconds.

4. Continue checking other buttons, for example press Line 1 to reveal 700. Continue to press other buttons to see what is programmed. Press the speak button to exit the Button Inquiry feature.

Programming a Flexible (Feature) Button:

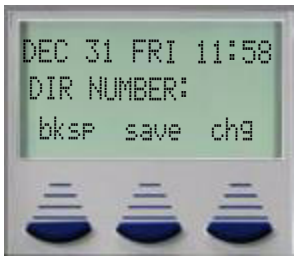
1. While the phone is idle, press Feature #3. The display indicates that flexible (Feature) button programming mode, is active, and prompts for a key to be pressed:

2. Press the Flexible (Feature/DSS) Button to be programed. The display will update, showing what is programmed under the button indicated. For example, if the first button (upper Right) were pressed it would display:

3. Press chg the following will be displayed.

4. There are two programming categories, "Dir" and "feat". "DIR" is a Dial Directory Code, which means it is just like dialing a number such as 101 for extension 101, or dialing 700 for CO Line 1; so to dial a system speed bin location just dial 600 (500 for a station speed dial bin). "feat" is a code that requires the "feature" button to operate correctly. Therefore, when programing a "feat" feature, remember to start it with the "feature" button. For example, the entry to place DND on a button would be feature 4.

   a. To program a directory number, press dir.



   b. Enter the appropriate directory number and then press save. If the wrong code is entered, before saving it, simply press bksp and chg to re-enter the number.

   c. To program a feature code, press feat.

   d. Press the feature button.

   e. Enter the feature code for example, enter Feature 4 for DND and then press save.

5. Press another button to continue programming other Feature/DSS Buttons or press the speaker button to exit this programming.

Operational Notes

- If an invalid code is dialed an error tone is played and the Digital Speakerphone will display CODE UNAVAILABLE.
- A user can program a Flexible (Feature/DSS) Button for a specific CO line, even if their access is restricted in database programming. However, if the user tries to access the line, it will be restricted as designed in database programming.
- When assigning a "feat." feature type on a button, remember to begin the entry with the "feature" button, followed by the feature code. For example, for DND, the entry is f4 and not just 4. Refer to the beginning of this chapter for valid feature codes.
- A feature can only be assigned to one button. If a second button is created, the first button becomes an "AVAILABLE KEY".
- To clear, or un-assign, a button follow the programming steps, but press save without entering a DIR or feat. code.
- Buttons with no features programed on them will display AVAILABLE KEY.

Forced Intercom (Call Forward) or One time DND

Feature Code: While on a call - Feature 4

Description

Using the Forced Intercom-Call Forward feature, you can immediately forward tone ringing intercom calls to the attendant by pressing the Do Not Disturb button.

Default Settings:

N/A

Operation

1. When a telephone is set to Tone Ring, or the calling party presses the "*" key to convert to Tone Ring, and another station is calling, the display shows:

2. Press f4. The display shows:

3. The ring is discontinued and the call is sent to the programmed attendant.
4. The extension remains in Do Not Disturb mode until deactivated.

Operational Notes

- When Forced Intercom-Call Forward is activated, the calling party connection is an intercom call to the attendant extension.
- Forced Intercom Call Forward cannot activated if another Extension Call Forward is already enabled.

Forced Intercom Tone Ring

Feature Code: TONE *

Description

Extension users can use the Forced Intercom Tone Ring feature to cause the called Extension to ring when initiating an intercom call. After a Voice Announce connection has been established, the calling party may convert the alert signal at that extension from Voice Announce to Tone Ring.

Additionally, extensions that are in programmed to Tone Ring, can be converted to Privacy Mode using this same technique.

Default Settings:

N/A

Operation

1. Establish an intercom call to an extension in "Voice Announce" (Feature 9 8) mode. The calling parties telephone will display:

2. Press * to change the alert signal at the called extension from Voice Announce to Tone Ring. The calling parties telephone will display:

3. A Tone Ring alert signal is sent and continues at the called extension until it is answered or forwarded to the preprogrammed destination. Prior to forwarding, the calling party can dial * again to return to *Voice Announce* mode.

Operational Notes

- The Calling Extension can convert an extension that is programmed to ring from Ring Tone Mode to Privacy Mode, using the same method.
- To leave a Callback request at a called extension that doesn't answer, the alert signal must be set for Tone Ring.
- An Intercom call will not forward unless it is in Tone Ring mode.

Get Held Trunk (CO Line)

Feature Code: Feature 7 *

Description

Get Held Trunk allows a user to get the oldest held call at an extension. This allows a user, such as an attendant, to answer several calls, place them on hold, and reconnected to them in the order that they were placed on hold.

Default Settings:

N/A

Operation

1. Answer each call
2. Place the calls on hold
3. Dial Feature 7 * to pick up the oldest held call.
4. Take action on that call. Continue this procedure for all holding calls.

Operational Notes

N/A

Headset Mode

Feature Code to enable: Feature 9 #

Feature Code to disable: Feature * 9 #

Description

The Headset feature allows the user to toggle between speaker mode and headset mode. Press the speaker button once, from an idle telephone, to activate the headset, press it again to activate the speaker mode. Once enabled, the disable code Feature * 9 # must be dialed to deactivate headset mode.

Default Settings:

- Headset mode is disabled by default

Operation

1. From an Idle extension dial Feature 9 # to enable headset mode or Feature * 9 # to disable headset mode.

Operational Notes

N/A

Hidden Codes (Dial Pad)

Feature Code: Feature 61

Description

A four-digit code may be stored for dialing by one-button operation. The Hidden Code also called Dial Pad feature must be programmed on a Flexible (Feature/DSS) button or it will not operate. This feature, simulates a user dialing the 4 digits, and can be used to store 4 digit codes, such as Account Codes or a voice mailbox password. Call the voice mail, when it answers, press the Hidden Code Feature Button to enter the 4 digit password.

Default Settings:

N/A

Operation

Storing the Code:

1. While the telephone is idle, using the Flexible Button programming procedure, Feature #3, then press the Flexible (feature) button which will store the Hidden Code.

2. Press the softkey beneath chg.

3. Press the softkey beneath feat.

4. Press Feature 6 1 + {the Four, or less, digit code to store}.
5. Press the softkey beneath save.
6. The speaker button to exit Feature/DSS button Programming.

Using the Hidden Code:

1. When the 4 digit code is need, press the preprogrammed button. For example, Press the VM button on the telephone. When the voice mail answers, press the Hidden Code button.
2. The stored code is dialed.

Operational Notes

- The Hidden Code feature can only be used when stored on a Flexible (Feature/DSS) button.

Hold

System Hold:

N/A Fixed Hold Button

Exclusive Hold:

Activate Exclusive Hold: Feature + Hold

Description

Intercom and CO Lines calls can be placed on either system or exclusive hold. When a call is on hold, the extension that places it on hold, will receive a flashing green, double wink rate, on the associated button LED. All other extension will receive a Red indication. Exclusive Hold, is only available for the extension that places it on hold, and flashes green rapidly.

Default Settings:

N/A

Operation

1. Place or receive an intercom or CO Line call.
2. Press the Hold button to place the call on hold.
3. Press the Hold button again to pick up the same call at the same extension.
4. Other extensions within the system can press the flashing CO Line or Intercom extension to pick up the held call.

Operational Notes

- Calls placed on hold will hear Music-on-Hold, if supplied.
- Calls placed on hold will send an audible tone to the extension that placed it on hold when the "Hold Reminder" (MBC 03-08) timer expires. If the call remains on hold until the "Hold Reminder" timer expires again, it will begin recalling. If the call goes unanswered, after the "Hold Reminder" timer expires again, the call will be disconnected.
- To ensure disconnect, while a call is on hold, it will be monitored for disconnect, and be subjected to the Hold Abandon Timer (MBC 03-43)

Holding Call Answer

Feature Code: Hold

Description

The Holding Call Answer feature allows extension users to place a call on hold and retrieve the call by pressing the Hold button. When multiple calls are holding at an extension, Holding Call Answer will access the outside line that was placed on hold last.

Holding Call Answer works for all outside lines. It is possible to handle calls that do not appear (no button) at an extension via Holding Call Answer.

Default Settings:

N/A

Operation

1. When one or multiple calls are holding at your extension, press Hold. The oldest holding call is connected.
2. Press Hold again to place this call on hold.
3. Press Hold again to answer the next oldest holding call.
4. Repeat as required for any calls on hold. (From your extension)

Operational Notes

- Holding Call Answer will also operate for intercom calls placed on hold.
- If the person on hold hangs up, the system will automatically release the held CO line.

Hot Key (Dial Pad) Enable/Disable

Feature Code: Feature #6

Description

Hot Key also called Hot Dial Pad, enables the user to dial directly using the keypad without going off hook or pressing the s button. Once the call connects, begin conversing or just pick up the handset to speak privately. When Hot Key is disabled, the user must go off hook or press the speaker button before beginning a call.

Default Settings:

Hot Key is enabled

Operation

Disable:

While the telephone is idle, press Feature #6. The display will momentarily show the feature status as follows:

Enable:

While the telephone is idle, press Feature #6. The display will momentarily show the feature status as follows:

Hot Line

Feature Code: Feature 9 *

Description

The Hot Line feature - also called Off hook Preference or Prime Line Pick up - allows the user to access an extension or Speed Dial Directory number simply by going off hook. Locations, extensions or speed dial bin numbers, can be dialed immediately or after a delay, of up to 10 seconds. If a call is ringing at the extension, the ringing call will be answered when the extension user lifts the handset or pressing the speaker button.

Default Settings:

Hot line is disabled.

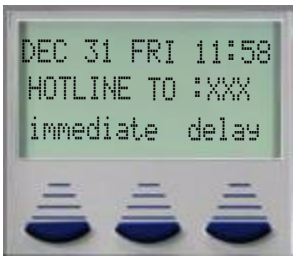
Operation

Setup:

1. While the telephone is idle, press Feature 9 *.

2. Press chg:

3. Enter the speed dial directory number or extension number to which this extension is to be connected when the phone goes off hook. Then press save:



4. Select if this destination is to be immediate or delayed.

   a. If you select immediate, you hear a confirmation tone and the function is invoked.

   b. If you select delay:

      1) Press chg until the appropriate delay time (in seconds) displays.

Invoke Hotline:

1. While the telephone is idle, lift the handset or press the speaker button. A call is placed to the selected destination either immediately or after the delay time.
2. Hang up to finish the call.

Disable Hotline:

1. Dial the feature code Feature 9*
2. Press "chg"
3. Press "save"

Operational Notes

- If delay mode is selected other calls can be placed during the delay period.
- If a call is ringing the extension, the ringing call will be answer when the handset is lifted, or the speaker button is pressed. There is no way to disable the answer feature.
- The Hotline feature code Feature 9* can be programmed on an available Feature/DSS Button.
- An intercom button may be placed on the extension to by pass this hot line feature. See "Intercom Key (Intercom Calling)" Page 109

Intercom Key (Intercom Calling)

Intercom Button Feature Code: Feature 6 5

Extension numbers 100 - 148

Description

Because of "Hot dialing", which allows the user to dial extension numbers without pressing the speaker button or lifting the handset, intercom buttons are rarely used. However, they are very helpful if Automatic Line Select See "Automatic Line Select" Page 51 or Hot Line See "Hot Line" Page 107 are enabled. In these cases, the intercom button is used to make intercom calls, and should be pressed before dialing an extension number. This feature must be programmed onto a programmable feature button.

Operational Notes

- Some applications may require a button to indicate use of the intercom feature at extensions. To meet this requirement, the feature code Feature 6 5 must be programmed on an available Feature/DSS Button for use.
- Auto Line Selection is set to "icm" (Intercom) by default, therefore, intercom dial tone is heard automatically when lifting the handset or when pressing the s button.
- When calling an extension that is in Hands Free, See "Intercom Mode/ Voice Announce (HF/Tone)" Page 109, the user can Force Tone Ring by dialing the * key after the extension number.

Intercom Mode/ Voice Announce (HF/Tone)

Feature Code: Feature 9 8

Description

Any Digital Speakerphones may receive intercom calls in one of three ways:

- Voice Announce Hands-free reply mode
- Voice Announce Privacy Mode
- Tone Ringing Mode

Voice announce Hands-free allows the parties, calling and called, to converse hands-free. The calling party presses the DSS/BLF button or dials the extension number (101~147) and the receiving party can hear and talk back to the calling party.

Voice announce Private mode is very similar to the voice announce hands-free, except the called party's mute button automatically comes on, stopping the calling party from hearing any of the

conversation in the called parties office. The calling party presses the DSS/BLF button or dials the extension number (101~147) and may announce to the called party. The called party must press their mute button, or go off hook, before being able to speak back to the calling party.

Tone Ring Mode-the extension will ring at the intercom ring cadence as defined by the Distinctive ring setting. See "Distinctive Ringing Extension" Page 85. The called party will have to answer the ringing call by pressing the speaker button or lifting the handset.

TABLE 5.6: Extension behavior in these mode

Mode	Momentary Confirmation	Confirmation Tone Heard	Status Bar (when intercom call rec'd)
Voice Announce – Handsfree	VA-HF MODE	single burst tone	Blue status bar and speaker button are lit solid Blue (Intercom button is lit solid green)
Voice Announce – Private	VA-PRIVACYMODE	single burst tone	Blue status bar, speaker button and Mute buttons are lit solid (Intercom button is lit solid green).
Tone Ring Mode	TONE RING MODE	Intercom ring cadence is heard	Blue status bar, and speaker button are both flashing. (Intercom button will flash green).

Default Settings:

All Digital Speakerphones that are set to Voice Announce – Hands-free mode.

Operation

Setup

1. While the extension is idle, press Feature 9 8. A confirmation tone is heard and the display indicates the new mode set:

2. Press Feature 9 8 again to advance through each of the available modes.

Receiving a Call in VA-HF Mode

1. When an extension is idle, users are alerted of intercom calls by one tone burst. The voice connection is established immediately and the parties may speak via the speakerphone.

Receiving a Call in VA-Privacy Mode

1. When an extension is idle, extension users will be alerted of an intercom call by one tone burst. The voice connection is then established immediately with the Mute function activated. the Called party can hear the calling extension voice announcement over the speaker, but the microphone in telephone is temporarily disabled.

2. The extension user can:

   a. Lift the handset for privacy.

   b. Press the m button to deactivate the "Mute" feature and speak with the caller using the speakerphone.

Receiving a Call in Tone Mode

1. When an extension is idle, the extension user will be alerted of an intercom call by a double-burst tone which is repeated until you respond or until the call follows a Call Forward route.

2. If an extension user dials an extension that is in "Tone Ring" mode and presses "*" key the called extension switches from "Tone Ring" Mode to Voice Announce Privacy mode. The called party then follows the VA-Privacy Mode Parameters.

3. The extension user can:

   a. Press the speaker button or Lift the handset for privacy.

Operational Notes

- If a Feature/DSS Button has been programmed with the Intercom Mode Feature 9 8 programmed on it, the LED associated will indicate the current mode selection as follows:
- Voice Announce – Hands-free, LED will light steady green.
- Voice Announce – Privacy, LED will light steady blue.
- Tone Ring Mode - LED will not light

Intrusion

Description

If granted in programming, the Intrusion feature allows an extension user to enter into an existing conversation by dialing a code or pressing a preprogrammed button. Intrusion can be initiated on either a busy CO Line or a busy extension.

Default Settings:

By default no extensions are granted the ability to intrude on conversations.

Operation

Intruding on an Extension:

1. Dial a busy extension or press the preprogrammed DSS/BLF button.
2. At the busy signal, dial the Intrusion (suffix code) 8 or press the preprogrammed feature button.

Intruding on a CO Line:

1. Dial a busy extension or press the preprogrammed DSS/BLF button.
2. At the busy signal, dial the intrusion (suffix code) 8 or press the preprogrammed feature button.

Operational Notes

- The Extension's Day (01-Ext-05), Night (01-Ext-06), and Monitor (01-Ext-07) Classes of service determine if an extension can initiate or receive an Intrusion
- The CO Line's Day (02-ccc-04) and Night (02-ccc-05) Classes of Service determine if a CO Line can receive an Intrusion. (where ccc = CO Line number 700-724, 744-747)
- By Default, no extensions can receive an intrusion.
- All parties can hear the extension user that intrude on a conversation.
- Extensions with call forwading such as Direct or Busy Call Forwarded, cannot receive an extension to intrude, because the intercom call follows the call forwarding.
- The attendant cannot be intruded upon.

Last Number Redial

Feature Code: Feature 8

Description

The Last Number Redial feature, or LNR, automatically dials the last number dialed from the telephone and retains up to sixteen (16) digits. The extension user may choose a specific outside line by first pressing the desired outside line button or allow the LNR to automatically select the CO Line.

Default Settings:

N/A

Operation

Choose an Outside Line First

1. Press an outside line button.
2. Press Feature 8.

Automatically Select an Outside Line

1. Press Feature 8.

Operational Notes

- Last Number Redial works only for CO Line calls.
- The LNR feature code can be programmed on a Feature/DSS Button.
- LNR will redial dial a speed dial number, and any subsequent manually dialed digits.
- In the event that all CO lines are busy the extension user will hear busy tone and the telephone will display:

- If the Last Number Redial memory is empty the extension user will hear error tone and the telephone will display:

Loud Bell (Optional)

Feature Code: 4 2 9

Description

The system comes equipped with one dry contact closure which can be connected to a customer provided loud bell device. Any one or all CO Line groups can be programmed to active the loud bell closure, which will ring when the CO Line rings. The loud bell closure will follow the ring cadence of the CO Line group. The contact closure must not exceed 24 V DC,.5 Amps.

Caution:

THE USE OF AC CURRENT WILL DAMAGE THIS CONTACT

Default Settings:

N/A

Operation

1. The loud bell can also be activated by dialing 4 2 9.

Memo (Note Pad)

Feature Code: Feature 5 *

Description

The Memo (Note) Pad feature enables an extension user to enter a telephone number, while on a call, for later use.

Default Settings:

NA

Operation

1. While connected to an outside line, press the pre-programmed Feature/DSS Button designated as Memo (Note) Pad or press Feature 5 TONE *.

2. Using the dial-pad, enter the number to be stored and then press the softkey beneath save. Only the user will hear the confirmation tone and the display returns to the outside line connected status.

Dialing the Number Stored in Your Memo (Note) Pad

1. While the telephone is idle, press Feature 5 LOAD * or press the desired CO Line button, then press Feature 5 LOAD *.

Operational Notes

- The feature code Feature 5 TONE * can be programmed as a Feature/DSS Button.
- Only 1 number can be stored using the Memo (note) Pad feature.
- The stored number remains until it is replaced with a new number.

Message Waiting

Feature Code: Feature 9 MNO 6

Feature Code (suffix Code): Ext + 9

Description

Alert an extension (busy or idle) that of an attempted call using the Message Waiting feature. The Digital Speakerphone and Wireless Handset will display the message and give the extension user a 1-button reply button.

Default Settings:

NA

Operation

Digital Speakerphone and Wireless Handset:

1. Dial an extension number, the display will update:

2. The display will update, revealing three choices:

3. Press `callme` to leave a message waiting indication:

4. Press `vmsg` button to leave a voice mail message (requires a voice mail). The called extension will play an alert tone, then forward to the extensions programmed voice mailbox.

5. Press prep, select chg to customize a message or next to scroll through the preprogrammed text messages; Empty, Call Operator, Call Home, Call School, Visitor Waiting, Urgent, Come See me. to Press send to send the selected message:

6. The receiving extension will display:

Option 2

1. An extension user can, from an idle phone, send a message to a station without calling the station first. From the idle phone dial Feature 9 6:.

2. Enter the desired extension number 101-148, and press save:

3. Follow from above, step 2

Operational Notes

- A maximum of forty, station-to-station messages (not including voice mail) can be supported by the system at one time.
- Empty - can be customized, for one time use, at the time it is sent.

Messages (Text Message)

Feature Code to Enable: Feature 9 0

Feature Code to Enable: Feature * 9 0

Description

Digital Speakerphone users can update their display, using the Messages (Text Message) also called Premises Messages, giving calling parties an indication of their current status. There are six preprogrammed messages and one for one time use, which is customizable at the time it is sent. The following messages are available for use: Empty, Out for Lunch, Will return soon, Gone for the day, in a meeting, out of office, On vacation,

Default Settings:

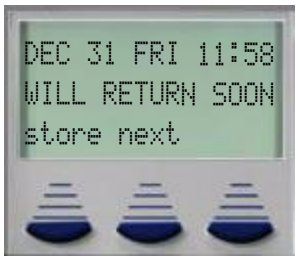
NA

Operation

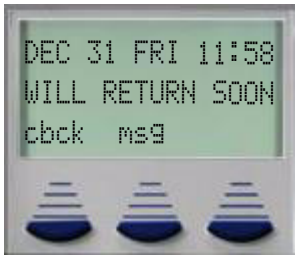
Digital Speakerphone and Wireless Handset:

1. Dial the Messages, text message Code Feature 9 0:.

2. Press chg to customize a message, or press next to scroll through the other six choices, press store to select the desired message:.



3. Once selected, any extension calling, will receive the saved message in their display:



Monitor (Extension)

Feature Code: Suffix Code EXT + 1

Description

When granted in programming, an extension user can join, and Monitor an existing conversation by dialing a code or pressing a flexible button. A busy extension can only be monitored by an authorized extension. Authorized extensions are extensions that have a more privileged Monitor Class of Service, than the extension being monitored.

Default Settings:

No extensions can monitor another one because all extensions are assigned a Monitor COS of 5. A Monitor COS of 0 is the most privileged, and 9 is the least privileged.

Operation

Monitoring an Extension:

1. Dial a busy extension or press the preprogrammed DSS/BLF button.
2. At the busy signal, dial the Monitor (suffix code) + 1 or press the preprogrammed feature button.

Operational Notes

- Extension's (Monitor COS - 01-Ext-07) Monitor Class of Service (MCOS) determines whether an extension can receive be monitored.
- By Default, no extensions can be monitored.
- Unless the Monitoring extension, presses the "Mute" button none of the parties can hear the extension.
- An extension that is Direct or Busy Call Forwarded, cannot be monitored.
- The attendant cannot be monitored.

Mute

Description

Press the Mute button during a conversation to temporarily suspend the transmit of the microphone. This makes is possible to have a private conversation.

Default Settings:

Mute is one of the fixed buttons, and it is inactive.

Operation

1. While connected to any call, press the mute button. The display momentarily shows:

2. Press Mute again to cancel. The display momentarily shows:

Operational Notes

- The Mute button at the station that activated. *Mute* is active the LED status bar flashes slowly.

Night Mode/Active

Feature Code: Feature 63

Description

The attendant or alternate attendant extension may select between Day, Night and Timed modes. These modes are designed to accommodate special ringing requirements for Day and Night. Timed mode is used to automatically switch between Day and Night modes.

When programming a Day/Night button, it is possible to enter the feature code as well as the password. For example, enter "Feature + 63 + 9999" on one button.

Default Settings:

The system is in day mode, and Night Mode off.

Operation

Change Service Mode

1. At the attendant extension:

   a. Press the Feature/DSS button programmed with the Service Mode feature code or enter the feature code Feature 63. The following will be displayed.

   b. Enter the attendant extension password (Default password is 9999).

2. The Service Mode is advanced to the next mode.
3. Repeat until the appropriate mode of service display.

On-Hook Dialing

Feature Code: Speaker Button

Description

Using the Hot Key Pad, an extension user can make telephone calls using On-Hook Dialing. This means that the user does not have to pick up the handset or press the speaker button before dialing a number.

Default Settings:

N/A

Operation

1. Dial any extension number directly from the keypad without lifting the handset. The Hot Key feature must be active.

Or…

2. Press any outside line button and dial without lifting the handset.
3. When Hot Key is disabled, press the speaker button or press an idle outside line button then dial without lifting the handset.

Operational Notes

N/A

One Touch Record

Feature Code: Feature MNO 6 PQRS 7

Description

With a Hard Drive or Flash voice mail system, extension users can press one button and record the current conversation. This One Touch Record (Record on the Fly) feature can be used to record internal or external calls. This feature is can be used with the wireless handset to record important information when a paper and pencil are not available.

Default Settings:

N/A

Operation

1. While connected to any call, press the preprogrammed One Touch Record button. The display momentarily shows:

2. When the recording session is established the display will update and display:

3. The conversation will be recorded. To stop recording, press the Hold button, the One Touch Record button or simply hang up. However, it is also possible to reach the maximum record length for the individual mailbox. Depending on the voice mail, once the recording length is exceeded, a message may play.

Operational Notes

- One Touch Record requires a voice mail system
- Placing the call on hold will end the recording
- Record Allow (01-xxx-20) must be enabled to use One Touch Record

Page All - Tenant Group 1

Feature Code: 400

Description

Using the dial code 400 extension users can page all valid extensions within tenant group 1.

Default Settings:

N/A

Operation

1. From an idle extension dial the directory code 4 0 0:

2. Make the page announcement and hang up or wait for a meet me page connection.
3. It is a good idea to depress the hook switch before hanging up.

Operational Notes

Only idle extensions will receive the page.

Page All Tenants, All Extensions

Feature Code: 4 0 9

Description

The system can be programmed with up to three tenant groups. Therefore, the Page All Tenants, all Extensions (Directory code 4 0 9) was added to allow one extension a way to page all of the tenant groups and all of the valid (idle) extensions connected to the system.

Default Settings:

N/A

Operation

1. From an Idle extension dial the directory code 4 0 9:

2. Make the page announcement and hang up or wait for a meet me page connection.
3. It is a good idea to depress the hook switch before hanging up.

Operational Notes

- Only idle extensions will receive the page.

Page Allow/Deny

Feature Code: Feature #9

Description

Page Allow/Deny allows extension users can select to, or not to, receive a page.

Default Settings:
By default all extensions can receive a page.

Operation

1. From an Idle extension dial Feature #9 the display will temporarily update:

2. From an Idle extension dial Feature #9 the display will temporarily update:

Operational Notes

N/A

Page Groups

Feature Code: Dial Code 401 to 408

Description

All extensions are assigned to one of eight Page Groups. The page groups' last number corresponds to the desired page group.

TABLE 5.7 Page Groups

Page Group	Dial Code
1	401
2	402
3	403
4	404
5	405
6	406
7	407
8	408

Default Settings:

By default all extensions are in group 1 dial code 401.

Operation

1. From an Idle extension dial 401 to 408 he display will temporarily update (where xxx = page group):

Operational Notes

N/A

Page - Meet Me

Feature Code: Feature 5 9

Description

Any internal or external page announcement can be answered using a Meet Me Page code. After hearing a page announcement, dial the Meet Me Page code from any telephone and be connected to the paging extension.

Default Settings:

N/A

Operation

1. While a page is currently in progress, the telephone displays:

2. Press Feature 5 9. The display shows:

Operational Notes

- A page may be answered at any telephone using the Meet Me Page code, even if the page announcement is not heard over the telephone speaker.
- The page may be any zone page or all page.
- The Meet Me Page code may be programmed on any Feature/DSS Button.

Pause

Feature Code: Feature 70

Description

Pause Insertion is used to generate an intentional delay in dialing on outgoing CO line calls. A pause or a combination of pauses may be stored in the Speed Dial bins to allow timed access to special services, while allowing the extension user to monitor the progress of the call.

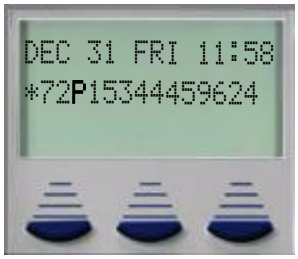
A pause will appear as P on a Digital Speakerphone display.

Default Settings:

N/A

Operation

1. To enter a Pause in a Speed Dial Bin, press Feature 70, a P will appear in the display.:



Operational Notes

N/A

Phantom Lines / Virtual Numbers

Feature Code: 850 - 879

Description

Phantom Lines are software resources, that can be assigned to a button allowing that button to become the Phantom Line. CO Line and intercom calls can be routed to Phantom Line (Virtual Number) which can be accessed by any extension that has a button appearance of that Phantom Line.

Phantom Lines do not audibly ring, call indication at a Phantom Line is accomplished by fast flashing indication on the associated LED only.

Using Phantom Lines:

- Phantom lines can be used to alert multiple extension of an incoming call. All extensions with a Phantom Line button will receive a visual, but no audible indication.
- When equipped with the optional hard drive voice mail system Phantom Lines can be used to activate an over head page for an incoming calls. Only extensions with the Phantom Line (Virtual Number) button programmed, will be able to pick up the call.

Default Settings:

Dial codes: 850 - 879

Operation

Programming a Phantom Line

1. To activate a phantom line, it must be programmed on a Flexible (Feature) button. If the number is not programmed on a button, when dialed, the user will get error tone and OUT OF SERVICE will be displayed.

Placing a Call Using Phantom Line

1. While idle, dial the Phantom Line number to speak to another extension user.
2. The Phantom Line called will begin to fast flash at the extensions where this Phantom Line appears.

Transferring a Call to a Phantom Line

1. While connected (intercom or CO Line), press the Transfer button.
2. Dial the Phantom Line number.
3. Hang up to complete the transfer.
4. The Phantom Line called will begin to fast flash at the extensions where this Phantom Line appears.

Operational Notes

- Phantom Lines must be programmed onto Feature/DSS buttons to operate.
- If no appearance of the Phantom Line exists in the system, the user attempting to call the Phantom Line or transfer a call to the Phantom Line will receive error tone and see the message OUT OF SERVICE in the display.

Phone Lock / Unlock

Feature Code: Feature 9 7

Description

To prevent unauthorized calls from an extension, an extension user can lock their telephone. Each extension is assigned a 4-digit password which is required to lock and unlock the telephone.

Note:

PHONE LOCK, WHEN ENABLED, WILL BLOCK ALL EXTERNAL CALLS INCLUDING 911!

Default Settings:

All phones are unlocked at default.

Operation

To Lock a Telephone

1. Press Feature 9 7

2. Enter the current password (The factory default for ext. 101 is "9999", for all others it is "0000") and then press show.

3. Press yes.

4. No outside line calls can be made at this extension.

To Unlock a Telephone

1. Press Feature 9 7.

2. Enter the current password and then press show.

3. Press no.

4. Outside line calls can now be made at this extension.

Operational Notes

- When an extension is locked, it can only make intercom calls. However, the extension can still answer and retrieve calls on hold, while it is locked.
- If someone tries to make a CO line call from a locked telephone, they will hear error tone and the display will show PHONE LOCKED.
- The Phone Lock feature code can be programmed on a Feature/DSS Button.

Pickup Groups

Feature Code: Directory Code 410 - 417

Description

The system provides eight (8) Extension Pick Up Groups per Tenant Group for partitioning the system into separate departments. Each group can pick up a ringing call by dialing the Group Call Pick up Code (*). However, occasionally it is necessary to pick up calls that are not in the same pick up group. The system allows extension users from other groups to dial a code, to pick up an audibly ringing call from another group.

All extensions are programmed into a Pick Up Group. Extension Pick Up Groups are assigned in the Database Programming.

Default Settings:

All Extensions are in Pick Up Group 1. The following is a list of pick up groups and their dial codes.

TABLE 5.8 Pick up groups

Pick up Group	Dial Code
1	410
2	411
3	412
4	413
5	414
6	415
7	416
8	417

Operation

1. Each ringing call, within a group can be picked up by an extension, within the same group by dialing the pick up code for that group.

Operational Notes:

- The telephone must be audibly ringing or the pick up will fail and display telephones will say PICKUP FAILURE.

Pulse to DTMF Conversion

Feature Code: 

Description

When the system is connected to Dial Pulse (Rotary) outside CO line, the extension user may manually force the system to send DTMF tones, when accessing a DTMF driven service, such as a voice mail or IVR system.

Default Settings:

All CO Lines are set to Tone Signaling mode.

Operation

1. Access an outside CO line (Pulse Dialing) and dial any number.
2. In a connected state, press TONE *.
3. All digits dialed after this code will be sent in DTMF.

Operational Notes

- The dialing conversion can only be from pulse mode to DTMF mode.

Recall

Feature Code: N/A

Description

Recall is a means of assuring proper call handling. There are several types of recall that can be invoked in the system, which can affects calls that are on hold or being transferred. The recall parameter is designed to assure that all calls on hold or being transferred will not go unattended.

When a Call is placed on hold and the hold recall timer expires, the call will recall at the extension that placed it on hold. Similarly, unanswered transferred calls will recall at the transferring extension when the transfer recall timer expires.

Default Settings:

Hold Reminder (MBC 03-08 *Hold Reminder*)

Exclusive Hold Time (MBC 03-09 *Ex_Hold Time*)

Transfer Internal Recall (MBC 03-11 *XFR_I Recall*)

Transfer CO Line Recall (MBC 03-12 *XFR_B Recall*)

SLT Hold Recall (MBC 03-13 *SLT Hold Recall*)

EKT Hold Recall (MBC 03-14 EKT *Hold Recall*)

Operation

1. Operation of recall is associated to feature invoked (transfer, Hold, etc.)
2. While a CO line recalls the initiator, the initiator or any extension (with normal access of that CO Line) may answer the recall ringing line.

Operational Notes

- Recalling CO Lines will follow Call Forward destination settings.
- Recalls are not directed to the programmed Alternate Attendant extension.
- When a holding or transferred call begins to recall, the outside party will hear transfer ring-back tone.
- During recall, the CO line returns to System Hold allowing any extension with normal CO line receive privileges to retrieve the recalling line.

Release Key

Feature Code: Feature 5 2

Description

The Release Key is used to cancel or complete any current action, bring it back to idle, without hanging up the handset.

Default Settings:

No Release Key is programmed on the telephone Feature/DSS Buttons.

Operation

N/A

Operational Notes

- Release Key must be programmed on a Feature/DSS Button to operate.
- Release Key will disconnect calls in progress.

Room Status (Hotel/Motel Feature)

Feature Code: Feature 7 #

Description

The System comes equipped with basic hotel/motel features. Once enabled, the Attendant or Alternate Attendant can dial the feature code and update the Room's Status; *Check In, Check Out, and Clean*. The LED associated with the flexible buttons on a DSS Console will change color to indicate the current status of each room. A room that is "Checked In" will not light the LED. When the room is "Checked Out" the LED is lit green, flashing slowly. When the room status is updated to "Clean" the LED will be lit solid green. This visual indication is only available on a DSS Console.

> *Before any extension is able to make a CO Line call that extension, even administrative extensions, must be checked In.*

Default Settings:

All extensions are checked out.

Operation

1. The Attendant or Alternate Attendant dials the feature code Feature 7 #.

2. Enter the Attendant Password or Alternate Attendant Password and then press show. .

3. Enter the Extension Number to be modified - Checked In, Out or Clean and then press show.

4. Select the action to be taken - Checked In, Out or Clean - A confirmation tone is heard.

5. Enter the next extension number to be modified, or the speaker button to exit programing.

Operational Notes

- Only the Attendant and the Alternate Attendant extensions can change a Room Status.
- Any Extension, even the Administrative extensions, must be "Checked In" to make local or long distance telephone calls.
- No Extensions, even Administrative extensions, will be able to make Central Office calls - including 911 - until they are "Check In".

Reminder Tones

Feature Code: N/A

Description

A specific interruption in intercom dial tone is provided to remind a user that a call processing affecting feature has been invoked. Whenever Do Not Disturb or Call Forward is enabled at an extension, the user, will hear this reminder tone when accessing intercom dial tone. The distinction of Reminder Tone is a fast repeated interruption of intercom dial tone. This tone is frequently referred to as "stutter" dial tone.

Default Settings:

N/A

Operation

Intercom dial tone will be appended with "Stutter Dial Tone" whenever the extension is used to place intercom calls.

Operational Notes

- Once a digit is dialed the reminder tone is removed until the next time the intercom is accessed.

Ringing Level / Muted Ringing

Feature Code: N/A

Description

Ringing Level - Ringing volume can be adjusted at each telephone. There are four levels of ringing available. Ringing Tone can be adjusted per the user's required setting using the Distinctive Ringing – Extension feature.

Muted Ringing - When an extension is busy on a call – incoming intercom and CO line calls will automatically ring at the lowest ring volume setting regardless of the level set by the extension. When the extension is idle, incoming calls ring at the loudness level set by the user.

Default Settings:

Ringer volume is set at level 2.

Operation

1. While the extension is idle, press the volume up or volume down button to set the ringing level.

Operational Notes

- Ringing levels are adjusted from the lowest level (0) to the highest level (3).
- Distinctive Ringing – CO Line settings, overrides Extension settings.
- When an extension is set to the highest or lowest level, a double tone is heard.
- As ringing levels are adjusted the current setting displays on the LCD.

Ringing Line Priority

Feature Code: N/A

Description

Ringing Line Priority is a system-wide feature that automatically connects incoming calls based on a predetermined priority. The ringing extension is automatically connected to the priority ringing facility, upon lifting the handset or pressing the ringing button.

Ringing Line Priority can be overridden at the extension by first pressing a direct appearing of a non-ringing, CO line, CO Line Group, feature button or by dialing an intercom number, while on hook. Auto Line Select (Feature 9 5) will not override the ringing line priority.

Ringing Line Priority is:

Callback – Extension Highest

Callback – CO Line

Recalling – CO Line

Transferred – CO Line

Incoming – CO Line

Incoming – ICM call Lowest

Default Settings:

N/A

Operation

N/A

Operational Notes

N/A

Saved Number Redial

Feature Code: Feature 51

Description

The Saved Number Redial, or SNR feature is normally used whenever you want to store a telephone number that you would like to dial later. The same feature code is used to Save a Dialed Number (SDN) and to dial the saved number – Saved Number Redial (SNR).

Default Settings:

N/A

Operation

SDN

After you've placed an outside line call to a number that you would like to store, press Feature 51. The dialed number is stored in the Saved Number memory.

SNR

When the telephone is idle, press the Feature/DSS Button designated as SNR or press Feature 51. The stored number is dialed.

Operational Notes

- SDN can store up to sixteen (16) digits.
- When SNR is attempted and the SDN buffer is empty, the display will show NO SAVED NUMBER.
- If all CO lines are busy when the redial is attempted the display will show ALL CO LINES BUSY.
- The Save Dialed Number/Saved Number Redial feature code can be programmed on any Feature/DSS Button.

Single Line Telephone / Analog Device Support

Feature Code: N/A

Description

The system will accommodate eight (8) analog ports, which are added by installing 4 port expansion modules. These extension ports have dedicated DTMF receivers and support standard two-wire analog telephone devices. Common uses of the analog extension ports are facsimile machines, modems, wireless and wired single line 2500 (analog) telephones.

All analog ports support Calling Party and Telephone Company Caller ID. Therefore, Caller ID telephones will receive Calling Party, internal station-to-station, Caller ID and requires no additional hardware. A Caller ID board and a subscription to a Telephone Company's Caller ID service is required to receive Caller ID on the desired CO Line.

The analog port is a -24V DC circuit and provides twenty-five (25) – cycle (frequency) ringing for the attached devices.

Default Settings:

N/A

Operation

N/A

Operational Notes

- Any single line (2500 type) telephone equipment can be connected to the system using an analog port, but only telephones designed to receive FSK, will receive CID information.
- To ensure that all calls are non-blocking, all analog ports have dedicated DTMF receivers.
- Calling party information is transmitted to all analog ports, and can be received by a Caller ID equipped telephone.
- All analog ports in the system can receive telephone company Caller ID, with a CID card, and a Caller ID subscription.

Speakerphone

Feature Code: N/A

Description

All digital telephones are equipped with a high-quality, half-duplex speakerphone, which makes it possible to make and receive hands-free calls.

Default Settings:

N/A

Operation

Placing a Call

1. Dial 9, or Press an idle CO Line button or press the DSS/BLF button or dial an intercom number; there is no need to press the speaker button or go off hook.
2. The speaker button's LED will immediately light, and the speakerphone is active.
3. Press the speaker button to hang up the call.

Answering a Call

1. If an extension is in hands-free mode, an intercom call will connect, without pressing any buttons. Press the speaker button to answer a ringing CO Line call.
2. The speaker button's LED will immediately light, and the speakerphone is active.
3. Press speaker button to hang up the call.

Switching from Speaker to Handset and Handset to Speaker.

1. To switch from speaker mode to handset, simply lift the handset. Note: the mute button will deactivate.
2. To switch from handset to speaker, press the speaker button, and then place the handset securely on hook. If the handset "Bounces" the call will be terminated.

Operational Notes

- The speakerphone function is impacted by environmental conditions.
- To dial intercom numbers directly from an idle condition, the Hot Key See " Hot Key (Dial Pad) Enable/Disable" on Page 106 setting must be Enabled. Otherwise, the extension user must press a programmed Intercom Button, program in intercom button, or press the speaker button prior to dialing the extension number.

Speed Dial

Feature Code: Feature 1

Description

The Speed Dial feature allows users to store frequently dialed numbers. Each extension may store up to fifty (50), but are assigned ten (10) at default. The system has a total of 1000 speed bins, which can be divided between the system and the extensions. The default extension speed dial numbers are 500 to 549.

The system may store 100 numbers 600 - 699 for system-wide access. System Speed Dial numbers can be programmed by Attendant Administration (See " Attendant Administration" on Page 46) or in database programming.

System speed bins may be provisioned to override Toll Restriction settings, allowing extensions to dial these numbers regardless of their CO Line or Extension Class of Service; with the exception of Class of Service 7, which does not have accesses to system speed bins.

Related Features	Programming
Attendant Administration (Feature *0) Pause (Feature 70) Class of Service – Extension Class of Service – CO Lines Pulse to DTMF Conversion Flash (Feature 3) Toll Restriction	Class of Service Extension (Day - 01-Ext-05, Night 01-Ext-06) Class of Service CO Line (Day - 02-LN-04, Night 02-LN-05) Resource - Speed Number Assignment 04-08 Resource - System Speed dial (ABBR) 04-09

Operation

Storing a number

1. From an idle telephone dial Feature 1 and then enter the speed bin to be programmed 500 - 549
2. Enter the number to be dialed, including a flash (Feature 3) if need, or pauses (Feature 70. Press next.
3. Select the line group to be accessed when the speed bin is dialed. The line group is only used when a speed bin is accessed through the navigation keys.

Placing a Call

Digital Telephones enter and store their speed dial number using Feature 1, to dial a stored number, press a CO Line and enter Feature 1, followed by the bin number 500 - 549.

1. To dial a stored speed dial number press the desired CO Line and then press Feature 1, please the speed dial bin to be dialed (500 - 549). Or using the navigation keys, from an idle telephone press up to access the highest speed bin (549) or down to access the lowest (500).
2. The speaker button's LED will immediately light, and the speakerphone is active.
3. Press speaker button to hang up the call.

Operational Notes

- The speakerphone function is impacted by environmental conditions.
- The mute button will only deactivate when switching from speakerphone to handset. Going from handset to speakerphone, the mute button remains active.

Transfer and Answer Calls

Feature Code: Feature 6 8

Description

Transfer and Answer Call is a convenience feature that speeds the process of completing a transfer and answering a ringing call, by making the operation possible by one button. (This feature must be used from a feature (Flexible) button that has been designated for the purpose.)

When a busy extension user is in the process of transferring a call and another call rings in, the Transfer/Answer button can be pressed to complete the transfer and answer the ringing call at the same time.

Default Settings:

N/A

Operation

Setup

Program an available Feature/DSS Button for the Transfer/Answer code operation.

1. While on a CO Line call and another call is ringing, initiate the transfer process.
   a. Press the Transfer button.

b. Dial the destination intercom extension number.

Or...

c. Press the Feature/DSS button of the destination extension number.

2. Press the Transfer/Answer button. The transfer is completed and the ringing call is answered.

Operational Notes

- This feature only works when it is programmed on a button, and a call is audible ringing at the extension.

Transfer Beep

Feature 7 9

When a call is transferred an audible tone is heard. Dial Feature 7 9 to disable this tone.

Related Features	Related Programming
N/A	N/A

UCD Agent Log Off/ Log On

Feature Code: Feature 9 1 Log Off

Feature Code: Feature 9 1 Log On

Feature Code: # 9 1 Log Off - Analog Telephone

Feature Code: # * 9 1 Log On - Analog Telephone

Description

Unified Call Distribution (UCD), can be considered an advanced Hunt Group. There are 24 UCD Groups, each can have up to 24 members and a member can logged into more than one group at a time. Each group can be assigned one of three Hunting methods; Linear, All Ring and Distributed.

- Linear Method, checks the first member programmed into the group, only if it is busy, will it check the next member; ringing the members in the order that they are programmed into the group.
- All Ring Method, rings all extensions programmed into the group simultaneously.
- Distributed Method, Finds the member that has been on-hook and idle the longest, and rings that extension; the hope is to distribute the calls evenly throughout all of the members.

UCD Agent Log Off/Log On

Extensions become active (Logged On) UCD Agents (members of a UCD group) when they are programmed into the group. The agents will receive calls using one of the three hunt methods described above. When an agent leaves for the day or takes a break the agent should Log Off, temporarily removing them from the group. Once removed from the group, that extension will function normally, but it will not receive any UCD Calls until it is logged back into the group. When the agent returns from break, they should log back into the group, once again becoming an active member. When placed on a button, that button will toggle the agent in and out of the UCD group. When the agent is logged out of the UCD group the button will be lit solid. When the agent is logged into the group, the button will not be lit.

To ensure that a call is not left in queue, the system requires that one Agent (Member) be Logged On at all times. If an agent is the last agent logged on, and tries to Log Out, they will get an error tone, and the display shows `Last Agent`; that agent should dial Feature 4 or press their DND button.

Default Settings:

N/A

Operation

1. While the extension is idle, the UCD Group Agent presses Feature 9 1 to Log On or Feature 9 1 to Log Off.
2. The display will momentarily indicate the new Agent Status (Log On or Log Off).

   A Feature/DSS (Flexible) button programmed with the code Feature 9 1 *will toggled the Agent Log Off / Log On.*

Operational Notes

- If a Feature/DSS Button is programmed as the Agent Log Off/On button, the LED associated to the button will light steady to indicate the Agent is Logged Off.

6.0 Database Programming

Introduction to Database Administration

Database programming can be done from any digital display telephone. Once in programming, there are two methods of navigation. The first, and most common, is the Basic Programming Navigation which allows the programmer to scroll through each menu and then select the programming parameter to be modified. This is a comprehensive way to ensure that every parameter is verified while stepping through the database. The second method eliminates the need to step through every menu parameter by entering a Menu Bypass Code (MBC).

The Menu Bypass Code (MBC) allows the programmer to enter a code to go directly to a programming item. This is a quicker and more efficient way to program; once the programmer is familiar with general Programming, it is likely that the MBC will be used when programming a system.

A MBC is created or built using the menu numbers (01 ~ 08), followed by the number of times the "Next" button is pressed while in a programming Menu. For example, to program the time and date the MBC is 8-14 (the system automatically places the "-") and then press save, the display will read "System Time" press show to continue. To access the MBC entry area, press the volume up or volume down button. A complete list of Menu Bypass Codes are included at the end of this manual in Appendix "A".

Table6.0.1: Menu Bypass Code Upper Level Numbers

Upper Level Menu Number	Menu Description
01:	Extension
02:	CO Line
03:	Call Handling
04:	Resource
05:	Restriction
06:	Extension Application
07:	CO Line Applications
08:	System Application

Programming Navigation

Primary Navigation Keys

Interactive Soft Keys 1, 2 and 3 - These three buttons are the Primary Programming Navigation Keys. Their functions change depending on the programming mode.

Volume Up/Down Keys - Are used to access the Menu Bypass Code (MBC) entry area.

Hold Key - Used to back up one level from your current programming position.

Speaker Button - Used to exit programming.

Programming Mode

To enter programming mode:

Press the [Feature] #*

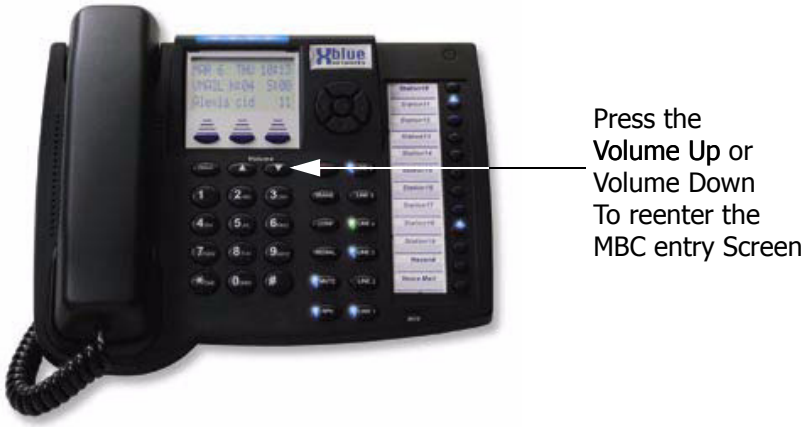
Default Password is 8 zeros: 00000000

Press the number 2 button - The middle Soft button which should now be labeled show

The initial display, which appears to be blank is the **Menu Bypass Code (MBC)** Entry screen.

This screen allows the programmer to enter a MBC and then Press save and jump directly to the programming parameter. For example to set the System Time and Date enter 8 1 4, the display will show 8-14-, and then press save.

If the actual MBC Code is not know, just enter something close, like 8 1 0, and press next until the desired parameter is found.



Menu Bypass Codes

Table 6.0.2: Menu Bypass Codes

MBC - Extension 1. Extension Show Ext: Feature	Default	Range	MBC
Position: 1-01-01	x-xx-xx		01 - ext - 01
Tenant Group	1	1, 2, 3	01 - ext - 02
Pickup Group	1	1 - 8	01 - ext - 03
Paging Group	1	1 - 8	01 - ext - 04
Day Class	0	0 - 7	01 - ext - 05
Night Class	0	0 - 7	01 - ext - 06
Monitor Class	5	0 - 9	01 - ext - 07
Warning Tone	N	Y/N	01 - ext - 08
Drop Call Out	N	Y/N	01 - ext - 09
Drop Call In	N	Y/N	01 - ext - 10
Intrus. Active	N	Y/N	01 - ext - 11
Intrus Accept	Y	Y/N	01 - ext - 12
Intrus Tone	Y	Y/N	01 - ext - 13
OHVA Active	Y	Y/N	01 - ext - 14
OHVA Accept	Y	Y/N	01 - ext - 15
Feature Btn	N	Y/N	01 - ext - 16
Paging Allow	Y	Y/N	01 - ext - 17
ECF Operation	N	Y/N	01 - ext - 18
SMDR Output	Y	Y/N	01 - ext - 19
Record Allow	N	Y/N	01 - ext - 20
Port Type	Ext	Ext, VA, VM	01 - ext - 21
Dir No. Swapping		101 - 148, 181 - 188	01 - ext - 22
Line Assignment	Y	Y/N	01 - ext - 23
Receive Assign	Y	Y/N	01 - ext - 24
DSS Unit #1	Null	101 - 148	01 - ext - 25
DSS Unit #2	Null	101 - 148	01 - ext - 26
DSS Unit #3	Null	101 - 148	01 - ext - 27
DSS Unit #4	Null	101 - 148	01 - ext - 28
Wrong Dest	None	430 - 453, 101 - 148, 181 - 188	01 - ext - 29
P-Fwd Busy	None	430 - 453, 101 - 148, 181 - 188	01 - ext - 30
P-Fwd NoAns	None	430 - 453, 101 - 148, 181 - 188	01 - ext - 31
Boss 1st	None	430 - 453, 101 - 148, 181 - 188	01 - ext - 32
Boss 2nd	None	430 - 453, 101 - 148, 181 - 188	01 - ext - 33
Forced LCR	No	Y/N	01 - ext - 34
DND allow	Y	Y/N	01 - ext - 35

Table 6.0.2: Menu Bypass Codes

Double Beep	Y	Y/N	01 - ext - 36
B. St. Trk Icm	Y	Y/N	01 - ext - 37
Alt. Line ID	None	Y/N	01 - ext - 38

MBC - CO Line
2. CO Line
Show CO Line - 700 - 719, 744 - 747

Feature	Default	Range	MBC
Position: 1-05-01	xx-xxx-xx		02 - trk - 01
Tenant Group	1	1, 2, 3	02 - trk - 02
LN Group/Route	1	1 - 8	02 - trk - 03
Day Class	0	0 - 7	02 - trk - 04
Night Class	0	0 - 7	02 - trk - 05
MOH Source	MC1	MC1, MC2	02 - trk - 06
Dialing	Tone	Tone/Pulse	02 - trk - 07
Trunk Type	CO	CO, PBX, Empty, Page, and Hot Line	02 - trk - 08
Call Abandon	N	Y/N	02 - trk - 09
Private to	Null	430 - 453, 101 - 148, 181 - 188	02 - trk - 10
CO Ring Type	0	0 - 4	02 - trk - 11
Privacy RLS	N	Y/N	02 - trk - 12
Busy To Idle	1	1 - 6	02 - trk - 13
Answer Position		(Day Ring Member (DRM)= 1 - 6)	02 - trk - 14 - 01 - (DRM)
Day	430	430 - 453, 101 - 148, 181 - 188	02 - trk - 14 - 01 - (DRM)
Night	430	430 - 453, 101 - 148, 181 - 188	02 - trk - 14 - 02
P-Fwd No Ans	None	430 - 453, 101 - 148, 181 - 188	02 - trk - 14 - 03

Table 6.0.2: Menu Bypass Codes

MBC - Call Handling 3. Call Handling Feature	Default	Range	MBC
Trunk Conf	2LNS	3LNS / 2LNS / No	03-01
CO Flash	0.8	100 - 300 ms	03-02
PBX Flash	0.8	100 - 300 ms	03-03
Pause Time	2.0	.5 - 7 Seconds	03-04
Dialing Ratio			03-05
Break Time	60	60/67	03-05-01
Inter_DGT	800	400 - 800	03-05-02
Tone Time	70	40 - 120	03-05-03
PR Time	100	20 - 300	03-06
Ring Abandon	5	1 - 10	03-07
Hold Reminder	60	0 - 90 Seconds	03-08
EX. Hold Time	1	0 - 8 Minute	03-09
Warning Time			03-10
Outgoing Call	5	1 - 30 Minutes	03-10 - 01
Incoming Call	5	1 - 30 Minutes	03-10 - 02
XFR_I Recall	30	0 - 120 Seconds	03-11
XFR_B Recall	60	0 - 120 Seconds	03-12
SLT H_Recall	1.0	0 - 5 Minutes	03-13
EKT H_Recall	1.0	0 - 5 Minutes	03-14
SLT Hook_Flash			03-15
Start	200	60 - 1400 ms	03-15-01
End	800	300 - 1500 ms	03-15-02
PBX_A Pause	2.0	.5 - 7 Seconds	03-16
Dial Wait Time	0	0 - 8 Seconds	03-17
Dial Delay	100	100 - 2000 ms	03-18
Camp on Time	0	0 - 60 Seconds	03-19
Alarm Play	30	10 - 600 Seconds	03-20
Hotel Enable	N	Y/N	03-21
Sys Spd Check	N	Y/N	03-22
TSI Connect	Y	Y/N	03-23
Conf Tone	N	Y/N	03-24
Call Duration	20	1 - 25 Seconds	03-25
Inter. Prefix	011		03-26
Country Code	Null		03-27
Long Dist Prefix	1		03-28
Local Area Code			03-29
Area COD	Null	...	03-29-01
Area Pre	Null	...	03-29-02

Table 6.0.2: Menu Bypass Codes

Area COD	Null	...	03-29-32
Area Pre	Null	...	03-29-32
Tenant Calling		(t)=tenant group	03-30
To Tenant 1	Y	Y/N	03-30-(t)-01
To Tenant 2	Y	Y/N	03-30-(t)-02
To Tenant 3	Y	Y/N	03-30-(t)-03
SMDR Call Output			03-31
Outgoing Call	Y	Y/N	03-31-01
Incoming Call	N	Y/N	03-31-02
Account Cod	Y	Y/N	03-31-03
Automatic Redial			03-32
Attempts	2	0 - 15	03-32-01
Interval	60	30 - 120	03-32-02
Waiting Time	15	10 - 30 Minutes	03-32-03
External FWD			03-33
Service	Always	Always, Never, Day, Night	03-33-01
Talk Time	5	1 - 15 Minutes	03-33-02
VM Dialing Ratio			03-34
Tone Time	90	60 - 150 ms	03-34-01
Int_Dgt Time	90	60 - 150 ms	03-34-02
VM Monitor_T	20	10 - 60 Seconds	03-35
VM Resrv Port	0	0 - 12 Ports	03-36
FAX Ring Time	30	10 - 60 Seconds	03-37
Conf Talk_T	10	0 - 120 Minutes	03-38
Unspv Conf_T	10	0 - 120 Minutes	03-39
Preset FWD_T	10	6 - 30 Seconds	03-40
Ring Recog	100	50 - 1500 ms	03-41
Talk Abandon	600	50 - 1000 ms	03-42
Hold Abandon	600	50 - 1000 ms	03-43
SLT HF To Hold	0	0 - 5	03-44
CID RPT MOD	FSK	FSK/DTMF	03-45
DTMF CID			03-46
Start DGT	A	0 - A	03-46-01
End DGT	C	0 - A	03-46-02
DTR Tone Time	40	30 - 90 ms	03-46-03
DTR Inter DGT	40	30 - 90 ms	03-46-04
RPT-Tone Time	70	30 - 90 ms	03-46-05
RPT-Inter DGT	70	30 - 90 ms	03-46-06
Market	ROW	R.O.W./Brazil	03-46-07
CO_CID	A_1st RNG	A_1st Ring/B_1st Ring	03-47

Table 6.0.2: Menu Bypass Codes

Auto Attendant		1, 2, 3	03-48
Ring_T To Ans	0	0 - 20 Seconds	03-48-01
Ring No Ans	20	10 - 90 Seconds	03-48-02
Drop No Ext #	N	Y/N	03-48-03
XFR Mode	RBT	RBT/MOH	03-48-04
Waiting Cod	#	0 - #	03-48-05
Inquiry Cod	*	0 - #	03-48-06
DISA Code	None	0 - #	03-48-07
VAA_W.D. Time	07	00 - 15	03-48-08
Answer Position			03-48-09
Show Tenant		1, 2, 3	03-48-09-t
Day Mode	101	101 - 148, 181 - 188, 430 - 453	03-48-09-(t)-01
Noon Mode	101	101 - 148, 181 - 188, 430 - 453	03-48-09-(t)-02
Night Mode	101	101 - 148, 181 - 188, 430 - 453	03-48-09-(t)-03
Show Trunk		700 - 719, 747 - 747	03-48-10
Auto_A Trunk	N	Y/N	03-48-10-[TR 700-724]-01
Service	Never	Never, Day, Night, Always	03-48-10-[TR 700-724]-02
DISA			03-49
Ring_T To Ans	0	0 - 19	03-49-01
Allowed Ext COS			03-49-02
Ext COS 0	Y	Y/N	03-49-02-01
Ext COS 1	N	Y/N	03-49-02-02
…		Y/N	
Ext COS 7	N	Y/N	03-49-02-07
Show Trunk			03-49-03-[TR 700 - 719]-
DISA Trunk	N	Y/N	03-49-03-[TR 700 - 719]-01
DISA Day COS	0	0 - 7	03-49-03-[TR 700 - 719]-02
DISA Night COS	0	0 -7	03-49-03-[TR 700 - 719]-03
Service	Always	Always, Never, Day, Night	03-49-03-[TR 700 - 719]-04
Talk Time	5	1 - 15 Minutes	03-49-03-[TR 700 - 719]-05
DTMF Tone	Y	Y/N	03-50
LCR Time	3.0	1.0 - 8.0	03-51
Wait ICLID_T	0.5	0.0 - 8.0	03-52
Reset Mode	Warm	Warm/Cold	03-53
System Reset	Reset	Y/N	03-54

Table 6.0.2: Menu Bypass Codes

MBC - SYS Resource			
4. SYS Resource			
Feature	Default	Range	MBC
DB PSWD	00000000	00000000 - ZZZZZZZZ	04-01
Attendant		101 - 148	04-02
Show Tenant		1, 2, 3	04-02-t
Attendant-Tenant 1	101		04-02-(t)-01
ATT. DSS	Null	View Only	04-02-(t)-02
ATT. DSS	Null	View Only	04-02-(t)-03
ATT. DSS	Null	View Only	04-02-(t)-04
ATT. DSS	Null	View Only	04-02-(t)-05
Alternate - Tenant1	Null		04-02-(t)-06
ATT. DSS	Null	View Only	04-02-(t)-07
ATT. DSS	Null	View Only	04-02-(t)-08
ATT. DSS	Null	View Only	04-02-(t)-09
ATT. DSS	Null	View Only	04-02-(t)-10
Night Attendant	101		04-02-(t)-11
NGTATT. DSS1	Null	View Only	04-02-(t)-12
NGTATT. DSS2	Null	View Only	04-02-(t)-13
NGTATT. DSS3	Null	View Only	04-02-(t)-14
NGTATT. DSS4	Null	View Only	04-02-(t)-15
Busy EKT ICM	Y	Y/N	04-02-(t)-16
System Reminder			04-03
Show Tenant		1, 2, 3	
Play Time	1	1 - 10 Minutes	04-03-(t)-01
Reminder 1	Null	00:00 - 23:59	04-03-(t)-02
…			
Reminder 8	Null	00:00 - 23:59	04-03-(t)-09
User Password			04-04
Length	4	4 - 8	04-04-01
Show Ext		101 - 148	04-04-02-[ext]
User Names	Null		04-05
Show Ext		101 - 148	04-05-[ext]
CO Line Names			04-06
Show CO LN		700 - 719, 744 - 747	04-06-[trk]
Preprog Message			04-07
Outgoing			04-07-01
Call Operator			04-07-01-01
Call Home			04-07-01-02
Call School			04-07-01-03
Visitor Waiting			04-07-01-04

Table 6.0.2: Menu Bypass Codes

Urgent			04-07-01-05
Come See Me			04-07-01-06
Premises Message			04-07-02
Out to Lunch			04-07-02-01
Will Return Soon			04-07-02-02
Gone for the Day			04-07-02-03
In a Meeting			04-07-02-04
Out of Office			04-07-02-05
On Vacation			04-07-02-06
Spd No. Assign			04-08
Individual		101 - 148, 181 - 188	04-08-01
To Increase		10 - 50	04-08-01-[ext]-01
To Decrease		10 - 50	04-08-01-[ext]-02
System Spd. No.			04-09
Speed No.		600 - 699	04-09-(t)
ICLID Name Asgn			04-10
ICLID Name Prgm			04-11
External Pager			04-12
Pager ID	1		04-12-1-
Tenant Group	Null	1, 2, 3	04-12-1-01
Paging GP 1	Null	Y/N	04-12-1-02
Paging GP 2	Null	Y/N	04-12-1-03
…			
Paging GP 8	Null	Y/N	04-12-1-09
Loud Bell	1		04-13
Application	L.B.	L.B., MC1, MC2, Ext Page	04-13-1-01
Trunk Route 1	No	Y/N	04-13-1-02
Trunk Route 2	No	Y/N	04-13-1-03
…			
Trunk Route 8	No	Y/N	04-13-1-09
DSS Allocation		01 - 04	04-14
DSS Owner	Null	101 - 148, 181 - 188	04-14-DSS-01
Dir Number	Null	101 - 148, 181 - 188	04-14-DSS-02
Built_In Modem			04-15
Directory #	100	100 - 220	04-15-01
Baud Rate	2400	1200/2400	04-15-02
RMT X_Rate	9600	1200 - 19200	04-16
CIL X_Rate	9600	1200 - 19200	04-17
KSU Revision			04-18

Table 6.0.2: Menu Bypass Codes

MBC - Restriction 5. Restriction Feature	Default	Range	MBC
Toll Restriction			05-01
Tenant		1, 2, 3	05-01-(t)
DGT Interval		001 - 100	05-01-(t)-int-
From		0000000 - #######	05-01-(t)-int-01
To		0000000 - #######	05-01-(t)-int-02
Extension COS		0 - 7	05-01-(t)-int-03
Trunk COS		0 - 7	05-01-(t)-int-04
RX Len	16		05-01-(t)-int-05
Account Code			05-02
Length	3	2 - 8	05-02-01
Auto Route Select	Y	Y/N	05-02-02
Password (Account Code)	001 - 600	acc=account code table 001-600	05-02-03-acc
Password			05-02-03-acc-01
COS	0	0 - 7	05-02-03-acc-02
Disabled	N	Y/N	05-02-03-acc-03
LCR Forced	N	Y/N	05-02-03-acc-04
Trunk Route	1	1 - 8	05-02-03-acc-05
Least Cost Routing			05-03
Tenant			05-03-t
LCR TAB Assgn			05-03-(t)-01-
Digit Comp Table			05-03-(t)-01-01
Dgt. Modi. Tab.			05-03-(t)-01-02
LCR TAB Prgm			05-03-(t)-02-
Digit Comp Table			05-03-(t)-02-01
Dgt. Modi Tab			05-03-(t)-02-02

Table 6.0.2: Menu Bypass Codes

MBC - Ext Application 6. Ext Applicat. Feature	Default	Range	MBC
UCD Programming		01 - 24	06-01
Tenant Group		1, 2, 3	06-01-gp-01
UCD Attrib		UCD/VA	06-01-gp-02
UCD GP Member		gp=01 - 24	06-01-gp-03
Member 1		101 - 148, 181 - 188	06-01-gp-03-01
Member 2		101 - 148, 181 - 188	06-01-gp-03-02
…			
Member 24		101 - 148, 181 - 188	06-01-gp-03-24
Hunt Method	Line	Linear, Dist, All	06-01-gp-04
No Ans Time	10	5 - 60	06-01-gp-05
Over 1 Time	0	0 - 255	06-01-gp-06
Over 1 Dest	Null	101 - 148, 181 - 188, 430 - 453	06-01-gp-07
Over 2 Time	0	0 - 255	06-01-gp-08
Over 2 Dest	Null	101 - 148, 181 - 188, 430 - 453	06-01-gp-09
Over Count	1	1 - 128	06-01-gp-10
ReRoute Dst	Null	101 - 148, 181 - 188, 430 - 453	06-01-gp-11
UCD Busy Mode	RBT	RBT, MC1, MC2	06-01-gp-12
Voice Mail			06-02
Tenant Group	Null	1 - 3	06-02-(t)
VM Hunt Group		01 - 24	06-02-(t)-01
Prefix Table			06-02-(t)-02
ICM/VM	#2	0000 - ####	06-02-(t)-02-01
Transfer	#1	0000 - ####	06-02-(t)-02-02
Busy Fwd	#3	0000 - ####	06-02-(t)-02-03
No_Ans Fwd	#4	0000 - ####	06-02-(t)-02-04
Direct Fwd	#5	0000 - ####	06-02-(t)-02-05
CO Greeting	#6	0000 - ####	06-02-(t)-02-06
CO Recall	#9	0000 - ####	06-02-(t)-02-07
UCD Overflow	300	0000 - ####	06-02-(t)-02-08
Suffix DGT	Null	0000 - ####	06-02-(t)-03
Record DGT	#7	0000 - ####	06-02-(t)-04
Delete DGT	Null	0000 - ####	06-02-(t)-05
Dis DGT	******	0000 - ####	06-02-(t)-06
Auto Record Member		101 - 148, 181 - 188	06-03-
Member 1	Null	101 - 148, 181 - 188	06-03-01
Member 2	Null	...	06-03-02
Member 8	Null	101 - 148, 181 - 188	06-03-08

Table 6.0.2: Menu Bypass Codes

MBC - CO Line Application			
7. CO Line Application			
Feature	Default	Range	MBC
Trunk Route		tr=01 - 08	07-01
PBX Code	9	0000 - 9999	07-01-tr-01
Hunt Method	SEQL	SEQL, SEQLF, RAN	07-01-tr-02
Alternate Route		1 - 2	07-01-tr-03-
Route Number	0	0, 01 - 08	07-01-tr-03-r
Delete Digits	0		07-01-tr-03-1
Insert Digits	0		07-01-tr-03-2
Dir # Swap	9		07-01-tr-04
Fax Detection			07-02
Trunk 702	Null	181 - 188	07-02-01
Trunk 705	Null	181 - 188	07-02-02
Trunk 708	Null	181 - 188	07-02-03
Trunk 711	Null	181 - 188	07-02-04
Trunk 715	Null	181 - 188	07-02-05
Trunk 719	Null	181 - 188	07-02-06
T1 Card			07-03-
ISDN			07-04-
Translate Table			07-05-
ALT. LINE ID TAB			07-06-

MBC - Sys Application			
8. Sys Application			
Feature	Default	Range	MBC
Ring Scheme	3	0 - 9	08-01
Letter Type	0	0 - 7	08-02
Hour Mode	12	12/24	08-03
Auto Log-Off	20	10 - 60	08-04
Log-On Again	30	0 - 60	08-05
Test Time	Null	00:00 - 23:59	08-06
Position to Dir			08-07
Show Cabinet			08-07-c
1-01-01	101	c=card, b=board	08-07-c-b
1-01-02	102		08-07-c-b
….			
1-01-08	108		08-07-c-b
DIR to Position			08-08
Position	1-01-01	Dir=101 - 172	08-08-dir
Numbering Plan			08-09

Table 6.0.2: Menu Bypass Codes

Trunk Route			08-09-01
Route 1 Length	1	1 - 4	08-09-01-01
Route 2 Length	3	1 - 4	08-09-01-02
…		1 - 4	
Route 5 Length	3	1 - 4	08-09-01-05
Leading 1	Null	(Route 1 Default "9")	08-09-01-06
Leading 2	80		08-09-01-07
…	Null		
Leading 5	Null		08-09-01-10
Ext Dir Number			08-09-02
Length	3		08-09-02-01
Leading 1	1		08-09-02-02
Leading 2	Null		08-09-02-03
…			08-09-02-03
Leading 8			08-09-02-09
Ext Page Group			08-09-03
Length	3		08-09-03-01
Leading 1	40		08-09-03-02
Leading 2	Null		08-09-03-03
Leading 3	Null		08-09-03-04
Ext Hunt Group			08-09-04
Length	3		08-09-04-01
Leading 1	43		08-09-04-02
Leading 2	44		08-09-04-03
Leading 3	45		08-09-04-04
Ext Pickup Group			08-09-05
Length	3		08-09-05-01
Leading 1	41		08-09-05-02
Leading 2	Null		08-09-05-03
Leading 3	Null		08-09-05-04
Indiv Spd No			08-09-06
Length	3		08-09-06-01
Leading 1	5		08-09-06-02
Leading 2	Null		08-09-06-03
Leading 3	Null		08-09-06-04
System Spd No.			08-09-07
Length	3		08-09-07-01
Leading 1	6		08-09-07-02
Leading 2	Null		08-09-07-03
Leading 3	Null		08-09-07-04
CO Line Dir Number			08-09-08

Table 6.0.2: Menu Bypass Codes

Length	3		08-09-08-01
Leading 1	7		08-09-08-02
Leading 2	Null		08-09-08-03
Leading 3	Null		08-09-08-04
Music Source			08-09-09
Length	3		08-09-09-01
Leading 1	421		08-09-09-02
Leading 2	422		08-09-09-03
Leading 3	Null		08-09-09-04
Loud Bell	429		08-09-10
Length	3		08-09-10-01
Leading 1	Null		08-09-10-02
Leading 2	Null		08-09-10-03
Leading 3	Null		08-09-10-04
External Pager			08-09-11
Length	3		08-09-11-01
Leading 1	460		08-09-11-02
Leading 2	Null		08-09-11-03
Leading 3	Null		08-09-11-04
Virtual Number			08-09-12
Length	3		08-09-12-01
Leading 1	85		08-09-12-02
Leading 2	86		08-09-12-03
Leading 3	87		08-09-12-04
Conf. Rooms			08-09-13
Length	3		08-09-13-01
Leading 1	89		08-09-13-02
Leading 2	Null		08-09-13-03
Leading 3	Null		08-09-13-04
LCR Code			08-09-14
Length	2		08-09-14-01
Leading	88		08-09-14-02
Operator Code			08-09-15-01
Length	1		08-09-15-02
Leading 1	0		08-09-15-03
Account code			08-09-16-01
Length	2		08-09-16-02
Leading	82		08-09-16-03
Suffix Code			08-10
ICM Ring/Voice	*		08-10-01
DND Override	3		08-10-02

Table 6.0.2: Menu Bypass Codes

Camp On	4		08-10-03
Call Back	#		08-10-04
Call Pickup	6		08-10-05
Intrusion	8		08-10-06
MSG Waiting	9		08-10-07
ICM OHVA	0		08-10-08
Monitor	1		08-10-09
CO Line Copy			08-11
Individual Copy			08-11-01
Group Copy			08-11-02
Extension Copy			08-12
Individual Copy			08-12-01
Group Copy			08-12-02
Feature Key Copy			08-13
Individual Copy			08-13-01
Group Copy			08-13-02
System Time			08-14
Year			08-14-01
Month			08-14-02
Day			08-14-03
Weekday			08-14-04
Hour			08-14-05
Minute			08-14-06
Time Switching			08-15
Show Tenant		(t) = 1, 2, 3	08-15-(t)
Follow Tenant	Y	Y/N	08-15-(t)-
Sunday		dy=day of the week	08-15-(t)-dy
Noon Start			08-15-(t)-dy-01
Noon End			08-15-(t)-dy-02
Night Start			08-15-(t)-dy-03
Night End			08-15-(t)-dy-04
…			
Saturday			08-15-(t)-dy
Noon Start			08-15-(t)-dy-01
Noon End			08-15-(t)-dy-02
Night Start			08-15-(t)-dy-03
Night End			08-15-(t)-dy-04

6.1 Extension Programming

Attendant - DSS Console

MBC: 01-ext-25, 01-ext-26, 01-ext-27, and 01-ext-28

Description

This extension programming area, is a view only parameter, that shows which extensions have DSS Units assigned to them. DSS units are associated with the extension numbers in the Resource Parameter 04-02-(t)01 (t=tenant 1, 2 or 3).

Default Settings:

No DSS Consoles are defined

01-ext-25 - View assigned DSS 1

01-ext-26 - View assigned DSS 2

01-ext-27 - View assigned DSS 3

01-ext-28 - View assigned DSS 4

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. At the MBC entry screen; Enter 01-ext-25, 01-ext-26, 01-ext-27 or 01-ext-28, and then press the softkey beneath SAVE to view the DSS that is assigned to the entered Extension. If no DSS is assigned, it will be set to "NULL".
3. Press the Volume button to return the MBC entry screen or exit programming.

Auto Record

MBC: Auto Record 06-03-xx (xx = Member Number 01 - 08)

MBC: Record Allow 01-ext-20

Feature code: Feature PQRS 7 MNO 6

Description

Up to eight extensions may be programmed into an automatic record group. Each extension in the group will automatically record all conversations that take place between it, and any internal or external telephone call. The recording will be deleted automatically after the call is released or placed on hold unless the user presses the One Touch Record (Voice Recorder) button (Feature PQRS 7 MNO 6). When saved, the conversation is stored in the extension user's mailbox.

The Feature Code Feature PQRS 7 MNO 6 must be programmed under a Flexible (Feature/DSS) button on the Digital Telephone to be used with the Auto Record feature.

Outgoing call recordi0.ng begins after the warning Time (MBC 03-10) has expired.

Calls placed on hold are considered a completed call and ends the recording function. Therefore, it is important to remember, to save the recorded conversation the extension user must press the One Touch Record button prior to placing the call on Hold (HOLD).

Auto Record occupies one voice channel on the system voice mail during the record operation. This resource consuming function should be deployed with careful consideration of the total available voice mail channels and the overall impact on other voice mail/auto attendant related functions.

A maximum of eight (8) digital telephones may be assigned for use with the Auto Record feature.

Default Settings:

Auto Record is disabled at default for all extensions.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. At the MBC entry screen; Enter 01-ext-20 (ext= 101-148) and then press the softkey beneath save or Press next to get to Extension, then press show, press next to advance to the RECORD ALLOW programming screen for the selected extension. The display will show the current setting for Record Allow for this extension.
3. Press the softkey beneath chg to select Y/N (Yes/No).Y will set this extension as a Record Allow extension.
4. Press the Volume button to return the MBC entry screen.
5. Repeat steps 2 through 4 for other extensions.

Boss/Secretary Group

MBC: Boss 1st - 01-ext-32
MBC: Boss 2nd - 01-ext-33

Feature Code: N/A

Description

Up to two extensions may be defined as "Boss" extensions for the extension being programmed. When the "Boss" extension activates the Do Not Disturb feature, calls to that extension will be rerouted to secretary extension. Extensions defined as a "Boss", cannot be assigned as a secretary.

Default Settings:

N/A

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. At the MBC entry screen; Enter 01-ext-32 (ext=101-148), 01-ext-32 (ext=101-148) and then press the softkey beneath save. Press chg and enter the "Boss" extension.
3. Press the Volume button to return the MBC entry screen.
5. Repeat steps 2 through 4 for other extensions

Call Forward - Predefined

MBC Code:

External Call Forward: 01-ext-18

External Call Forward Operation: 03-33

Wrong Destination: 01-ext-29

P-Fwd Busy: 01-ext-30

P-Fwd NoAns: 01-ext-31

Preset FWD_T: 03-40

Feature Code: N/A

Description

There are two types of extension call forwarding that must be enabled in database administration, Call Forward External and Call Forward Predefined. When enabled, Call Forward External (01-Ext-18 where Ext=101-148) allows extension users to forward transferred CO Line calls to an external (Off Net) telephone number such as a cellular telephone. If disabled, extension users will not be able to external call forward their calls.

Call Forward Predefined allows extension user the to enjoy the benefits of call forwarding without the hassles of remembering to set it.

There are three types of Predefined Call Forwarding, two which rely on the "current state-of-the-extension", i.e. busy or no answer, and the third type is wrong number destination. If the optional voice mail system is installed, it is recommended that all extensions are Predefined No Answer Call Forward to the voice mail. Because when using Predefined busy Forward, a busy extension will not be given an opportunity to answer a second call, because that call will be directly forwarded to voice mail.

- Transferred calls, which are Forwarded to voice mail will be sent directly to the extensions voice mailbox.
- In most cases, extension call forwarding Feature *2(x), (x = the specific type of extension forwading), supersedes Predefined Call Forward settings.
- Predefined Call Forward Busy will forward all internal or external telephone calls placed to a busy extension.
- Predefined Call Forward No Answer will forward all internal or external unanswered telephone calls.
- Predefined Call Forward Wrong destination. will forward calls to the entered destination whenever the extension dials an incorrect extension number. This is helpful at in lobbies and waiting areas.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program an extension for External Call Forward (MBC 01-ext-18):

2. Enter 01-ext-18 (ext=100-148) and press the softkey beneath save. This advances to the selected extension ECF OPERATION database item.
4. Toggle the softkey beneath chg for Y/N. Y will allow External Call Forward for the extension.
5. Press the Volume button to return to the MBC Screen.

Related Programming - Program the various system External Call Forward parameters:

2. Enter 03-33-01 and press the softkey beneath save to advance to the SERVICE programming screen for use with External Call Forward.
3. Press the softkey beneath chg to select the service mode for when you would like the External Call Forwarding programming to be active. The Selections are ALWAYS (default), NEVER, DAY, or NIGHT.
4. Press the softkey beneath next to advance to the TALK TIME programming screen.
5. Press the softkey beneath chg until the desired value displays. Available talk times can be 1- 5, 10 or 15 minutes.
6. Press the Volume button to return to the MBC Screen.

Program an extension for Predefined Call Forward:

- Wrong Destination: MBC 01-ext-29
- P-Fwd Busy: MBC 01-ext-30
- P-Fwd NoAns: MBC 01-ext-31

2. Enter the appropriate MBC and press the softkey beneath save. This advances to the selected extension P-FWD database item.
3. Enter the forward destination, such as an extension or VM Group 453.
4. Press the Volume button to return to the MBC Screen.

Program the system predefined (preset) forward timer

- Preset FWD_T: MBC 03-40

2. Enter the appropriate MBC and press the softkey beneath save. This advances to the selected extension PRESET-FWD_T database item.
3. Enter the time, in seconds that a call should ring at an extension before it forward so the programmed destination. Valid selections are 6-30 seconds.
4. Press the Volume button to return to the MBC Screen.

Class of Service - Extension

MBC: Day - 01-ext-05

MBC: Day - 01-ext-06

Description

The system provides eight (8), Classes of Service (COS) which are used for outside line dialing privileges. Each extension may be assigned one Day-COS and one Night-COS. The Extension COS is primarily used for restriction and control of long distance dialing. Toll restriction tables (MBC 05-01) allow customized dialing privileges to be assigned to any or all Classes of Service.

System Speed Dial is specially linked with an extension's COS, allowing many speed dial numbers to override toll restriction programming. System Speed Check (MBC 03-22) is used determine if a speed dial number is compared against the extensions assigned COS. If set to no, then the number will be allowed regardless of the extensions' COS. If set to yes, the extensions' COS will determine if the number is allowed, or denied.

Default Settings:

Class of Service – Day = 0 for all Extensions. (Range is 0-7.)

Class of Service – Night = 0 for all Extensions. (Range is 0-7.)

Restriction – Toll Restriction – (MBC 05-01) No toll restriction is applied for COS 0.

NOTE: *"Night" in Digital telephone programming is the same as "Evening" in RMP programming*

NOTE: *When both the Extension and the CO Line have Class of Service restrictions, the more restricted COS will take control of the call. For example, if an extension has no restrictions, but the CO Line is restricted to Local Calls only, then only local calls will be allowed.*

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-05 (ext=100-148) and press the softkey beneath `save` to advance to the `DAY CLASS` programming screen to program the extension's Day COS. (0-7.)

   Or…
3. Enter 01-ext-06 (ext=100-148) and press the softkey beneath `save` to advance to the `NIGHT CLASS` programming screen to program the extension's Night COS. (0-7.)
4. Press the softkey beneath `chg` to change either the `DAY` or `NIGHT` COS from the current setting to the desired COS; valid Classes of Service are 0-7, where 0 is the highest and 7 is the lowest.
5. When all changes are complete, press the Volume button to return to the MBC Screen or exit programming.

CO Line Assignment

MBC: Day - 01-ext-23-(ln)

Description

CO Line Assignment is used to assign CO Lines to extensions, for out-calling access. Each extension can be allowed or denied access to any or all CO Lines. Calls can be transferred to an extension regardless of CO Line Assignment properties.

Default Programming

All extension have CO Line Access to all CO Lines.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program extensions for CO Line Access. (01-ext-23-(ln) (ext=101-148 and ln=CO Line 700-719, 744-747):

2. Enter 01-ext-23-ln and press the softkey beneath save. This advances to the LINE ASSIGNMENT programming screen for the extension and CO line selected.
3. Toggle the softkey beneath chg for Y/N. Selecting Y will allow access on the CO line.
4. Press the Volume button to return to the MBC Screen and enter another extension and CO Line.

Or…

6. Press the softkey beneath back or the softkey beneath next to select the previous or next sequential CO Line for the selected extension.
7. Press the softkey beneath chg until the desired values are displayed.
8. When finished programming CO Line Access, press the Volume button to return to the MBC Screen or exit programming.

CO Line Receive Assignment

MBC: Day - 01-ext-24-(ln)

Feature Code: N/A

Description

CO Line Receive Assignment is used to allow an extensions to answer ringing CO Lines. If an extension does not have Receive Assignment, but does have a programmed button, and the CO Line starts ringing, the button will light solid indicating that, that line is busy.

Default Settings:

All extensions have are Receive Assigned – Yes to all CO Lines.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program extensions for the ability to Receive (answer) CO Lines while ringing. (01-ext-24-(ln) (ext=101-148 and ln= 01 representing CO Line 700-719, 744-747):

2. Enter 01-ext-24-ln and press the softkey beneath save. This advances to the RECEIVE ASSIGN - TRK CO TNT programming screens for the extension and CO Line selected.

4. Toggle the softkey beneath chg for Y/N.Y will allow the specified extension to answer CO lines when ringing.

5. Press the softkey beneath back or the softkey beneath next to go to the previous or advance to the next CO Line to program for this extension.

   Or…

6. Press the Volume button to return to the MBC Screen and enter the next extension/CO Line to program.

7. When all changes are complete, press the Volume button to return to the MBC Screen or exit programming.

Directory Number Swapping

MBC Code: 01-ext-22

Feature Code: N/A

Description

As part of the Numbering Plan in the system, extension directory numbers (as defined in the database programming) can be exchanged (swapped) from one port to another. This feature can be used to simplify moves and changes of extensions at any specific location. When extension directory numbers are swapped from one port to another, the associated programming is moved with the extension number. To renumber several extensions at one time, go to System Application - "Position to Directory" and put in the "Cabinet" number and then the "card" number, the current extension number will be displayed. Press "chg" and enter the desired extension number, which will swap with original extension number.

Default Settings:

N/A

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-22, then press the softkey beneath save. This advances to the DIR NO. SWAPPING programming screen.
3. Press the softkey beneath show.
4. Enter the extension directory number that is to be assigned to this port, then press the softkey beneath save. The new directory number is now in operation on this port. The old directory number is now moved to the port where the new number came from.
5. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

Do Not Disturb Allow/Deny

MBC Code: 01-ext-35

Feature Code: Feature (GRN 4)

Description

At default all extensions are allowed to place their telephones into Do Not Disturb. Set this parameter to "N" (No) and that extension will not be able to use DND.

Default Settings:

All extensions are set to "No"

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-35, then press the softkey beneath save. This advances you to the DND ALLOW programming screen.
3. Press the softkey beneath chg and select from "Y" to allow or "N" to deny the extension from using the DND Feature.
4. Press the Hold (HOLD) button to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

Double Beep

MBC Code: 01-ext-36

Feature Code: N/A

Description

When an extension has answered a call and transfers it to another extension or UCD Group, the transferring extension can be programmed to receive a single or a double beep. When set to "Yes" the extension will hear a double beep, when set to "No" only a single beep is heard.

Default Settings:

All extensions are set to "Yes" to receive a double beep

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-36, then press the softkey beneath save. This advances you to the DOUBLE BEEP programming screen.
3. Press the softkey beneath chg and select from "Y" to hear the double beep and "N" receive a single beep.
4. Press the Hold (HOLD) button to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

Drop Call In

MBC Code: 01-ext-10

Feature Code: N/A

Description

Great for any location where it is important to limit the length of inbound calls, the Drop Call In parameter monitors all answered CO Line calls by the programmed extension. When the timer expires the caller is played a tone and 30 seconds later the call is terminated. The outside party will have no indication that the tone is played or why the call was terminated.

Default Settings:

Drop Call In = N

Digital Telephone Programming

1. Enter 01-ext-10 and press the softkey beneath save to advance to the DROP CALL IN programming screen.
2. Toggle the softkey beneath chg for Y/N. Y will enable DROP CALL IN for the extension selected.
3. Press the Volume button to return to the MBC or exit programming.

Drop Call Out

MBC Code: 01-ext-09

Description

Great for any location where it is important to limit the length of outbound calls, the Drop Call Out parameter monitors all outbound CO Line calls placed from the programmed extension. When the timer expires the caller is played a tone and 30 seconds later the call is terminated. The outside party will have no indication that the tone is played or why the call was terminated.

Default Settings:

Drop Call Out = N

Digital Telephone Programming

1. Enter 01-ext-09 and press the softkey beneath save to advance to the DROP CALL OUT programming screen.
2. Toggle the softkey beneath chg for Y/N. Y will enable DROP CALL OUT for the extension selected.
3. Press the Volume button to return to the MBC or exit programming.

Extension Paging Groups

MBC - Page Groups: 01-ext-04

MBC Code - Page Allow: 01-ext-17

Feature Codes:

- All Call - Tenant 1: 400
- Page Groups: 401 - 408
- Page All Tenants: 409
- External Page: 460

Description

There are eight (8) Extension Paging Groups per Tenant Group for partitioning the system into separate departments for page announcements.

Extension Paging Group members, receive Internal Zone Pages directed to the Extension Paging Group.

Default Settings:

All extensions are in Paging Group 1. (Range is 1 - 8.)

System Application – Numbering Plan – EXT Page Group = 400 - 408

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-04, then press the softkey beneath save to advance to the PAGING GROUP programming screen.
3. Press the softkey beneath chg until the Paging Group for the selected extension displays.
4. Press the HOLD button to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

Using the Navigation Keys to Page:

Left Navigation Button  Right Navigation Button

1. Press the right Navigation key 5 times, or the left key once.
2. Press the up Navigation key to do an all page, and the down navigation key to page a specific Zone.

Extension Pickup Groups

MBC Code: 01-ext-03

Feature Code:

Call Pickup, within the same group: *, from another group: 410 - 417

Directed Call Pickup: ext + 6

Description

There are eight (8) Extension Pick Up Groups per Tenant Group for partitioning the system into separate departments for organized call answering within the department. Extensions in a Pick Up Group may retrieve calls ringing at another extension within the same Pick Up Group.

Default Settings:

All Extensions are set to Pick Up Group 1 (Range is: 1 - 8.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-03, then press the softkey beneath save. This advances to the PICKUP GROUP programming screen for the selected extension.
3. Press the softkey beneath chg until the desired pickup group displays.
4. Press the Hold (HOLD) button to exit programming for this extension and Enter a new Extension Number.
5. Press the softkey beneath show
6. Press the softkey beneath next until the database item Pick Up Group displays for this extension.

Or…

7. Press the Volume button to return to the MBC Screen and enter 01-ext-03 (entering the new extension number).
8. Continue making other programming changes or exit the programming mode.
9. Press the Hold (HOLD) button to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

External Call Forward

MBC Code: 01-ext-18

Feature Code: Feature ABC 2

Description

External Call forward allows extension users to External Call Forward (Transfer off net) a transferred Central Office Line call to a remote destination such as a home or cellular telephone.

Default Settings:

Extension – ECF Operation = N. (Range is Y/N.)

Call Handling – (03-33-01) - External CFW – Service = Always. (Range is Never, Day, Night, Always).

Call Handling – (03-33-02) External CFW – Talk Time = 5 (Range is 1 to 60 minutes).

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Related Programming - External Call Forward:

2. Enter 03-33-01 and press the softkey beneath save. This advances to the External Call Forward SERVICE programming screen.
3. Press the softkey beneath the softkey beneath chg to select ALWAYS, NEVER, DAY, or NIGHT.
4. Press the softkey beneath next to advance to the TALK TIME programming screen.
5. Press the softkey beneath chg to select the allowable External Call Forward Talk Time, in minutes. The selections available are from 1 to 60 minutes.
6. Press the Volume button to return to the MBC Screen.

Program the various system External Call Forward parameters:

2. Enter 03-33-02 and press the softkey beneath save. This advances to the External Call Forward SERVICE programming screen.
3. Press the softkey beneath the softkey beneath chg to select ALWAYS, NEVER, DAY, or NIGHT.
4. Press the softkey beneath next to advance to the TALK TIME programming screen.
5. Press the softkey beneath chg to select the allowable External Call Forward Talk Time, in minutes. The selections available are from 1 to 60 minutes.
6. Press the Volume button to return to the MBC Screen or exit the programming mode.

Forced LCR

MBC Code: 01-ext-34

Feature Code: N/A

Description

Extensions can be forced to use Least Cost Routing, ensuring that they use the most cost effective method to place calls.

Default Settings:

All extensions are set to "No"

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-34, then press the softkey beneath save. This advances you to the FORCED LCR programming screen.
3. Press the softkey beneath chg and select from "Y" to force LCR and "N" to by pass LCR when an extension is dialing a number.
4. Press the Hold (HOLD) button to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

Feature Button Disable

MBC Code: 01-ext-16

Feature Code: N/A

Description

This extension option will disable the use of the feature button at the entered extension. This option can be helpful when the telephone is located in an area where it can be easily tampered with, or where user changes are not desirable.

Default Settings:

The feature button is enabled at all extensions.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-16, then press the softkey beneath save to advance to the FEATURE BTN programming screen.
3. Press the softkey beneath chg until the appropriate value displays for the selected extension (101-148).
4. Press the Hold button (HOLD) to return to the previous menu level or press the volume button to return to the MBC Screen or exit programming.

Intrusion

MBC Code - Intrusion active: 01-ext-11

MBC Code - Intrusion Accept: 01-ext-12

MBC Code - Intrusion Tone: 01-ext-13

Feature Code:

- Intrusion - ext + 8

Description

When granted in programming, Intrusion allows an extension user to join an existing conversation. The Extension user calls a busy extension, gets a busy signal, then dials the intrusion code to join the conversation. Additionally, if granted in programming, the Extension user may Intrude on a busy CO Line.

NOTE: *In some locations, Intrusion may be considered unlawful. Therefore, it is the Installing companies responsibility to check with Local, State and Federal Law Enforcement agencies to determine the appropriateness of this feature.*

Default Settings:

All Calls are considered Private, so no extensions may intrude on another extension.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-12 to advance to the INTRUS. ACTIVE programming screen or Enter 01-ext-13 to advance to the INTRUS. TONE programming screen.
3. Toggle the softkey beneath chg to select Y/ N. Y will allow an initial caller to enter into an existing conversation.
4. Press the HOLD to enter a new extension.
5. Repeat steps 2 through 4 for other extensions.
6. Press the HOLD button to return to the previous menu level or press the to return to the MBC Screen or exit programming.

Monitor-Extension-CO Line

MBC Code: 01-ext-07

Feature Code:

- ext + 1

Description

When granted in programming, an extension user can join, and Monitor an existing conversation by dialing a code or pressing a flexible button. A busy extension can only be monitored by an authorized extension. Authorized extensions are extensions that have a more privileged Monitor Class of service, than the extension being monitored.

Default Settings:

No extensions can monitor another one because all extensions have a Monitor COS of 5. A Monitor COS of 0 is the most privileged, and 9 is the least privileged.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-07, then press the softkey beneath save to advance to the MONITOR CLASS programming screen for the extension selected.
3. Press the softkey beneath chg until the appropriate MONITOR CLASS for this extension displays. MONITOR CLASS specifies who can Monitor this extension and who can this extension Monitor. 0 = Most Privileged, 9 = Least Privileged. To Monitor another extension this extension must be more Privileged.
4. Press the to return to the MBC Screen
5. Repeat steps 2 through 4 for other extensions.
6. Press the HOLD button to return to the previous menu level or press the to return to the MBC Screen or exit programming.

Off Hook Voice Announce (OHVA)

OHVA Active MBC: 01-ext-14

OHVA Accept MBC: 01-ext-15

Feature Code:

N/A

Description

Off hook Voice Announce or OHVA allows the user to make an off hook voice announcement, over the speaker, to a busy extension. The calling extension will go off hook on the handset and dial the busy extension number, when busy tone is heard, select "Voic" using the interactive buttons.

Default Settings:

OHVA Active and OHVA Accept are enabled at all extensions.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-14 for OHVA Active (ext=101-148) or 01-ext-15 for OHVA Accept (ext=101-148) and then the softkey beneath save to advance to the OHVA ACTIVE or OHVA ACCEPT programming screen for the selected extension.
3. Press the softkey beneath chg to select Y/N (Yes/No).Y will set this extension to receive or accept an Off hook voice announcement.
4. Press the Volume button to return the MBC Screen.
5, Repeat steps 2 through 4 for other extensions.

Operation Notes:

1. The called extension must be off hook on the handset or headset for OHVA to operate.

One Touch Record (Allow)

MBC: 01-ext-20

Feature Code:

- *Feature* 6 7

Description

One Touch Record allows extension users to record a conversation for review at a later time. This feature requires an integrated voice mail system, and allows any extension user with record allow set to "Y", to record-on-the-fly by pressing the preprogrammed Voice Recorder (One Touch Record) button (*Feature* 6 7). The recorded conversation is stored in the extension user's mailbox.

NOTE: One Touch Record Feature 67 must be programmed under a Flexible (Feature/DSS) button.

One Touch Record will occupy one voice channel (port) on the voice mail system during the record operation. This resource consuming function should be deployed with careful consideration of the total available voice mail channels and the overall impact on other voice mail/auto attendant related functions.

Default Settings:

Record is disabled at all extensions.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-20 (101-148) and then the softkey beneath save to advance to the RECORD ALLOW programming screen for the selected extension. The display will show the current setting for Record Allow for this extension.
3. Press the softkey beneath chg to select Y/N (Yes/No).Y will set this extension as a Record Allow extension.
4. Press the Volume button to return the MBC Screen.
5, Repeat steps 2 through 4 for other extensions.

Paging

MBC: 01-ext-04

Feature Code:

- All Call - Tenant 1: 400
- Page Groups: 401 - 408
- Page All Tenants: 409 (Attendant only)
- External Paging: 460

Description

There are three types of page announcements that are available in the system.

- Internal Zone Paging - There are 8 Paging Zone that are used to page idle telephones within a desired group.
- External Paging - The system is equipped with one external paging port which can be programmed to work with one or all tenant groups, as well as any or all paging zones. This hardware interface is used to connect an ancillary Public Address (Paging) equipment.
- All Call Paging - This Tenant 1 paging parameter is used to access all paging zones, internal and external, for tenant group 1.
- All Tenant Paging - This paging is used to access all paging zones, internal and external as well as all programmed tenants.

NOTE: *Note: Paging is one-way only. The Page Allow/Deny setting does not interfere with an extension's ability to make a page or to establish a Meet Me Page.*

Default Settings:

Extension – Paging Group = 1 for all extensions. (Range is 1-8.)

Extension – Paging Allow = Y for all extensions. (Range is Y/N.)

System Resource – External Pager – Tenant Group = 1. (Range is 1-3.)

System Resource – External Pager – Paging Group 1 = Y. (Range is Y/N.)

System Application – Ext Page Group Zone codes 201 - 208.

System Application – External Page code 200.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program extensions into Paging Groups:

2. Enter 01-ext-04 and then press the softkey beneath save to advance to the PAGING GROUP programming screen for the extension selected.
3. Press the softkey beneath chg until the desired PAGING GROUP number displays.
4. Press the to return to the MBC Screen
5. Repeat steps 2 through 5 for other extensions.

Program External Pager to a Tenant Group and Paging Groups:

2. Enter 04-12-(t)-01 through 04-10-(t)-09 (where t=tenant group 1, 2 or 3) and then press the softkey beneath save to advance to the TENANT GROUP programming screen.
3. Press the softkey beneath chg until the desired TENANT GROUP displays. This is the tenant group to which the external pager will be associated.
4. Press the softkey beneath next until the PAGING_GP to be programmed displays.
5. Toggle the softkey beneath chg for Y/N for each of the Paging Groups. Y will allow the External Pager to be connected for page announcements whenever the selected Page Group is dialed.
6. Press the HOLD button to return to the previous menu level or press the to return to the MBC Screen or exit programming.

Station Message Detail Recording (SMDR)

MBC: 01-ext-19

MBC: SMDR Output - Outcall - 03-31-01

MBC: SMDR Output - Incoming - 03-31-02

MBC: SMDR Output - Account Code - 03-31-03

Feature Code: N/A

Description

This feature allows the system administration to track all incoming and outgoing CO line traffic, chronologically by extension number. When used, Account code data is also recorded for each call. SMDR is output from the standard "SMDR" RS232C serial port located on the CCB board. An external serial printer or call accounting software package may be connected for permanent record keeping or call cost accounting. Each data record output is within the standard 80-character frame See "Station Message Detail Recording (SMDR)" Page 22. Data communications is one direction only through the SMDR port and is programmable for data rate (baud rate) in database programming.

Default Settings:

Extension – SMDR Output is set to "Y" (Yes). (Range is Y/N.)

Call Handling – SMDR Call Output – Outgoing Call is set to "Y." (Range is Y/N.)

Call Handling – SMDR Call Output – Incoming Call is set to "N." (Range is Y/N.)

Call Handling – SMDR Call Output – Account Code is set to "Y." (Range is Y/N.)

System Resource – Modem & Serial Port – CIL X_Rate is set to "9600." (Range is 1200/2400…19200.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program an extension for SMDR Output:

2. Enter 01-ext-19, then press the softkey beneath save. This advances to the SMDR OUTPUT programming screen for the extension selected.
3. Toggle the softkey beneath chg for Y/N. Y will enable SMDR output for the selected extension.

4. Press the Volume button and repeat steps 2 through 4 for other extensions.

Program the SMDR Call Output – Outgoing Call:

2. Enter 03-31-01, then press the softkey beneath save. This advances to the OUTGOING CALLS programming screens for SMDR Output selection
3. Toggle the softkey beneath chg for Y/N. Y enables SMDR output for the extension selected.
4. Press the Hold button (HOLD) to exit this programming and return to the previous menu level or press the Volume button to return to the MBC Screen.

Program the SMDR Call Output – Incoming Call:

2. Enter 03-31-02, then press the softkey beneath save. This advances to the INCOMING CALL programming screen for SMDR selection for Incoming Calls.
3. Toggle the softkey beneath chg for Y/N. Y will enable SMDR for incoming calls on the extension selected.
4. Press the Hold button (HOLD) to exit this programming and return to the previous menu level or press the Volume button to return to the MBC Screen.

Program the SMDR Call Output – Account Code:

2. Enter 03-31-03, then press the softkey beneath save. This advances to the ACCOUNT CODE programming screen for SMDR for Account Codes.
3. Toggle the softkey beneath chg for Y/N. Y will allow output of Account Code data in the SMDR data.
4. Press the Hold button (HOLD) to exit this programming and return to the previous menu level or press the Volume button to return to the MBC screen.

Program the (CIL) Call Information Log serial port baud rate:

2. Enter 04-17, then press the softkey beneath save. This advances to the CIL X_RATE port transmission rate setting.
3. Press the softkey beneath chg to select a transmission rate of 1200/2400-19200.
4. Press the Hold button (HOLD) to exit this programming and return to the previous menu level or press the Volume button to return to the MBC screen.

Tenant Groups

MBC: Tenant Groups 01-ext-02

MBC: Tenant Calling 03-30-(t)-

Feature Code: N/A

Description

Tenant Groups allow for the separation of system resources, so that the system can operate as though it were two or three separate systems.

Tenant Group Assignments can be programmed to completely isolate extension functions. Once extensions are assigned to a Tenant Group, the calling characteristics between the groups can be customized; this includes prohibiting calls from one group to another. Often, full tenant separation is not required or even desired. However, when necessary the system will allow total isolation of several system resources, such as CO Line Assignment, CO Line Ring Assignment, CO Line Receive Assignment.

Default Settings:

Extension – Tenant Group, 01-ext-02, all extensions are set to Tenant Group 1. (Range is 1-3.)

CO Line – Tenant Group, 01-trk-02, all CO Lines are assigned to Tenant Group 1. (Range is 1-3.)

Call Handling – Tenant Calling, 03-30, All Tenant Groups are allowed to dial intercom directory numbers of extensions in all other tenant groups. (Range is Y/N for each calling direction between tenant groups.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program extensions into the tenant group:

2. Enter 01-ext-02, then press the softkey beneath save. This advances to the TENANT GROUP programming screen.
3. Press the softkey beneath chg until the desired tenant group for this extension displays.
4. Press the Hold button (HOLD) to enter a new extension to program and repeat from step 3 or press the Volume button to return to the MBC Screen.

Program CO Lines into the tenant group:

2. Enter 02-trk-02, (trk = Trunk (CO Line 700-719, 744-747) then press the softkey beneath save. This advances to the TENANT GROUP selection for the CO Line selected.
3. Press the softkey beneath chg until the desired tenant group for this CO Line displays.

4. Press the Hold button (HOLD) to enter a new CO Line to program and repeat from step 6 or press the Volume button to return to the MBC Screen.

Program Tenant Group Calling:

2. Enter 03-30 and then press the softkey beneath save. This advances to the TENANT CALLING programming screen.
3. Press the softkey beneath show.
4. Enter the Tenant Group for which changes are to be made and then press the softkey beneath show. The display shows the status of calling allowed settings from this tenant group to the tenant group displayed.
5. Toggle the softkey beneath chg for Y/N. Select N if calling to the tenant group is to be denied.

Or…

2. Press the softkey beneath next to skip to the tenant group to program.
3. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC screen or exit programming.

Uniform Call Distribution (UCD) / Hunt Groups

MBC: UCD 06-01-gp

gp=group 1-24

Feature Code: Feature 9WXYZ 1

Description

UCD (Uniform Call Distribution) comes standard, and allows extensions to be linked for call handling. The system has 24 UCD Groups. Each group has a lead (or pilot) number, which acts as the access point of the UCD Group, dialing (430 - 453) allows a group of extensions to be accessed. Additionally, Calls may be transferred to a UCD Group for handling by one of the UCD Group agents, or members.

UCD Groups can be configured in one of three ways:

- Linear
- Distributed
- All Ring

Linear - Calls transferred to a Linear UCD Group are routed to the first member every time. This means that the first Member of a Linear UCD Group will be the primary answering point for all calls received by this group. Each subsequent Member receives calls only when the previous Member(s) is unavailable to take a call. (Unavailable is determined by the following status' Busy, DND active, Agent Log Off active, or when calls to the member go unanswered.)

Distributed - Calls transferred to a Distributed UCD Group are routed to group members in a uniformly distributed fashion. This means, each new call that is routed to the next available UCD Member. The goal of a Distributed UCD Group is to distribute all calls evenly between all group members. This distribution is affected by extensions that are unavailable. (Unavailable is determined by the following status' Busy, DND active, Agent Log Off active, or when calls to the member go unanswered.)

All Ring - Calls transferred to an All Ring UCD Group will ring all available group members simultaneously. (Extensions are considered Unavailable when they are Busy, DND active, Agent Log Off active, or when calls to the member go unanswered.)

UCD Group call handling is greatly enhanced by call Queue provisioning. When calls are presented to the UCD Group, but no agents are available, the call is considered, "In Queue". While a caller waits in queue, the system offers several queued call operations. These are:

- No Answer – Member advancement
- Overflow 1 Destination programming
- Overflow 2 Destination programming
- Overflow Count programming
- Reroute Destination programming

No Answer - Member Advancement - each UCD Group has a No Answer Timer. This timer can be set to advance a call from one UCD Group Member to the next when the ringing member does not answer the call within the time allotted.

Overflow 1 Destination: each UCD Group has an Overflow 1 Timer and Destination. This timer can be set to determine how long the queued call will remain in queue before being routed to the Overflow 1 Destination. The Destination can be an extension responsible for handling calls that remain in queue too long or a voice announcement device. Recorded Announcement devices can be used to play recorded messages to callers waiting in queue. (Typically, "all agents are still busy - please continue to hold.") Overflow 1 Destination can be played one time only. (For high traffic scenarios a recorded Voice Announcement UCD Group can be used to play the same message to multiple callers.)

Overflow 2 Destination: each UCD Group has an Overflow 2 Timer and Destination. This timer can be set to determine how long the queued call will remain in queue following the Overflow 1 Timer before being routed to the Overflow 2 Destination. (Overflow 1 Timer plus Overflow 1 Destination recorded message time plus Overflow 2 Timer.) The Destination can be an extension responsible for handling calls that remain in queue too long or a voice announcement device. Recorded Announcement devices can be used to play recorded messages to callers waiting in queue. (Typically, "please continue to hold to reserve your place in queue.") (For high traffic scenarios a recorded Voice Announcement UCD Group can be used to play the same message to multiple callers.)

Overflow Count: Each UCD Group has an Overflow Count that is associated to the Overflow 2 Timer. This counter can be set to allow a specific number of times that the Overflow 2 Timer may repeat. For each cycle of the Overflow 2 Timer the Overflow 2 Destination recording is played. If a call remains in queue so long that the Overflow Count counter expires, this call is routed to the programmed Reroute Destination.

Reroute Destination: Each UCD Group has a Reroute Destination. This can be programmed with an extension number and is used to remove this call from UCD Group queue and route the call for immediate handling.

NOTE: *CO Lines may be assigned to ring directly into UCD Groups (see CO Line - Answer Position (02-trk-14).*

NOTE: *An integrated voice mail system, when installed, uses the 24th UCD Group. Therefore, the 24th UCD Group cannot be used for any other purpose.*

Default Settings:

CO Line – Answering Position 02-trk-14 = no UCD Groups are assigned for CO Line ringing.

System Application – Numbering Plan - Ext Hunt Group (08-09-04)

Extension Application – UCD – Attribute (06-01-gp-02) (gp= group 01-24)= UCD. The range is: UCD/V.A.

Extension Application – UCD – Tenant Group (06-02) = 1. The range is: 1-3.

Extension Application – UCD – Name (RMP) = NULL. The range is 7 characters.

Extension Application – UCD – Member (06-01-gp-03-mem) (gp= group 01-24, and mem-Member 01-24) = NULL. The range is any extension number.

Extension Application – UCD – Hunting Method (06-01-gp-04) (gp= group 01-24) = Linear. The range is Linear/All Ring/Distributed.

Extension Application – UCD – No Answer Timer = 10 (06-01-gp-05) (gp= group 01-24). The range is 5-60 seconds.

Extension Application – UCD – Overflow 1 Timer = 0 (06-01-gp-06) (gp= group 01-24). The range is 0-255.

Extension Application – UCD – Overflow 1 Destination = NULL (06-01-gp-07) (gp= group 01-24). The range is UCD Group or extension directory number.

Extension Application – UCD – Overflow 2 Timer = 0 (06-01-gp-08) (gp= group 01-24). The range is 0-255.

Extension Application – UCD – Overflow 2 Destination = NULL (06-01-gp-09) (gp= group 01-24). The range is UCD Group or extension directory number.

Extension Application – UCD – Overflow Count = 1 (06-01-gp-10) (gp= group 01-24). The range is 1-128.

Extension Application – UCD – Reroute Destination = NULL (06-01-gp-11) (gp= group 01-24). The range is UCD Group or extension directory number.

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.
2. Enter 06-01 and then the softkey beneath `save` to advance to the `UCD PROGRAMMING` screen.
3. Press the softkey beneath `show` to advance to the `UCD GROUP` programming screen.

4. Enter a UCD GROUP number 1-24, representing groups 430 - 453 and press the softkey beneath show. This advances to the TENANT programming screen.
5. Press the softkey beneath chg to select the Tenant group which this UCD Group is to be associated.
6. Press the softkey beneath next. This advances to the UCD GP. MEMBER programming screen.
7. Press the softkey beneath chg to select the Attribute for this UCD Group.
8. Press the softkey beneath next.
9. Enter (06-01-gp-03-mem) (gp= group, mem-Member 1-24).
10. Press the softkey beneath show.
11. Press the softkey beneath next, the softkey beneath back to choose the Member.
12. Press the softkey beneath chg.
13. Enter the extension directory number of the extension to assign as a Member.
14. Press the softkey beneath save.
15. Repeat from the softkey beneath next, the softkey beneath back for additional Members.
16. Press the Hold button (HOLD) when you have finished entering members.
17. Press the softkey beneath next.
18. Enter 06-01-gp-03-mem (06-01-gp-03-mem) (gp= group, mem-Member 01-24).
19. Press the softkey beneath chg.
20. Enter the extension directory number of the extension to assign as a Member.
21. Press the softkey beneath save.
22. Press the softkey beneath next, the softkey beneath back for additional Members.
23. Repeat steps 20-23 to add additional Members.
24. Press the Hold button when you have finished entering members.
25. Press the softkey beneath next.
26. Enter 06-01-gp-04 (gp = group 01-24)(UCD Group select Hunting Method).
27. Press the softkey beneath chg to select the Hunting Method for this UCD Group.
28. Press the softkey beneath next.
29. Enter 06-01-gp-05 (gp = group 01-24) (UCD Group enter No Answer Time).
30. Press the softkey beneath chg.
31. Enter an appropriate No Answer Time.

32. Press the softkey beneath save.
33. Press the softkey beneath next.
34. Enter 06-01-gp-06 (gp = group 01-24)(UCD Group select Overflow 1 Timer).
35. Press the softkey beneath chg.
36. Enter an appropriate Overflow 1 Timer.
37. Press the softkey beneath save.
38. Press the softkey beneath next.
39. Enter 06-01-gp-07 (gp = group 01-24)(UCD Group enter Overflow 1 Destination).
40. Press the softkey beneath chg.
41. Enter an appropriate Overflow 1 Destination.
42. Press the softkey beneath save.
43. Press the softkey beneath next.
44. Enter 06-01-gp-08 (gp = group 01-24) (UCD Group select Overflow 2 Timer).
45. Press the softkey beneath chg.
46. Enter an appropriate Overflow 2 Timer.
47. Press the softkey beneath save.
48. Press the softkey beneath next.
49. Enter 06-01-gp-09 (gp = group 01-24) (UCD Group enter Overflow 2 Destination).
50. Press the softkey beneath chg.
51. Enter an appropriate Overflow 2 Destination.
52. Press the softkey beneath save.
53. Press the softkey beneath next.
54. Enter 06-01-gp-10 (gp = group 01-24) (UCD Group select Overflow Count).
55. Press the softkey beneath chg.
56. Enter an appropriate Overflow Count.
57. Press the softkey beneath save.
58. Press the softkey beneath next.
59. Enter 06-01-gp-11 (gp = group 01-24) (UCD Group enter Reroute Destination).
60. Press the softkey beneath chg.
61. Enter an appropriate Reroute Destination.

62. Press the softkey beneath save.
63. Press the softkey beneath next.
64. Press the Volume button to return to the DB Item Selection Screen or exit programming.

UCD Announcement Groups

MBC: UCD 06-01-gp

gp=group 1-24

Description

With the Integrated Hard Drive voice mail system UCD Groups may use overflow messages when calls remain in queue longer than the overflow timer. This application is considered a "Recorded Announcement Devices" (RAD) or a Recorded Announcement (RAN).

Once the overflow timer expires the integrated Hard Drive voice mail system using the following numbering plan, which begins with 9301 and continues to 9372. Overflow announcement 1 uses number 9301~9324, overflow announcement 2 uses numbers 9325~9348 and reroute destination message uses numbers 9349~9372. Announcements should be recorded in the following "Mailboxes".

TABLE 6.1 .1 Overflow Announcement Integration Digits

UCD Group	Over Flow Msg 1	Over Flow Msg 2	ReRoute	Usage Examples
1	9301	9325	9349	9301-9325-9349
2	9302	9326	9350	9302-9326-9350
3	9303	9327	9351	9303-9327-9351
4	9304	9328	9352	9304-9328-9352
5	9305	9329	9353	9305-9329-9353
6	9306	9330	9354	9306-9330-9354
7	9307	9331	9355	9307-9331-9355
8	9308	9332	9356	9308-9332-9356
9	9309	9333	9357	9309-9333-9357
10	9310	9334	9358	9310-9334-9358
11	9311	9335	9359	9311-9335-9359
12	9312	9336	9360	9312-9336-9360
13	9313	9337	9361	9313-9337-9361
14	9314	9338	9362	9314-9338-9362
15	9315	9339	9363	9315-9339-9363
16	9316	9340	9364	9316-9340-9364
17	9317	9341	9365	9317-9341-9365
18	9318	9342	9366	9318-9342-9366
19	9319	9343	9367	9319-9343-9367
20	9320	9344	9368	9320-9344-9368
21	9321	9345	9369	9321-9345-9369
22	9322	9346	9370	9322-9346-9370
23	9323	9347	9371	9323-9347-9371
24	9324	9348	9372	9324-9348-9372

Default Settings:

Extension Application – Uniform Call Distribution – Attribute (06-01-gp-02)= UCD (Range is UCD/V.A.)

Extension Application – Uniform Call Distribution – Members (06-01-gp-03-mem)= NULL

Extension – Port Type = "EXT" (01-ext-21) (Range is EXT/V.A./VM)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program Analog Extension port as Type VA:

2. Enter 01-Aext-21 (Aext=Analog Extension), then press the softkey beneath save. This advances to the PORT TYPE programming screen of the extension selected.
3. Press the softkey beneath chg to until VA is displayed.
4. Press the Hold button (HOLD) to return to continue programming analog extensions as port type VA as required or press the Volume button to return to the MBC Screen or exit programming.
5. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

Program the Voice Announcer UCD Group:

2. Enter 06-01-gp-02 (gp=01-24), then press the softkey beneath save. This advances to the selected UCD Group (01-24) UCD ATTRIB programming screen.
3. Press the softkey beneath chg until VA is displayed.
4. Press the softkey beneath next. This advances to the MEMBER programming screen for the selected UCD Group.
5. Press the softkey beneath show. This advances to the first (of twenty-four) members of this UCD Group.
6. Use the softkey beneath back and the softkey beneath next to select the UCD Group Member for programming.
7. Press the softkey beneath chg.
8. Enter the extension directory number of the analog extension to assign as this VA UCD Group Member.
9. Press the softkey beneath save.
10. Repeat from the softkey beneath next, the softkey beneath back for additional Members.

11. Press the Hold button (HOLD) when finished entering members or press the Volume button to return to the MBC Screen or exit programming.

Voice Mail - Analog / Tenant Integration / Port Type

MBC: UCD 06-01-gp

gp=group 1-24

MBC: Analog Extension 01-ext-21

Aext = 181 - 188

Description

The system may be interfaced with a third-party voice mail system; via spare analog ports. Doing so occupies these ports and therefore reduces the number of analog ports that can be used for the Single Line telephones, FAX machines, modems, etc.

To complete the voice mail installation, the analog ports must be identified as voice mail ports, then placed into a UCD Group and finally program the integration information.

Default Settings:

N/A

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter the code to advance to the specific database programming as described:
   a. 01-Aext-21 (Aext=Analog extension port) and press the softkey beneath show.
      i. Press the softkey beneath chg until the port type VM displays for this extension.
3. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

   a. 06-01-Ugp-03-01 (Ugp=UCD Group Number 01- 24) and press the softkey beneath save.
      i. Press the softkey beneath chg.
      ii. Enter the extension directory of the analog port to program into this Member and press the softkey beneath save.
      iii. Press the softkey beneath next.
      iv. Continue from the softkey beneath chg above to program all voice mail ports as members of this UCD Group.

4. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

   a. Enter 06-02-(t)-01 ((t)=tenant group 1-3) and press the softkey beneath save. This advances to voice mail Table for Tenant 1 – Hunt Group.

      i. Press the softkey beneath chg until the UCD Group to be used as the VM Hunt Group displays. (UCD Group where all of the VM type analog ports are programmed as Members.)

      ii. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

5. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

   a. Enter 6-02-(t)-02-01 ((t)=tenant group 1 - 3) (VM Table – Prefix Table – ICM/VM and press the softkey beneath save.

      i. Press the softkey beneath chg.

      ii. Enter the required digits to identify this call as originated at the subscriber phone.

      iii. Press the softkey beneath save.

      iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

6. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

   a. Enter 06-02-(t)-02-02 ((t)=tenant group 1-3) and press the softkey beneath save.

      i. Press the softkey beneath chg.

      ii. Enter the required digits to identify this call as transferred to this subscriber MB.

      iii. Press the softkey beneath save.

      iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

7. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

   a. Enter 06-02-(t)-02-02 (VM Table – Prefix Table – Busy FWD, where 1-3 = Tenant Group) and press the softkey beneath save.

      i. Press the softkey beneath chg.

      ii. Enter the required digits to identify this call as forwarded from this busy subscriber.

      iii. Press the softkey beneath save.

      iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

8. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

   a. Enter 06-02-(t)-02-02 (VM Table – Prefix Table – No Answer, where 1-3 = Tenant Group) and press the softkey beneath save.

      i. Press the softkey beneath chg.

      ii. Enter the required digits to identify this call as forwarded from this subscriber-no answer.

      iii. Press the softkey beneath save.

      iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

9. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

   a. Enter 06-02-(t)-02-02 (VM Table – Prefix Table – Direct, where 1-3 = Tenant Group) and press the softkey beneath save.

      i. Press the softkey beneath chg.

      ii. Enter the required digits to identify this call as immediately from this subscriber.

      iii. Press the softkey beneath save.

      iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

10. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

    a. Enter 06-02-(t)-02-02 (VM Table – Prefix Table – CO Greeting, where 1-3 = Tenant Group) and press the softkey beneath save.

       i. Press the softkey beneath chg.

       ii. Enter the required digits to identify this call to a specific CO Line.

       iii. Press the softkey beneath save.

       iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

11. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

    a. Enter 06-02-(t)-02-02 (VM Table – Prefix Table – CO Recall, where 1-3 = Tenant Group) and press the softkey beneath save.

       i. Press the softkey beneath chg.

       ii. Enter the required digits to identify this call as a specific CO Line recalling.

       iii. Press the softkey beneath save.

iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

12. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

    a. Enter 06-02-(t)-02-02 (VM Table – Prefix Table – UCD Overflow, where 1-3 = Tenant Group) and press the softkey beneath show.

        i. Press the softkey beneath chg.

        ii. Enter the required digits to identify this call as a UCD Overflow Announcement.

        iii. Press the softkey beneath save.

        iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

13. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

    a. Enter 06-02-(t)-03 (VM Table – Suffix Digit, where 1-3 = Tenant Group) and press the softkey beneath save

        i. Press the softkey beneath chg.

        ii. Enter the suffix digits if required to identify this call as the mailbox owner.

        iii. Press the softkey beneath save.

        iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

14. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

    a. Enter 06-02-(t)-03 (VM Table – Record Digit, where 1-3 = Tenant Group) and press the softkey beneath save.

        i. Press the softkey beneath chg.

        ii. Enter the digits required to active recording in this mailbox.

        iii. Press the softkey beneath save.

        iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

15. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

    a. Enter 06-02-(t)-03 (VM Table – Delete Digit, where 1-3 = Tenant Group) and press the softkey beneath save.

        i. Press the softkey beneath chg.

        ii. Enter the digits required to delete the current recording in this mailbox.

iii. Press the softkey beneath save.

iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

16. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

    a. Enter 06-02-(t)-03 (VM Table – Disconnect Digit, where 1-3 = Tenant Group) and press the softkey beneath show.

        i. Press the softkey beneath chg.

        ii. Enter the digits required to force disconnect of the active port.

        iii. Press the softkey beneath save.

        iv. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).

17. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

    a. Enter 03-34-01 (VM Dialing Ratio – Tone Time) and press the softkey beneath save. This advances to VM DIALING RATIO – TONE TIME programming screen.

        i. Press the softkey beneath chg until the appropriate Tone Time displays. Times can be 60, 90, 120 or 150 milliseconds. Tone time is the minimum duration of DTMF tones delivered to the voice mail analog port for voice processor call processing.

        ii. Press the softkey beneath next to program Inter-Digit Time. Or…

18. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

    a. Enter 03-34-02 (VM Dialing Ratio – Inter-Digit Time) and press the softkey beneath save. This advances to VM DIALING RATIO – INTER-DIGIT TIME programming screen.

        i. Press the softkey beneath chg until the appropriate Inter-Digit Time displays. Times can be 60, 90, 120 or 150 milliseconds. Inter-Digit Time is the minimum duration of time between tones delivered to the voice mail analog port for voice processor call processing.

19. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

Warning Tone / CO Line Call limiter

MBC Code: 01-ext-08

Description

The Warning Tone helps to limit the amount of time an extension spends on a CO Line call. If an extension exceeds the time limit the Warning Tone will play to the caller. The tone continues to play each time the timer expires until the call is terminated.

Also, See "Drop Call In" Page 175 (01-ext-10), and See "Drop Call Out" Page 176 (01-ext-09).

Default Settings:

Extension – Warning Tone = N (Range is Y/N.)

Related Programming Warning Time (03-10-01 - Outgoing, 03-10-02 - Incoming)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 01-ext-08 and press the softkey beneath `save` to advance to the `WARNING TONE` programming screen.
3. Toggle the softkey beneath `chg` for `Y/N`. `Y` will enable `WARNING TONE` for the extension selected.
4. Press the Volume button to return to the MBC or exit programming.

6.2 CO Line

Busy To Idle

MBC: 02-LN-13

Description

Busy to Idle is a timer which is used to ensure that a CO Line has enough time to fully disconnect, before it is accessed again.

DEFAULT SETTINGS:

Busy to Idle = 1 second (1 - 6)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 02-LN-13 (LN=700-719, 744-747) and press the softkey beneath SAVE to advance to the BUSY TO IDLE programming screen. Enter change to select between 1 and 6 seconds.

Call Forward - CO Line Preset (No Answer Condition)

MBC: 02-LN-14-03

Description

Unanswered Incoming CO Lines can be forwarded (diverted) to another destination such as an extension, virtual number or UCD group. There is only one forward setting which is used for day and night. This parameter is "Preset" in system programming and governed by the Preset Call Forward Timer (03-40). Once this timer expires, the CO Line is forwarded, regardless of Operating Mode (Day or Night) See "Attendant Administration" Page 46.

NOTE: *CO Line Predefined is a No Answer condition forward.*

DEFAULT SETTINGS:

Preset Call Forward Time (MBC: 03-40) = 10 seconds. (Range is 6-30 seconds in 2 sec. Increments.)

Pre_FWD NoAns (02-LN-14-03) (LN=700-719, 744-747) = "NULL" (no destination) for all CO lines. (Range is any extension, virtual directory number or UCD group.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 02-LN-14-03 (LN=700-719, 744-747) and press the softkey beneath SAVE to advance to the P-FWD NOANS programming screen to program the Predefined No Answer destination for each CO Line to be forwarded.

Communications Server 1

TABLE 6.2.1 Communications Server 1

3 CO Line Motherboard	CO Line 1 = 700
	CO Line 2 = 701
	*CO Line 3 = 702

TABLE 6.2.2 Communications Server 1

3 CO Line Expansion	CO Line 1 = 703
	CO Line 2 = 704
	*CO Line 3 = 705

TABLE 6.2.3 Communications Server 1

8 CO Line Expansion	CO Line 1 = 712
	CO Line 2 = 713
	CO Line 3 = 714
	*CO Line 4 = 715
	CO Line 5 = 716
	CO Line 6 = 717
	CO Line 7 = 718
	*CO Line 8 = 719

TABLE 6.2.4 Communications Server 1

4 SIP Gateway (future)	Gateway 1 = 744
	Gateway 2 = 745
	Gateway 3 = 746
	Gateway 4 = 747

Communications Server 2

TABLE 6.2.5 Communications Server 2

3 CO Line Motherboard	CO Line 15 = 706
	CO Line 16 = 707
	*CO Line 17 = 708

TABLE 6.2.6 Communications Server 2

3 CO Line Expansion	CO Line 1 = 709
	CO Line 2 = 710
	*CO Line 3 = 711

Tip: * = Equipped with Fax detection circuits

3. Press the softkey beneath chg to change the value of this data item.
4. Enter the appropriate destination. Valid entries are extension directory number (101-148), UCD/Hunt Group Directory Numbers (430-453), or Virtual Directory Numbers (850-879).
5. Press the softkey beneath save to store this new data.
6. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

Class of Service - CO Line

MBC: DAY - 02-LN-04

MBC: NIGHT - 02-LN-05

Description

The system provides eight (8), Classes of Service (COS) for assignment of outside line dialing-privileges. Each CO Line may be assigned one Day COS and one Night COS. The CO Line COS is primarily used for restriction and control of long distance dialing. Toll restriction tables allow customized dialing privileges to be assigned to any or all COS.

NOTE: *"Night" in Digital telephone programming is the same as "Evening" in RMP programming.*

NOTE: *When both the extension and the CO Line have Class of Service restrictions, the more restricted COS will take control of the call. For example, if an extension has no restrictions, but the CO Line is restricted to Local Calls only, then only local calls will be allowed.*

DEFAULT SETTINGS:

CO Line – Class of Service – Day (02-LN-04)= 0 for all Extensions. (Range is 0-7.)

CO Line – Class of Service – Night (02-LN-05)= 0 for all Extensions. (Range is 0-7.)

Restriction – Toll Restriction – At default all CO Lines use Digit Interval Table 001, which has no restriction, all calls are allowed. See "Toll Restriction - Class of Service" Page 282

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 02-LN-04 (LN=700-719, 744-747) and press the softkey beneath save to advance to the DAY CLASS programming screen.
3. Press the softkey beneath chg to select a DAY CLASS COS. (0-7.)
4. Press the softkey beneath next to advance to the NIGHT CLASS programming screen or enter Enter 02-ext-05 and press the softkey beneath save at the MBC Screen.
5. Press the softkey beneath chg to select a NIGHT CLASS (Evening) COS. (0-7)

6. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

CO Line Signaling / Dialing type (Tone/Pulse)

MBC: 02-LN-07

Description

To accommodate older Central Office facilities the system's CO Lines may be designated as Dial Pulse or DTMF (Touch Tone®) Dial types

By dialing a TONE * a CO Line marked as Dialing Type "Pulse" can be temporarily forced to send DTMF Tones, allowing the user to communicate with automated answering devices such as voice mail or Interactive Response Systems (IVR) etc.

DEFAULT SETTINGS

All CO Lines are assigned to signal in DTMF (Tone) mode.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 02-LN-07 (LN= CO Lines 700-719, 744-747) and press the softkey beneath save. This advances to the DIALING programming screen.
3. Toggle the softkey beneath chg to select TONE or PULSE dialing mode.
4. Press the Volume button to return to the MBC Screen to enter a new CO Line number.

CO Line Type Assignment (Trunk Type)

MBC: 02-LN-08

Description

Each CO line is assigned as either a "CO Line", "PBX", "EMPTY", "PAGE", "HOTLN". These designations are used to provide special handling for the CO Line circuit:

CO - The default, CO Line type circuits, are used to indicate that no special handling is needed.

PBX - When a CO Line is programmed as a PBX Line type, it automatically invokes system features for special operation and handling of PBX ports. When the programmed PBX Trunk access code is dialed, the system will monitor all digits dialed after the PBX access code is

dialed. The remaining dialed digits are compared against the Allowed Digit Interval Table See "Toll Restriction - Class of Service" Page 282, referenced by the station's Class of Service. Also, PBX type trunks will automatically receive a pause, after the PBX Code, but before signalling the telephone company facility. This operation applies for Call Log, Speed Dial, Last Number Redial, Saved Number Redial, Memo Pad, and Automatic Redial.

EMPTY - This parameter is reserved for CO lines that are equipped in the system, but not connected to telephone company network facilities. The system will not access a CO Line marked as EMPTY. When a CO Line is not connected to the system, and it is accessed, the telephone display will update to say "NO LOOP CURRENT" and the line will be taken out of the hunt.

PAGE - The PAGE parameter indicates that a CO Line is connected to a special apparatus. Typically used to connect ancillary paging equipment, the CO Line can only be accessed by dialing the CO Line directly or by pressing a programmed flexible (feature) button.

HOT LINE - The Hot Line parameter is used to indicate that a CO Line, when accessed, connects directly to a preprogrammed destination. These CO Lines support two-way communication and will pass DTMF tones. Additionally, a CO Line marked as "Hot Line" cannot be accessed by dialing the a line group access code such as "9".

DEFAULT SETTINGS

At default CO Line Type is set to CO for all CO Lines.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 02-LN-08 then press the softkey beneath save. This advances to the The CO Line TYPE display for the CO Line selected.
3. Press the softkey beneath chg to select between CO, PBX, EMPTY, HOTLN, or PAGE.
4. Press the Volume button to return to the MBC Screen and another CO Line number for programming or exit the program mode.

Loop Supervision (Talk/Hold Abandon)

MBC: 02-LN-09

Description

Call Abandon is a timed signal which is sent from the telephone company to the system to indicate that a trunk has disconnected. This is especially helpful when callers disconnect the call after being placed on hold.

DEFAULT SETTINGS

CO Line – Call Abandon set to Y (yes) for all CO Lines. (Range: Y/N)

Call Handling – (03-42) Talk Abandon Time set at 600ms. (Range: 50-1000ms)

Call Handling – (03-43) Hold Abandon Time set at 600ms. (Range: 50-1000ms)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 02-LN-09 (LN=700-719, 744-747) and press the softkey beneath save. This advances to the selected CO Line CALL ABANDON programming screen.
3. Toggle the softkey beneath chg for Y/N. Y will allow the selected CO Line to disconnect where a loop current interruption or polarity reversal is detected during a call.
4. Press the Volume button to return to the MBC Screen and repeat steps 2 through 4 for other CO Lines or press the Hold button (HOLD) and follow the prompts to select another CO Line to be programmed.
5. When finished programming CO Line Call Abandon, press the Volume button to return to the MBC Screen.

Program Call Abandon Timers as required, to match CO operation. (03-42 and 03-43):

6. Talk Abandon: At the MBC Screen enter either 03-42 and press the softkey beneath save for TALK ABANDON (Call Abandon during conversation "talk" mode.) or Hold Abandon: enter 03-43 and press the softkey beneath save for HOLD ABANDON (Call Abandon during on hold mode.)
7. Press the softkey beneath chg to select the desired values. Available selections are 50-1000, in increments of 50 milliseconds.
8. Press the Volume button to return to the MBC Screen or exit programming.

***NOTE:** Changing this timer may result in erratic operation.*

Music On Hold (Two Source)

MBC: 02-LN-06

FEATURE CODE: 420, 421

Description

The system comes equipped with two connections for an ancillary music-on-hold devices. When CO Lines are placed on hold, they can be programmed to use either music source one or music source two. This allows CO Lines to have different music-on-hold messages or music types.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 02-LN-06, then press the softkey beneath save. This advances to the MOH SOURCE programming screen.
3. Press the softkey beneath save to select the desired MOH source displays. MOH SOURCE values to select are MC1, MC2. Music Source one (MC1) may be either the internal synthesized music or the External Music Channel source connected to "Music1" on the CCB. MC2 is an external music source connected to "Music2" on the CCB.
4. Press the to return to the MBC Screen and repeat steps 2 through 4 for other CO lines or exit programming.

Privacy Release

MBC: 02-LN-12

Description

All calls in the system are considered Private. Privacy Release removes the safeguards allowing other extensions to join in on a busy CO Line. This setting is often desirable when the system is installed in a home or home office. The Privacy Release setting is programmed on a CO Line basis which allows one CO Line to be marked as Privacy Released while another can be marked for Privacy; thereby ensuring uninterrupted, private conversations on those CO Lines.

- Up to three additional extensions may join a CO line conversation in progress.

Privacy Release, may be considered an "Express Conference" and is subject to the system's conference parameters. The system supports up to eight, four party simultaneous conferences. Because Privacy Release uses the Conference Circuitry, only three additional extensions may join in on a CO Line conversation. And the maximum, Privacy Release multi-party conversations is limited to eight. (See "Conference, Supervised / Unsupervised" Page 230)

DEFAULT SETTINGS:

Privacy Release is set to N (NO) for all CO Lines. (Range is Y/N.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 02-LN-12 then press the softkey beneath save to advance to the PRIVACY RLS programming screen for the CO Line selected.
3. Toggle the softkey beneath chg for Y/N. Y releases to Privacy feature for this CO Line.
4. Press the Volume button and repeat steps 2 and 3 for other CO lines or return to the DB Item Selection Screen.

Private To

MBC: 02-LN-10

Description

The Private To feature provides a quick and secure method of programming a private line for one extension. If other extensions have a flexible (feature) button programmed for the Private Line, the line button will light when ringing or busy but the line cannot be answered, on incoming calls, or accessed for outgoing calls. The Private Line is used exclusively by the extension that is assigned as the "Private To" extension in Database Programming.

Incoming calls on a private CO line will ring its associated (private to) extension regardless of whether the CO line ring assignment is allowed in programming (See "Ring Assignment (Answer Position)" Page 211). Private Line programming will override CO Line – Answer Position and CO Line Receive Assignments for the Private To extension.

CO Lines designated as Private To, will follow call forward modes as set by the Private To extension.

DEFAULT SETTINGS:

Private To, is set to NULL (none) for all CO line

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 02-LN-10 then press the softkey beneath `save` to advance to the `PRIVAT TO` programming screen for the CO Line selected.
3. Press the softkey beneath `chg` and enter the Private to extension (101~148, 181~188).
4. Press the Volume button and repeat steps 2 and 3 for other CO lines or return to the DB Item Selection Screen.

Ring Assignment (Answer Position)

MBC: 02-LN-14

Description

Answer Position determines where each CO Line will ring. Valid Answer Positions are Extensions, UCD Groups and Virtual Numbers. Each CO Line has six answer positions available for the Day mode, and one in the Evening (night) mode. CO Lines can be forwarded using the Preset No Answer Forward parameter. This parameter will automatically forward unanswered CO Line calls to the preset (preprogrammed) destination.

UCD Groups are used to accommodate installations that require more then the allowed number of answering positions. Each UCD group may have up to 24 members (Extensions) and they may be programmed to ring in a linear, distributed or all ring mode.

DEFAULT SETTINGS

All CO Lines are assigned to ring at UCD 430 in the Day and Evening modes of operation.

No Preset Call Forward destination is assigned for any CO Line (see Call Forward – CO Line Preset.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program CO Lines for Day Ringing Assignment:

2. Enter 02-LN-14-01-01 (LN= CO Lines 700-719, 744-747) and press the softkey beneath save. This advances to the MEMBER programming screen where the first of six Members (ringing destinations) display.
3. Press the softkey beneath save.
4. Press the softkey beneath chg to change this member.

Or...

5. Press the softkey beneath next to select the next programmable member for ringing assignment.
6. When the MEMBER for change displays, press the softkey beneath chg.
7. Enter the directory number where Day mode ringing for this CO line will be assigned (Extensions: 101 - 148; Hunt Groups: 430 - 453; Virtual Numbers 850 - 879.) and press the softkey beneath save. The data is stored.
8. To program other Members press the softkey beneath next or the softkey beneath back to select the Member to change and repeat the process.
9. Press the Volume button to return to the MBC Screen.

Program CO Lines for Night Ringing Assignment:

2. Enter 02-LN-14-02 (LN= CO Lines 700-719, 744-747) and press the softkey beneath save. This advances to the NIGHT programming screen.
3. Press the softkey beneath chg to change the night assignment.
4. Enter the directory number where Evening mode ringing for this CO line will be assigned (Extensions: 101 - 148; Hunt Groups: 430 - 453; Virtual Numbers 850 - 879.) and press the softkey beneath save. The data is stored.
5. Press the Volume button to return to the MBC Screen.

Ring Type Assignment

MBC: 02-LN-11

Description

CO Lines can be programmed to use one of four distinctive ring (tones) types. Ring Tones are an audible indication used to differentiate CO Lines while they are ringing.

There are four Ring Types (1 - 4), which will take precedence over any extension distinctive ring settings. Additionally, a setting of zero (0) is considered a non-specific Ring Type, which means that the Ring Type selected at the extension will be followed.

DEFAULT SETTINGS:

All CO Lines are assigned Ring Type 0. (Range is 0 - 4.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 02-LN-11 (LN= CO Lines 700-719, 744-747) and press the softkey beneath save to advance to the CO RING TYPE programming screen. Press the softkey beneath chg until the desired Ring Type displays. The specific ring type assigned to the CO Line is the ring type heard when that CO Line rings.
3. Press the Volume button to return to the MBC Screen.

Ringing Modes

MBC: 02-LN-14-01-01

Description

The system has several ringing modes to allow flexible ringing patterns depending office conditions. The ringing modes available are: DAY and Night (Evening) and TIME. The Day and Night modes can be programmed for ringing assignments as required in these two operational conditions. Details for each mode are listed below.

Day: This is the ringing pattern for CO Lines while the system is in Day mode.

Night: This is the ringing pattern for CO Lines while the system is in Night (evening) mode.

TIME: This is a scheduled time clock that automatically adjusts the mode of system operation from Day mode to Night mode based upon preprogrammed settings.

Noon: Not used at this time.

Defaults Settings

CO Line – Answering Position – Day and Night = 430. (Range is Digital Extensions 101 - 148, UCD 430 - 453, Virtual Numbers 850 - 879).

System Application – Time Switching (See "Time (Service Mode) Switching" Page 315.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program Day Mode Answering Positions:

2. Enter 02-LN-14-01-01 then press the softkey beneath save. This advances to the Day mode MEMBER 1 Answering Position display.
3. Press the softkey beneath chg to select the desired extension.

Or...

4. Press the softkey beneath next to advance to the next member.
5. Press the softkey beneath chg to change the stored member (ringing/answering position).
6. Enter the directory number for the ringing position (extension, 101 - 148, UCD group 430 - 453, or Virtual numbers 850 - 879.)
7. Press the softkey beneath save to store this data.
8. Press the Volume button to return to the MBC Screen.

Program Eve Mode Answering Position (02-LN-13-02):

2. Enter 02-LN-14-02 (LN=trunk 700-719, 744-747) and press the softkey beneath save. This advances to the NIGHT mode Answering Position display.
3. Press the softkey beneath chg to select the stored answering position (ringing/answering position).
4. Enter the directory number for the ringing position (extension, 101 - 148, UCD Group 430 - 453, or Virtual numbers 850 - 879.) and press the softkey beneath save to store this data.
5. Press the Volume button to return to the MBC Screen.

Route Group

MBC: DAY - 02-LN-03

Description

CO Lines can be programmed into one of eight (8) route groups, which are used for CO Line Pool (outgoing) access. This allows extension users to pick up an idle CO Line by dialing an access code. For example, to access a CO Line in CO Line Route Group 1, the extension user dials 9.

DEFAULT SETTINGS

CO Line – CO Group = 1 for all CO Lines. (Range is 1-8.)

Digital Telephone Programming

1. Access the Programming Features as described in Section 6.0.
2. Enter 02-LN-03 (LN=700-719, 744-747) and press the softkey beneath save. This advances to ROUTE programming screen (CO Line Route Group) for the CO Line.
4. Press the softkey beneath chg until the appropriate ROUTE displays for this CO Line. The Co line being programmed is assigned 1 of 8 CO Lines or Trunk groups.
5. Press the Hold button (HOLD) to select another CO Line to be programmed or press the Volume button to return to the MBC Screen and enter another CO Line.
6. Press the softkey beneath show.
7. Press the softkey beneath next twice to advance to the CO Line Group programming for the CO Line selected.
8. When finished programming CO Line Groups, press the Volume button to return to the MBC Screen or exit programming.

Tenant Groups

MBC: Tenant Groups 02-LN-02

MBC: Tenant Calling 03-30-(t)-

Feature Code: N/A

Description

Tenant Groups allow for the separation of system resources, so that the system can operate as though it were two or three separate systems.

Tenant Group Assignments can be programmed to completely isolate extension functions. Once CO Lines are assigned to a Tenant Group, extension not in that group will not have access to the CO Line. Often, full tenant separation is not required or even desired. However, when necessary the system will allow total isolation of several system resources, such as CO Line Assignment, CO Line Ring Assignment, CO Line Receive Assignment.

Default Settings:

Extension – Tenant Group, 01-ext-02, all extensions are set to Tenant Group 1. (Range is 1-3.)

CO Line – Tenant Group, 01-trk-02, all CO Lines are assigned to Tenant Group 1. (Range is 1-3.)

Call Handling – Tenant Calling, 03-30, All Tenant Groups are allowed to dial intercom directory numbers of extensions in all other tenant groups. (Range is Y/N for each calling direction between tenant groups.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program Extensions into the tenant group:

2. Enter 01-ext-02, then press the softkey beneath save. This advances to the TENANT GROUP programming screen.
3. Press the softkey beneath chg until the desired tenant group for this extension displays.
4. Press the Hold button (HOLD) to enter a new extension to program and repeat from step 3 or press the Volume button to return to the MBC Screen.

Program CO Lines into the tenant group:

2. Enter 01-LN-02, (LN = Trunk (CO Line 700-719, 744-747) then press the softkey beneath save. This advances to the TENANT GROUP selection for the CO Line selected.
3. Press the softkey beneath chg until the desired tenant group for this CO Line displays.

4. Press the Hold button (HOLD) to enter a new CO Line to program and repeat from step 6 or press the Volume button to return to the MBC Screen.

Program Tenant Group Calling:

2. Enter 03-30 and then press the softkey beneath save. This advances to the TENANT CALLING programming screen.
3. Press the softkey beneath show.
4. Enter the Tenant Group for which changes are to be made and then press the softkey beneath show. The display shows the status of calling allowed settings from this tenant group to the tenant group displayed.
5. Toggle the softkey beneath chg for Y/N. Select N if calling to the tenant group is to be denied.

Or…

2. Press the softkey beneath next to skip to the tenant group to program.
3. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC screen or exit programming.

6.3 Call Handling Programming

Alarm Play (Wakeup Call)

MBC: 03-20

FEATURE CODE: FEATURE 9 2

Description

Extension users may activate a private alarm on their telephone to remind them of special appointments, events, etc., or as a wakeup call. When the programmed time is reached the extension user will hear tone ringing for a programmable period of time, which ranges from 10 - 600 seconds. The display will be unchanged until the softkey beneath ack is pressed or when the telephone is used for another call.

- The attendant and alternate attendant may set the alarm (wakeup call) at any extension in the system.

Default Settings:

No Extension Alarm times are set.

Alarm Play Time is set at 30 seconds.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-20 and press the softkey beneath save. This advances to the ALARM PLAY programming screen.
4. Press the softkey beneath chg to select an Alarm Play Time displays (in seconds). Available selections are 10, 30-600 seconds (30 second increments).
5. Press the Volume button to return to the MBC Screen or exit programming.

Auto Attendant (Module)

MBC: 03-48

Description

Not available.

Default Settings:

N/A

Auto Redial

MBC: 03-32

MBC: Attempts - 03-32-01

MBC: Interval - 03-32-02

MBC: Waiting Time - 03-32-03

Feature Code: feature PQRS 7 TUV 8

Auto Redial may be used to dial the last number dialed. The system will automatically dial the number and then wait for a predetermined time period. Following this predetermined time period if no action is taken the system will then hang up and the redial cycle will continue until the number of attempts designated in programming is reached.

If a Feature/DSS button has been programmed for use with Automatic Redial, the button may be used to invoke the feature. While the feature is active the LED of that button will be lit steady. During dialing attempts the LED of that button will flash.

The system will continue redial attempts until:

- Call rings through and caller picks up,
- The maximum number of attempts is reached,
- Any other feature is used on the telephone.

The number of redial attempts and the timed interval between attempts are set in system programming and are not changeable at the extension level.

If all extension accessible CO Lines or the CO Line group are busy at the time of an Automatic Redial attempt, that attempt will count as a valid attempt and reduce the remaining number of attempts.

Default Settings:

Attempts is set at 2 seconds

Interval is set at 60 seconds

Waiting Time is set at 10 seconds

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-32 and press the softkey beneath save. This advances to the AUTOMATIC REDIAL programming screen.
3. Press the softkey beneath show to enter into these data items.
4. Use the softkey beneath back and the softkey beneath next interactive buttons to select the appropriate data item to be changed. Available data items in Auto Redial are: ATTEMPTS, INTERVAL, and WAITING TIME.
5. When the item for change displays press the softkey beneath chg.
6. ATTEMPTS will allow any number to be entered from 0–2.

NOTE: An entry of 0 *disables Auto Redial.*

7. When the number has been entered, press the softkey beneath save
8. INTERVAL may be selected from the following choices: 30, 60, 90, 120 seconds. Each time that the softkey beneath chg is pressed the selection is incriminated through the available choices.
9. WAITING TIME may be selected from the following choices: 10, 15, 20, 25, 30 seconds. Each time that the softkey beneath chg is pressed the selection is incriminated through the available choices.
10. Press the Volume button to return to the MBC Screen or exit programming.

Call Forward - External

MBC: 03-33

MBC: 01-ext-18

Description

External Call forward allows extension users to External Call Forward (Transfer off net) a transferred Central Office Line call to a remote destination such as a home or cellular telephone. External Call Forward Operation (MBC: 01-ext-18) must be enabled.

When programmed, extension call forwarding, such as external CFW, will override any type system (database) forwarding, i.e. predefined.

Default Settings:

Extension – ECF Operation = N. (Range is Y/N.)

Call Handling – (03-33-01) - External CFW – Service = Always. (Range is Never, Day, Night, Always).

Call Handling – (03-33-02) External CFW – Talk Time = 5 (Range is 1 to 60 minutes).

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Related Programming - External Call Forward:

2. Enter 01-ext-18 and press the softkey beneath save. This advances to the selected extension ECF OPERATION programming screen.
3. Toggle the softkey beneath chg for Y/N. Y will allow external call forwarding for the extension selected.
4. Press the Volume button to return to the MBC Screen.

Program the various system External Call Forward parameters:

5. Enter 03-33-01 and press the softkey beneath save. This advances to the External Call Forward SERVICE programming screen.
6. Press the softkey beneath the softkey beneath chg to select ALWAYS, NEVER, DAY, or NIGHT.
7. Press the softkey beneath next to advance to the TALK TIME programming screen or enter 03-33-02 and press the soft key beneath save. This advances to the External Call Forward TALK TIME programming screen.
8. Press the softkey beneath chg to select the allowable External Call Forward Talk Time, in minutes. The selections available are from 1 to 60 minutes.
9. Press the Volume button to return to the MBC Screen or exit the programming mode.

Call Forward - Preset FWD Timer

MBC: 03-40

MBC: 01-ext-31

MBC: 02-LN-14-03

Description

The Preset (Predefined) Call Forward Timer is used to determine the amount of time that a call will go unanswered, before it forwards to the predefined destination. This timer is used for both CO Preset Call Forward (MBC: 02-LN-14-03 See "Call Forward - CO Line Preset (No Answer Condition)" Page 203) and the Extension Predefined No Answer Forward (MBC: 01-ext-31 See "Call Forward - Predefined" Page 168).

NOTE: *In most cases, extension call forwarding, feature *2*(x), (x=specific type of extension forwarding, supersedes Predefined Call Forward settings.*

Default Settings:

The timer is set at 10 seconds and ranges from 1 to 30 seconds. (Range is 6-30 seconds in 2 second increments).

Digital Telephone Programming

Program the Predefined Forward Time as required:

1. Enter 03-40 and press the softkey beneath save. This advances to the PRESET FWD_T programming screen.
2. Press the softkey beneath chg to select the desired values. Select a time, in seconds, before a call is forwarded to the predefined extension or voice mail. Available selections are 6-30 seconds in 2 second increments.
3. Press the Volume button to return to the MBC Screen or exit programming.

Caller Identification Parameters

MBC: International Prefix 03-26

MBC: Country Code 03-27

MBC: Long Distance Prefix 03-28

MBC: Local Area Code 03-29

Feature Code: Feature 6 #

Description

Caller Identification information is stored in a list, which contains the last fifty (50) calls into the system. If name and number are included from the telephone company subscription, both will be stored in the Caller ID Review Table. Using the Incoming Caller Line Identification (ICLID) feature code feature 6 # an extension user, with a display telephone, can review the list.

If no name is delivered from the telephone company, the number only will be displayed, conversely, if no number is delivered, then only the name will be displayed. Once the intended number if found, the end user may press the dial button to call the delivered number. However, Proper programming of local area code(s) and long distance prefix are required to assure accurate redial of CID numbers from the Caller ID Table.

The telephone navigation keys can be used to scroll through inbound caller ID, and outbound dialed telephone numbers. Press the right navigation key once and then press the up navigation key to review outbound numbers and press the down navigation key to review inbound calls.

Outgoing Log

Call Log

Incoming Log

Default Settings:

Call Handling – CID Programming Code – International Prefix = Null. (Range is – any 4 digits.)

Call Handling – CID Programming Code – Country Code = Null. (Range is – any four digits.)

Call Handling – CID Programming Code – Long Distance Prefix = 1

Call Handling – CID Programming Code – Local Area Code – Area Code eight tables are set at Null. (Empty.)

Call Handling – CID Programming Code – Local Area Code – Area Prefix eight tables are set at Null. (Empty.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-26 to program the INTER.PREFIX.

Or…

3. Enter 03-27 to program the COUNTRY CODE.

Or…

4. Enter 03-28 to program the LONG DIST PREFIX.

Or…

5. Enter 03-29 to program the LOCAL AREA CODE.
6. Press the softkey beneath save after each entry. This advances to the selected database item.
7. Press the softkey beneath show to view the contents of this database item.
8. Press the softkey beneath chg to change the contents of this database item.
9. Enter the actual code required for the selected function. (For example, "011" for international code. In the United States the Long Distance Prefix is preprogrammed to "1")
10. Press the softkey beneath save.
11. Press the Volume button to return to the MBC Screen.

Local Area Code programming 03-29:

12. Local Area Code Programming may require two entries; first the local area code, then the code required as a prefix (usually the same code) when this telephone number is dialed from CID memory. For example, a Local Area code may be 602, but because of 10 digit dialing requirements, the system may need to dial the whole 10 digits, so the 602 may need to be added back into the dial string. If 10 digit dialing is not require, only the Local Area Code table will need to be programmed.
13. Enter 03-28 then press the softkey beneath save.
14. Press the softkey beneath show, Area Code table 1 displays.
15. Press the softkey beneath chg to change the contents of this database item.
16. Enter the actual local area code that will be received with CID from the local calling area and press the softkey beneath save.
17. Press the softkey beneath next. This area code prefix displays.
18. If the area code must be dialed to complete local calls within that area code, press the softkey beneath chg.

19. Enter the prefix code here (usually the same digits as the area code) so that local calls dialed from redial/callback operations to telephone numbers received via CID include this code and press the softkey beneath save.

NOTE: *The Area Prefix may be left empty (Null) for callbacks to a local area code – that does not require 10 digit dialing or enter the area code needed for 10 digit dialing.*

20. Press the Volume button to return to the MBC Screen or exit programming.

Camp On timer

MBC: 03-19

Description

This parameter is used to determine how often the camp on reminder tone should be played to the called extension. When a calling extension encounters a busy extension they will be given the option to camp on to that extension. Once each time this timer expires an alert tone will be sent to the called extension.

Default Settings:

Camp on Time = 0 (Range is 0-60 Seconds)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-19, and then press the softkey beneath save. This advances to the CAMP ON TIME programming screen.
3. Press the softkey beneath chg to select between 0 and 60 Seconds.
4. Press the Volume button to return to the MBC Screen or exit programming

Caller ID Repeater (CID RPT Mod)

MBC: 03-45

Description

This parameter is used to determine which type of Caller ID, FSK or DTMF, Signaling will be analized when it is received from the telephone line provider.

This parameter should not be changed or caller ID will not work!

Default Settings:

FSK or DTMF

CO CID

MBC: 03-46

Description

This parameter is used to determine when the telephone line provider sends the Caller ID Signal.

This parameter should not be changed or caller ID will not work!

Default Settings:

A_1st Ring (After the first ring)

B_1st Ring (Before the first ring)

DTMF (CID)

MBC: 03-46

Description

This parameter defines the tones that would be analized by the system, if the telephone line provider received Caller ID in DTMF format. This parameter is not used in the United States.

This parameter should not be changed or caller ID will not work!

Default Settings:

DTMF CID is not used in the United States.

CO Line Loop Supervision (Talk/Hold Abandon)

MBC: Hold - 03-43

MBC: Talk - 03-42

Description

Call Abandon is a timed signal which is sent from the telephone company to the system to indicate that a CO Line has disconnected. This is especially helpful when callers disconnect the call after being placed on hold. The system receives a timed disconnect signal from the telephone line provider and forces the CO line on-hook.

NOTE: *It is highly recommended that all CO lines be set at the factory default for Call Abandon (Y) to optimize disconnect when feature such as Voice Mail and Meet Me Conference functionality.*

Default Settings:

CO Line – Call Abandon set to Y (yes) for all CO Lines (MBC 02-LN-09). (Range: Y/N)

Call Handling – Talk Abandon Time set at 600ms (MBC 03-42). (Range: 50-1000ms)

Call Handling – Hold Abandon Time set at 600ms(MBC 03-43). (Range: 50-1000ms)

Digital Telephone Programming

Program Call Abandon Timers as required, to match CO operation:

1. Enter 03-42 and press the softkey beneath save}. This advances to the TALK ABANDN programming screen.(Call Abandon during conversation "talk" mode.)

Or…

2. Enter 03-43 for Hold Abandon (Call Abandon during on hold mode.)
3. Press the softkey beneath chg.
4. Enter 50-1000 in increments of 50 milliseconds and press the softkey beneath save.
5. When finished programming Call Abandon database items, press the Volume button to return to the MBC Screen or exit programming.

Conference Room Timer

MBC: Conference Tone 03-24

MBC: Conf Talk_T 03-38

MBC: Unspv Conf_T 03-39

Description

Meet Me Conference Room is a fast and easy way to create a conference. Up to four internal or external parties can meet in any one of eight conference rooms. External parties are transferred, by an extension user, or auto attendant, into the conference room, while internal parties just dial one of the conference room pilot numbers, which range from 890 - 897. There is a programmable conference tone which plays each time a new caller enters the conference room. Disable the conference tone, if no audible indication is needed when someone enters an active conference room.

- It is highly recommended that all CO lines be set at the factory default for Call Abandon (Y) to optimize Meet Me Conference functionality.
- If Call Abandon is disabled, or when using older Central Office Facilities, on a CO line, it may be necessary to set the Meet Me Conference Talk Time to some value other than 0. When this timer expires, the CO line will be disconnected, even if the call is still active. However, this timer is the only facility that will allow the CO line to be disconnected if Call Abandon is No.

NOTE: *Up to four simultaneous connections may join any one conference.*

NOTE: *Up to eight simultaneous conferences may be established at any one time.*

Default Settings:

Call Handling – Meet Me Conference Talk Time (03-38) is set at 0 (unlimited). (Range is: 0-120 minutes, in 10-minute increments.)

Call Handling – Conference Tone is set to Y (Yes) (03-24). (Range is: Y/N.)

Call Handling - UnSpv Conf_T - is the amount of time an unsupervised conference call may continue before being disconnected.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program the Meet Me Conference Room Time:

2. Enter 03-38 and press the softkey beneath `save`. This advances to the `CONF. TALK_T` programming screen.

3. Press the softkey beneath chg to select the desire Meet Me Conference time. This is a time, in minutes, that will allow the CO Line to be disconnected if Call Abandon is set to NO. Available selections are 0-120 minutes, in 10-minute increments.

4. Press the Volume button to return to the MBC Screen.

Program the Conference Tone Operation:

5. Enter 03-24 and then press the softkey beneath save. This advances to the CONF TONE programming screen.

6. Toggle the softkey beneath chg for Y/N. Y will enable the Conference Tone so that entry into a conference is indicated with an alert tone or entered into without an alert tone.

7. Press the Volume button to return to the MBC Screen or exit programming.

Conference, Supervised / Unsupervised

MBC: CO Line Conference 03-01

Feature Codes:

Supervised Conference: Feature MNO 6 OPER 0

Unsupervised Conference Feature: PQRS 7 PQRS 7

Description

The system can accommodate up to eight (8), 4 member (party) conferences, simultaneously. Conference combinations may consist of 3 CO lines maximum and up to three extensions, to a maximum of 4 parties (members). One key telephone extension is considered the controller of the conference, and constitutes one conference member. Before a conference can be established with a maximum of 4 members, a 3-member conference must first be established.

Supervised/Unsupervised:

When the initiator of a conference remains on the call, it is considered a supervised conference. At any time the initiator can "Force Release" a participant by dialing the Forced Release code. To speak privately to an extension the initiator dial the "Private Talk" code, all other parties will be listening to Music-on-Hold. If the initiator dials the unsupervised conference code Feature PQRS 7 PQRS 7, and releases the conference it is considered an unsupervised conference, which is governed by the Conference Room timer (See "Conference Room Timer" Page 229).

NOTE: *Only the initiator, or new controller, can re-joined an existing unsupervised conference.*

- While establishing a conference or privately talking to one party all extensions involved in the conference will be placed on Exclusive Hold.
- If the initiator exits the conference the most recently invited, internal party, will automatically become the new controlling party.
- If the Conference Tone is enabled, a burst of tone will be heard by all participants each time a new participant joins the conference.

- The Unsupervised Conference feature code feature PORT 7 PORT 7 may be programmed on any available programmable Feature/DSS button.
- Conference can only be established at a Digital Telephone.

Default Settings

Call Handling – CO Line Conference = 3 CO Lines (03-01). (Range is None/2/3.)

Call Handling – Unsupervised Talk Time = 0 (unlimited) (03-38). (Range is 0-120 in 10-minute increments.)

Call Handling – Conference Tone = Y (03-24). (Range is Y/N.)

CO Line – Call Abandon = Y. (Range is Y/N.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program the maximum number of CO Lines that may be in a conference:

2. Enter 03-01 and press the softkey beneath save. This advances to the TRUNK CONF. programming screen.
3. Press the softkey beneath chg until the appropriate value displays (NO/2LNS/3LNS). These are the number of CO lines that will be allowed in a conference. "No" will not allow any CO Lines to be involved with a supervised or unsupervised conference, but this setting will not affect the Conference Room (meet me conference).
4. Press the Volume button to return to the MBC Screen.

Program the Unsupervised Conference Time:

2. Enter 03-38 and press the softkey beneath save. This advances to the CONF. TALK_T programming screen.
3. Press the softkey beneath chg to select the Unsupervised Conference Time. Available selections are 0–120 minutes in increments of 10 minutes.
4. Press the Volume button to return to the MBC Screen.

Program the Conference Tone Operation:

2. Enter 03-24 and then the softkey beneath save. This advances to the CONF TONE programming screen.
3. Toggle the softkey beneath chg for Y/N. Y will enable a tone to be heard when members are added or removed from a conference.
4. Press the Volume button to return to the MBC Screen or exit programming.

Dial Delay Time

MBC: 03-18

Description

This parameter was designed to compensate for older CO Lines which are slow to place a DTMF receiver on the circuit, causing the first digit dialed to be missed. The dial delay timer deploys a tone detector to "listen" for dial tone. When dial tone is detected the timer starts. When the timer expires, the dialed digits are sent. This timer is in milliseconds. This timer should not be changed without speaking to a technical support representative.

Default Settings:

Dial Delay Time = 100 (Range is 100-2000 ms)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-18, and then press the softkey beneath save. This advances to the DIAL DELAY programming screen.
3. Press the softkey beneath chg to select between 100 and 2000 ms.
4. Press the Volume button to return to the MBC Screen or exit programming

Dial Wait Time

MBC: 03-17

Description

This parameter was designed to compensate for older CO Lines which are slow to place a DTMF receiver on the circuit, causing the first digit dialed to be missed. This timer determines how long the system will wait after a CO Line is accessed before digits are "sent out" on the circuit. This timer is in seconds.

Default Settings:

Dial Wait Time = 0 (Range is 0-8 seconds)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-17, and then press the softkey beneath save. This advances to the DIAL WAIT TIME programming screen.
3. Press the softkey beneath chg to select between 1 and 8 seconds.
4. Press the Volume button to return to the MBC Screen or exit programming.

Direct Inward System Access (DISA)

No longer supported

End-to-End Signaling/Voice Mail Dialing Ratio

MBC: Tone Time - 03-34-01

MBC: Inter Digit Time 03-34-02

MBC: DTMF Tone - 03-50

Description

This feature allows Digital Telephone extensions to generate in-band DTMF tones while connected on ICM calls to an on-site voice mail system and to ancillary devices connected to the External Page Port.

Default Settings:

Tone Time = 120 (Range is 60-150)

Inter Digit Time = 120 (Range is 60-150)

DTMF Tone = Y (Range "Y" for Yes, and "N" for No.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-34-01, then press the softkey beneath save. This advances to the TONE TIME programming screen.
3. Press the softkey beneath chg to select a desired Tone Time. This timer is relevant only for analog interface voice processing systems connected to the analog ports. It is the minimum duration of DTMF tones delivered to the voice mail analog port for voice processor call processing. Available selections are 60, 90, 120, and 150 milliseconds

4. Press the softkey beneath next or enter 03-34-02, to advance to the INT_DGT TIME programming screen.
5. Press the softkey beneath chg to select an Inter-Digit Time. This timer is relevant only for analog interface voice processing systems connected to the analog ports. It is the minimum duration of time between DTMF tones delivered to the voice mail analog port for voice processor call processing. Available selections are 60, 90, 120, and 150 milliseconds.
6. Press the Volume button to return to the MBC Screen or exit programming.

FAX Ring Time

MBC: 03-37

Description

The FAX Ring Time parameter determines how long a FAX Call (FAX detection feature See "FAX Tone Detection" Page 301) rings to the designated FAX Answering Position before it forwards to the attendant extension.

Default Settings:

FAX Ring Time: 30 (10-60 seconds)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-37, then press the softkey beneath save. This advances to FAX RING TIME programming screen.
3. Press the softkey beneath chg to select between 10 and 60 seconds.
4. Press the Volume button to return to the MBC Screen or exit programming.

Flash - Analog Port (SLT) Flash Recognition

MBC: 03-15

Description

Flash, which is a momentary operation of the hook-switch, refers to the command issued by an analog device to invoke system features such as hold or transfer. There are two settings, a flash start and a flash end timer, which is used to recognize the difference between a flash request, to invoke a feature, and an on-hook command.

It is recommended that the default Start and End timing should be used wherever possible because the Flash Start Time can be set very low to detect very fast operation of the hook-switch, but care should be taken when using low Start settings since the timing may allow line noise to trigger a flash command. Similarly, the End Time can be set very high to detect very slow hook-flash operations but care should be taken when using high End settings since the timing may not allow the triggering of On-Hook commands in an acceptable period for the user.

Default Settings:

SLT Hook Flash Start is set to 200 (Range is: 60, 100-1400 milliseconds.)

SLT Hook Flash End is set to 1000 (Range is: 100-1500 milliseconds.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-15, then press the softkey beneath `save`. This advances to the `SLT HOOK_FLASH` programming screen.
3. Press the softkey beneath `show`. This advances to the `START` screen.
4. Press the softkey beneath `chg` to select the Start Time to detect SLT hook-flash. Available selections are `60`, `100-1400` milliseconds in 100 millisecond increments.
5. Press the softkey beneath `next` to advance to the `END` screen.
6. Press the softkey beneath `chg` to change the End Time to stop detection of SLT hook-flash. Available selections are `200-1500` milliseconds in 100 millisecond increments.
7. Press the Volume button to return to the MBC Screen or exit programming.

Flash - CO Line/PBX Flash Timer

MBC: CO Line - 03-02

MBC: PBX - 03-03

Feature Code: Feature 3

Description

CO Line Flash Timer (PBX Flash Timer) – is a programmed setting that will determine the flash timing, that will be sent to the telephone company central office when the user issues a Hook-Flash command, while connected to a CO Line. This feature is a requirement when the system is installed "behind" Centrex® or a PBX system. In these two cases, the Flash feature code should be programmed onto a Feature/DSS Button for easy access.

The Flash timer is programmable from 100ms to 1500ms in increments of 100ms (1/10th of a second). This parameter should be left at default unless instructed to change by a technical support representative.

1. If Call Waiting service is provided by the Central Office, the end user can use the Flash feature code (feature 3)to answer a second incoming call, while connected to another outside party.
2. The Flash code may be stored in any speed dial location.
3. At a Digital Telephone, when the flash code is dialed CO Flash will be displayed temporarily.
4. Once connected to a Central Office Line an Analog (Single line) extension dials #3 to generate a CO Line Flash.

Default Settings:

CO Flash Time is set to 0.8 seconds. (Range is: 0.1 – 3.0 seconds.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-02, then press the softkey beneath save. This advances to CO FLASH programming screen.
3. Press the softkey beneath chg to select the CO Line hook-flash timing displays. A CO Flash Time value determines what flash timing will be presented to the telephone company central office when the user issues a Hook-Flash command while connected to a CO Line. Available selections are from 100-500 in increments of 100 milliseconds.
4. Press the Volume button to return to the MBC Screen or exit programming.

Hold - Hold Reminder and Recall Timers

MBC:

Hold Remind Timer 03-08

Analog Telephone (SLT) Hold Recall Timer 03-13

Digital Telephone (EKT) Hold Recall Timer 03-14

Description

The Hold Reminder Timer is used to remind the extension user that a call has been placed on hold at their extension. Each time this timer expires, an alter tone is heard at the extension.

The Analog and Digital recall timers are used to release a call from hold (System or Exclusive) and re-ring the extension that placed it on hold. If the extension does not answer the recall, the call will follow the forward destination programming.

Default Settings:

Hold Reminder is set at 60 seconds (03-08). (Range is: 0-90 seconds, 0 disables the Hold Reminder function so no alert tone is heard.)

SLT Hold Recall is set at 0.5 minutes (03-13). (Range is 0-5.0 minutes.)

EKT Hold Recall is set at 0.5 minutes (03-14). (Range is 0-5.0 minutes.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program Hold Reminder:

2. Enter 03-08, then press the softkey beneath save. This advances to HOLD REMINDER TIME programming screen.
3. Press the softkey beneath chg until the desired HOLD REMINDER TIME displays. Available selections are: 0–90 seconds, 0 disables the Hold Reminder function.
4. Press the Volume button to return to the MBC Screen.

Program SLT Hold Recall:

2. Enter 03-13, then press the softkey beneath save. This advances to SLT H_RECALL programming screen.
3. Press the softkey beneath chg until the desired SLT H_RECALL time displays. This timer determines how long a call on Common (System) Hold remains on hold when the extension that placed the call on hold is an SLT phone. Available selections are 0–5.0 minutes.
4. Press the Volume button to return to the MBC Screen.

Program Digital Telephone Hold Recall:

2. Enter 03-14, then press the softkey beneath save. This advances to the EKT H_RECALL programming screen.
3. Press the softkey beneath chg until the desired Digital Telephone EKT H_RECALL time displays. This timer determines how long a call on Common (System) Hold remains on hold when the extension that placed the call on hold is a Digital Model Telephone. Available selections are 0–5.0 minutes.
4. Press the Volume button to return to the MBC Screen or exit programming.

Hold - Exclusive Hold Time

MBC: 03-09

Description

To place a call on Exclusive or Private Hold, the extension user presses the feature button plus the HOLD button. The associated LED on the telephone will flash at a rapid rate. The associated LED on all other telephones, with a button appearance of the held CO line, will be lit steady.

A CO line call will be placed on System Hold after the Exclusive Hold time expires. An alert tone will play as the timer expires and the hold condition for that CO line changes to System Hold. The lamp at the telephone will flash slowly, while the lamp at other extensions will begin to flash slowly.

- Exclusive Hold is used only for CO line calls.
- The Exclusive Hold duration is programmable from 1 - 8 minutes.

Default Settings:

Call Handling – Exclusive Hold Time is set at 3 minutes (03-09). (Range is 0-8 minutes. 0 disables Exclusive Hold Recall.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-09, then press the softkey beneath save. This advances to the EX_HOLD TIME programming screen.
3. Press the softkey beneath chg until the appropriate EX_HOLD TIME displays. The duration is programmable from 1-8 minutes. The lamp for the line at your telephone will flash fast and the lamp will light steady at other extensions for that CO line. Calls placed on Exclusive Hold will recall (ring) to the extension, that placed it on hold once this timer expires.
4. Press the Volume button to return to the MBC Screen or exit programming.

Hold Abandon

MBC: 03-43

Description

Each CO line has a programming option that directs the system to monitor distant party disconnect. The Hold Abandon Timer is the length of time that the system looks for a timed closure, from the telephone company, which indicates that a caller has disconnected. Anytime the system detects a disconnect signal from the Central Office, an existing Hold condition will be released, freeing that line for future inbound/outbound traffic.

- All types of Hold (e.g., System Hold, Exclusive Hold, and Conference Hold) are subject to the Hold Abandon feature.
- At default Call abandon is enabled for all CO lines.
- If the outside (held party) disconnects, the system will automatically release the held CO line.
- The CO line must have the loop supervision interrupt signal from the local carrier for Hold Abandon to function.

Default Settings:

Hold Abandon Time is set to 600 (03-43). (Range is: 50-1000 milliseconds.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-43, then press the softkey beneath `save`. This advances to `HOLD ABANDON` programming screen.
3. Press the softkey beneath `chg` to select the `Hold Abandon Time` to detect (`50-1000` ms) and then press the softkey beneath `save`. This value detects a time to determine when to release CO Lines.
4. Press the Volume button to return to the MBC Screen or exit programming.

Monitor (Voicemail Monitor - Answering Machine Emulation)

MBC: 03-35

Feature Code: Feature 64

Description

Voicemail Monitor is a timer that is used with Answering Machine Emulation, which requires a voice mail system. Like a home answering machine, answering machine emulation allows the extension user to listen a caller, that is leaving a message in their voice mailbox, and has the ability to retrieve the call from voice mail. Mimicking the call screening feature of a simple analog answering machine.

The Monitor timer is the length of time that an extension user can listen to, and pick up, a call from their voice mailbox. Once this timer expires, the extension user is not longer able to listen to or retrieve the call.

Answering Machine Emulation is automatically activated when an extension is forwarded to the voice mail system. After a call rings an extension, and it gets forwarded to the extensions' voice mailbox. Once the voice mailbox answers the call, the Monitor timer begins.

Default Settings:

Voicemail Monitor Time is set at 10 seconds. (Range is 10, 20… 60.)

Feature Key Programming – Button 20 is programmed as a Voice Mail button (f64).

Voice Mail is set to UCD Group 24 (directory number 453 extensions 189 - 200).

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-35 and press the softkey beneath save. This advances to the VM MONITOR_T programming screen.
3. Press the softkey beneath chg until the appropriate VM MONITOR_T displays (in seconds.) Voicemail Monitor Time is set at 10 seconds with a range of 10, 20-60 seconds. Monitor Time starts at the time the caller is connected to the user's voice mail box.
4. Press the softkey beneath back or the softkey beneath next for other programming or exit programming.
5. Press the Volume button to return to the MBC Screen or exit programming.

Hotel (Motel) Mode

MBC: 03-21

Feature Code: Feature 7 # (Hotel Mode must be enabled - Check in, Check out, Clean)

Feature Code: Feature 9 2 (Set wakeup calls for Hotel Guests)

NOTE: This feature requires a DSS Console

Description

Hotel Mode can be enabled in the system programming. This feature allows the system attendant and alternate attendant to administer certain system extension features to emulate hotel operations.

NOTE: This feature requires a DSS Console

The system attendant or alternate attendant can:

- Set extension wakeup calls via the Alarm Clock-Extension feature - feature 9 2.
- Set extension status to Checked In, Checked Out and Clean - the associated Flexible (Feature) button LED on the DSS Console, for the extension indicate the current status.

Feature	LED	Action
Checked In	Off	Off
Checked Out	Lit	Flash
Clean	Lit	Solid

- In "Checked Out" and "Clean" modes, dialing at the extension is restricted to intercom calls only.
- All extensions, including the administrative extensions, must be "Checked In" or they will not be able to make CO Line Calls.

CAUTION!

Extensions must be "Checked IN" to have ACCESS TO 911!

Default Settings:

Hotel Enable is set to N for NO. (Range is Y/N.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-21, then press the softkey beneath save. This advances to the HOTEL ENABLE programming screen.

WARNING!

To make Central Office Calls, Administrative Extensions must be "Checked In"

3. Toggle the softkey beneath chg for Y/N. Y will activate the hotel features of the system. This allows the attendant extension to set the Room Status and wakeup calls for all extensions within the same tenant group.
4. Press the Volume button to return to the MBC Screen or exit programming.

Pause / Pause Insertion

MBC: PBX_A Pause 03-16

MBC: Pause Time 03-04

Feature Code: Feature 70

Description

Pause is used to generate an intentional delay in dialing on outgoing CO line calls. A pause or a combination of pauses may be stored in the Speed Dial bins to allow timed access to special services, while allowing the user to monitor the progress of the call.

Features like, Saved Number Redial, or Last Number redial, will automatically have a Pause inserted into the dial string. The system also supports Automatic Pause Insertion (PBX Auto Pause) which monitors digits dialed on "PBX" type, CO Line, after the PBX Code has been dialed. When the PBX Code is recognized, the system automatically inserts a pause between the PBX code and the remaining digits.

A pause will appear as P on a Digital Telephone display.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program Auto Pause Insertion Time (used with PBX type CO Line Ports):

2. Enter 03-16, then press the softkey beneath save. This advances to the PBX_A PAUSE programming screen.

3. Press the softkey beneath chg to select the desired PBX Auto Pause Time. When a PBX Line port is connected to a system Trunk port, specific digit(s) (e.g. "9") are required to access the PBX Trunk. The system will automatically insert a pause between these digit(s) when redial features are invoked.

Program Pause Time (used with speed dial).

2 Enter 03-04, then press the softkey beneath save. This advances to the PAUSE TIME programming screen.

3 Press the softkey beneath chg to select the desired Pause Time. When a Pause is inserted into a Speed Dial number, this is the duration of the pause. Available selections are 0.1-3.0 seconds(100-3000 milliseconds).

4. Press the Volume button to return to the MBC Screen or exit programming.

Polarity Reversal Time

MBC: 03-06

Description

The polarity reversal time is the minimum duration that a polarity reversal condition must exist on a CO Line before the system will recognize the disconnect. This function impacts call abandon operations and voice mail disconnect scenarios.

NOTE: *Do not change this parameter without consulting a technical support representative.*

Default Settings:

100 ms (range from 20ms to 300ms in 20ms intervals)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-06, and then press the softkey beneath save. This advances to the PR TIME programming screen.
3. Press the softkey beneath chg to select between 20ms and 300 ms.
4. Continue making other programming changes or exit the programming mode.
5. Press the Volume button to return to the MBC Screen or exit programming.

Reset Mode

MBC: 03-53

Description

The reset mode parameter can be used to restart (warm start) or initialize (cold start) the system. When this parameter is set to "Warm" the system will reboot, without the loss of customer database programming. When this parameter is set to "Cold" the system will return itself to factory default. If cold start is selected there is no way to recover the customer database programming. However, it is possible to back up the database using the RMP software.

Default Settings:

MBC: Reset Mode = WARM (will not initialize)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-53, and then press the softkey beneath save. This advances to the RESET MODE programming screen.
3. Press the softkey beneath chg to select between Warm or Cold, and then press the softkey beneath reset. Two options are given, yes or no. If yes is selected, then the system will perform the reset command, as entered, and there is no way to stop the process. If no is selected, the reset command will be aborted, and the system will not be reset.
4. Either selection bring the extension to idle, and exit database programming. Refer to Section 6.0 to reenter database programming.

Ring Abandon Timer

MBC - 3-07

Description

For CO Line provider compliance; The Ring Abandon (CO Line Disconnect) timer gives the system the ability to match the CO Line providers' disconnect timer. The system requires a voltage reading of "Zero" 0 Vdc for the duration of this timer. Therefore, if a CO Line provider takes 200 milliseconds to go from off hook voltage, about 9 Vdc, to 0 Vdc then this timer must be set 200 milliseconds longer then the CO Line providers timer. If this timer is set too short, the system may inadvertently disconnect an active call.

Default Settings:

MBC: Ring Abandon Timer = 5 (500 milliseconds)

Data Range: 1 = 100 milliseconds — 10 = 1000 milliseconds

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-07, and then press the softkey beneath save. This advances to the RING ABANDON programming screen.
3. Press the softkey beneath chg to select between 1 = 100ms and 10 1000 ms.
4. Press the Volume button to return to the MBC Screen or exit programming.

Ring Recognition Time

MBC: Ring Recog - 03-41

Description

This timer compensates for older Central Office systems without adjustable timers. The ring recognition timer determines the minimum ring signal detection time for all analog CO Lines.

NOTE: *Changing this timer may result in erratic operation.*

Default Settings:

100 ms (range from 50ms to 1500ms)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-41, and then press the softkey beneath save. This advances to the RING RECOG. programming screen.
3. Press the softkey beneath chg to select between 50ms and 1500ms.
4. Press the Volume button to return to the MBC Screen or exit programming.

Tenant Group Calling

MBC: 03-30-(t)-(tg)

(t) = Tenant Group

(tg) = Tenant Group to be modified

Description

Each Extension is placed into one of three tenant groups. At default, each extension can call between tenant groups. This parameter can be used to isolate extensions from one or more tenant group, and deny them from calling each other.

TABLE 6.3.1 Restricting Tenant Group Calling

"Y" allows calls between extensions, "N" does not allow calls between extensions									
Tenant 1	Y	Y	Y	Y	N	N	N	N	Y
Tenant 2	Y	Y	N	N	N	N	Y	Y	Y
Tenant 3	Y	N	N	Y	N	Y	Y	N	N

NOTE: Extensions and CO Line must be in the same group to have access to each other.

NOTE: Once a CO Line is placed into a different Tenant group then the Extenision, all CO Line calls - including 911 - will be blocked.

Default Settings:

All extensions and CO Lines are in tenant group 1 and can call each other.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-30-(t)-(tg), and then press the softkey beneath save. This advances to the TENANT CALLING programming screen.
3. Press the softkey beneath chg to select between "Y" for Yes, or "N" for no to allow or deny calls between each tenant group.
4. Press the Volume button to return to the MBC Screen or exit programming.

Single Line Telephone Hook Flash to Hold timer (SLT HF to Hold)

MBC: 03-44

Description

This parameter determines the amount of time that a single line telephone must remain on hook to be considered a disconnect.

NOTE: *If out call notification is being used, this parameter should be set to 3.*

Default Settings:

SLT HF to Hold: 0 (range from 0 to 5 (500 ms)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-44, and then press the softkey beneath save. This advances to the SLT HF TO HOLD programming screen.
3. Press the softkey beneath chg to select between 0 and 5 (representing 500 ms).
4. Continue making other programming changes or exit the programming mode. Press the Volume button to return to the MBC Screen or exit programming.

Single Line Telephone - Flash

MBC: Start 03-15-01

MBC: End 03-15-02

Description

Single Line Telephones and similar analog devices connected to analog ports of the system must use unsophisticated signaling to administer call-processing operations (like transfer and hold). This fundamental call control is handled in the form of specific hook-switch operations. These are known as Hook-switch Flash (or just Flash) commands.

Whenever a system feature is to be invoked at a single line telephone, the user must operate the hook-switch in a fashion that is distinguishable from an on-hook (hang up) request. This becomes essential for proper handling of calls considering the single line telephone user may operate the hook-switch quickly – desiring to hang up and place a new call. Yet this fast operation of the hook-switch might be interpreted as a Hook-switch Flash operation.

Considering these factors the system provides for customization of the hook-switch command monitoring in system software. The database configuration may be adjusted to ignore hook-switch operations that are considered too short to be any valid request and to limit the time allotted conditions.

If the analog device/SLT does not have a Hook-Flash operation button, then operation of the hook-switch must fall within the "Start" and "End" time periods in order to be processed as a valid hook-flash operation.

- Hook-switch operations that are shorter than the "Start" time are ignored.
- Hook-switch operations that are longer than the "End" time are considered to be On-Hook or (hang up) commands.

An SLT Hook-Switch Flash is a compensation timer that allows the programmer to adjust signaling characteristics of SLT users such that they are properly deciphered by the system. Entries are in milliseconds.

Default Settings:

SLT Hook Flash – Start is set at 200 milliseconds (03-15-01). (Range is 60-1400)

SLT Hook Flash – End is set at 1000 milliseconds (03-15-02). (Range is 100-1500)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-15, then press the softkey beneath save. This advances to the SLT HOOK_FLASH programming screen.
3. Press the softkey beneath show or enter 03-15-01. This advances to the START screen. Press the softkey beneath chg to change the Start range setting. This timer indicates the minimum time that an analog/SLT must flash the hook-switch to be considered a valid flash-hook request. A hook-flash that is shorter than this timer is considered a mistake; no action is taken.
4. Press the softkey beneath next or enter 03-15-02. This advances to the END screen. Press the softkey beneath chg to change the End range setting. This timer indicates the Maximum time that an analog/SLT must flash the hook-switch to be considered a valid flash-hook request. A hook-flash that is longer than this timer is considered an On-Hook {hang up} request.
5. Continue making other programming changes or exit the programming mode.
6. Press the Volume button to return to the MBC Screen or exit programming.

SMDR

MBC: Outgoing Call 03-31-01

MBC: Incoming Call 03-31-02

MBC: Account Code 03-31-03

Description

Station Message Detailed Recording (SMDR) is an output of all station activity, which can contain inbound and outbound calls, as well as any account code that is entered.

Default Settings:

SMDR is disabled for incoming calls, but it is enabled for outoing calls and account codes. In addition, SMDR Output (01-ext-19), which is enabled by default, but can be disabled.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-31-01, 03-31-02, 03-31-03 then press the softkey beneath save. This advances to the OUTGOING CALL, INCOMING CALL OR ACCOUNT CODE programming screen.
3. Select "Y" for yes, to active or "N" for no to deactivate the SMDR Feature
4. Press the Volume button to return to the MBC Screen or exit programming

System Speed check

MBC: 03-22

Description

This parameter determines if system speed bins will be checked by toll restriction before being dialed. When set to "Y" (Yes) then all numbers will check toll restriction before being dialed, if set to "No" (No) then toll restriction will not be checked.

Default Settings:

Sys SPD CHK = N

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-22, and then press the softkey beneath save. This advances to the SYS SPD CHECK programming screen.
3. Press the softkey beneath chg to select between "Y" for Yes, or "N" for no (No means that Toll Restriction will not be checked).
4. Press the Volume button to return to the MBC Screen or exit programming

Toll Service Interface (TSI Connect)

MBC: 03-23

Description

This parameter, also known as CO Line Handshake function, will send the originating CO Line a signal that the destination CO Line has connected. If programmed, the system will receive this signal and begin SMDR Logging for that call.

Default Settings:

TSI Connect = Y (Range is Y/N)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-23, and then press the softkey beneath save. This advances to the TSI CONNECT programming screen.
3. Press the softkey beneath chg to select between "Y" for Yes, and "N" for No.
4. Press the Volume button to return to the MBC Screen or exit programming

Tone/Pulse (Dialing Ratio)

MBC: 03-05-01 - Break Time

MBC: 03-05-02 - Inter_Dgt Time

MMBC: 03-05-03 - Tone Time

Description

Although rare, Dial Pulse dialing, still exists in some areas with older Central Office equipment. The system is equipped to handle both Dial Pulse and Touch Tone® (DTMF) dialing. The DTMF On time (length of each tone - Senderized) and Make/Break (Dial Pulse open and close timing) as well as the Inter-Digit Time for non-senderized or manually dialed DTMF tones can all be customized to accommodate customer dialing scenarios.

Typically, no modification is required. However, in some installation environments where outside telephone company equipment is becoming antiquated or line conditions are poor, tone duration and/or inter-digit duration timing may be increased to offset these poor conditions.

- A longer tone duration or inter-digit duration time will cause a slower output of manual or automatic system-dialed numbers.
- A longer DTMF On time and/or inter-digit tone time can be used to ensure more reliable interaction with remote voice mail and similar remote DTMF dial pad actuated devices.

Default Settings:

Dialing Ratio – Break Time = 60 ms (03-05-01) (Range is: 60/67.)

Dialing Ratio –Inter-Digit Time = 800 ms (03-05-02) (Range is: 400-800ms.)

Dialing Ratio –Tone Time = 70ms (03-05-03) (Range is 70/90/120 ms.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program Pulse Dialing Break Time:

2. Enter 03-05-01 and then press the softkey beneath `save`. This advances to `DIALING RATIO` programming screen.
3. Press the softkey beneath `show`. This advances to `BREAK TIME` screen.
4. Press the softkey beneath `chg` to select the appropriate break time ratio (60/67). This value should be consistent with Service Provider requirements. Break time is the system timing in milliseconds of Pulses (loop current interruption) generated by the Xplus100 system to signal the CO for Pulse dialing requirements.

5. Enter 03-05-02 and then press the softkey beneath save, or Press the softkey beneath next to advance to pulse dialing INTER_DGT TIME. This is the system timing, in milliseconds of the time between digit dialing signals. (Dial Pulse and DTMF modes use this timer) Press the softkey beneath chg to select the INTER_DGT TIME.
6. Enter 03-05-03 and then press the softkey beneath save, or Press the softkey beneath next to advance to TONE TIME.
7. Press the softkey beneath chg to select the appropriate TONE TIME (this time is also used for DTMF inter-digit timing). This is the system timing, in milliseconds of duration of Tone (DTMF) signal generated by the system for each DTMF digit.
8. Press the Volume button to return to the MBC Screen or exit programming.

Transfer (Recall)

MBC: XFR_I 03-11

MBC: XFR_B 03-12

Description

Transfer is used to deliver calls from one extension to another extension while maintaining the privacy of the connection. This means that calls can be routed to other system destinations such as Extensions, UCD Groups, Virtual Numbers, etc. Transferred calls follow the receiving extension's forwarding.

Calls that are transferred are subject to a unique transfer recall time. When calls are transferred to an extension that is not forwarded and the call goes unanswered at the destination extension, the call will recall (ring) back to the transferring party when the recall timer expires.

There are two recall timers that affect transferred calls: Transfer-Idle Recall Time (XFR_I) and Transfer-Busy Recall Time (XFR_B). Idle and Busy represent the status of the receiving extension when the call is a blind or unsupervised transfer. If the extension destination is busy, the Transfer-Busy Timer is used. If the extension destination is idle, the Transfer-Idle Timer is used.

- Transferred CO Lines that are recalled are placed on system hold at the time the recall occurs.
- When a transferred CO line recalls, the line number and extension number where the call was transferred will be displayed.
- The transferred party will hear a ring-back tone until it is answered.
- Both CO Line and intercom calls may be transferred.
- When using a screened or supervised transfer; if the destination extension answers, and speaks to the transferring extension, in Voice Announce Hands-Free mode and does not lift the handset, the transferred call will ring the extension.
- When using a screened or supervised transfer; if the destination extension answers, and speaks to the transferring extension by lifting the handset, the transferred call will connect immediately when the transfer operation is complete.
- During a transfer, the outside line is placed on Exclusive Hold and can only be retrieved or accessed by the initiating or receiving extensions.

Default Settings:

Call Handling – XFR_I Recall (03-12) (Transfer – Idle Recall) is set to 30 seconds. (Range is 16/30/60/90/120 seconds.)

Call Handling – XFR_B Recall (03-13) (Transfer – Busy Recall) is set to 60 seconds. (Range is 16/30/60/90/120 seconds.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-11, then press the softkey beneath save. This advances to the XFR_I RECALL programming screen.
3. Press the softkey beneath chg until the appropriate value for this data item displays. Available settings are 16, 30, 60, 90, and 120 seconds. This value determines how long a call will stay on Exclusive Hold at an extension that has transferred the call to a destination that was idle at the time of the transfer.
4. Press the softkey beneath next to advance to the next data item or exit programming.

Or…

5. enter 03-12, then press the softkey beneath save. This advances to the XFR_B RECALL programming screen.
6. Press the softkey beneath chg until the appropriate value for this data item displays. Available settings are 16, 30, 60, 90, and 120 seconds. The conditions are the same as XFR_I RECALL. This timer is applied when the transfer destination is busy at the time of the transfer.
7. Press the Volume button to return to the MBC Screen or exit programming.

VM reserve port

MBC: 03-36

Description

The voice mail reserve port parameter, is used to ensure that one port remains available to do mundane functions such as Message Waiting Indication. If no port is reserved the system will light the MWI on an "as time permits" basis.

Default Settings:

MBC: VM reserve port = 0 (Range is 0-8)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-36, and then press the softkey beneath save. This advances to the VM RESERV PORT programming screen.
3. Press the softkey beneath chg and enter the number of reserve ports. Typically this will be set to zero or 1.
4. Press the Volume button to return to the MBC Screen or exit programming

Wait ICLID

MBC: 03-52

Description

This timer is used to ensure that the caller ID data (FSK) sent from the telephone company is received, into the system, before it begins to ring.

Default Settings:

MBC: Wait ICLID = .05 (Range is .05 to 8.0)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 03-52, and then press the softkey beneath save. This advances to the WAIT ICLID programming screen.
3. Press the softkey beneath chg to select between .05 seconds and 8.0 seconds.
4. Press the Volume button to return to the MBC Screen or exit programming

Warning Time / Call Duration

MBC: Drop Call Out Timer 03-10-01

MBC: Drop Call In Timer 03-10-02

MBC: Warning Tone 01-ext-08

MBC: Drop Call Out 01-ext-09

MBC: Drop Call In 01-ext-10

Description

The Warning Time helps to limit the amount of time an extension spends on a CO Line call. If an extension exceeds the Warning Time limit the Warning Tone will play to the caller. The tone continues to play each time the timer expires until the call is terminated.

The Drop Call In parameter monitors all answered CO Line calls by the programmed extension. When the timer expires the caller is played a tone and 30 seconds later the call is terminated. The outside party will have no indication that the tone is played or why the call was terminated.

The Drop Call Out parameter monitors all outbound CO Line calls placed from the programmed extension. When the timer expires the caller is played a tone and 30 seconds later the call is terminated. The outside party will have no indication that the tone is played or why the call was terminated.

The Warning Time, Drop Call In and Drop Call Out is set on a per extension basis and according to call type (outgoing or incoming or both).

This timer is also used for Auto Record See "Auto-Record" Page 285. When this timer expires, the auto record feature will begin.

Tips: This feature is not recommended as a Toll Saver Option.

Default Settings:

Extension – Warning Tone = N (01-ext-08) (Range is Y/N.)

Extension – Drop Call In = N (01-ext-10) (Range is Y/N for each extension.)

Extension – Drop Call Out = N (01-ext-09) (Range is Y/N for each extension.)

Call Handling – Warning Time – Outgoing Call = 5 (03-10-01) (Range is 1-30 minutes.)

Call Handling – Warning Time – Incoming Call = 5 (03-10-02) (Range is 1-30 minutes.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program the extension for the appropriate mode:

2. Enter 01-ext-08 (ext=101~148, 181~188) for WARNING TONE.
3. Enter 01-ext-09 (ext=101~148, 181~188) for DROP CALL OUT.
4. Enter 01-ext-10 (ext=101~148, 181~188) for DROP CALL IN.
5. For each programming item (Steps 1, 2 and 3), toggle the softkey beneath chg for Y/N. Y will enable WARNING TONE, DROP CALL OUT, or DROP CALL IN for the extension selected.
6. Press the Volume button to return to the MBC Screen and repeat steps 1 through 6 for other extensions or exit programming.

Program Warning Time:

2. Enter 03-10-01 and press the softkey beneath save to advance to the OUTGOING CALL programming screen.
3. Press the softkey beneath chg to select the timer that governs how long the selected extension may be connected on an outgoing call before hearing a warning tone. Available selections can be between 1 and 30 minutes.
4. Enter 03-10-02 and press the softkey beneath save to advance to the INCOMING CALL programming screen.
5. Press the softkey beneath chg to select the timer that governs how long the selected extension may be connected on an incoming call before hearing a warning tone. Available selections can be between 1 and 30 minutes.
6. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming.

6.4 System Resource

Alarm Clock - System (System Reminder)

MBC: Alarm Play Time 03-20

MBC: System Reminder Play Time 04-03-(t)-01

MBC: System Reminder (04-03-(t)-alm

((t) = tenant, alm = alarm number 01 - 08)

Description

The system may be set to alert all idle digital extensions at predetermined intervals during the day. Up to Eight (8) different alarms can be set to play at predetermined times. The "Play Time" (MBC: 04-03-(t)-01) is also predetermined and set in the system programming.

- The Play Time dictates how long the music source will be played, from 1 to 10 minutes. The external music source connected to the MC1 music connector is used for the System Reminder.
- A System Reminder in progress is canceled at an extension when another function is invoked.
- Extensions monitoring Background Music channel MC1 will not recognize the System Reminder.
- The music alarm will not play at an extension that is busy on a call (handset or speaker-phone), or in Do Not Disturb (DND) mode.
- The Play Time remains the same for all eight reminders within a tenant group.

Default Settings:

No System Reminder times (04-03-(t)-alm are set for any system Tenant Group.

Play Time (04-03-(t)-01) is set at one (1) minute.

Alarm Play Time (03-20)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Alarm Play Time:

2. Enter 03-20 and press the softkey beneath save. This advances to the ALARM PLAY programming screen.
3. Press the softkey beneath chg until the appropriate Alarm Play Time displays (in seconds). This is how long the music source will be played (the time period is adjustable from 10 to 600 seconds.)
4. Press the softkey beneath back or the softkey beneath next to continue programming.
5. Press the Volume button to return to the MBC Screen or exit programming.

Reminder Play Time:

2. Enter 04-03-(t)-01 and press the softkey beneath save. This advances to the PLAY TIME programming screen.
3. Press the softkey beneath chg until the appropriate Alarm Play Time displays (in seconds). This is how long the music source will be played (the time period is adjustable from 1 to 10 minutes)
4. Press the softkey beneath back or the softkey beneath next to continue programming.
5. Press the Volume button to return to the MBC Screen or exit programming.

Reminder 01 - 08:

2. Enter 04-03-(t)-alm (alm = alarm 01 - 08) and press the softkey beneath save. This advances to the REMINDER 1:NULL programming screen. Enter the Alarm time, in 24 hour format (For example, 1:00 pm = 13:00, 3:00 pm = 15:00, 11:00 pm = 23:00). Then press the softkey beneath the save.
3. Press the softkey beneath back or the softkey beneath next to continue programming. repeat 2, for all eight system reminders (Alarms).
4. Press the Volume button to return to the MBC Screen or exit programming.

Attendant

MBC: Attendant 04-02-(t)-1

((t)= tenant group 1 - 3)

MBC: Alternate Attendant 04-02-(t)-6

((t)= tenant group 1 - 3)

Description

Each tenant group can be assigned one primary day and one primary night attendant as well as one alternate attendant. The primary attendant extension supports general system functions like

setting the service mode, programming system speed bins, Auto Attendant recording Line, dial 0, and Hotel/Motel features.

When multiple internal calls are received at the attendant, the calls queue in the order that they are received. All calls to the attendant will ring, and cannot be answered in Hands Free mode.

The attendant's extension password allows for control of the system service mode (Day/Night/ Alternate/Time), time of day settings, System Speed Dial number programming, and recording of the optional Auto Attendant greetings. The attendant extension may be connected to any system station port and be assigned any intercom extension number in the numbering plan, at default the attendant is extension 101.

The Extension User Password programmed for the Attendant extension is required for entry into Attendant Administration. The default password is 9999.

- Only the designated Attendant extension can manually change the system Ring Mode.
- Only the designated Attendant or Alternate Attendant extensions can manually change the extension Room Status (Hotel Mode).
- The Attendant extension receives all calls from any extension that invokes Forced Intercom Call Forward (Press DND while the telephone is ringing).

Default Settings:

Extension 101 is the system programmed Attendant.

Extension 101 Attendant Password is 9999.

Digital Telephone Programming

1. Access the programming section using the procedures in Section 6.0.

Program Attendant Extension:

2. Enter 04-02-(t)-01 (t)=tenant group - to program the attendant extension for Tenant Group 1. (04-02-2-01 for Tenant 2 Group, 04-02-3-01 for Tenant Group 3.) and press the softkey beneath save. This advances to the

3. To change the designated attendant extension press the softkey beneath chg and enter the extension number to be assigned as the Attendant Extension.

NOTE: *Only valid extension directory numbers can be assigned as tenant group attendants. Extensions can only be programmed into one Tenant Group.*

4. Press the softkey beneath save.

5. Return to the Database Item Select screen by pressing the Volume button.

Program Alternate Attendant Extension:

2. Enter 04-02-(t)-06 to program the attendant extension for Tenant Group 1. (04-02-2-06 for Tenant 2 Group; 04-02-3-06 for Tenant Group 3.) and press the softkey beneath save.

3. To change the designated attendant extension press the softkey beneath chg and enter the extension number to be assigned as the Attendant Extension.

4. Press the softkey beneath save.
5. Press the Volume button to return to the MBC Screen or exit programming.

Attendant / Extension DSS Console

MBC: DSS Owner 04-14-dc-01

MBC: DIR Number 04-14-dc-02

(dc = DSS Console number 01- 12)

Description

There are three attendants and three alternate attendants, one for per tenant group. Each attendant and alternate attendant can be associated, in programming, to have up to four (4) Direct Station Select (DSS) consoles with a maximum of 12 units per system. The DSS Console has 50 programmable buttons, 48 with dual color LED's and two single color LED's.

Each DSS Console requires its own dedicated digital port and therefore reduces the number of Digital Telephones that can be connected to the system on a one-to-one basis.

The Hotel Features, Room Status - Checked in, Checked out, and Room Clean - require a DSS console.

Default Setting:

No *Attendant/Extension Consoles* are assigned in default.

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.
2. Enter 04-14-dc-01 and press the softkey beneath save. This advances to the DSS OWNER programming (the attendant extension) for the DSS.
3. To change the designated DSS Console Owner press the softkey beneath chg and enter the extension number to be assigned as the DSS Console Owner.

NOTE: *Only valid (equipment installed) extension directory numbers can be assigned as DSS Console Owners.*

4. Press the softkey beneath save.
5. Press the softkey beneath next or enter 04-14-dc-02. The current directory of the DSS Console is displayed (NULL if empty).
6. Press the softkey beneath chg to enter the new DSS Console directory number (the extension number of the digital port to which the DSS Console is connected).
7. Press the softkey beneath save.

8. Press the softkey beneath next. The display prompts you for the next DSS Console number to program. Valid entries are 1-12.
9. Pressing the Volume button to return to the MBC Screen or exit programming.

Attendant / Extension DSS Console Button Programming

MBC: N/A

Feature Code: Feature #4

Description

Each DSS Console has 50 buttons that may be programmed (by the DSS Console Owner) for any of the available system directory numbers, including Extensions, Central Office Lines, and System Speed Dial Bins. Forty-eight of the buttons have dual colored LED's, two are single color, which can be programmed by the owner extension or through the database programming. Only directory numbers can be programmed on DSS Console buttons.

Default Settings:

Null	Ext. 101	Ext. 102	Ext. 103	Ext. 104
Ext. 105	Ext. 106	Ext. 107	Ext. 108	Ext. 109
Ext. 110	Ext. 111	Ext. 112	Ext. 113	Ext. 114
Ext. 115	Ext. 116	Ext. 117	Ext. 118	Ext. 119
Ext. 120	Ext. 121	Ext. 122	Ext. 123	Ext. 124
Ext. 125	Ext. 126	Ext. 127	Ext. 128	Ext. 129
Ext. 130	Ext. 131	Ext. 132	Ext. 133	Ext. 134
Ext. 135	Ext. 136	Ext. 137	Ext. 138	Ext. 139
Ext. 140	Ext. 141	Ext. 142	Ext. 143	Ext. 144
Ext. 145	Ext. 146	Ext. 147	Pickup 410	Ext. Page 460

Digital Telephone Programming

These buttons cannot be modified in database programming using a Digital telephone.

Attendant Calling (Dial 0)

MBC: Attendant 04-02-(t)-01

MBC: Alternate Attendant 04-02-(t)-06

((t)=Tenant Group)

MBC: Operator Code Length 08-09-15-01

MBC: Operator Code Leading 08-09-15-02

Description

The extension that is programmed as the Attendant may receive multiple internal calls via the programmed Operator Code, at default, the Operator Code is 0. The attendant extension also has a three digit directory number, which at default is 101. Either the attendant three-digit extension number, or 0, can be assigned to any feature button.

The Operator code can be changed from the default, one digit "Dial 0" to a multiple digit entry. However, the new operator code cannot conflict with another portion of the database. For example, the Operator code cannot be 700, because that is the first CO Line.

Changing the Operator dial code is not recommended because it can easily confuse extension users

Default Settings:

Numbering Plan – Operator Code – Length is set to 1 (one) (08-09-15-01).

Numbering Plan – Operator Code – Leading is set to 0 (zero) (08-09-15-02).

Attendant – Tenant Group 1 is set to extension 101 (04-02-(t)-01).

Attendant – Alternate - Tenant Group 1, 2, and 3 is set to Null (none) (04-02-(t)-06)

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.

Program Operator Code:

2. Enter 08-09-15-01 and press the softkey beneath save. This advances to the Operator Code LENGTH (the length of this code may be 1-4 digits). Press next to advance or press the volume up or down button to enter the MBC programming screen, enter 08-09-15-02 and press the softkey beneath save. This advances to the Operator Code-LEADING programming screen.

3. Press the softkey beneath chg to change values for either LENGTH or LEADING. For LENGTH you are selecting the appropriate number of digits to dial for the operator code displays. For LEADING you are entering the actual code necessary for the attendant. For example, if Length is set to 1, the entire code is the "Leading Digit" (typically "0.") If the Length is 2, the resulting code will be two digits. The Leading Digit may be enter as a single digit or both digits.

4. Press the softkey beneath save.

5. Press the Volume button to return to the MBC Screen.

Program Operator Extension:

2. Enter 04-02-(t)-01 ((t)=tenant group to be programmed) then press the softkey beneath save. This advances to the ATTENDANT programming screen for entered Tenant Group.
3. Press the softkey beneath chg to enter the appropriate extension number that will serve as the Attendant for this tenant group.
4. Press the softkey beneath save.
5. Press the softkey beneath next to scroll through the DSS console(s) assigned to the attendant extension.

NOTE: *This is display information only and cannot be changed in this programming parameter.*

6. Continue to press the softkey beneath next until ALTERNATE displays.

Or…

7. Press the Volume button to return to the MBC Screen.
8. Enter 04-02-(t)-06 and press the softkey beneath save. This advances to the ALTERNATE programming screen for this tenant group.
9. Press the softkey beneath chg to change the contents of this database item and enter the appropriate extension number that will serve as the Alternate Attendant for this tenant group.
10. Press the softkey beneath save.
11. Press the softkey beneath next to view DSS Console(s) assignments for this extension and to advance and select the next tenant group to program an Attendant and Alternate Attendant.

    Or…

12. Press the Volume button to return to the MBC Screen and enter the Index for the appropriate database item for the appropriate tenant group.

CO Line Name

MBC: 04-06-LN

(LN=CO Line Number)

Description

The system provides the ability to name each CO Line. Therefore, when the line is accessed or ringing, the name appears on a display telephone and not the CO Line number. This not only provides a customized, professional appearance, it is more helpful to the user than a CO Line number such as 700.

Default Settings:

System Resource – CO Line names are named LINE xxx (xxx=700-719, 744-747).

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.

Program CO Lines for Customized names:

2. Enter 04-06-LN (LN= CO Line number 700~719, 744~747) line and press the softkey beneath save. This advances to the selected CO Line Name/Label and shows the current name/label programmed. To program the name "Line 1" - enter 5554446633#*1#.

   Dial Pad Character Entry:

Depression 1	Depression 2	Depression 3	Depression 4	Depression 5
1	Special Character			
2	A	B	C	
3	D	E	F	
4	G	H	I	
5	J	K	L	
6	M	N	O	
7	P	Q	R	S
8	T	U	V	
9	W	X	Y	Z
0	0			
*	To display a Number			
#	Space			

3. Press the softkey beneath chg to enter a new name/label.
4. Press the softkey beneath save to save the new name/label programming.
5. Press the softkey beneath next to enter another CO Line directory number for programming.
6. When finished programming CO Line Name/Labels, press the Volume button to return to the MBC Screen or exit programming.

Extension Password

MBC: Password Length 04-04-01

MBC: View Extension Password 04-04-02-SN

(SN = extension 101 - 148)

Description

All extensions in the system have an associated User Password. Passwords are used to facilitate *Phone Lock, Call Forward Remote* and *Attendant* features. Passwords, by default are 4 digits in length, but can be as long as 8 digits. When the password is more then 4 digits in length, the additional digits will appear as zeros. For example, by default extension 101's password is 9999, if the password length is increased to 8 digits, the new default password will be 99990000.

Default Settings:

User Password: Extension 101 is set to 9999. All other extensions are set to 0000. The user passwords can be viewed but they can only be changed at the station level.

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.

Program User Password Length:

2. Enter 04-04-01 and press the softkey beneath save to enter the LENGTH programming screen. The current User Password Length displays.
3. Press the softkey beneath chg until the desired LENGTH displays (valid lengths 4-8).
4. Press the softkey beneath next to advance to the SHOW EXT screen and then the softkey beneath show to display the PSWD screen.
5. Enter the extension number to change and press the softkey beneath save. The Password for the extension entered displays.
6. Press the softkey beneath back or the softkey beneath next to return to the extension number enter screen and repeat the above operations to view other extension passwords.
7. Press the Volume button to return to the MBC Screen or exit programming.

NOTE: *Extension Passwords are changed at the extension only via the Phone Lock feature.*

NOTE: *The use of phone lock may block access to 911!*

To view Extension Passwords:

2. Enter 04-04-02-SN (SN = extension number 101-148, 181~188) and then press the softkey beneath save. The selected extension password displays.

3. Press the softkey beneath back or the softkey beneath next to enter another extension number and repeat the above operations to view other extension passwords.
4. Press the Volume button to return to the MBC Screen or exit programming.

Extension User Name

MBC: 04-05-ext

(ext=101~148, 181~188)

Description

An alphanumeric, seven-character name may be assigned to each extension in the system. This name will be displayed on the Digital Telephone in place of the standard "EXT" message.

Extension User Names are programmed in the customer database programming area and the names may consist of upper and lower case letters as well as numbers and various "special" characters as provided by the Enhanced Lettering Scheme.

The programmed Extension User Name will be displayed at called extensions whenever intercom calls are made from one extension to another. Whenever there is no Extension User Name programmed, the characters "EXT" are displayed.

- Names may be six (6) or fewer characters.

Default Settings:

User Names: all User Names for all extensions are set to "Null" (nothing programmed). The range is any alphanumeric character set up to 6 characters in length.

Digital Telephone Programming

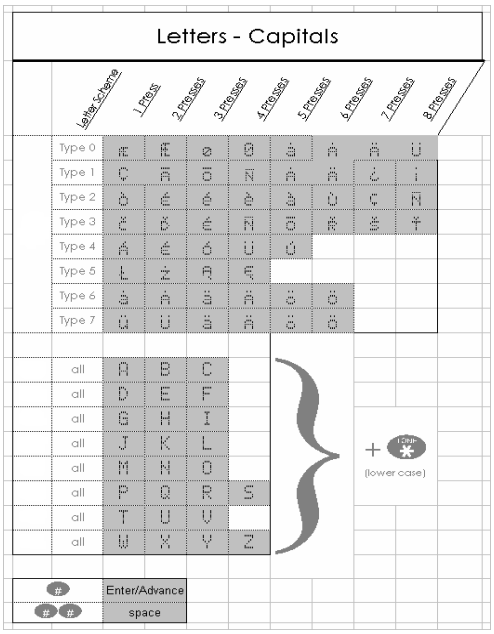
1. Access the MBC Screen using the procedures in Section 6.0.
2. Enter 04-05-SN (SN=extension 101-148 then press the softkey beneath save. This advances to the USER NAMES programming screen for the extension selected.
3. Press the softkey beneath chg and then enter the new USER NAMES for this port using the Dial Pad

Dial Pad Character Entry:

Depression 1	Depression 2	Depression 3	Depression 4	Depression 5
1	Special Character			
2	A	B	C	
3	D	E	F	
4	G	H	I	
5	J	K	L	
6	M	N	O	
7	P	Q	R	S
8	T	U	V	
9	W	X	Y	Z
0	0			
*	To display a Number			
#	Space			

4. Press the Volume button to return to the DB Item Selection Screen or exit programming.

Special Characters



Loud Bell / External Page / Music Source - Control

MBC: Application 04-13-1-01

MBC: Paging Group 04-13-1-tg

(tg=trunk group, 02=Trunk Group 1, 03=Trunk Group 2...09=Trunk Group 8

Description

The system provides one dry contact closure (standard) for interface with ancillary devices such as a Loud Bell or Strobe Light for the hearing impaired. The contact closure is rated at 24VDC, 1Amp. The Contact Closure can be assigned to operate in three different ways:

Loud Bell: If the system is installed in a high noise environment, there may be a need to use a loud or high-gain ringing device or strobe light. The contact is considered a "Normally Open" contact which closes when ringing occurs on CO Lines within the CO Line Group which is designated as Loud Bell. The Contact closes each time the CO Line rings causing the Loud Bell Device or Strobe light to be activate.

External Page: The contact may also be programmed to control External Paging equipment. When programmed in this way, the contact closure operates whenever the External Paging Port is activated.

Music Source: The contact may also be programmed to control Message-On-Hold devices. In this way, the contact closes whenever CO lines are placed on Hold. This function can reduce wear on electromechanical devices that provide the message on hold function.

Default Settings:

Loud Bell = L.B. (Loud Bell) (04-13-1). (Range is: L.B., MS1, MS2, EP.)

Loud Bell – CO Line Group – 1-8 = N (04-13-1-tg). (Range is Y/N.)

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.
2. Enter 04-13-1-01 and then press the softkey beneath save. This advances to the LOUD BELL programming screen.
3. Press the softkey beneath chg until the appropriate application displays L.B., MS1, MS2, E.P.). Select L.B. and then the softkey beneath change.
4. If the contact is to be used as LBC, press the softkey beneath next to the CO Line Group(s) that will cause the contact to operate. To go directly to this programming operation 04-13-1-02 - 04-13-1-(tg).
5. Press the softkey beneath chg to activate/deactivate the LBC for each CO Line Group.

6. Press the Volume button to return to the MBC Selection Screen or exit programming.

Messaging - Out Going

MBC: 04-07-01-mg

(mg=message number 01 - 06)

Description

A busy or unattended Digital Telephones may be notified of a call attempt via one of the Out Going (Text) Messaging features. At an idle Digital Telephone, the display will show messages sent to the extension and provide prompts to assist the user in responding to the messages. Busy extension, with a flexible button programmed as a "Message Button" (*feature* 9 6), will receive a rapid flash indicating that there is a message waiting.

The following list is the default outgoing messages, which may be customized using the dial pad character entry method.

- Call Operator
- Call Home
- Call School
- Visitor Waiting
- Urgent
- Come see me

Dial Pad Character Entry:

Depression 1	Depression 2	Depression 3	Depression 4	Depression 5
1	Special Character			
2	A	B	C	
3	D	E	F	
4	G	H	I	
5	J	K	L	
6	M	N	O	
7	P	Q	R	S
8	T	U	V	
9	W	X	Y	Z
0	0			
*	To display a Number			
#	Space			

Default Settings:

Preprogrammed Message – Outgoing Message 1 = Call Operator (04-07-01-01)

Preprogrammed Message – Outgoing Message 2 = Call Home (04-07-01-02)

Preprogrammed Message – Outgoing Message 3 = Call School (04-07-01-03)l

Preprogrammed Message – Outgoing Message 4 = Visitor Waiting (04-07-01-04)

Preprogrammed Message – Outgoing Message 5 = Urgent (04-07-01-05)

Preprogrammed Message – Outgoing Message 6 = Come See Me (04-07-01-06)

Digital Telephone Programming

1. Access the MBC Screen.
2. Enter 04-07-01-mg (mg= message number 01-06), then press the softkey beneath save. This advances to the OUTGOING MESSAGE programming screen.
3. Press the softkey beneath next or the softkey beneath back to advance to the next preprogrammed message to change.
4. Press the softkey beneath chg to enter a new message for the selected preprogrammed message.
5. Use the dial pad keys to enter the new message. When finished press the softkey beneath save.
6. Press the Volume button to return to the Data Base Item Selection Screen or exit programming.

Messaging - Premises (Extension)

MBC: 04-07-02-mg

(mg=Premises message 01 - 06)

Description

Each Digital Telephone can display an Extension Status Message (Premises Message) that informs other users of the current status of called extension. Six programmed messages can be used and one message can be customized at the time it is sent. Whenever another Digital Telephone calls an extension using Premises Messages, the preprogrammed message displays at the calling extension.

Default Settings:

Preprogrammed Message – Premises Message 1 = Out to lunch

Preprogrammed Message – Premises Message 2 = Will return soon

Preprogrammed Message – Premises Message 3 = Gone for the day

Preprogrammed Message – Premises Message 4 = In a meeting

Preprogrammed Message – Premises Message 5 = Out of office

Preprogrammed Message – Premises Message 6 = On vacation

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.
2. Enter 04-07-02-mg (mg=Premises Messages 01-06, then press the softkey beneath save. This advances to PREMISES MESSAGE programming.
3. Press the softkey beneath next or the softkey beneath back to navigate to the next preprogrammed message to change.
4. Press the softkey beneath chg to enter a new message for the selected preprogrammed message.
5. Use the dial pad keys to enter the new message. When finished press the softkey beneath save.
6. Press the Volume button to return to the MBC Selection Screen or exit programming.

Modem

MBC: Modem Directory Number 04-15-01

MBC: Modem Baud Rate 04-15-02

Description

The system has an optional, internal 2400 bps modem that can be accessed by a Windows based proprietary Remote Maintenance & Programming software application (RMP). When equipped, the modem allows dedicated communications between the system processor and the RMP software application. Only, incoming CO Lines can be transferred to the Modem. At default the modem extension is set to 100 but can be swapped with another extension.

NOTE: *No analog (SLT) port are required for the modem to work.*

Default Settings:

Built-in Modem – DIR. No. (directory number) is set to 100.

Built-in Modem – Baud Rate is set to 2400.

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.
2. Enter 04-15. Then press the softkey beneath save. This advances to BUILT_IN MODEM programming.
3. Press the softkey beneath show . This advances to the DIRECTORY screen, the MBC for this parameter is 04-15-01.
4. Press the softkey beneath chg to change the modem directory number.
5. Enter the new directory number that is to be assigned to the modem resource and press the softkey beneath save. The directory number must be from those designated for Extension Directory Numbers.
6. Press the softkey beneath next . This advances to the BAUD RATE programming screen, the MBC for this parameter is 04-15-02.
7. Press the softkey beneath chg until the appropriate baud rate displays.
8. Press the Volume button to return to the Data Base Item Selection Screen or exit programming.

Speed Dialing - Extension / System

MBC: Individual 04-08-01

MBC: System List 04-08-02

MBC: System Speed No. 04-09-(t)-spb

(t)=tenant group

spb=speed bins 600-699

Feature Code: System Speed Bin Programming feature #0

Feature Code: Individual (Extension) Speed Bin feature 1

Description

The system allows frequently dialed number to be stored in either System or Extension Speed Dial Bins. A System Speed Dial Bin becomes a system resource allowing other extensions to share the entered telephone number. Whereas an Extension Speed bin is a private Speed Dial Bin which can only be accessed by the extension that entered the number. Both System and Extension Speed Bins may be stored on any Flexible (feature) button; allowing one-button operation.

- There are a total of 1000 speed bins in the system, 900 of which may be divided between the extensions.
- Extensions may be assigned up to fifty (50) personal (extension) speed bins for their personal use. At default extensions 101-132 are each assigned 10 personal (extension) Speed Bins – numbered 500-509.
- There are 100 System Speed bins available for system-wide use numbered 600-699. System Speed Dial bins are programmed via Attendant Administration (using a Digital telephone) or via RMP. System Speed bins can be programmed to override an extensions toll restriction, and allow a restricted extension to dial numbers that they normally restricted.
- System and Extension Speed bins hold up to16 digits, including chaining, pauses and flashes. If a longer number is necessary, speed bins may be chained together.
- Pauses (Feature 70) and Flashes (Feature 3) may be stored in Speed Dial.
- Chaining, Pauses and Flashes each occupy one character position.

Default Settings:

SPD No. Assignment – System List is set to 100.

SPD No. Assignment – Extensions 101-132 are assigned 10 speed bins. All others are set to 0, but they may be assigned up to 50, to a maximum of 900.

SPD No. Programming – System List; all bins are empty NULL.

SPD No. Programming – Individual List; all bins are empty NULL.

NOTE: *Individual Speed Dial Numbers can be programmed at the extension or via RMP.*

Individual SPD No. – Length is 3. The range is 1-4.

Individual SPD No. – 500-519 assigned. The range is any number per Numbering Plan.

System SPD No. – Length is 3. The range is 1-4.

System SPD No. – 600-699 assigned. The range is any number per Numbering Plan.

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.

To program SPD No. Assignment:

2. Enter 04-08, then press the softkey beneath save. This advances to the SPD. NO. ASSIGN. screen.
3. Press the softkey beneath show, this advances to the assignment for INDIVIDUAL Speed Dial numbers screen.
4. Press the softkey beneath show to change an extension's speed numbers assignment.
5. Enter the extension number at the SHOW EXT screen to change assignments.
6. Press the softkey beneath show, this advances to the TO INCREASE screen for this extension.

7. Press the softkey beneath chg to increase the assigned speed dial numbers for this extension.

Or...

8. Press the softkey beneath next to advance to the TO DECREASE screen for this extension.
9. Press the softkey beneath chg to decrease the assigned speed dial numbers for this extension.
10. Press the softkey beneath next to advance and enter another extension number.
11. Repeat steps 5 through 10 to program other extension numbers or continue to step 12.
12. Press the Hold button (HOLD) to return to the previous menu level.

Or...

13. Press the softkey beneath next, this advances to the SYSTEM LIST Assignment screen for System Speed Dial numbers.
14. Press the softkey beneath show. This advances to the SHOW TENANT screen.
15. Enter the Tenant Group for which changes are to be made. (Usually Tenant Group 1.)
16. Press the softkey beneath show, this advances to the TO INCREASE screen for this Tenant Group System Speed List.
17. Press the softkey beneath chg to increase the number of allocated speed dial numbers (in increments of 50).

Or...

18. Press the softkey beneath next to advance to the TO DECREASE screen for this Tenant Group System Speed List.
19. Press the softkey beneath chg to decrease the number of allocated speed dial numbers (in increments of 50).
20. Press the softkey beneath next to advance to the SHOW TENANT screen.
21. Enter the Tenant Group for which changes are to be made. (Usually Tenant Group 1.)
22. Press the Volume button to return to the MBC Screen.

To program System Speed Numbers:

23. Enter 04-09-(t), (t)=tenant group, then press the softkey beneath save. This advances to the SYSTEM SPD. NO. entry point for the Tenant Group selected.
24. Enter the speed dial number to program (600-699), then press the softkey beneath show. The current stored number displays.
25. Press the softkey beneath chg to change this stored number.
26. Enter the new telephone number with special characters as required.

Pause = P

Flash = /

Speed Numbering Chaining = @ + next speed number (600-699).

27. Press the softkey beneath save. The speed dial number and the new contents are displayed.
28. Press the softkey beneath next and enter the next speed dial number to change and follow the conventions above.

Or...

29. Press the Hold button (HOLD) to exit this programming and return to the previous menu level. Press the Volume button to return to the MBC Screen or exit programming.

6.5 Phone Restriction Programming

Account Codes

MBC: 05-02

Feature Code: 89

Description

Account Codes are passwords used by extension users to bypass toll restriction and when used with Station Message Detail Recording (SMDR) can be used to identify the caller.

Account Codes can vary in length from two to eight digits and each is assigned a Class of Service which temporarily overrides the extensions preprogrammed Class of Service. At the end of the call, the extension's preprogrammed Class of Service returns and the temporary Class of Service is released.

Account Codes may be entered at any extension voluntarily or extensions may be forced to use an account code each time a call is attempted. In both cases the Account Code creates an association of the call and the extension in the SMDR record.

Each Tenant Group has six hundred individual Account Codes that can be programmed. All Account Codes that are entered by an extension user are verified against this table. If no match is found, and account codes are required, then call is denied.

Default Settings:

Account Code length - 3 digits (Range is 2-8.)

Account Codes - None programmed (Range is 0-9, maximum of 8 digits.)

Account Code Class of Service - 0

Account Code Disabled - N

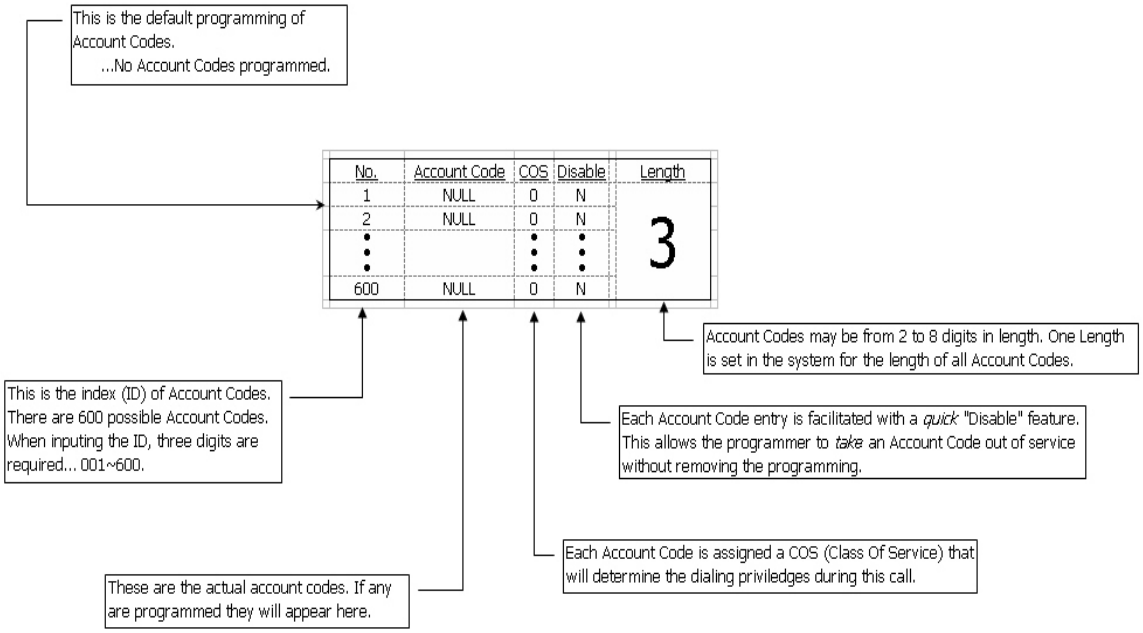
Extension Classes of service - all calls allowed

Account Code Access Code - 89

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 05-02 and press the softkey beneath save to advance to the ACCOUNT CODE programming screen. In Figure 6.5.1, seen below can be used as a visual aid in programming Account Codes using the a Digital Telephone.

Figure: 6.5.1 Account Code Programming



3. Press the softkey beneath show to display the Account Code LENGTH.
4. Press the softkey beneath chg until the appropriate account code length displays. The Account Code LENGTH can be from 2 to 8 digits. Press the softkey beneath save after entering a new LENGTH.
5. Press the softkey beneath next to advance to the account code PSWD programming screen.
6. Press the softkey beneath show to advance to the ID NUMBER of the account code to be changed.
7. Enter the Account Code number 001-600 to change/display.
8. Press the softkey beneath show. The existing programming will be displayed. (NULL=EMPTY).
9. Press the softkey beneath chg and enter the account code using the digits 0-9. When the correct number of digits are entered (according to the length programmed in steps 3 and 4), press the softkey beneath save. This database item is then updated.
10. Press the softkey beneath next to advance to the COS display for this Account Code.
11. Press the softkey beneath chg until the appropriate COS displays for this Account Code PSWD.

12. Press the softkey beneath next and DISABLED is displayed. This setting is used temporarily disable the use of a particular Account Code without removing its programming. DISABLED means that this account code is active.
13. Toggle the softkey beneath chg to select Y or N to disable this Account Code password.
14. Press the softkey beneath next to continue programming other account codes or exit programming.

Least Cost Routing (LCR)

MBC: 05-03-(t)

(t)=tenant group

MBC: 03-51 LCR Time

MBC: 01-EN-34

Feature Code: MW 8 DIV 8

Description

When users can't easily make call cost decisions on their own, Least Cost Routing can be implemented to assure that calls being placed are utilizing the most cost-efficient method. LCR works by analyzing the number dialed by a user before any digits are "sent" (dialed) on the line. The detailed programming of LCR during setup is essential to assure that the system selects the best possible resource available to make a call.

The **Digit Comparison Table** is the primary tool in LCR that must be programmed. There are 100 tables, which are shared between all three tenants. The digit comparison table is created using four parameters, "From" and "To" digits to compare, and line group (Route) and finally the Digit Modification Table. This configuration allows for a very flexible means of entering digits for comparison and routing. The From and To parameters may contain a single digit or a group of digits up to ten maximum in length.

TABLE 6.5.1 Digit Comparison Table

Interval No.	From	To	Route	DMT No.
001	1909590	1909599	2	1
002	590	599	2	2
003			0	0

In the example in table 6.5.1, interval table 001 has a from 1909590 and a to 1909599, so all seven digits will be evaluated, any other digits dialed will be ignored. The call will be directed to line group (route) 2, and the digit modification table 01 will be referenced. In Interval table 002, the first three digits will be evaluated, any other digits dialed will be ignored. The call will be directed to line group (route 2), and the digit modification table 02 will be referenced.

The **Digit Modification Table** is used to modify the string of digits dialed. There are 24 Digit Modification Tables, which are shared between all three tenants, and it is used to modify numbers by deleting and/or replaced them before sending the number to the central office for processing. There are four parameters used; delete digits, prefix digits, insert digits, and insert position. This allows the system to add or delete numbers that were dialed, but may not be needed by the central office for processing. For example, someone not familiar with an area may dial 11 digits to a local area code, so LCR will strip the extra numbers before sending them to the central office.

TABLE 6.5.2 Digit Modification Table

Interval Number.	Delete Digits	Prefix Digits	Insert Digits	Insert Position
01	1			None
02		909		0
03				None

In the example in table 6.5.2, interval table 01, will delete the "1" and only 10 digits will be dialed to the central office. Interval table 02 will take the 7 digit numbers beginning with 509 - 599, and Pre-insert 909 before the digits are dialed to the central office.

Default Settings:

Restriction – Toll Restriction – Digit Comparison Table:

Digit Interval 001 – 100 – From = Null
Digit Interval 001 – 100 – To = Null
Digit Interval 001 – 100 – Route = 0
Digit Interval 001 – 100 – DMT = 0

Restriction – Toll Restriction – Digit Modification Table:

Digit Interval 01 – 24 – Delete Digits = None
Digit Interval 01 – 24 – Prefix Digits = Null
Digit Interval 01 – 24 – Insert Digits = 0
Digit Interval 01 – 24 – Insert Position = None

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program Extension with Forced LCR:

2. Enter 01-EN-34 (EN=Extension 101~148, 181~188) and then press the softkey beneath save. This advances to the FORCED LCR Select Y for Yes, to force the extension to use LCR and N to allow the extension to make calls without LCR.

3. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or exit programming

Program Digit Comparison Table (DCM)

2. Enter 05-03-(t)-01-tbl ((t)=tenant, tbl=table number 001~100) and press the softkey beneath show. This advances to the FROM column of the tenant group and interval selected.

4. Enter the new starting digit sequence, up to 10 digits in length, and then press the softkey beneath save.

5. Press the softkey beneath next to advance to the TO column of the tenant group and interval selected.

6. Enter the new ending digit sequence, up to 10 digits in length, and then press the softkey beneath save.

7. Press the softkey beneath next to advance to ROUTE (line group), valid entries are 1-8.

8. Press the softkey beneath save and then press the softkey beneath next to advance to DMT (digit modification table), valid entries are 01~24.

9. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or press the speaker button to exit programming.

Program Digit Modification Table (DCM)

2. Enter 05-03-(t)-02-tbl ((t)=tenant, tbl=table number 01~24) and press the softkey beneath show. This advances to the DELETE column of the tenant group and interval selected.

3. Enter the digit sequence to be deleted, up to 10 digits in length, and then press the softkey beneath save.

4. Press the softkey beneath next to advance to the PREFIX column of the tenant group and interval selected.

5. Enter the digit sequence, up to 10 digits in length, that will be inserted at the beginning of the dialed sequence before it is presented to the Central Office Line.

6. Press the softkey beneath next to advance to INSERT column of the tenant group and interval selected.

7. Enter the digit sequence, up to 10 digits in length, that will be inserted into the dialed sequence before it is presented to the Central Office Line.

8. Press the softkey beneath save and then press the softkey beneath next to advance to DMT (digit modification table), valid entries are 01~24.

9. Press the softkey beneath next to advance to INSERT POSITION column of the tenant group and interval selected.

10. Enter the position within the dial sequence, that the entered insert numbers should begin. Valid entries are 0~10. Press the softkey beneath save

11. Press the Hold button (HOLD) to return to the previous menu level or press the Volume button to return to the MBC Screen or press the speaker button to exit programming.

Toll Restriction - Class of Service

MBC: 05-01-(t)-(tbl) (t)=tenant group, (tbl)=digit interval table (001-100)

Description

Each Extension and Central Office Line is assigned a Class of Service (COS). At default, no restriction is applied to either the extension or the CO Line. The COS is used to allow or disallow calls when they are dialed.

If a digit or range of digits dialed on a CO line does not match the dialing extension's COS or CO Line's COS, the call is denied. The calling COS criteria can be applied to local, and long distance calls. The System provides 100 Toll Restriction tables (known as digit intervals) per Tenant Group. Each entry may contain 10 digits in the "From" column and 10 digits in the "To" column. When a calls is placed, all appropriate, Digit Interval table's "From" and "To" columns are checked. If the digits dialed are in the range, the call is allowed, otherwise, the call is not allowed.

- Extensions and CO Lines are assigned one Day and one Night Class of Service. When an extension dials a call:
- The extension's COS is checked; if the digits are not within the allowed digit range, the call is denied.
- If the digits are within the allowed digit range, the CO Line's COS is checked; if the digits are not within the allowed range of digits, the call is denied, otherwise, the call is allowed.

A Digit Interval Table entry may be as simple as setting the From table to "2", and the "To" to "9" which will only allow digits between 2 and 9, and not allowing digits 0, 1, * and # or as complex as setting the "From" table to "1813412" and the "To" to "1813450". The number of digits evaluated equals the number of digits that are entered in the "From" and the "To" tables. In the second example, calls with this associated COS will validate the first seven digits dialed, or until the first digit that does not fall between the "From" and the "To" table is discovered. For Example, if 1813410 is dialed, it would not be allowed, when the digit "0" is detected. Whereas, the number 1813419 (plus any digits) will be allowed.

- The Digit Interval 001 is preprogrammed as: From "0" To "#", which allows all digits to be dialed.
- Some System Speed Bins can be set to Override toll restriction.
- Account Codes are assigned their own Class of Service, which overrides both the extension and the CO line Classes of Service.

Table 6.5.3 shows the following example:

Classes of Service in table 6.5.3 are read vertically and they are created by the Digit Interval Table entries. Each COS can be created by up to 100 interval tables. The entered digits are only allowed if the COS (read vertically) has a "Y", otherwise the digit interval table is ignored.

- Digit Interval Table 001, allows all digits to be dialed, and it has been granted to the Extension Day and Night Class of Service "0", and all CO Line Classes of Service. 911 is also allowed.
- Digit Interval Table 002 allows local calling only, which has been granted to the Extension Day and Night Class of Service "1", the CO Line's COS is unaffected because of the Digit Interval Table 001. 911 is also allowed.

- Digit Interval Table 003 allows only 800 calls which has been granted to the Extension Day and Night Class of Service "2". 911 is also allowed.
- Digital Interval Table 004 allows all digits between 1866 through 1877 (including 1866 and 1877) to be dialed. 911 is also allowed.

TABLE 6.5.3 Digit Interval Tables, creating Toll Restriction

DGT			Extension - Day - COS								Extension - Night - COS								CO Line - Day - COS								CO Line - Night - COS							
INT	From	T0	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7
001	0	#	**Y**	N	N	N	N	N	N	N	**Y**	N	N	N	N	N	N	N	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
002	2	9	N	**Y**	N	N	N	N	N	N	N	**Y**	N	N	N	N	N	N	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
003	1800	1800	N	N	**Y**	N	N	N	N	N	N	N	**Y**	N	N	N	N	N	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
004	1866	1877	N	N	**Y**	**Y**	N	N	N	N	N	N	**Y**	**Y**	N	N	N	N	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
005	911	911	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**

Default Settings:

Restriction – Toll Restriction – Digit Interval 001 – From = 0 (up to 10 digits) (COS0)

Restriction – Toll Restriction – Digit Interval 001 – To = # (up to 10 digits) (COS0)

Restriction – Toll Restriction – Digit Interval 002 – From = 2 (up to 10 digits) (COS1)

Restriction – Toll Restriction – Digit Interval 002 – To = 9 (up to 10 digits) (COS1)

Restriction – Toll Restriction – Digit Interval 003 – From = 1800 (up to 10 digits) (COS2)

Restriction – Toll Restriction – Digit Interval 003 – To = 1800 (up to 10 digits) (COS2)

Restriction – Toll Restriction – Digit Interval 004 – From = 1866 (up to 10 digits) (COS2)

Restriction – Toll Restriction – Digit Interval 004 – To = 1877 (up to 10 digits) (COS2)

Restriction – Toll Restriction – Digit Interval 005 – From = 911 (up to 10 digits) (All COS)

Restriction – Toll Restriction – Digit Interval 005 – To = 911 (up to 10 digits) (All COS)

Extension - Day/Night Class Of Service = 0 (01-ext-05 (Day), 01-ext-06 (Night) (ext=extension). (Range is 0-7.)

CO Line Day/Eve Class Of Service = 0 (02-LN-04 (Day), 02-LN-05 (Night) (LN=CO Line). (Range is 0-7.)

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.

Program Digit Interval(s) and assign Extension/CO Line COS to Digit Intervals:

2. Enter 05-01-(t)-tbl ((t)=tenant group, tbl= interval table 001-100) and then press the softkey beneath SAVE. This advances to the FROM column of the tenant group and interval selected.

3. Press the softkey beneath chg to change the start of this interval range (beginning FROM…).
4. Enter the new starting digit sequence, then press the softkey beneath save.
5. Press the softkey beneath next to advance to the TO column of the tenant group and interval selected.
6. Press the softkey beneath chg to change the end of this interval range (up …TO).
7. Enter the new ending digit sequence and then press the softkey beneath save.
8. Press the softkey beneath next to advance to EXTENSION or CO LINE COS as required for change.
9. Press the softkey beneath show. The DAY Allowed parameter displays for the Extension or CO Line COS.
10. Press the softkey beneath next to advance to the NIGHT ALLOWED COS for the Extension or CO Line COS.

Or…

11. Press the softkey beneath show to program CLASS allowed settings for this Digit Interval. CLASS 0 is displayed.
12. Press the softkey beneath next and the softkey beneath back until the appropriate CLASS to change displays.
13. Toggle the softkey beneath chg until the appropriate setting (Y/N) displays.
14. Press the Volume button to return to the MBC Screen.

Program Extensions for the COS to follow:

1. Enter 01-ext-05 (ext=101-148, 181-188) for DAY Class Of Service and 01-ext-06 is NIGHT or Class Of Service.
2. Press the softkey beneath chg until the appropriate CLASS displays for the selected service mode.
3. Press the Volume button to return to the MBC Screen.

Program CO Lines for the COS to follow:

2. Enter 02-LN-04 (LN=700-719, 744-747) is DAY Class Of Service and 02-LN-05 (LN=700-719, 744-747) is NIGHT Class Of Service.
3. Press the softkey beneath chg until the appropriate COS displays for the selected service mode.
4. Press the Volume button to return to the DB Item Selection Screen or exit programming.

6.6 Extension Application Programming

Auto-Record

MBC: 06-03-ext

(ext=extension 101-148)

MBC: Extension Record Allow - 01-ext-20

(ext=extension 101-148)

Description

The system permits eight extensions to be place into an Auto-Record group. The system will record all conversations at with these extension automatically whenever the user is on an internal/external call. The recording will be deleted automatically after the call is released or placed on hold unless the user presses Voice Recorder (One Touch Record) button. (*Feature* 6 7) to save the recorded conversation before ending or holding the call. When saved, the conversation is stored in the extension user's mailbox.

NOTE: *The Voice Recorder code* Feature 6 7 *must be programmed under a Flexible (Feature) button on the Digital Telephone to be used with the Auto Record feature. At default, one of the flexible buttons on the digital telephone is set to Voice Recorder.*

- Placing a call on hold constitutes completing a call and ends the recording function. If the recorded conversation prior to pressing hold is to be kept, the Voice Record Feature/DSS button must be pressed prior to pressing Hold (HOLD).
- Auto Record like One Touch Record occupy one voice channel on the voice mail system during the record operation. This resource consuming function should be deployed with careful consideration of the total available voice mail channels and the overall impact on other voice mail/ auto attendant related functions.

Related Programming:

Outgoing call recording begins after the Call Duration Timer (See "Warning Time / Call Duration" Page 255) (MBC: Outgoing 03-10-01, MBC: Incoming 03-10-02) has expired.

One Touch Record button must be programmed on a Flexible button (Feature 6 7)

Record Allow (MBC: 01-ext-20 See "Auto Record" Page 166) must be granted for all extensions in the Auto Record group.

Default Settings:

Auto Record is disabled at default for all extensions.

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 06-03-ext (ext=extension 101-148, 181-188) and then the softkey beneath save to advance to the AUTO RECORD programming screen. Enter the auto record member and press save. Press next to continue to enter additional members.
3. Press the Volume button to return the MBC Screen or press clear to exit programming.

UCD / Hunt Group

MBC: 06-01

Feature Code: feature 91

Description

Uniform Call Distribution (UCD) Groups allow system resources (primarily extensions) to be linked for call handling. The system comes standard with 24 UCD Groups, each can have up to 24 members.

UCD groups have a lead (or pilot) number ranging from 430 to 453 (453 is reserved for voice mail). Extensions may call a group of extensions by dialing the associated UCD Group number. CO Line calls may also be transferred to UCD Groups for handling by one of the UCD Group Members. UCD Group Members are often referred to as "Agents." The use of Agent and Member in this material is synonymous. Each UCD Group to be configured in one of three ways:

- Linear
- Distributed
- All Ring

Linear - A Linear UCD Group rings the first (Primary) member every time the pilot number is dialed, or when a call is transferred to the group. Each subsequent Member receives calls only when the previous Member(s) are unavailable to take a call. (Unavailable is determined by the following status' Busy, DND active, Agent Log Off active, or when calls to the member go unanswered.)

Distributed - A Distributed UCD Group routes calls to group members in a uniformly distributed fashion. That is, each new call is routed to the UCD Member that has been on-hook and idle the longest. For Example, if the third UCD Group Member handled the last call into the UCD Group, the next call into this UCD Group will be routed to UCD Group Member 4, regardless of the status of other UCD Group Members. (Assuming Member 4 is available.) (Unavailable is determined by the following status' Busy, DND active, Agent Log Off active, or when calls to the member go unanswered.)

All Ring - An All Ring UCD Group rings all group members simultaneously when the pilot number is dialed or when a call transferred to the group. That is, for each call into the UCD Group, all available members ring. To stop an extension from ringing, the agent must be unavailable, which is determined by the following status' Busy, DND active, Agent Log off active.

Calls to a UCD Group that are waiting to be answered by a UCD Agent (Member) are considered "In Queue". While calls are in Queue they will not follow individual extensions' forwarding. However, UCD calls in queue can overflow to, two messages and can be redirected to a reroute destination.

The following are the programmable parameters:

- No Answer – Member advancement
- Overflow 1 Timer
- Overflow 1 Destination programming
- Overflow 2 Timer
- Overflow 2 Destination programming
- Overflow Count programming
- Reroute Destination programming

No Answer Timer: Member Advancement: each UCD Group has a No Answer Timer. Each time this timer expires the caller will advance from one UCD Group Member to the next, when the ringing member does not answer the call.

Overflow 1 timer: When this timer expires the call will be sent to the overflow 1 destination. This timer is adjustable from 0 to 255, but should not be set below 1 second, or the caller will immediately go to the overflow destination.

Overflow 1 Destination: Each UCD Group has an Overflow 1 Timer and Destination. This timer can be set to determine how long the queued call will remain in queue before being routed to the Overflow 1 Destination. The Destination can be an extension responsible for handling calls that remain in queue too long or a voice announcement device. Recorded Announcement Devices (RAD) sometimes called Recorded ANnouncement (RAN) can be used to play recorded messages to callers waiting in queue. (Typically, the first message resembles "all agents are busy - please continue to hold.") The Overflow 1 Destination can only be played once (per call). (For high traffic scenarios a recorded Voice Announcement UCD Group can be used to play the same message to multiple callers.)

NOTE: Do not be set below 1 second, or the caller will immediately go to the overflow destination.

Overflow 2 Destination: Each UCD Group has an Overflow 2 Timer and Destination. This timer can be set to determine how long the queued call will remain in queue following the Overflow 1 Timer before being routed to the Overflow 2 Destination. (Overflow 1 Timer, plus Overflow 1 Destination recorded message time, plus Overflow 2 Timer.) The Destination can be an extension responsible for handling calls that remain in queue too long or a voice announcement device. Recorded Announcement (RAD or RAN) devices can be used to play recorded messages to callers waiting in queue. (Typically the second message resembles, "We apologize for the delay, but due to an unusually high call volume, our agents are still busy. Calls are answered in the order that they are received, please continue to hold to reserve your place in queue.") (For high traffic scenarios a recorded Voice Announcement UCD Group can be used to play the same message to multiple callers.)

Overflow Count: Each UCD Group has an Overflow Count that is associated to the Overflow 2 Timer. This counter is used to determine how many times the Overflow 2 Destination is accessed before advancing to the Reroute Destination.

Reroute Destination: Each UCD Group has a Reroute Destination. This destination can be programmed with an extension number and is used to remove the call from UCD Group queue and route the call for immediate handling.

- CO Lines may be assigned to ring directly into UCD Groups (See "CO Line Ring Assignment (Answer Position)" Page 195).
- When a voice mail system is installed into the system, it uses UCD Group 24, Pilot number 453. Therefore this UCD Group is not available for any other purpose.

Default Settings:

Extension Application – UCD – Attribute = UCD. The range is: UCD/V.A.

Extension Application – UCD – Tenant Group = 1. The range is: 1-3.

Extension Application – UCD – Name = NULL. The range is 7 characters. (Only available through RMP Programming)

Extension Application – UCD – Member 1-24 = NULL. The range is any extension number.

Extension Application – UCD – Hunting Method = Linear. The range is Linear/All Ring/Distributed.

Extension Application – UCD – No Answer Timer = 10. The range is 5-60 seconds.

Extension Application – UCD – Overflow 1 Timer = 0. The range is 0-255.

Extension Application – UCD – Overflow 1 Destination = NULL. The range is UCD Group or extension directory number.

Extension Application – UCD – Overflow 2 Timer = 0. The range is 0-255.

Extension Application – UCD – Overflow 2 Destination = NULL. The range is UCD Group or extension directory number.

Extension Application – UCD – Overflow Count = 1. The range is 1-128.

Extension Application – UCD – Reroute Destination = NULL. The range is UCD Group or extension directory number.

CO Line – Answering Position = no UCD Groups are assigned for CO Line ringing.

System Application – Numbering Plan - Extension Hunt Group

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.
2. Enter 06-01 and then the softkey beneath `save` to advance to the `UCD PROGRAMMING` screen.

3. Press the softkey beneath show to advance to the UCD GROUP programming screen.
4. Enter a UCD GROUP number (1-24 representing groups 430-453) and press the softkey beneath show. This advances to the TENANT programming screen.
5. Press the softkey beneath chg to select the Tenant number to which this UCD Group is to be associated.
6. Press the softkey beneath next. This advances to the UCD GP. MEMBER programming screen.
7. Press the softkey beneath chg to select the Attribute for this UCD Group.
9. Press the softkey beneath next.
10. Enter 06-01-ugp-03 (ugp=UCD groups 01-24 - UCD Group select Member(s)).
11. Press the softkey beneath show.
12. Press the softkey beneath next, the softkey beneath back to choose the Member to program.
13. Press the softkey beneath chg.
14. Enter the extension directory number of the extension to assign as a Member.
15. Press the softkey beneath save.
16. Repeat from the softkey beneath next, the softkey beneath back for additional Members.
17. Press the Hold button (HOLD) when you have finished entering members.
18. Press the softkey beneath next.
19. Enter 06-01-ugp-03-mbr (ugp=UCD Group 01-24, mbr=Member 01-24) (UCD Group select specific Member).
20. Press the softkey beneath chg.
21. Enter the extension directory number of the extension to assign as a Member.
22. Press the softkey beneath save.
23. Press the softkey beneath next, the softkey beneath back for additional Members.
24. Repeat steps 20-23 to add additional Members.
25. Press the Hold button (HOLD) when you have finished entering members.
26. Press the softkey beneath next.
27. Enter 06-01-ugp-04 (ugp=UCD Group 01-24) (UCD Group select Hunting Method).
28. Press the softkey beneath chg to select the Hunting Method for this UCD Group.
29. Press the softkey beneath next.
30. Enter 06-01-ugp-05 (ugp=UCD Group 01-24) (UCD Group enter No Answer Time).

31. Press the softkey beneath chg.
32. Enter an appropriate No Answer Time.
33. Press the softkey beneath save.
34. Press the softkey beneath next.
35. Enter 06-01-ugp-06 (ugp=UCD Group 01-24) (UCD Group select Overflow 1 Timer).
36. Press the softkey beneath chg.
37. Enter an appropriate Overflow 1 Timer.
38. Press the softkey beneath save.
39. Press the softkey beneath next.
40. Enter 06-01-ugp-07 (ugp=UCD Group 01-24) (UCD Group enter Overflow 1 Destination).
41. Press the softkey beneath chg.
42. Enter an appropriate Overflow 1 Destination.
43. Press the softkey beneath save.
44. Press the softkey beneath next.
45. Enter 06-01-ugp-08 (ugp=UCD Group 01-24) (UCD Group select Overflow 2 Timer).
46. Press the softkey beneath chg.
47. Enter an appropriate Overflow 2 Timer.
48. Press the softkey beneath save.
49. Press the softkey beneath next.
50. Enter 06-01-ugp-09 (ugp=UCD Group 01-24) (UCD Group enter Overflow 2 Destination).
51. Press the softkey beneath chg.
52. Enter an appropriate Overflow 2 Destination.
53. Press the softkey beneath save.
54. Press the softkey beneath next.
55. Enter 06-01-ugp-10 (ugp=UCD Group 01-24) (UCD Group select Overflow Count).
56. Press the softkey beneath chg.
57. Enter an appropriate Overflow Count.
58. Press the softkey beneath save.
59. Press the softkey beneath next.
60. Enter 06-01-ugp-11 (ugp=UCD Group 01-24) (UCD Group enter Reroute Destination).

61. Press the softkey beneath chg.
62. Enter an appropriate Reroute Destination.
63. Press the softkey beneath save.
64. Press the softkey beneath next.
65. Press the Volume button to return to the MBC Screen or exit programming.

Enter the integrated voice mail group 453, in the overflow destination, to use it as an integrated RAN device. When a call remains in queue long enough to overflow one of the announcements, the following integration digits are sent from the KSU to the integrated voice mail system. The announcement messages should be stored in these "Mailboxes".

TABLE 6.6.1 Overflow Messages per UCD Groups

UCD Group	Overflow MSG 1	Overflow MSG 2	Reroute Destination	Linking Per UCD group
430	9301	9325	9349	9301 - 9325 - 9349
431	9302	9326	9350	9302 - 9326 - 9350
432	9303	9327	9351	9303 - 9327 - 9351
433	9304	9328	9352	9304 - 9328 - 9352
434	9305	9329	9353	9305 - 9329 - 9353
435	9306	9330	9354	9306 - 9330 - 9354
436	9307	9331	9355	9307 - 9331 - 9355
437	9308	9332	9356	9308 - 9332 - 9356
438	9309	9333	9357	9309 - 9333 - 9357
439	9310	9334	9358	9310 - 9334 - 9358
440	9311	9335	9359	9311 - 9335 - 9359
441	9312	9336	9360	9312 - 9336 - 9360
442	9313	9337	9361	9313 - 9337 - 9361
443	9314	9338	9362	9314 - 9338 - 9362
444	9315	9339	9363	9315 - 9339 - 9363
445	9316	9340	9364	9316 - 9340 - 9364
446	9317	9341	9365	9317 - 9341 - 9365
447	9318	9342	9366	9318 - 9342 - 9366
448	9319	9343	9367	9319 - 9343 - 9367
449	9320	9344	9368	9320 - 9344 - 9368
450	9321	9345	9369	9321 - 9345 - 9369
451	9322	9346	9370	9322 - 9346 - 9370
452	9323	9347	9371	9323 - 9347 - 9371
453	9324	9348	9372	9324 - 9348 - 9372

Voice Mail / Tenant Group

MBC: Voice mail 06-02

MBC: Extension - Tenant Group - 01-ext-02

MBC: Extension - Preset Call Forward - 01-ext-31

MBC: Extension - Port Type - 01-ext-21

ext = extension 101~148

MBC: VM Dialing Ratio 03-34

Description

When using tenant groups, each group must have it's own "Voice Mail" group. This is accomplished by programming some of the voice mail ports (189~200) into the required tenant group and then these ports are entered into a new UCD group. At default, the voice mail uses the 24th UCD group pilot group number 453, so for tenant Group 2, the 23rd group pilot group 452, may be selected.

Also, this parameter can be used to interface to a third-party voice mail system via spare analog ports. Doing so occupies these ports and therefore reduces the number of system ports that can be used for the telephones, FAX machines, modems, etc.

Using voice mail greatly enhances the use of the system. Features accessible when voice mail is installed vary depending upon the third-party product connected. Features that the system will accommodate include:

- Automated Attendant
- Extension unique voice mailboxes
- Call Forward to extension voice mailboxes
- Answering Machine Emulation
- UCD Queue Announcements
- Menu Routing
- Voice Record
- Automatic Voice Record
- Specific CO Line Greetings on Automated Attendant

Related programming:

Voice mail 06-02

Extension Tenant Group 01-ext-02

Extension Preset call forward 01-ext-31

Extension Port Type 01-ext-21

Call Handling - VM Dial Ratio 03-34

Default Settings:

N/A

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.

Identify VM ports

2. Identify the extensions as a voice mail port. Enter 01-ext-21 and press the softkey beneath save. This advances to the PORT TYPE programming screen.
3. Press the softkey beneath chg until the port type VM displays for this extension.
4. Press the Volume button to return to the MBC Screen.

Put the ports into the new tenant group

2. Identify the extensions as a voice mail port. Enter 01-ext-02 and press the softkey beneath save. This advances to the TENANT GROUP programming screen.
3. Press the softkey beneath chg to select between tenant group 1, 2 and 3.
4. Press the Volume button to return to the MBC Screen.

Enter members into the UCD Group

2. Create a voice mail UCD group. Enter 06-01-ugp-03-01 (ugp=UCD Group 01-24) and press the softkey beneath save. This advances to Member #1 of the UCD Group selected.
3. Press the softkey beneath chg to enter the extension directory of the analog port to program into this Member.
4. Press the softkey beneath save.
5. Press the softkey beneath next.
6. Repeat steps 2 through 8 to program all voice mail ports as member of this UCD Group.
7. Press the Volume button to return to the MBC Screen.

Voice Mail Group Integration

2. Enter 06-02-(t)-01 ((t)=tenant group)) and press the softkey beneath save. This advances to the VM HUNT GROUP programming screen for Tenant (1) – Hunt Group.
3. Press the softkey beneath chg until the UCD Group to be used as the VM HUNT GROUP displays. Enter the UCD Group where all of the VM type analog ports are programmed as Members.
4. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix), OR...
5. Press the Volume button to return to the MBC Screen.

6. Enter 06-02-(t)-02-01 ((t)=tenant groups)) and press the softkey beneath save. This advances to the PREFIX TABLE – ICM/VM, programming screen for the selected tenant group.
7. Press the softkey beneath chg to enter the required digits to identify this call as originated at the subscriber phone.
8. Press the softkey beneath save.
9. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
10. Press the Volume button to return to the MBC Screen or exit programming.
11. Enter 06-02-(t)-02-02 ((t)=tenant group)) and press the softkey beneath save. This advances to the PREFIX TABLE programming screen for the selected tenant group.
12. Press the softkey beneath chg to enter the required digits to identify this call as transferred to this subscriber.
13. Press the softkey beneath save.
14. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
15. Press the Volume button to return to the MBC Screen.
16. Enter 06-02-(t)-02-02 ((t)=tenant group)) and press the softkey beneath save. This advances to the PREFIX TABLE – BUSY FWD programming screen for the selected Tenant Group.
17. Press the softkey beneath chg to enter the required digits to identify this call as forwarded from this busy subscriber.
18. Press the softkey beneath save.
19. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
20. Press the Volume button to return to the MBC Screen.
21. Enter 06-02-(t)-02-02 ((t)=tenant group)) and press the softkey beneath save. This advances to the PREFIX TABLE – NO ANSWER programming screen for the selected tenant group.
22. Press the softkey beneath chg to enter the required digits to identify this call as forwarded from this subscriber-no answer.
23. Press the softkey beneath save.
24. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
25. Press the Volume button to return to the DB Item Selection Screen.

26. Enter 06-02-(t)-02-02 ((t)=tenant group)) and press the softkey beneath save. This advances to the PREFIX TABLE – DIRECT FWD programming screen for the selected tenant group.
27. Press the softkey beneath chg to enter the required digits to identify this call as immediately from this subscriber.
28. Press the softkey beneath save.
29. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
30. Press Volume button to return to the MBC Screen.
31. Enter 06-02-(t)-02-02 ((t)=tenant group)) and press the softkey beneath save. This advances to the PREFIX TABLE – CO GREETING programming screen for the selected tenant group.
32. Press the softkey beneath chg and enter the required digits to identify this call to a specific CO Line.
33. Press the softkey beneath save.
34. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
35. Press the Volume button to return to the MBC Screen.
36. Enter 06-02-(t)-02-02 ((t)=tenant group)) and press the softkey beneath save. This advances to the PREFIX TABLE – CO RECALL programming screen for the selected tenant group.
37. Press the softkey beneath chg and enter the required digits to identify this call as a specific CO Line recalling.
38. Press the softkey beneath save.
39. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
40. Press the Volume button to return to the MBC Screen.
41. Enter 06-02-(t)-02-02 ((t)=tenant group)) and press the softkey beneath save. This advances to the PREFIX TABLE – UCD OVERFLOW programming screen for the selected tenant group.
42. Press the softkey beneath chg and enter the required digits to identify this call as a UCD Overflow Announcement.
43. Press the softkey beneath save.
44. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
45. Press the Volume button to return to the MBC Screen.

46. Enter 06-02-(t)-03 ((t)=tenant group)) and press the softkey beneath save. This advances to the SUFFIX DIGIT programming screen for the selected tenant group.
47. Press the softkey beneath chg and enter the suffix digits if required to identify this call as the mailbox subscriber.
48. Press the softkey beneath save.
49. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
50. Press the Volume button to return to the MBC Screen.
51. Enter 06-02-(t)-03 ((t)=tenant group)) and press the softkey beneath save. This advances to the RECORD DIGIT programming screen for the selected tenant group.
52. Press the softkey beneath chg and enter the digits required to active recording in this subscriber mailbox.
53. Press the softkey beneath save.
54. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
55. Press the Volume button to return to the MBC Screen.
56. Enter 06-02-(t)-03 ((t)=tenant group)) and press the softkey beneath save. This advances to the DELETE DGT programming screen for the selected tenant group.
57. Press the softkey beneath chg and enter the digits required to delete the current recording in this subscriber mailbox.
58. Press the softkey beneath save.
59. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
60. Press the Volume button to return to the MBC Screen.
61. Enter 06-02-(t)-03 ((t)=tenant group)) and press the softkey beneath save. This advances to the DISCONNECT DIGIT programming screen for the selected tenant group.
62. Press the softkey beneath chg and enter the digits required to force disconnect of the active port.
63. Press the softkey beneath save.
64. Press the softkey beneath next to continue programming the various call handling digits (Prefix/Suffix).
65. Press the Volume button to return to the MBC Screen.
66. Enter 03-33-01 and press the softkey beneath save. This advances to the VM DIALING RATIO – TONE TIME programming screen.
67. Press the softkey beneath chg until the appropriate Tone Time displays. This timer is relevant only for analog interface voice processing systems connected to system analog

ports. The Tone Time is the minimum duration of DTMF tone delivered to the voice mail analog port for voice processor - call processing. Available selections are 60, 90, 120, 150 milliseconds.

68. Press the softkey beneath next to program Inter-Digit Time.

69. Press the softkey beneath chg until the appropriate Inter-Digit Time displays. This timer is relevant only for analog interface voice processing systems connected to system analog ports. The INT_DGT TIME is the minimum duration of time between DTMF tones delivered to the voice mail analog port for voice processor - call processing. Available selections are 60, 90, 120, 150 milliseconds.

70. Press the Volume button to return to the MBC Screen or exit programming.

6.7 CO Line Application Programming

Alternate Route

MBC: 07-01-lg-03

(lg=line group)

Description

Used with CO Line Groups, CO Line Alternate Route is used to reroute callers from a busy CO Line group to one that is idle, even if it was not the original CO Line Group dialed. This feature is useful in high traffic environments when the use of secondary CO Line Groups may be required. To accommodate special dialing parameters a special insert or delete digit table was added.

When a user accesses a CO Line Group and all of the CO Lines in the group are busy, the user is automatically rerouted to the defined secondary route. To accommodate special dialing - such as Universal Access Codes - an Insert Digital entry was added, or in the even that digits must be deleted, a special Delete Digit field was added.

- When CO Lines in all groups are busy, busy tone will be heard and a busy message will be displayed in the LCD.
- A user may invoke callback to the first selected CO Line group by pressing the softkey beneath cbck.

Default Settings:

All CO Line Groups are set as follows for Alternate assignments:

Alternate CO Line Group 1 is set to 0 (no alternate).

Alternate CO Line Group 2 is set to 0 (no alternate).

Alternate CO Line Group 1 and 2 – Delete Digits is set to 0 (delete nothing).

Alternate CO Line Group 1 and 2 – Inserted Digits" is set to Empty (insert nothing).

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.

Program CO Line Groups for Alternate CO Line Groups:

2. Enter 07-01-lg-03 (lg = Line Group) and press the softkey beneath save. This advances to the ALTER. ROUTE programming screen. Press the softkey beneath show, the display shows ALTER. CO GP :_.
3. Enter the Alternate Route to program (1 for first alternate, or 2 for second alternate) for this CO Line Group.
4. Press the softkey beneath show. The display shows CO GP NUMBER : X. (Where x is the current programming, 0 means no alternate route. To change this Alternate Route selection, press the softkey beneath chg.
5. Enter the CO Line Group that is to be used as the (1st or 2nd) Alternate Route for this CO Line Group and press the softkey beneath save.
6. Press the softkey beneath next to advance to the DELETE DIGITS screen for this Alternate Route selection. If it is necessary to delete digits from the dialed digits when calls are routed to this alternate, put in the number of digits to delete here.
7. Press the softkey beneath chg and enter the quantity of digits to delete from the beginning of the number dialed. (0-9)
8. Press the softkey beneath save.
9. Press the softkey beneath next to advance to the INSERTED DIGITS screen for this Alternate Route selection. If it is necessary to insert digits before sending the dialed digits when calls are routed to this alternate, enter the actual digits required here.
10. Press the softkey beneath chg and enter the required digits. (Up to 16 digits may be inserted.)
11. Press the softkey beneath save.
12. Press the softkey beneath next. The display shows ALTER. CO GP:_ The next Alternate Route may now be programmed for this CO Line Group (if required).
13. Enter the Alternate Route to program (1 for first alternate, or 2 for second alternate) for this CO Line Group, press the softkey beneath show and continue programming as per the first alternate programming.
14. Press the Volume button to return to the MBC Screen.

NOTE: *"1" indicates that ONE digit - starting with the first digit should be deleted. If "2" were entered into this data item, the first two digits, of those the user dialed, would be deleted/removed.*

NOTE: *Note that the "Delete Digit" function is performed first - that is, after the first x number of digits are deleted as specified in Delete Digits, the "Inserted Digits" function is applied. For Example: If the digit "1" needed to be deleted, and then the 1+ area code be added "1913". The Delete Digit would be set to 1, and the insert digits would be set to 1913. The result is; the user dials 1+555-1212, and the dial string is modified to 1-913-555-1212.*

FAX Tone Detection

MBC Code: 07-02-01

Feature Code: N/A

Description

The system comes equipped with FAX Tone Detection on the third (3rd) port of each 3 port CO Line module. That is, CO Line ports 3, 6, 9, 12, 15 and 18 have the circuitry required to detect a standard "CNG" FAX tone. When FAX detect is enabled the characteristics of the CO Line change, because the system actually answers the telephone line, and monitors for the CNG tone, which is receive from a facsimile transmission. If CNG tone is detected the call is automatically connected to the specified (programmed) facsimile extension. If no CNG tone is detected, then the system simulates ring back tone to the caller, and follows the assigned ring assignment.

Default Settings:

Fax Destination set to "None" for CO Line directory numbers 702, 705, 708, 711, 715 and 719. Valid extensions are analog extension ports.

TABLE 6.7.1 CO Lines with FAX detection Circuits

Card	CO Line Number
1	702
2	705
3	708
4	711
5	715
6	719

Digital Telephone Programming

1. Access the Digital Telephone Programming Features as described in Section 6.0.
2. Enter 07-02-01, then press the softkey beneath save. This advances to the first FAX DETECTION programming screen.
3. Press the softkey beneath chg and enter the CO line number of the analog port that is connected to the fax machine that will answer fax calls answered on this line.
4. Press the softkey beneath save.
5. Press the softkey beneath next to program the second fax extension, or press the Volume button to return to the MBC screen or exit programming.

NOTE: *Once an analog device is defined, Fax detection is automatically active. Because the system actually answers the incoming call, CO Lines will not forward to a telephone company voice mail system.*

PBX Compatibility (Trunk Route)

MBC: 07-01

(tr=trunk group 01-08)

Description

The system may be installed as a subordinate of a host PBX. To make a call, (PBX extension numbers and CO Lines) the user accesses the PBX port via line button and dials the appropriate PBX code. The PBX Code determines what a user dials on this CO Line "type" to gain access to outside dial tone provided from the host PBX.

The Hunting Method determines the order that the trunks in a trunk route will be selected for outgoing calls. Typically this order will be from the last line to the first line.

- SEQL (Sequential - Last line first)
- SEQF (Sequential - First Line first)
- RAN (Random order selection)

Default Settings:

PBX Code (07-01-tr-01) = 9. (Range is any number up to four digits.)

Search Order (07-01-tr-02) = SEQL. (Range is SEQF/SEQL/RAN.)

Alternate Route (07-01-tr-03) = Null

DIR # Swap (07-01-tr-04) = Null (See "CO Line Group Directory Number Swapping" Page 303)

(tr=trunk group 01~08)

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.

Define Trunk Route

2. Enter 07-01- then press the softkey beneath save to advance to the TRUNK ROUTE programming screen. Press show and enter the route number to be modified, and then press show.
3. Enter chg to change the PBX CODE and then press the softkey beneath save.
4. Press the softkey beneath the next to advance to HUNTING METHOD or press the Volume button to return to the MBC Screen.

Hunt Method (Search order) for the selected CO Line Group:

2. Enter 07-01-tr-02, to then press the softkey beneath save. This advances to the Hunting method programming screen for the CO Line Group selected (1-8).

3. Press the softkey beneath chg until the appropriate order displays (SEQL = Sequential Last, SEQF = Sequential First, RAN = Random access).
4. Press the Volume button to return to the MBC Screen or exit programming.

Alternate Route Group:

2. Enter 07-01-tr-03, to then press the softkey beneath save. This advances to the ALTER. ROUTE programming screen for the secondary route group.
3. Press the softkey beneath show and then press chg and enter the route to be used if all CO Line is the original route is busy.
4. Press the Volume button to return to the MBC Screen or exit programming.

CO Line Group Directory Number Swapping

MBC: 07-01-0(tr)-04

(tr=Trunk Route)

Description

CO Line Group Number Directory Swapping is provided to further customize directory numbers to specific system resources. In this case, the Directory Numbers assigned to CO Line Groups, can be adjusted (if required) to meet the individual needs for a application.

For Example, the Directory Number for CO Line Group 1 at default is 9, and the Directory Number for CO Line Group 2 at default is 800. These two Directory Numbers can be swapped using the Directory Number Swapping utility if the operation is to access CO Line Group 2 using the directory number 9.

Default Settings:

CO Line Group 1 = 9

CO Line Groups 2 - 8 are 800 - 806

Digital Telephone Programming

1. Access the MBC Screen using the procedures in Section 6.0.

Enter CO Line Group Directory Swapping:

2. Enter 07-01-0(g)-04 (g=line group 1-8) and press the softkey beneath save. The current directory number assigned to this CO LINE GROUP displays.
3. Press the softkey beneath show to swap this directory number with another CO Line group directory number. (9, 800-806).
4. Enter the directory number that is to be used to access this CO Line Group.

NOTE: The selected number must be assigned to this system resource in Numbering Plan.

5. Press the softkey beneath save to store the data.
6. Press the Volume button to return to the MBC Screen or press the softkey beneath next to enter another CO Line Group number for which the directory number is to be swapped.
7. Continue making other programming changes or exit the programming mode.

6.8 System Application Programming

12/24 Hour Mode Selection

MBC: 08-03

Description

The Digital Telephone can display either 12 or 24 hour time format.

NOTE: *No "AM" or "PM" is displayed in 24-hour mode.*

Default Settings:

The default setting is 12 hour mode.

Digital Telephone Programming

1. Access the Programming Features as described in Section 6.0.
2. Enter 08-03, then press the softkey beneath save. This advances to HOUR MODE programming screen.
3. Press the softkey beneath chg until the appropriate hour format displays.
4. Press the Volume button to return to the MBC Screen or exit programming.

Automatic Log Off Parameter

MBC: Automatic Log Off 08-04

MBC: Log On Again 08-05

MBC: Modem Directory Number 04-15

Description

The Automatic Log Off time determines how long the RMP software will remain "On-Line" (connected) before shutting down the connection between the PC and the KSU. This ensures that the software application is properly disconnected from the KSU each time it is used.

The Log On Again parameter determines how long the system will wait before accepting a valid password, after an incorrect password has been entered three times.

NOTE: *Only one device can be in the Database Administration Programming area at one time. If a second device tries to enter, an error tone is played and "DB Setup Failure" is displayed.*

Default Settings:

RMP Connection – Auto Log Off = 20 minutes. (Range is 10/20…60.)

RMP Connection – Log On Again = 30 minutes. (Range is 0/10…60.)

Digital Telephone Programming

1. Access the MBC Screen.

Program Auto Log-Off and/or Log-On Again timers:

2. Enter 08-04, then press the softkey beneath save. This advances to the AUTO LOG-OFF programming screen.
3. Press the softkey beneath chg to change the AUTO LOG-OFF timer until the desired time displays. This ensures that the connection from the programming PC and the KSU is properly disconnected. AUTO LOG-OFF will perform this function automatically. Available selections are 10, 20,...60.
4. Enter 08-05, then press the softkey beneath save or Press the softkey beneath next to advance to the LOG-ON AGAIN screen.
5. Press the softkey beneath chg to change the LOG-ON AGAIN timer until the desired time displays. This security data item, prohibits access to database administration (programming) when there have been three unsuccessful attempts to enter correct database password. When the wrong password is entered three times, this is the amount of time, in minutes, that must lapse before the system will grant access into the Database Programming area. An entry of 0 disables this function. Available selections are 0, 10, 20,...60.

Program settings for the built-in (optional) modem:

2. Enter 04-15, then press the softkey beneath save. This advances to the BUILT_IN MODEM programming screen.
3. Press the softkey beneath show. This advances to the DIRECTORY # screen. To change to the built-in modem directory number, press the softkey beneath chg.
4. Enter the desired unique directory number; valid numbers are 100~199.
5. Press the softkey beneath next to advance to the modem BAUD RATE screen.
6. Press the softkey beneath chg until the appropriate baud rate displays. Selections are 1200 and 2400.
7. Press the Volume button to return to the MBC Screen or exit programming.

Copy - Extension Programming

MBC: 08-12-cp

(cp=copy parameter, 01=individual, 02=group)

Description

Extension Programming Copy is used to copy programmed parameters from one extension to others. Create a "Template" extension and copy it to individual extensions or to a group of extensions.

- ***Individual*** - Copy the parameters from the Template extension to another extension.
- ***Group*** - Copy the parameters from the Template extension to a group of extensions, using the Pick Up Group to identify the extensions.

Default Settings:

N/A

Digital Telephone Programming

1. Access the Programming Features as described in Section 6.0.

Individual Copy Mode:

2. Enter 08-12-01 and then press the softkey beneath save. This advances to the INDIVIDUAL COPY programming screen.
3. Press the softkey beneath show. This advances to the COPY FROM screen.
4. Enter the "Template" extension directory number and press the softkey beneath save. This advances to the COPY TO screen.

5. Enter an extension directory number where this data is to be copied, then press the softkey beneath save. The COPY TO screen returns immediately prepared for another extension to be entered. Repeat the process for all extensions to be copied with this data.

6. Press the Volume button to return to the MBC Screen or exit programming.

Group Copy Mode:

2. Enter 08-12-02 and then press the softkey beneath save. This advances to the GROUP COPY programming screen.

3. Press the softkey beneath show. This advances to the COPY FROM screen.

4. Enter the "Template" extension directory number and press the softkey beneath save. This advances to the COPY TO screen.

5. Enter a Pickup Group directory number associated to the extensions where this data is to be copied, then press save. The COPY TO screen returns immediately prepared for another Pick Up Group to be entered. Repeat the process for all extension Pickup Groups to be copied with this data.

6. Press the Volume button to return to the MBC Screen or exit programming.

Copy - CO Line

MBC: 08-11-cp

(cp=copy parameters, 01=individual, 02=group)

Description

To assist in the programming process, the CO Line copy feature allows the installer to create a "Template" CO Line, and then copy the parameters to all or some of the remaining CO Lines.

Default Settings:

N/A

Digital Telephone Programming

1. Access the Programming Features as described in Section 6.0.

Copy CO Line(s) Individually (One At A Time):

2. Enter 08-11-01 and press the softkey beneath save. This advances to the TRUNK COPY programming screen.

3. Press the softkey beneath show. The system prompts for the CO Line that should be copied COPY FROM.

4. Enter the CO Line directory number of the "Template" CO Line and press the softkey beneath save. The system prompts for the first CO Line directory number where the source data is to be copied COPY TO.

5. Enter the CO Line directory number (700-719, 744-747) where the copy data should be stored and press the softkey beneath save. The system prompts for the next directory number where the source data is to be copied COPY TO.

6. Continue entering CO Line directory numbers for those CO Lines where the copy data should be stored and press the softkey beneath save for each entered directory number.

7. When finished programming CO Lines via the Individual Copy function, press the Volume button to return to the MBC Screen.

Copy multiple CO Line(s) via Group:

2. Enter 08-11-02 and press the softkey beneath save. This advances to the GROUP COPY programming screen.

3. Press the softkey beneath show. The system prompts for the CO Line that should be copied COPY FROM.

4. Enter the CO Line directory number of the "Template" CO Line and press the softkey beneath save. The system prompts for the CO Line Group directory number where the source data is to be copied COPY TO.

5. Enter the CO Line Group directory number (9, 800-806) where the copy data should be stored and press the softkey beneath save. The copy data is stored in all CO Lines that are part of that CO Line Group. At this time the system prompts for the next CO Line Group directory number where the source data is to be copied COPY TO.

6. Continue entering CO Line Group directory numbers where the copy data should be stored and press the softkey beneath save for each entered directory number.

7. When finished programming CO Lines via the Group Copy function, press the Volume button to return to the MBC Screen or exit programming.

DIR to Position

MBC: Directory to Position - 08-08-SN (read only)

(SN=extension 101-148, CO Lines 700-719, 744-747)

MBC: Position to Directory - 08-07-cab-crd

(cab=cabinet 1 or 2, crd=Card 01-05)

Description:

The Directory to Position (08-08) is a visual confirmation of where an extension is located in the system. The location is written in cabinet, card and slot, format. For example, by default extension 101 is located at 1-01-01 or Cabinet 1, Card 1, Slot 1.

The Position to Directory (08-07) is used to locate and swap with other extensions in the system. Enter the Cabinet and Card's numerical value, such as 1 for cabinet, and 1 for card, to find which extension number is currently (in software) located at that location. At default this is the location for extension 101. This is a quick and easy way to relocate (swap) extension numbers.

Default Settings:

TABLE 6.8.1 Default Extension Locations

Cabinet	Cards	Port	Extensions
01	01	01-8	101-108
	02	01-16	109-116, 149-156
	03	01-16	117-124, 157-164
	04	01-04	181-184
	09	01-12	189-200
02	01	01-08	125-132
	02	01-16	133-140, 165-172
	03	01-16	141-148, 173-180
	04	01-04	285-588

TABLE 6.8.2 Default Central Office Locations

Cabinet	Cards	Port	Extensions
01	05	01-04	Default Server 700-702
	05	05-08	3 CO expansion 703-705
	06	01-04	Not used 748-751
	07	01-04	VoIP 744-747
	08	01-23	(US) T1/PRI 712-734
	08	01-08	8 Port CO 712-719
	08	01-32	(ROW) E1/PRI 712-743
02	05	01-04	Default Server 706-708
	05	01-04	3 CO expansion 709-711
	06	01-04	Not used 752-755

Digital Telephone Programming

1. Access the Programming Features as described in Section 6.0.

Directory to Position:

2. Enter 08-08-SN (SN=extension 101-188 or Trunks 700 - 747) and press the softkey beneath save. This advances to the POSITION TO DIR programming screen.
3. Press the softkey beneath show. At the SHOW CABINET enter the Cabinet number 01 or 02. Press the softkey beneath show.

4. At the SHOW BOARD enter the Board number 01 - 04 or 05 depending on the Cabinet selected. Press the softkey beneath show. Press next to Scroll through the to view the location of any extension on that card.

5. When finished programming press the Volume button to return to the MBC Screen.

Position to Directory:

2. Enter 08-07-cab-crd (cab=cabinet 01 or 02, crd=Card/Board 01 - 04 or 05 depending on the Cabinet selected) and press the softkey beneath save. This advances to the DIR TO POSITION programming screen.

3. Press the softkey beneath show to see the extension that is located at that location. Press chg and enter a new extension number. The entered extension number swaps locations with the original extension number. For example, at 1-01-01 is 101 and 1-01-02 is 102; If 102 is relocated to 1-01-01, then 101 will be relocated at 1-01-02 is entered and 102.

4. When finished programming press the Volume button to return to the MBC Screen or exit programming.

Letter Type

MBC: 08-02

Description:

The Letter type is used to accommodate special character requirement, for the Name in Display, CO Line Name or Special Messaging features. While inputting characters, using the dial pad, the number 1 becomes the "Special Character" input device.

Default Settings:

The Letter Type is set to 0.

Digital Telephone Programming

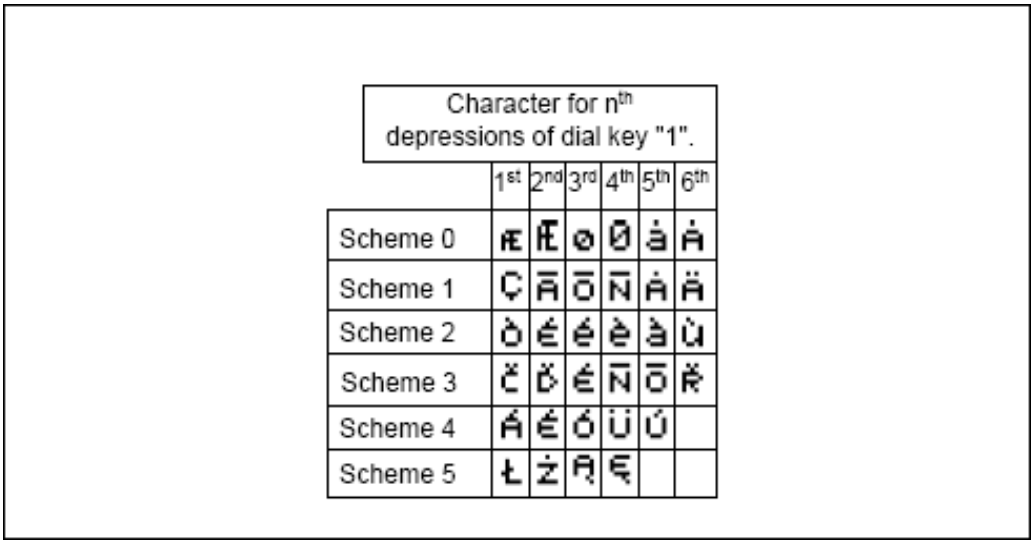
1. Access the Programming Features as described in Section 6.0.

2. Enter 08-02, then press the softkey beneath save. This advances to LETTER TYPE programming screen.

3. Press the softkey beneath chg until the appropriate letter type format appears. Only one letter type is available per system.

4. Press the Volume button to return to the MBC Screen or exit programming.

Special Character input matrix



	Character for nth depressions of dial key "1".					
	1st	2nd	3rd	4th	5th	6th
Scheme 0	Æ	Æ	ø	Ø	à	À
Scheme 1	Ç	Ā	Ō	Ñ	Á	Ä
Scheme 2	ò	é	é	è	à	ù
Scheme 3	č	ď	é	ň	ō	ř
Scheme 4	Á	É	Ó	Ü	Ú	
Scheme 5	Ł	Ż	Ą	Ę		

Numbering Plan

MBC: 08-09

Description

The Numbering Plan refers to the structure of dialed access to the various resources that are part of the system. A primary example is the extension numbers of the system. When one extension calls another, the numbering plan is the mechanism that facilitates this call.

The system's numbering plan can be changed to accommodate customer's needs and special installations. To ensure that there are no conflicts, two features with the same number, the numbering plan is changed in a "Swap" fashion.

The system supports a range of numbering plans, which includes 2, 3 or 4 digits in length. Using a 2 digit numbering plan will limit the number of extensions, and features that are available. At default the system has a three digit numbering plan, which means to activate most of the features a three digit code is required. The only exceptions are, 0 for the operator, 9 for line group 1 and 82 for account code.

The table below shows the feature, the number of digits required to activate the feature, and the leading digit in the dial string. For example, The UCD Groups require three digits, and the pilot numbers begin with 430, 440 and 450. Conference Rooms also require three digits, starting at 890.

When modifying the numbering plan, select an open numbering sequence, and swap it with the current numbering scheme. For example, to change Extensions from 1xx to 3xx, go to the Extension Numbering Plan and change the leading digit from 1 to 3.

The Leading (Leading Digit) column shows the first digit or two digits that needs to be dialed to activate a feature. The third digit in the dial sequence, unless otherwise noted, is always zero (0). For example, the Leading Digits for the UCD groups begin with 43, 44, and 45. This means that

the Feature or Dial Code, for the first of the 24 UCD groups begins with the leading digits 43+0 or 430, like wise, 44+0 or 440 and 45+0 becomes 450. similarly, Page Groups are 40+0 or 400 ~ 408.

The Digit (Digit Length) column shows how many digits are expected for a feature code to operate. For example, both the Operator (0) and Trunk Group 1 (9) codes are only one digit, so only require one dialed to be dialed, whereas Extensions and CO Lines require a 3 digit code.

NOTE: *If the Digit Length is changed, all of the Leading Digits must be reentered.*

Default Settings:

TABLE 6.8.3Numbering Plan Default Layout

Feature	MBC	Digit	Leading	Feature	MBC	Digit	Leading
Operator	08-09-14	1	0	CO Lines	08-09-08	3	7xx
Open			2xx	Music on Hold	08-09-09	3	421
Page Group	08-09-03	3	40x	Loud Bell	08-09-10	3	429
UCD Groups	08-09-04	3	43x	External Page	08-09-11	3	460
UCD Group	08-09-04	3	44x	Virtual Numbers	08-09-12	3	85x
UCD Group	08-09-04	3	45x	Virtual Numbers	08-09-12	3	86x
Pick Up Group	08-09-05	3	46x	Virtual Numbers	08-09-12	3	87x
Open		3	3xx	Conference Room	08-09-13	3	89
Extensions	08-09-02	3	1xx	Account Code	08-09-15	2	82
Speed Bins (SN)	08-09-06	3	5xx	CO Line Group 2-8	08-09-01	3	80x
Speed Bins (System)	08-09-07	3	6xx	Trunk Route 1	08-09-01	1	9

Digital Telephone Programming

1. Access the Programming Features as described in Section 6.0.
2. Using the table above, enter the appropriate MBC and then press the softkey beneath save to advance to the parameter to be programmed.
3. Press the softkey beneath show to enter into parameter's directory Numbering Plan.

Or…

4. Press the softkey beneath next to advance to the next Numbering Plan item.
5. When the Numbering Plan program to change displays, press the softkey beneath show.
6. The first parameter is LENGTH. If this is to be changed press the softkey beneath chg until the appropriate length for this code displays.
7. Press the softkey beneath next until the LEADING digit to be programmed displays.
8. Press the softkey beneath chg to allow an entry into this item.

9. Enter the LEADING digit(s) to be assigned to this system resource and press the softkey beneath save.
10. Press the softkey beneath next to advance to the next Leading Digit to program or until the next Numbering Plan item to be changed displays.
11. Repeat the steps 6-10 above for all Numbering Plan items to be changed.
12. Press the Volume button to return to the MBC Screen or exit programming.

Ring Scheme

MBC: 08-01

Description

Ring Scheme is provided to denote ringing patterns specific to system resources. Ringing at an extension for intercom calls is different than ringing for CO Line calls. This difference is referred to as Ring Scheme.

There are 10 choices of ring schemes that can be selected.

Default Settings:

Ring Scheme = 3. (Range is 0-9.)

Digital Telephone Programming

1. Access the Programming Features as described in Section 6.0.
2. Enter 08-01 to program Ring Scheme and press the softkey beneath save. This advances to the RING SCHEME programming screen.
3. Press the softkey beneath chg until the appropriate value displays.

The following table describes the ten different ring schemes:

Scheme		Ring Signal						Ring Signal				
	CO Lines	On	Off	On	Between	Description	Extension	On	Off	On	Between	Description
0		.33	.33	.33	5	Double Burst Repeated every 6 seconds		1.2			4.8	One 1.5 Second Ring Repeated every 6 Seconds
1		.33	.33	.33	5	Double Burst Repeated every 6 Seconds		1.2			5.8	One 1.5 Second Ring Repeated every 7 Seconds
2		1.8			3.8	One 2 Second Ring Repeated every 6 Seconds		.33	.33	.33	5	Double Burst Repeated every 6 Seconds
3		2			2	1 long Burst Repeated every 6 Seconds		.5	.5.	.5	3.5	Double Burst Repeated every 5 Seconds
4		2			4	One 2 Second Ring Repeated every 6 Seconds		2			2	1 Long Burst Repeated every 4 Seconds
5		1.2			4.8	One 1.5 Second Ring Repeated every 6 Seconds		1			1	1 Long Burst Repeated every 2 Seconds
6		2			4	One 2 Second Ring Repeated every 6 Seconds		1.5	.5	.5	4	1 Second ring followed by .5 Second burst repeated
7		.5	.5	.5	4	Double burst Repeated every 5 Seconds		2			4	One 2 second ring Repeated every 6 Seconds
8		2			4	One 2 Second Ring Repeated every 6 Seconds		2			4	One 2 Second ring Repeated every 6 Seconds
9		1			4	One Ring Repeated every 5 Seconds		.33	.33	.33	5	Double Burst Repeated every 6 Seconds

4. Press the Volume button to return to the MBC Screen or exit programming.

Time (Service Mode) Switching

MBC: 08-15

Description

The system can be programmed to follow a seven day twenty-four hour time schedule, for each Tenant Group, that will automatically switch the system between Day and Night modes. This affects incoming CO line Day and night ringing and extension and CO Line Classes of Service. The system must be in "Time Mode" for Automatic switching between day and night modes. The Attendant or Alternate Attendant can place the system in to Time Mode and when needed, they can manually change the service modes. (See "Attendant Administration" Page 46)

Default Settings:

The system is set to Day Mode Operation.

The Service Mode Switching is set to operate (when the KSU is in "Time" mode) in Day Mode from 8am to 5pm, Monday through Friday; Alternate (Noon) Mode (only used with the 4VAA Card) from 12noon to 1pm, Monday through Friday; and Night (evening) Mode at all other times.

Digital Telephone Programming

1. Access the Programming Features as described in Section 6.0.
2. Enter 08-15-(t)- ((t)=tenant group), then press the softkey beneath save. This advances to TIME SWITCHING programming screen.
3. Enter the appropriate tenant group, 1, 2 or 3 for this service mode schedule to follow, and then press the softkey beneath save. The first day of the week (SUNDAY) displays.
4. If changes are necessary for this day press the softkey beneath show; otherwise, press the softkey beneath next until the day of the week for which changes must be made displays. Then press the softkey beneath show.
5. The first time period for which the Service Mode may switch displays for the day selected; ALT START(Alternate Start Time which is only used with the 4VAA card).
6. Press the softkey beneath chg to change this data.

Or…

7. Press the softkey beneath next to select the Service Mode for which a time schedule must be entered. (The data items that can be changed are ALT START, ALT END, EVE START, EVE END.)
8. When the Service Mode to be changed displays press the softkey beneath chg and enter the new value in 24-hour format (e.g., 1:00 PM is entered as 13:00). Press the softkey beneath save to store this data.

Or…

9. Enter 08-15-1-02-01 to program ALT START.
10. Enter 08-15-1-02-02 to program ALT END.
11. Enter 08-15-1-02-03 to program EVE START.
12. Enter 08-15-1-02-04 to program EVE END.
13. Press the Volume button to return to the MBC Screen or exit programming.

Suffix Code

MBC:08-10

Description

Suffix codes are feature codes that are dialed after an intercom call has been established. For example, an extension can be "Forced" into ringing mode by pressing the "*" key, after the called extension answers in "Hands Free Mode".

Default Settings:

TABLE 6.8.4 Default Suffix Codes

Suffix Code	Feature
EXT + 0	Open
EXT + 1	Monitor
EXT + 2	Open
EXT + 3	Do Not Disturb
EXT + 4	Camp On
EXT + 5	Open
EXT + 6	Call Pick up
EXT + 7	Open
EXT + 8	Intrusion
EXT + 9	MSG Waiting
EXT + *	Forced Tone Ring
EXT + #	Call Back

Digital Telephone Programming

1. Access the Programming Features as described in Section 6.0.
2. Enter 08-10, then press the softkey beneath save. This advances to SUFFIX CODE programming screen.
3. To make changes to the Suffix Code parameters press the softkey beneath show.
4. Press the softkey beneath next to scroll through the suffix parameters.
5. When the desired Suffix parameter is reached, press the softkey beneath chg. Enter the new Suffix code, if the Suffix code is already assigned, it will "Swap" the new code for the old code. For example, By changing the DND Override Suffix code from 3 to *, the Forced Tone Ring Suffix Code will automatically become 3.
6. Press the Volume button to return to the MBC Screen or exit programming.

Test Time

MBC: 08-06

Description:

Enter the time of day, in 24 hour format, that the system should run a self test. This test information stored until the next test or until it is downloaded using the RMP software application.

Default Settings:

The Test Time is set to NULL.

Digital Telephone Programming

1. Access the Programming Features as described in Section 6.0.
2. Enter 08-06, then press the softkey beneath save. This advances to TEST TIME programming screen.
3. Press the softkey beneath chg and enter the time, in 24 hour format, that the system should run a self test.
4. Press the Volume button to return to the MBC Screen or exit programming.

System Time and Date

MBC: 08-14-tm

(tm=01-year, 02-month, 03-day, 04-weekday, 05-hour, 06-minute)

Description

The system has a built-in time clock that is used to track System Time for reference in certain features such as Day and Night Mode, SMDR, Alarm Clock as well as displaying the Time and Date at all Digital Telephones.

System Time and Date must be set in the database for proper display at the Digital Telephones and all other time-sensitive feature operations.

Default Settings:

Hour Mode set at 12 (Range is 12/24) (08-03)

System Time – Year 07 (Range is 0-99) (08-14-01)

System Time – Month JAN (Range is JAN-DEC) (08-14-02)

System Time – Day 1 (Range is 1-31) (08-14-03)

System Time – Weekday FRI (Range is SUN-SAT) (08-14-04)

System Time – Hour 00 (Range is 0-23) (08-14-05)

System Time – Minute 00 (Range is 0-59) (08-14-06)

Digital Telephone Programming

1. Access the programming features as described in Section 6.0.
2. Enter 08-03, then press the softkey beneath save. This advances to the HOUR MODE programming screen.
3. Press the softkey beneath chg to change to select 12/24 Hour Mode.
4. Press the Volume button to return to the MBC Screen.
5. Enter 08-14-, then press the softkey beneath save. This advances to the SYSTEM TIME programming screen.
6. Press the softkey beneath show. The YEAR database item displays.
7. Press the softkey beneath chg to change the year for the system clock.

Or…

8. Press the softkey beneath next to advance to the next system clock item that requires changes. The next system clocks will be MONTH, DAY, WEEKDAY, HOUR, and MINUTE.
9. Press the softkey beneath chg and enter data for each system clock described in step 7, as required.
10. Press the Volume button to return to the MBC Screen or exit programming.

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