

GE Mobile Communications



C3™ Series Console Conventional

Operator's Manual

- SAVE THIS MANUAL It contains important safety and operating instructions for the C3 Series Console.
- Do not use auxiliary equipment not recommended or sold by the manufacturer. To do so may result in a risk of fire, electric shock, or injury to persons.
- To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting.
- Make sure the cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in risk of a fire and electric shock. If extension cord must be used make sure:
 - a. That pins of plug of extension cord are the same number, size, and shape as those on the unit.
 - That extension cord is properly wired and in good condition; and
 - c. That wire is large enough for the AC ampere rating of unit as specified in **Table 1**.

TABLE 1 RECOMMENDED MINIMUM SIZE FOR EXTENSION CORDS

Length of Cord (ft)	25	50	100	150
AWG Size of Cord	18	18	18	16

- Do not operate unit with damaged cord or plug replace them immediately.
- Do not operate unit if it has received a sharp blow or otherwise damaged in any way; call a qualified service shop.
- Do not dissemble unit; contact a qualified service shop when service or repair is required. Incorrect reassembly may result in a risk of electrical shock or fire.
- To reduce risk of electric shock, unplug unit from outlet before attempting any maintenance or cleaning.

- 10. GROUNDING AND AC POWER CORD CONNEC-TION — To reduce risk of electrical shock use only a properly grounded outlet. The unit is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. Be sure that the outlet is properly installed and grounded in accordance with all local codes and ordinances.
- DANGER Never alter AC cord or plug. If it will not fit an outlet, have a proper outlet installed by a qualified electrician. Improper connection can result in a risk of an electric shock.
- 12. This unit is for use on a 110-volt circuit, and has grounding plug that looks like the plug illustrated in Figure 1. A temporary adapter, which looks like the adapter illustrated in sketches B and C, may be used to connect this plug to a two-pole receptacle as shown in sketch B if a properly grounded outlet is not available. The temporary adaptor should be used only until a properly grounded outlet can be installed by a qualified electrician.
- 13. DANGER Before using adapter as illustrated, be certain that center screw of outlet plate is grounded. The green color rigid ear or lug extending from adapter must be connected to a properly grounded outlet make certain it is grounded. If necessary, replace original outlet cover plate screw with a longer screw that will secure adapter ear or lug to outlet cover plate and make ground connection to grounded outlet.

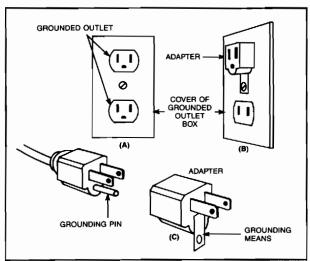


FIGURE 1. GROUNDING METHODS

SECTION/PARAGRAPH	PAGE	SECTION/PARAGRAPH	PAGE
IMPORTANT SAFETY INSTRUCTIONS.	I	HEADSET	2-10
TABLE OF CONTENTS		FOOT SWITCH	2-10
LIST OF FIGURES AND TABLES	. III	SECTION 3 — OPERATION, OPI INITIATED ACTION	
C3 SERIES CONSOLES		051 5051110 4 1405111 5	
OPERATOR'S MANUAL HISTORY		SELECTING A MODULE	3-2
AND CHANGE INSTRUCTIONS	. IV	ACCESSORY OPERATION	
SECTION 1 — INTRODUCTION	1-1	HEADSET OPERATION	
SECTION 2 — CONTROLS, INDICATO	RS.	RECEIVE	2.0
AND DISPLAYS	2-1	VOLUME ADJUSTMENT	
GENERAL		TRANSMITTING ON THE CONSOLE	3-3
CONTROL MODULES	2-2	TRANSMITTING TO A	
DEDICATED SWITCHES	2.6	SELECTED CHANNEL	3-3
FREQUENCY		TRANSMITTING TO AN UNSELECTED CHANNEL	
REPEAT DISABLE SWITCH		UNSELECTED CHANNEL	3-4
REMOTE DISABLE SWITCH		SIMUL-SELECT OPERATION	
TIEMOTE DIOTEE OVVITORY	2 0		
SWITCH MODULE	2-6	MAKING A SIMUL-SELECT TRANSM (NON-MEMORY)	
PA		STORING, RECALLING, AND CLEA	
SITE SWITCH		SIMUL-SELECTS FROM MEMORY.	
ALL MUTE		Storing A Simul-Select	
PRIORITY	2-7	Recalling A Simul-Select	
AUX	2-7	Instant Transmit From Simul-Select	
INTERCOM	2-7	Clearing A Simul-Select Memory	
INTERCOM TX	2-7	Gloding / Camar Golder Montory : 1	
SIM-SEL		TELEPHONE OPERATION	3-7
SIM-SEL #		ANSWERING AN INCOMING CALL.	3-8
SIM-SEL # TX		PLACING AN OUTGOING TELEPHO	NE CALL 3-9
PATCH		PLACING A TELEPHONE CALL ON H	IOLD 3-9
PATCH #			
PATCH #TX		PATCHING A TELEPHONE CALL	3-9
ALERT		PATCHING A TELEPHONE CALL	
CONSOLE DISABLE		(NON-MEMORY PATCH)	3-9
CONSOLE ENABLE		PATCHING A TELEPHONE CALL	
CONSOLE # KEY		(EXISTING MEMORY PATCH)	3 -9
		PATCH OPERATION	3.10
KEYPAD MODULE	2-9	MAKING A PATCH (NON-MEMORY)	
CLOCK		STORING, RECALLING, AND CLEAN	
VU METER		PATCHES FROM MEMORY	
INDICATORS		Storing A Patch	
TELEPHONE KEYPAD		Recalling A Patch	
Function Keys	2-10	Clearing A Patch Memory	
SPEAKER MODULES	2-10	con	tinued —

02011011,17	ARAGRAPH	PAGE	SECTION/P	ARAGRAPH	PAGE
USING THE	INTERCOM	3-12	SUPERVISO	RY FUNCTIONS	3-16
INTERCO	M DIRECT DIAL	3-12		g A Console In The System	
	An Intercom Call			g A Console In The System	
	ng An Intercom Call			Override	
	An Intercom Call On Hold		,		
	IE HOTLINE INTERCOM		CHANGING	THE DISPLAY ON A	
	An Intercom Call		RADIO CON	TROL MODULE	3-17
J				IE CHANNEL LIST	
AUXILIARY	FUNCTIONS	3-13	USING CH	IANNEL NUMBER	3-18
	NTROL MODULE FUNCTIONS				
	Audio		SETTING TH	IE CLOCK	3-18
	The Unselect Speaker				
	An Alert Tone		SECTION	4 — OPERATOR EVENT	
_	ne Public Address (PA) System		SECTION	RESPONSES	
	g The Chime			NESPONSES	 -1
	uxiliary Function Keys		ANGWEDING	G A TELEPHONE CALL	4-2
	PLAY RADIO CONTROL		ANSWERIN	A A I LLLPHONL CALL	· · · · · · · · · · · · · · · · · · ·
	FUNCTIONS		ANSWERING	G A DIAL UP INTERCOM CALI	L 4-2
	g The Transmit/Receive Frequenc				
	g Remote Controllers		ANSWERING	G THE HOTLINE INTERCOM .	4-3
	g Channel Guard				
Repeate	r Disable	3-15	SECTION !	5 — OPERATING PROBL	<i>EMS</i> 5-1
			INDICATO	R TEST	5-1
			VEV TEST	•	E 1
			KEY TEST	•	5-1
			KEY TEST	·	5-1
			KEY TEST	•	5-1
LIST O	F FIGURES AND TA	ABLES	KEY TEST	·	5-1
LIST O		ABLES PAGE	KEY TEST		PAGE
FIGURE/TAE		PAGE	FIGURE/TAI	BLE MODULES USED DURING	PAGE
FIGURE/TAE	BLE GROUNDING METHODS	PAGE	FIGURE/TAI	BLE MODULES USED DURING TELEPHONE OPERATION .	PAGE
FIGURE/TAE	GROUNDING METHODS SEVEN-BAY, TWO-POSITION	PAGE	FIGURE/TAI	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING	PAGE
FIGURE/TAE	BLE GROUNDING METHODS	PAGE	FIGURE/TAI FIGURE 3-4 FIGURE 3-5	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION	PAGE
FIGURE/TAE	GROUNDING METHODS SEVEN-BAY, TWO-POSITION	PAGE	FIGURE/TAI	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN	PAGE 3-7 3-10
FIGURE/TAE FIGURE 1 FIGURE 1-1	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE I	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-6	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN OPERATING THE INTERCO	PAGE 3-7 3-10
FIGURE/TAE FIGURE 1-1 FIGURE 2-1	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE 1 1-1	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-6	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN OPERATING THE INTERCO MODULES USED IN	PAGE3-73-10 M3-12
FIGURE/TAE FIGURE 1-1 FIGURE 2-1 FIGURE 2-2	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE 1-1 2-3 2-4	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-6	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN OPERATING THE INTERCO	PAGE3-73-10 M3-12
FIGURE/TAE FIGURE 1-1 FIGURE 2-1 FIGURE 2-2 FIGURE 2-3	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE 1-1 2-3 2-4 2-6	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-6 FIGURE 3-7	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN OPERATING THE INTERCO MODULES USED IN CHANGING A CHANNEL	PAGE3-73-10 M3-12
FIGURE/TAE FIGURE 1-1 FIGURE 2-1 FIGURE 2-2 FIGURE 2-3 FIGURE 2-4	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE 1-1 2-3 2-4 2-6 2-9	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-6 FIGURE 3-7	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN OPERATING THE INTERCO MODULES USED IN CHANGING A CHANNEL RECOMMENDED MINIMUN	PAGE3-73-10 M3-12
FIGURE/TAE FIGURE 1-1 FIGURE 2-1 FIGURE 2-2 FIGURE 2-3	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE 1-1 2-3 2-4 2-6 2-9	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-6 FIGURE 3-7	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN OPERATING THE INTERCO MODULES USED IN CHANGING A CHANNEL RECOMMENDED MINIMUN SIZE FOR EXTENDED COR	PAGE3-73-10 M3-123-17
FIGURE/TAE FIGURE 1-1 FIGURE 2-1 FIGURE 2-2 FIGURE 2-3 FIGURE 2-4 FIGURE 2-5	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE 1-1 2-3 2-4 2-6 2-9	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-7 TABLE 1	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION . MODULES USED IN OPERATING THE INTERCO MODULES USED IN CHANGING A CHANNEL RECOMMENDED MINIMUM SIZE FOR EXTENDED COR CONSOLE CONTROLS	PAGE3-73-10 M3-123-17
FIGURE/TAE FIGURE 1-1 FIGURE 2-1 FIGURE 2-2 FIGURE 2-3 FIGURE 2-4 FIGURE 2-5	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE 1-1 2-3 2-4 2-6 2-9 S 2-10	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-7 TABLE 1	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN OPERATING THE INTERCO MODULES USED IN CHANGING A CHANNEL RECOMMENDED MINIMUN SIZE FOR EXTENDED COR CONSOLE CONTROLS MODULE CONTROLS,	PAGE3-73-10 M3-123-17 M DS1
FIGURE/TAE FIGURE 1-1 FIGURE 2-1 FIGURE 2-2 FIGURE 2-3 FIGURE 2-4 FIGURE 2-5 FIGURE 3-1	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE 1-1 2-3 2-4 2-6 2-9 S 2-10	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-7 TABLE 1	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION . MODULES USED IN OPERATING THE INTERCO MODULES USED IN CHANGING A CHANNEL RECOMMENDED MINIMUM SIZE FOR EXTENDED COR CONSOLE CONTROLS	PAGE3-73-10 M3-123-17 M DS1
FIGURE/TAE FIGURE 1-1 FIGURE 2-1 FIGURE 2-2 FIGURE 2-3 FIGURE 2-4 FIGURE 2-5 FIGURE 3-1	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE I 1-1 2-3 2-4 2-6 2-9 S 2-10	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-7 TABLE 1 TABLE 2-1 TABLE 2-2	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN OPERATING THE INTERCO MODULES USED IN CHANGING A CHANNEL	PAGE
FIGURE/TAE FIGURE 1-1 FIGURE 2-1 FIGURE 2-2 FIGURE 2-3 FIGURE 2-4 FIGURE 2-5 FIGURE 3-1 FIGURE 3-2	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE I 1-1 2-3 2-4 2-6 2-9 S 2-10	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-7 TABLE 1 TABLE 2-1 TABLE 2-2	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN OPERATING THE INTERCO MODULES USED IN CHANGING A CHANNEL RECOMMENDED MINIMUN SIZE FOR EXTENDED COR CONSOLE CONTROLS MODULE CONTROLS,	PAGE
FIGURE/TAE FIGURE 1-1 FIGURE 2-1 FIGURE 2-2 FIGURE 2-3 FIGURE 2-4 FIGURE 2-5 FIGURE 3-1 FIGURE 3-2	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE I 1-1 2-3 2-4 2-6 2-6 2-10 3-3	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-7 TABLE 1 TABLE 2-1 TABLE 2-2	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN OPERATING THE INTERCO MODULES USED IN CHANGING A CHANNEL RECOMMENDED MINIMUM SIZE FOR EXTENDED COR CONSOLE CONTROLS MODULE CONTROLS, INDICATORS, AND DISPLAY CONSOLE OPERATIONS	PAGE
FIGURE/TAE FIGURE 1-1 FIGURE 2-1 FIGURE 2-2 FIGURE 2-3 FIGURE 2-4 FIGURE 2-5 FIGURE 3-1 FIGURE 3-2	GROUNDING METHODS SEVEN-BAY, TWO-POSITION CONSOLE	PAGE I 1-1 2-3 2-4 2-6 2-6 2-10 3-3	FIGURE/TAI FIGURE 3-4 FIGURE 3-5 FIGURE 3-7 TABLE 1 TABLE 2-1 TABLE 2-2	MODULES USED DURING TELEPHONE OPERATION . MODULES USED DURING PATCH OPERATION MODULES USED IN OPERATING THE INTERCO MODULES USED IN CHANGING A CHANNEL	PAGE

C3 SERIES CONSOLES OPERATOR'S MANUAL HISTORY AND CHANGE INSTRUCTIONS

MANUAL HISTORY

CHANGE NUMBER	CHANGE DATE	CHANGE DESCRIPTION
Original		
issue		

CHANGE INSTRUCTIONS

Add and remove pages as indicated.

CHANGE NUMBER	PAGES REMOVED	PAGES ADDED

The **GE C3™ Series Dispatch Center** console has been designed for flexibility. The console may be adapted to a variety of communication needs through additional modules and features. A multiposition console is shown in *Figure 1-1*. The console operator may:

- Initiate or monitor communications between radio units.
- Initiate patches and coordinate emergency activities.

This manual is composed of five sections. The contents of the sections are as follows:

- SECTION 1 Introduction briefly describes the GE C3 Dispatch Center Console and lists the contents of the manual.
- SECTION 2 Controls, Indicators, and Displays identifies all operator controls, indicators, and displays on the console.
- **SECTION 3** Operator-Initiated Actions explains how the operator may initiate an action (such as placing a call or setting up a patch) using the console. All operating procedures where the operator initiates (rather than reacts to) an action are covered in this section.
- **SECTION 4** Operator Event Responses explains how the operator can respond to operating events, such as an incoming radio or intercom call. Procedures in this section cover how to react, rather than how to initiate a console operation.
- **SECTION 5** Operating Problems possible operational problems with the console are covered in this section. How to identify operational problems, and references to additional information.

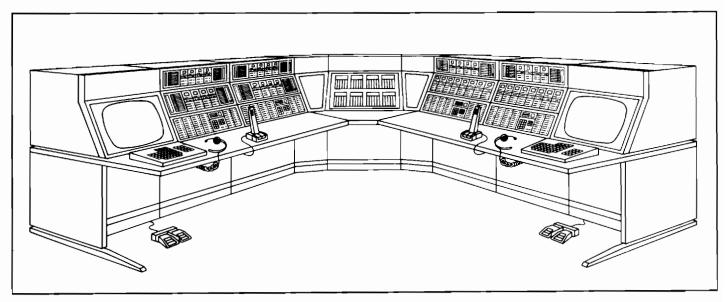


FIGURE 1-1. SEVEN-BAY, TWO-POSITION CONSOLE

GENERAL

This section provides information necessary to understand and operate the C3 Console. You should become thoroughly familiar with the keys and indicators described, and the operating instructions, before attempting to use the equipment

Table 2-1 lists the console controls, a brief description, and the page reference where additional information may be found. Use this table when you need to quickly locate information on a console control or as a quick reference guide.

TABLE 2-1. CONSOLE CONTROLS

MODULES AND PRIMARY CONTROL NAMES	PAGE NUMBER	DESCRIPTION	
MUTE	2-5	Mutes audio coming from any Channel.	
SELECT	2-5	Selects Channel for monitoring or transmit.	
VOL	2-5	Adjusts received volume associated with a specific Channel.	
TRANSMIT (Instant)	2-5	Controls transmit to Channel	
DEDICATED \$	SWITCH	ES	
FREQUENCY	2-6	Controls the transmit and receive frequencies of conventional base stations.	
REPEAT DISABLE	2-6	Enables or disables a remote repeater in a conventional system.	
REMOTE DISABLE	2-6	Disconnects or connects a remote control unit.	
SWITCH MOD	ULE		
PA	2-6	Used to transmit to a customer-supplied public address system.	
SITE	2-6	Used to change the transmit site.	
ALL MUTE	2-7	Temporarily reduces the volume level of the unselect speaker.	
PRIORITY	2-7	Allows supervisory personnel to override a channel in use by another dispatcher.	
AUX	2-7	Used to activate a customer-supplied auxiliary function.	

MODULES AND PRIMARY CONTROL NAMES	PAGE NUMBER	DESCRIPTION
INTERCOM	2-7	Used to activate the intercom function.
INTERCOM TX	2-7	Used to transmit through the intercom.
SIM-SEL	2-7	Activates the non-memory simul-select function.
SIM-SEL #	2-7	Activates a stored simul- select function.
SIM-SEL # TX	2-8	Starts transmission to an active or inactive simul-select.
PATCH	2-8	Activates the patch function.
PATCH #	2-8	Activates a stored patch function.
PATCH # TX	2-8	Starts transmission (instant transmit) to an active or inactive patch.
ALERT #	2-8	Activates alert tone to be sent before a message.
CONSOLE DISABLE	2-8	Allows supervisory personnel to disconnect another console.
CONSOLE ENABLE	2-8	Allows supervisory personnel to enable another console
CHIME	2-9	Used to reduce the volume of the chime.
CONSOLE # KEY	2-9	Activates the console hotline intercom.
KEYPAD MOD	ULE	
SCROLL	2-10	Used when changing a channel on a Radio Control module.
CLEAR	2-10	Used to clear keypad entries and simul-select and patch memories.

GENERAL continued

TABLE 2-1. CONSOLE CONTROLS continued

MODULES AND PRIMARY CONTROL NAMES	PAGE NUMBER	DESCRIPTION			
RADIO CONT	RADIO CONTROL MODULES				
TEST	2-10	Allows entering the test mode.			
PROGRAM	2-10	Initiates a channel change on a Radio Control module.			
ENTER	2-10	Enters the numbers typed through the keypad and confirms programming entries.			
TRANSMIT	2-10	A common Push-To-Talk (PTT) bar.			
SPEAKER MC	SPEAKER MODULES				
VOL	2-10	Sets the volume coming from the speaker.			

The basic modules which make up a console control panel are:

- Radio Control modules
- Switch modules
- Keypad modules
- Speaker modules

The position and combination of modules vary depending on communication needs. A typical control panel is shown in *Figure 2-1*, your console may be different. Each module serves a specific purpose:

- Radio Control modules are used to communicate with fleets, subfleets, and agencies on conventional systems.
- Switch modules are used for special features.
- The Keypad module is used for telephone, intercom, and special functions.
- Speaker modules allow you to hear radio transmissions made over the system.

CONTROL MODULES

There are two types of Radio Control modules:

- Display Radio Control modules used to display programmable identifications in communications to channels on conventional systems.
- Radio Control modules used in communications over channels in conventional systems.

The keys on the Radio Control modules are color coded as follows:

- GREEN keys for SELECT functions
- YELLOW keys for MUTE functions
- RED keys for TRANSMIT functions
- WHITE keys for optional SWITCH functions

Each Radio Control module has six switches (*Figure 2-2*). The SELECT, MUTE, and TRANSMIT switches are standard and occupy three positions. Remaining positions may be filled with optional switches. A description of the standard controls, indicators, and displays are found in *Table 2-2*.

The remainder of this section explains the various optional switches that may be added to Radio Control modules, along with additional features found on the console. Actual switches on your console depend on options selected at the time the order was placed.

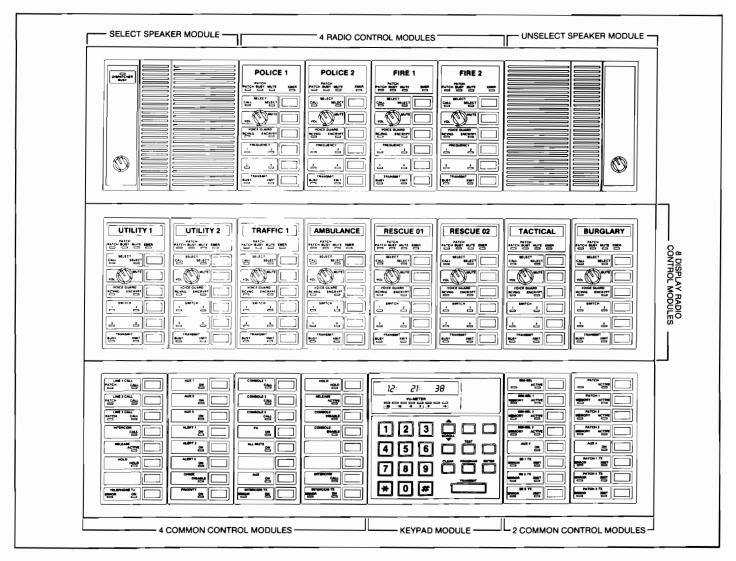
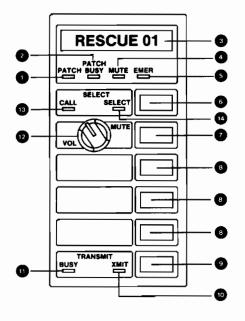


FIGURE 2-1. TYPICAL CONTROL PANEL

DISPLAY RADIO CONTROL MODULE



NON-DISPLAY RADIO CONTROL MODULE

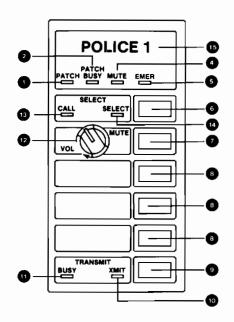


FIGURE 2-2. RADIO CONTROL MODULES

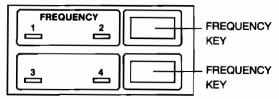
TABLE 2-2. MODULE CONTROLS, INDICATORS, AND DISPLAYS

NAME -	TV05	00:00	FIGURE 2-2		
NAME	TYPE	COLOR	REFERENCE		
Display	Alphanumeric		3	An eight-character alphanumeric display at the top of the module which shows the name of the channel. When the module is selected (SELECT key pressed) and a call is received, the display will change to the NAME of the radio whose call you are receiving.	
Label	Fixed		15	A channel label at the top of module. This label shows the name of the channel. The label is not changeable without replacement.	
PATCH	LED Indicator	Green	1	Lights when the Channel is involved in a patch.	
PATCH BUSY	LED Indicator	Yellow	2	Lights when a dispatcher at another console (multiple-console site) has involved the Channel in a patch.	
MUTE	LED Indicator	Green	4	Lights when the MUTE key has been pressed.	
MUTE	Pushbutton Key	Yellow	7	An alternate-action key on Radio Control modules used to mute audio coming from any Channel.	
EMER	LED Indicator	Red	5	Lights when the Channel is involved in an emergency activated by a mobile or portable radio.	
SELECT	LED Indicator	Green	14	Lights when the module is selected (SELECT key pressed). Received audio associated with the Channel will be heard through the Select speaker.	
CALL	LED Indicator	Red	13	Flashes or remains steady to signal an incoming call. When flashing, it signals a call from a selected Channe (SELECT key pressed) on your console. When continuon, it indicates the call is from a Channel which is selected by another console within a multiple-console site.	
SELECT	Pushbutton Key	Green	6	An alternate-action key used to select the Radio Contro module. Use SELECT to monitor and transmit to a Channel. When a module is selected, you will hear received audio associated with the module through the Select speaker. When a module is not selected, you will hear received audio associated with the module through the Unselect speaker.	
VOL	Control Knob	Black	12	Used to adjust the received volume associated with a specific Channel.	
BUSY	LED Indicator	Yellow	11	Lights when a dispatcher at another console is transmitting to the Channel.	
TRANSMIT (Instant)	Pushbutton Key	Red		Press to transmit to the Channel. The Channel does not have to be selected.	
XMIT	LED Indicator	Red	10	Lights when a transmission is being made to the Channel.	

DEDICATED SWITCHES

The optional switch positions in each Radio Control module may be filled by any of the dedicated switches listed below. Each switch has a key to operate the switch and one or two status indicators. Refer to **Section III** for operating instructions.

FREQUENCY



The FREQUENCY switch (conventional systems only) controls the transmit and receive frequencies (channels) of conventional base stations (Maximum: 4 frequencies). The # indicator (1, 2, 3, or 4) lights when the frequency is being used for transmit and receive operations. Only one Frequency indicator will be on at any time.

REPEAT DISABLE SWITCH



The REPEAT DISABLE switch enables or disables a remote repeater in a conventional system. The DISABLE indicator lights when a repeater has been disabled. When the repeater is disabled, transmissions will not be rebroadcast but they will be heard at the console.

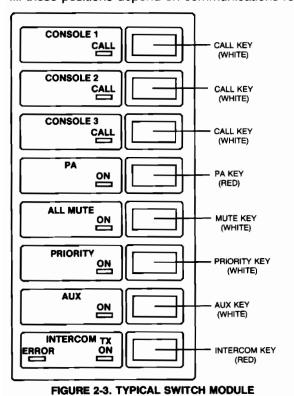
REMOTE DISABLE SWITCH



The REMOTE key (white) is used to disconnect or connect a remote control unit. The DISABLE indicator lights when a remote control unit has been disconnected.

SWITCH MODULE

The typical Switch module shown in *Figure 2-3* contains eight switch positions. Each switch has a key to enable or disable the function and one or two indicators to show the status of the switch (e.g., the PA switch has a PA key and one indicator). Switch module functions are common to the operations of the console and are not limited to a Channel. The switches that fill these positions depend on communications requirements.



PA SWITCH



PA KEY Used to transmit to a customer-supplied public address system.

ON Lights when the PA key is pressed. INDICATOR

SITE SWITCH



SITE KEY Used to change the transmit site (main site to standby site).

MAIN Lights when the main transmit site is INDICATOR being used

STANDBY Lights when the standby transmit site is being used.

SWITCH MODULE continued

ALL MUTE



ALL MUTE KEY Used to temporarily reduce the volume level of the Unselect speaker. Once the ALL MUTE key is pressed the Unselect volume will be reduced for up to 30 seconds, or until the ALL MUTE key is pressed again.

ON INDICATOR

Lights when the ALL MUTE function is active.

PRIORITY



PRIORITY KEY Allows supervisory personnel to override a channel in use by another dispatcher in the system. The interrupted dispatcher will hear a side-tone when the Channel is being overridden.

ON INDICATOR

Lights when the PRIORITY key is pressed.

AUX



KEYUsed to activate a customer-supplied auxiliary function (such as activating a door opener). The # is the auxiliary function key number.

ON Lights when the auxiliary function is INDICATOR active.

INTERCOM



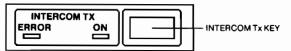
INTERCOM Used KEY Press

Used to activate the intercom function. Press and release to activate the intercom.

CALL

Lights when the intercom is active.

INTERCOM TX



INTERCOM TX KEY Used to transmit through the intercom when not using a headset. Press and hold while speaking through the microphone to send a message over the intercom only. Release to listen to a reply over the intercom. Headset operation does not use this key.

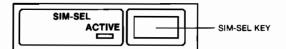
ERROR INDICATOR

Lights if the intercom call is not in progress.

Lights when the intercom is active.

ON INDICATOR

SIM-SEL



SIM-SEL KEY Activates the non-memory simul-select function. When pressed, Radio Control and telephone modules may be selected for inclusion in the simul-select.

ACTIVE INDICATOR

Lights when non-memory simul-select is active.

SIM-SEL



SIM-SEL # KEY Activates a stored simul-select function. When pressed, Radio Control and telephone modules may be selected for inclusion in the simul-select and stored for later retrieval. The key also recalls a stored simul-select. The # stands for the number of the SIM-SEL key.

MEMORY INDICATOR

Lights when a simul-select has been stored in memory.

ACTIVE INDICATOR

Lights when a simul-select is active. Blinks when simul-select cannot be made.

SWITCH MODULE continued

SIM-SEL # TX



SIM-SEL # TX KEY Starts transmission (instant transmit) to an active or inactive simul-select with a corresponding key number. The # is the number of the simul-select key.

ERROR INDICATOR

Lights if a transmission cannot be made to the simul-select or if simul-select has not been set up.

XMIT INDICATOR

Lights when a transmission is being made to the active simul-select.

PATCH



PATCH KEY

Activates the patch function. When pressed, Radio Control and telephone modules may be selected for inclusion in a patch.

ACTIVE INDICATOR

Lights when a patch is active.

PATCH



PATCH # KEY Activates a stored patch function. When pressed, Radio Control and telephone modules may be selected for inclusion in the patch and stored for later retrieval. The key also recalls a stored patch. The # stands for the number of the PATCH key.

MEMORY INDICATOR

Lights when a patch has been stored in memory.

ACTIVE INDICATOR

Lights when a patch is active.

PATCH # TX



PATCH #
TX KEY

Starts transmission (instant transmit) to an active or inactive patch with a corresponding key number. The # is the number of the patch key.

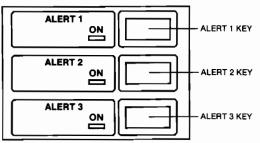
ERROR INDICATOR

Lights if a transmission cannot be made to the patch.

XMIT

Lights when a transmission is being made to the active patch.

ALERT



ALERT #
KEY

Activates alert tone to be sent before a message. The # is the number of the alert tone key. Each key transmits a different tone.

ON INDICATOR

Lights when the ALERT key is pressed.

CONSOLE DISABLE



CONSOLE DISABLE KEY Allows supervisory personnel to disconnect another console in the system. Once disabled, the console can be enabled by using the CONSOLE Enable switch. The CONSOLE key is used with the keypad module to disable another console.

DISABLE INDICATOR

Lights when a console is being disabled and flashes if a console cannot be disabled.

SWITCH MODULE continued

CONSOLE ENABLE



CONSOLE ENABLE KEY Allows supervisory personnel to enable a console in the system. The CONSOLE key is used with the keypad module to

enable a console.

ENABLEINDICATOR

Lights when a console is being enabled and flashes if a console cannot

be enabled.

CHIME



CHIME KEY

Used to reduce the volume of the chime which signals an incoming intercom or

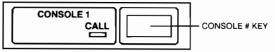
telephone call.

DISABLE INDICATOR

Lights when the chime volume is

lowered.

CONSOLE # KEY



CONSOLE #
KEY

This key is used with the hotline intercom. Pressing this key dials the corresponding console intercom number.

CALL INDICATOR

Lights when the CONSOLE # key is

pressed.

KEYPAD MODULE

The Keypad module contains the clock, VU meter, telephone keypad, 8 function keys, and a transmit bar. A Keypad module is shown in *Figure 2-4*.

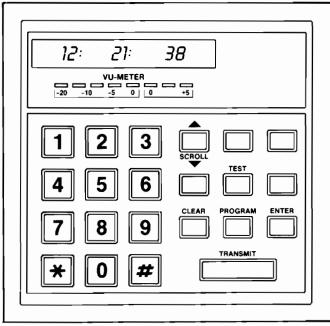


FIGURE 2-4. KEYPAD MODULE

VU METER

The VU meter shows your voice level when transmitting and the select speaker audio level when receiving. Meter indications should stay in the green range when transmitting. Excessive red range readings mean you are either talking too close to the microphone or too loudly.

TELEPHONE KEYPAD

The telephone keypad has 10 numeric keys (0-9) and two symbol keys (* and #) that are used to dial telephone, intercom, and individual call numbers.

CLOCK

The 12/24 hour clock displays the current time.

LBI-38006

KEYPAD MODULE continued

SCROLL key Used with PROGRAM key to change a

channel on a Display Radio Control

module.

SCROLL[▼]key Used with PROGRAM key to change a

channel on a Display Radio Control

module.

CLEAR key Used to clear keypad entries and simul-

select and patch memories.

TEST key Allows entering the test mode. **PROGRAM** Initiates a group change on a Display

Radio Control module. key

ENTER key Enters the numbers typed through the

keypad and confirms programming

entries.

TRANSMIT

A common Push-To-Talk (PTT) bar

which functions the same as a transmit foot switch. When pressed transmissions can be made to all selected groups and

channels.

SPEAKER MODULES

Two or more speakers (Figure 2-5) are located on each console. In the figure, the Select speaker has the DISPATCHER BUSY indicator and the Unselect speaker has no indicators. Your console may be arranged differently.

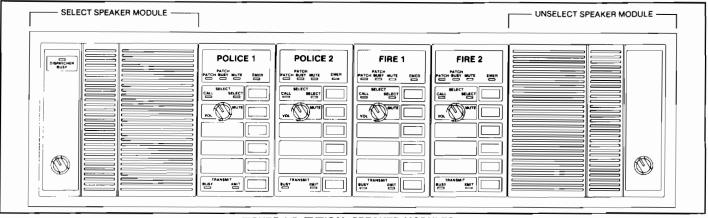


FIGURE 2-5. TYPICAL SPEAKER MODULES

VOL Sets the volume coming from the speaker.

(Volume) control

Select Speaker

Reproduces received audio from the Radio Control module that is selected

(SELECT key pressed).

Unselect Reproduces receive audio from Radio Control modules that are not selected. Speaker

DISPATCHER BUSY Indicates the dispatcher is busy with a console operation. Lights when a call is being received through the select speaker, when the console is transmitting, or during a telephone or intercom call.

HEADSET

Headset connectors (adapter box under console tabletop) are provided for each dispatch position. When the headset is used, the receive audio on the Select speaker is muted, the console microphone is disabled, and the headset microphone is enabled. Intercom and telephone operation does not require the use of the TX keys when a headset is used. Intercom and telephone headset operation is full-duplex, that is, you can transmit and receive at the same time.

FOOT SWITCH

An optional dual-pedal foot switch is available for the console. The right pedal is for transmit and the left pedal performs the Channel Monitor function on Radio Control modules.

SECTION 3 - OPERATOR-INITIATED ACTIONS

This section explains operator-initiated actions performed on the C3 console. Operator-initiated actions are defined as operations performed as a result of a want or need, such as the need to communicate with an individual unit. Operator responses to events, such as a response to an emergency declaration, are covered in section 4.

Basic, frequently used procedures are explained first, followed by the more complex and special features. Throughout this section the terms unselect and select are used. These terms refer to pressing the SELECT key on a particular module.

A table which lists console operations, primary controls, and page references is provided in **Table 3-1**. Use this table when you need to quickly locate information on a desired console operation, or as a reference to remind you of the controls used for different operations.

TABLE 3-1. CONSOLE OPERATIONS

DESCRIPTION OF OPERATION	PAGE NUMBER	OPERATIONAL FUNCTION	PRIMARY CONTROLS USED IN OPERATION
Module selection	3-2	SELECTING A MODULE	SELECT
Headset and foot switch operation.	3-2	ACCESSORY OPERATION	
Basic receive operation.	3-2	RECEIVE	VOL
Transmitting on select or unselect modules.	3-3	TRANSMITTING ON THE CONSOLE	SELECT TRANSMIT
Using the Simul- Select feature for "broadcast" type messages.	3-5	SIMUL-SELECT OPERATION	SIM-SEL TRANSMIT SELECT
Placing and answering telephone calls	3-7	TELEPHONE OPERATION	LINE # CALL TELEPHONE PTT RELEASE KEYPAD MODULE HOLD
Creating, storing, and activating patches between channels and telephone lines.	3-10	PATCH OPERATION	PATCH SELECT PATCH # PATCH # TX CLEAR
Using intercom functions	3-12	USING THE INTERCOM	INTERCOM KEYPAD MODULE INTERCOM TX RELEASE HOLD CONSOLE #

DESCRIPTION OF OPERATION	PAGE NUMBER	OPERATIONAL FUNCTION	PRIMARY CONTROLS USED IN OPERATION
Using auxiliary console functions such as muting the speakers and sending alert tones	3-13	AUXILIARY FUNCTIONS	MUTE ALL MUTE TRANSMIT ALERT # PA CHIME AUX # FREQUENCY REMOTE MONITOR REPEAT DISABLE
Using console functions intended for supervisory personnel.	3-16	SUPERVISORY FUNCTIONS	CONSOLE KEYPAD MODULE PRIORITY TRANSMIT
How to change the channel assigned to a Display Radio Control module.	3-17	CHANGING THE DISPLAY ON A RADIO CONTROL MODULE	PROGRAM SELECT SCROLL ENTER KEYPAD MODULE

LBI-38006

SELECTING A MODULE

When a Radio Control module is selected, the SELECT indicator is on and audio received will be heard through the Select speaker. When the module is unselected, the audio will be heard through the Unselect speaker and the SELECT indicator will be off.

- Press the SELECT key to select a Channel. The SELECT indicator will light, and audio from the selected Channel will be heard through the Select speaker.
- Press the SELECT key again (or select a new Radio Control module) to unselect the Radio Control module. The SELECT indicator will go off, and audio from the unselected module will be heard through the Unselect speaker.

NOTE: Only one Radio Control module at a time (at each console) will operate in the SELECT mode, unless Simul-Select or patch is active.

ACCESSORY OPERATION

HEADSET OPERATION

An optional headset is available for use with the console. The headset plugs into a dual-jack interface located below the console tabletop. When the headset is plugged in, the console Select speaker is disconnected and the select speaker audio will be heard through the earpiece. The headset microphone will be active and the console microphone(s) will be disconnected.

FOOT SWITCH OPERATION

An optional dual-pedal foot switch may be used with the console. The right foot-switch pedal performs the same function as the TRANSMIT bar (common transmit) on the Keypad module. The left pedal performs the same function as the MONITOR key on a Radio Control module.

RECEIVE

Receive audio is heard through the console speakers or headset. A selected Channel (SELECT indicator on) will be heard through the select speaker and the unselected Channels will be heard through the Unselect speaker.

- Selected Channels are heard through the Select speaker. DISPATCHER BUSY indicator lights when a call is received.
- All other Channels are heard through the Unselect speaker.

VOLUME ADJUSTMENT

Each module (Radio Control and Speaker) has a black volume (VOL) control. The Volume control on the Radio Control modules controls the receive audio volume coming from this module. The volume control on each speaker module controls the volume of all receive audio coming through that speaker.

- Radio Control module volume control—sets the level of audio received from the channel.
- Unselect speaker module volume control—sets the level of all audio heard over the Unselect speaker (all unselected Channels).
- Select speaker module volume control—sets volume level of all calls heard over the Select speaker (selected Radio Control module).

TRANSMITTING ON THE CONSOLE

TRANSMITTING TO A SELECTED CHANNEL (FIGURE 3-2)

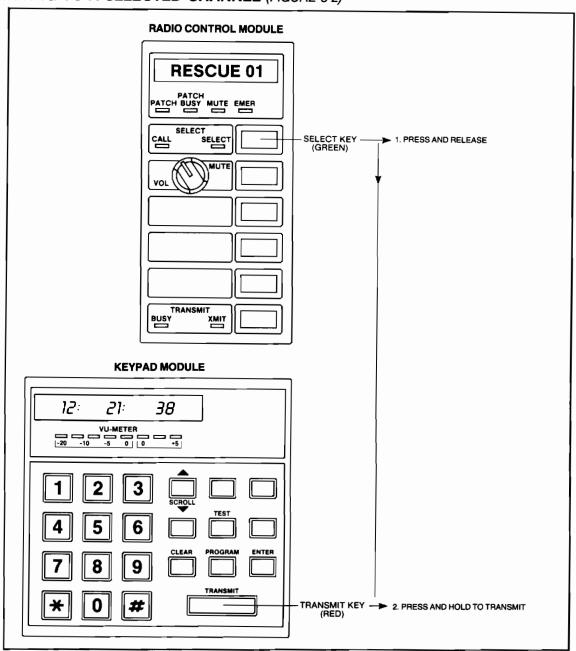


FIGURE 3-1. TRANSMITTING TO A SELECTED CHANNEL

Press the SELECT key on the Radio Control module. The SELECT indicator (green) will light. The SELECT indicator on any previously selected module will go off.

NOTE: If the BUSY indicator is on, the Channel is in use. Wait until the BUSY indicator is off before starting to transmit.

NOTE: IF YOUR CONSOLE IS EQUIPPED WITH CHANNEL GUARD press the MONITOR key (or left foot switch) before transmitting to make sure the channel is not busy. Do not transmit if the channel is in use. See DISABLING CHANNEL GUARD for more information.

TRANSMITTING ON THE CONSOLE continued

TRANSMITTING TO A SELECTED CHANNEL (continued)

- 2. Press the foot switch or TRANSMIT bar on the keypad module. The XMIT indicator (red) on the Radio Control module and the Speaker module DISPATCHER BUSY indicator will go on.
- 3. Speak into the microphone and make your transmission.
- Release the foot switch or TRANSMIT bar when the transmission is complete (the XMIT indicator will go off).
 Listen through the Select speaker for any reply.

TRANSMITTING TO AN UNSELECTED CHANNEL (FIGURE 3-2)

The instant transmit key allows the console operator to make a transmission over unselected Radio Control modules.

NOTE: If the BUSY indicator is on, the Channel is in use. Wait until the BUSY indicator is off before starting to transmit.

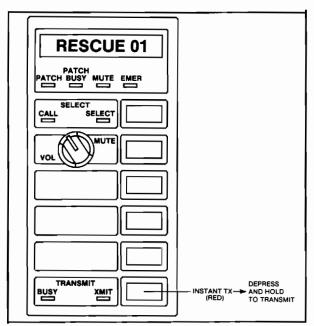


FIGURE 3-2. TRANSMITTING TO AN UNSELECTED RADIO CONTROL MODULE

- Press and hold the TRANSMIT key on the Radio Control module. The XMIT indicator (red) will go on and the DISPATCHER BUSY indicator on the Speaker module will go on.
- 2. Speak into the microphone and make your transmission.
- 3. Release the TRANSMIT key when your transmission is completed (the XMIT and DISPATCHER BUSY indicators will go off). Listen through the Unselect speaker for any reply.

SIMUL-SELECT OPERATION

The Simul-Select function (*Figure 3-3*) allows the console operator to make transmissions to several Channels at once. This feature allows "broadcast" messages (i.e., All Points Bulletins) to be sent quickly to a large group of radio users. Simul-Select calls can be stored in memory for quick recall or setup at the time of transmission.

NOTE: Only one Simul-Select can be active at one time.

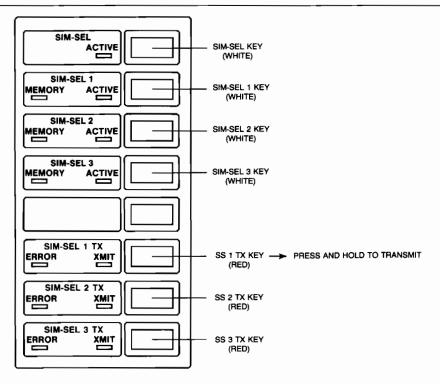


FIGURE 3-3. SIMUL-SELECT SWITCH MODULE

MAKING A SIMUL-SELECT TRANSMISSION (NON-MEMORY)

- 1. Press and hold the white SIM-SEL key.
- Press and release the green SELECT key on each Radio Control module with which you want to transmit. The green SELECT indicator on each Radio Control module will light as it is added to the Simul-Select.
- Release the SIM-SEL key. The ACTIVE indicator (green) will light if the Simul-Select is set up. The ACTIVE indicator will flash and go off if the Simul-Select cannot be set up.
- Press the foot switch or common TRANSMIT bar and speak into the microphone. The XMIT indicator will light on all modules in the Simul-Select. Your transmission will be received by all radios operating on the Channels you selected in the Simul-Select.
- 5. Release the foot switch or TRANSMIT bar when the transmission in completed.
- Press and release the SIM-SEL key (or select a single Radio Control module) when all Simul-Select transmissions are completed. The ACTIVE indicator and Radio Control module SELECT indicators will go off and the Simul-Select will be discontinued.

LBI-38006

SIMUL-SELECT OPERATION continued

Add or Remove Radio Control modules from an active Simul-Select as follows:

- 1. Press and hold the white SIM-SEL key.
- Press and release the green SELECT key on each Radio Control module to be added or removed from the Simul-Select. The green SELECT indicator on the module will light if it was added or go out if it was removed from the Simul-Select.
- 3. Release the SIM-SEL key. The new Simul-Select will be active.

STORING, RECALLING, AND CLEARING SIMUL-SELECTS FROM MEMORY

Simul-Selects may be stored in memory and recalled when needed to save the time of setting up a new Simul-Select each time. The numbered SIM-SEL keys are used when Simul-Selects are stored.

STORING A SIMUL-SELECT

- 1. Press and hold the white SIM-SEL # key (where # is the number of the key).
- Press and release the green SELECT key on each Radio Control module that you want in the Simul-Select. The green SELECT indicator on each module will light as it is added to the Simul-Select.
- Release the SIM-SEL # key. The ACTIVE indicator will light if the Simul-Select can be activated, or flash and go off if it cannot be activated. The MEMORY indicator will go on.

NOTE: The Simul-Select will be deactivated (ACTIVE indicator goes off and the MEMORY indicator remains on) if the SIM-SEL # key is pressed and released, or a SELECT key on a Radio Control module not in the Simul-Select is pressed.

- Press the foot switch or TRANSMIT bar and speak into the microphone. The XMIT indicator will light on all Radio Control modules in the Simul-Select. Your transmission will be received by all radios operating on the Channels you selected in the Simul-Select.
- 5. Release the foot switch or TRANSMIT bar when the transmission is completed.
- 6. Press and release the SIM-SEL key when all Simul-Select transmissions are completed. The ACTIVE indicator will go off and the Simul-Select will be discontinued. The MEMORY indicator will remain on.

RECALLING A SIMUL-SELECT

Once a Simul-Select has been stored, it may be recalled at any time. This saves the time of setting up the Simul-Select each time you want to make a transmission. A Simul-Select can be recalled from any SIM-SEL # switch that has the MEMORY indicator on.

- Press and release the SIM-SEL # key (where # is the number of the Simul-Select). The ACTIVE indicator (green)
 will light if the Simul-Select is set up, and the SELECT indicator on each Radio Control module in the Simul-Select
 will come on. The ERROR indicator will flash and go off and an error tone may be heard if the Simul-Select cannot
 be set up.
- Press the foot switch or TRANSMIT bar and speak into the microphone. The XMIT indicator will light on all Radio Control modules in the Simul-Select. Your transmission will be received by all radios operating on the Channels you selected in the Simul-Select.
- 3. Release the foot switch or TRANSMIT bar when the transmission is completed.
- 4. Press and release the SIM-SEL # key when all Simul-Select transmissions are completed. The ACTIVE indicator will go off and the Simul-Select will be discontinued. The MEMORY indicator will remain on.

SIMUL-SELECT OPERATION continued

INSTANT TRANSMIT FROM SIMUL-SELECT MEMORY

Instant transmissions may be made to Simul-Selects stored in memory by using the SIM-SEL # TX key.

- 1. Press and hold the SIM-SEL # key (where # is the number of the Simul-Select memory from which you want to transmit). The XMIT indicator will light.
- Speak into the microphone and make your transmission.
- 3. Release the SIM-SEL # key when the transmission is complete (the XMIT indicator will go off).

CLEARING A SIMUL-SELECT MEMORY

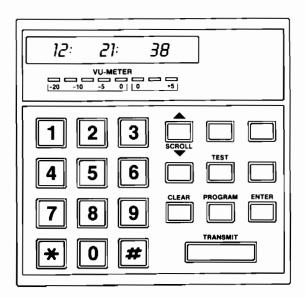
Clear a Simul-Select stored in memory (MEMORY indicator on) as follows:

- 1. Press and hold the SIM-SEL # key (where # is the number of the Simul-Select you want to clear).
- 2. Press and release the CLEAR key on the Keypad module.
- Release the SIM-SEL # key. All SELECT indicators on the Radio Control modules in the Simul-Select will go off.
 The ACTIVE and MEMORY indicators on the SIM-SEL # switch will also go off.

TELEPHONE OPERATION

The C3 console provides direct telephone line access. A telephone call can be placed, put on hold, or patched to one or more Channels. The modules used when operating the telephone are shown in *Figure 3-4*.

KEYPAD MODULE



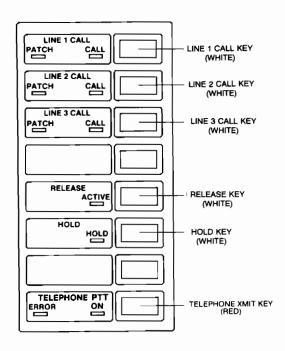


FIGURE 3-4. MODULES USED DURING TELEPHONE OPERATION

TELEPHONE OPERATION continued

ANSWERING AN INCOMING CALL

You will hear ringing (unless disabled) on the Unselect speaker and the CALL indicator will flash on the LINE # CALL switch when there is an incoming telephone call. The CALL indicator will remain flashing until the call is answered or the call is cancelled.

NOTE: IF A HEADSET IS **NOT** USED, you can only hear the calling party when the TELEPHONE TX key is released. Telephone audio will come through the Unselect speaker.

 Press and release the LINE # CALL key (where # is the number of the line with the flashing CALL indicator). The ACTIVE indicator will light on the RELEASE switch. The CALL indicator will flash slowly until the call is completed.

NOTE: If a headset is used steps 2 and 3 are not needed. Talk and listen through the headset the same as a standard telephone call. It is not necessary to press the TELEPHONE PTT key.

- 2. Press the TELEPHONE PTT key and speak into the console microphone to answer the call.
- Release the TELEPHONE PTT key when you have finished talking and listen to the calling party.
- 4. When the call is completed, press the RELEASE key. The ACTIVE indicator will go off.

PLACING AN OUTGOING TELEPHONE CALL

NOTE: IF A HEADSET IS **NOT** USED, you can only hear the calling party when the TELEPHONE PTT key is released. Telephone audio will come through the Select speaker.

- Press and release the LINE # CALL key (where # is the number of the line on which you wish to place a call). The CALL indicator will flash slowly, dial tone will be heard on the Select speaker, and the ACTIVE indicator will light.
- Press the keys on the keypad module to dial the telephone number. You will hear the digits being dialed, followed by the call being connected or a busy signal.

NOTE: If a headset is used steps 3 and 4 are not needed. Talk and listen through the headset the same as a standard telephone call. It is not necessary to press the TELEPHONE PTT key.

- When the called party answers the phone, press the TELEPHONE PTT key and speak into the microphone.
- 4. Release the TELEPHONE PTT key to listen to the called party.
- 5. When the call is completed, press the RELEASE key. The ACTIVE indicator will go off.

PLACING A TELEPHONE CALL ON HOLD

To place a call on hold:

- Press and release the HOLD key. The HOLD indicator will go on, and the CALL indicator on the active LINE # CALL switch will flash quickly. The call is on hold and you may place or answer another call.
- 2. Press the HOLD key again to take the call off hold. The HOLD indicator will go off.

PATCHING A TELEPHONE CALL

A telephone call may be patched to one or more channels. This allows members of the patched channels to talk among themselves and with the patched telephone call.

PATCHING A TELEPHONE CALL (Non-Memory Patch)

NOTE

A telephone call must be set up before it can be added to a patch.

- 1. Press and hold the white PATCH key.
- 2. Press and release the green SELECT key on each Radio Control module which you want to patch. The green PATCH indicator on each module will light as it is added to the patch.
- 3. Press and release the LINE # CALL key to include the active telephone call in the patch.
- 4. Release the PATCH key. The ACTIVE indicator will light if the patch is set up. The ACTIVE indicator will flash and go off and an error tone will be heard if the patch cannot be set up. Once the ACTIVE indicator is on, members of the patch may talk with each other and the active telephone caller.
- Press the foot switch or TRANSMIT bar and speak into the microphone to talk with all radios in the patch. The XMIT indicator will light on all modules in the patch. Your transmission will be received by all radios operating in the patch.
- 6. Release the foot switch or TRANSMIT bar when the transmission is completed.
- Press and release the PATCH key when the patch is completed. The ACTIVE indicator will go off and the patch will be discontinued.

PATCHING A TELEPHONE CALL (Existing Memory Patch)

A telephone call may be added to a patch recalled from memory as follows:

NOTE

A telephone call must be set up before it can be added to a patch.

- Press and release the PATCH # key (where # is the number of the patch). The ACTIVE indicator will light if the
 patch is set up. The ERROR indicator will flash and go off and an error tone may be heard if the patch cannot be
 set up.
- 2. Press and hold the PATCH # key.
- Press and release the LINE # CALL key to include the active telephone call in the patch. Once the ACTIVE indicator is on, members of the patch may talk with each other and the active telephone caller.
- Release the PATCH # key and press the PATCH # TX key corresponding to the active patch. Speak into the microphone. Your transmission will be received by all radios operating in the patch.
- 5. Release the PATCH # TX key when the transmission is completed.
- Press and release the PATCH # key when the patch is completed. The ACTIVE indicator will go off and the patch will be discontinued. The MEMORY indicator will remain on.

PATCH OPERATION

A patch is used to let radio users on different channels communicate with each other. A patch can also be used to allow a telephone call to be placed to a number of radio users. Normally, radio users on different channels cannot communicate with each other, but during emergencies or other special situations, the console operator may patch these channels together. The modules used during patch operation are shown in *Figure 3-5*.

NOTE: More than one patch can be active at one time.

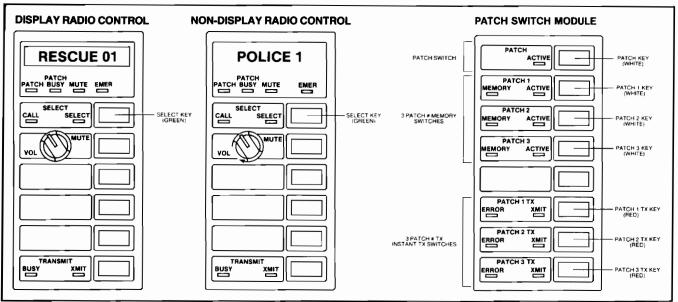


FIGURE 3-5. MODULES USED DURING PATCH OPERATION

MAKING A PATCH (NON-MEMORY)

NOTE: Patch audio is heard on the Select speaker only when the patched module is in Select mode. A module with a PATCH BUSY indicator on cannot be placed in a patch.

- Press and hold the white PATCH key.
- 2. Press and release the green SELECT key on each Radio Control module which you want to patch. The green PATCH indicator on each module will light as it is added to the patch.
- 3. Release the PATCH key. The ACTIVE indicator (green will light if the patch is set up. The ACTIVE indicator will flash and go off and an error tone will be heard if the patch cannot be set up. Once the ACTIVE indicator is on, the radios in the patched Channels may communicate with each other.
- 4. Press the foot switch or TRANSMIT bar and speak into the microphone to talk with all radios in the patch. The XMIT indicator will light on all modules in the patch. Your transmission will be received by all radios operating on the Channels you selected in the patch.
- 5. Release the foot switch or TRANSMIT bar when the transmission is completed.
- Press and release the PATCH key when the patch is completed. The ACTIVE indicator will go off and the patch will be discontinued.

PATCH OPERATION continued

Add or Remove Radio Control modules from an active patch as follows:

- 1. Press and hold the white PATCH key.
- Press and release the green SELECT key on each Radio Control module to be added or removed from the patch. The green PATCH indicator on the module will light if it was added or go out if it was removed from the patch.
- 3. Release the PATCH key. The new patch will be active.

STORING, RECALLING, AND CLEARING PATCHES FROM MEMORY

Patches may be stored in memory and recalled when needed to save time. The numbered PATCH keys are used when patches are stored.

STORING A PATCH

- 1. Press and hold the white PATCH # key (where # is the number of the key).
- Press and release the green SELECT key on each Radio Control module that you want in the patch. The green PATCH indicators on each module will light as it is added to the patch.
- Release the PATCH # key. The ACTIVE indicator will light if the patch can be activated or flash and go off if it cannot be activated. The MEMORY indicator will go on.

RECALLING A PATCH

Once a patch has been stored, it may be recalled at any time. This saves the time of setting up the patch each time you want to make a patch. A patch can be recalled from any PATCH switch that has the MEMORY indicator on.

- Press and release the PATCH # key (where # is the number of the patch). The ACTIVE indicator (green) will light if the patch is set up. The ERROR indicator will flash and go off and an error tone may be heard if the patch cannot be set up.
- Press the PATCH # TX key corresponding to the active patch, and speak into the microphone. The XMIT indicator will light on the PATCH # TX switch. Your transmission will be received by all radios operating on the selected Channels in the patch.
- Release the PATCH # TX key when the transmission is completed.
- 4. Press and release the PATCH # key when the patch is completed. The ACTIVE indicator will go off and the patch will be discontinued. The MEMORY indicator will remain on.

CLEARING A PATCH MEMORY

Clear a patch stored in memory (MEMORY indicator on) as follows:

- 1. Press and hold the PATCH # key (where # is the number of the patch you want to clear).
- 2. Press and release the CLEAR key on the Keypad module.
- Release the PATCH # key. All PATCH indicators on the modules in the patch will go off. The ACTIVE and MEMORY indicators on the PATCH # switch will also go off.

USING THE INTERCOM

An intercom is provided to allow you to talk with other console operators in the system. The modules used when operating the intercom are shown in Figure 3-6.

INTERCOM SWITCH MODULE

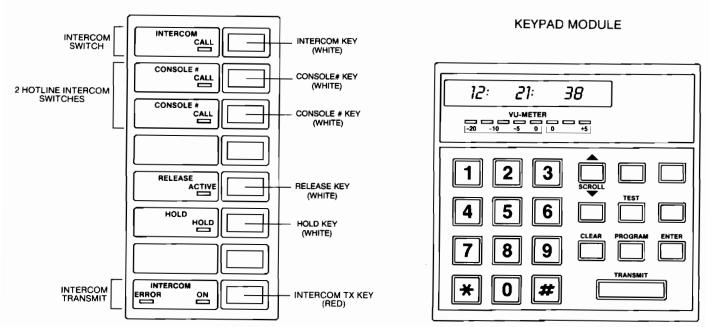


FIGURE 3-6. MODULES USED IN OPERATING THE INTERCOM

INTERCOM DIRECT DIAL

PLACING AN INTERCOM CALL

- Press and release the INTERCOM key. The CALL indicator will come on and flash slowly. You will hear a dial tone through the Select speaker.
- Dial the intercom number of the console you wish to call using the Keypad module keys. The number will be displayed on the keypad module and ringing will be heard. An alert tone will be heard at the called console. When the intercom is answered, the ringing will stop.
- 3. Press the white INTERCOM key to answer the intercom.

NOTE: If a headset is used steps 3 and 4 are not needed. Talk and listen through the headset the same as a standard telephone call. It is not necessary to press the INTERCOM TX key.

- Press the red INTERCOM TX key and speak into the console microphone. The ON indicator will light when the intercom is working. The ERROR indicator lights if the intercom call cannot be placed.
- Release the INTERCOM TX key to listen for an intercom reply.
- Press and release the RELEASE key to turn off the intercom. The CALL indicator will go off and the keypad module will display the time.

LBI-38006

USING THE INTERCOM continued

ANSWERING AN INTERCOM CALL

An incoming intercom call will be signalled by ringing (if enabled) and a fast blinking CALL indicator. Answer an intercom call as follows:

1. Press and release the white INTERCOM key. The CALL indicator will flash slowly.

NOTE: If a headset is used, steps 2 and 3 are not needed. Talk and listen through the headset the same as a standard telephone call. It is not necessary to press the INTERCOM TX key.

- Press the INTERCOM TX key and speak into the console microphone. The ON indicator will light when the intercom is working. The ERROR indicator lights if the intercom call cannot be placed.
- 3. Release the red INTERCOM TX key to listen for an intercom reply.
- 4. Press and release the RELEASE key to turn off the intercom. The CALL indicator will go off.

PLACING AN INTERCOM CALL ON HOLD

- 1. Press and release the HOLD key. The HOLD indicator will go on, and the CALL indicator will go off. The call is on hold and you may place or answer another call.
- 2. Press the HOLD key again to take the call off hold. The HOLD indicator will go off.

USING THE HOTLINE INTERCOM

The hotline intercom function provides immediate access between dispatchers in a system.

Placing An Intercom Call

 Press and release the CONSOLE # key that corresponds to the console being called. (The console intercom number is automatically dialed). You will hear ringing through the Select speaker and an alert tone will be heard at the called console. The ringing will stop when the intercom is answered.

NOTE: If a headset is used, steps 2 and 3 are not needed. Talk and listen through the headset the same as a standard telephone call. It is not necessary to press the INTERCOM TX key.

- Press the INTERCOM # TX key and speak into the console microphone. The ON indicator will light when the intercom is working. The ERROR indicator lights if the intercom call cannot be placed.
- 3. Release the INTERCOM # TX key to listen for an intercom reply.
- 4. Press and release the RELEASE key to turn off the intercom. The CALL indicator will go off.

AUXILIARY FUNCTIONS

RADIO CONTROL MODULE FUNCTIONS

Muting Audio

The yellow MUTE key on the Radio Control modules reduces the volume level of audio coming from channels.

LBI-38006

AUXILIARY FUNCTIONS continued

- Press the MUTE key to reduce the volume level of calls coming from the Channel. The MUTE indicator will
 come on.
- 2. Press the MUTE key again to return to the normal volume level. The MUTE indicator will go off.

MUTING THE UNSELECT SPEAKER

The ALL MUTE key is used to temporarily reduce the volume level of the Unselect speaker. Once the ALL MUTE key is pressed, the Unselect speaker volume will be reduced for a preset time, or until the ALL MUTE key is pressed again.

- 1. Press and release the ALL MUTE key to reduce the volume on the Unselected speaker. The ON indicator will go on.
- Press and release the ALL MUTE key again to return the volume to its previous level, or wait until the timer expires. The ON indicator will go out.

SENDING AN ALERT TONE

Alert tones are generally used as a signal before sending an important message. Each Alert key transmits a distinctive tone.

- 1. Press and hold the foot switch, TRANSMIT bar, or INSTANT TX key. The XMIT indicator will go on.
- Press and hold the ALERT # key. (Where # is the alert key number indicating the type of alert tone.) The ON indicator will go on.
- Release the ALERT # key and speak into the microphone. The ON indicator will go off when the ALERT key is released.
- 4. Release the foot switch, TRANSMIT bar, or INSTANT TX key when the transmission is complete. The XMIT indicator will go off.

USING THE PUBLIC ADDRESS (PA) SYSTEM

The PA key activates a customer-supplied public address (PA) system. When this key is pressed, the microphone may be used to talk over the PA system.

- Press and hold the PA key. The ON indicator will come on.
- Speak into the console microphone. Your message will be heard over the PA system.
- Release the PA key when the message is complete. The PA system will be turned off, the ON indicator will go off, and the console will return to normal operation.

DISABLING THE CHIME

Normally a chime (ringing) signals incoming intercom and telephone calls. The chime volume may be reduced using the CHIME key. When the chime volume is reduced, the telephone and intercom indicators will signal incoming calls.

- 1. Press and release the CHIME key to reduce chime volume. The DISABLE indicator will light.
- 2. Press and release the CHIME key again to restore the chime. The DISABLE indicator will go off.

USING AUXILIARY FUNCTION KEYS

The AUX # key (where # is the auxiliary function number) activates customer-supplied auxiliary functions (such as activating a door opener).

SECTION 3 -OPERATION, OPERATOR-INITIATED ACTIONS

LBI-38006

AUXILIARY FUNCTIONS continued

- 1. Press and release the AUX key to turn the function on. The ON indicator will come on.
- 2. Press and release the AUX key again to turn the function off. The ON indicator will go off.

NOTE

Some auxiliary functions are turned on only as long as the AUX key is pressed and held down.

NON-DISPLAY RADIO CONTROL MODULE FUNCTIONS

SELECTING THE TRANSMIT/RECEIVE FREQUENCY

The FREQUENCY switch selects the transmit and receive frequencies of conventional base stations. Select the frequency assigned to the Radio Control module as follows (only one frequency assigned at a time):

Press and release the FREQUENCY key (white) until the desired frequency number indicator is illuminated.

DISABLING REMOTE CONTROLLERS

The REMOTE switch disconnects remote control units controlling the channel from the base station. Remotes controlling a channel may be disabled or enabled as follows:

- 1. Press and release the REMOTE key to disconnect (disable) a remote control unit. The DISABLE indicator will go on.
- Press and release the REMOTE key again to connect (enable) a remote control unit. The DISABLE indicator will go off.

DISABLING CHANNEL GUARD

The MONITOR switch disables or enables Channel Guard on selected Radio Control modules. Use the monitor switch when you want to make sure no other transmissions are taking place on the channel or when you want to monitor calls not directed to you. Pressing and holding the MONITOR key temporarily disables Channel Guard on selected Radio Control modules, allowing you to hear all transmissions even if they are not coded with your Channel Guard tone. Release the MONITOR key to return to normal operation.

- Press and release the MONITOR key to disable Channel Guard and monitor all transmissions on the selected channel. The ON indicator will go on.
- 2. Press and release the MONITOR key again to turn Channel Guard on again. The ON indicator will go off.

REPEATER DISABLE

The REPEAT DISABLE switch is used to turn a remote repeater on or off.

- Press and release the REPEAT key to disable the remote repeater for this channel. The DISABLE indicator will
 come on. Transmissions made over this channel will be heard at the console, but not retransmitted.
- Press and release the REPEAT key again to enable the remote repeater. The DISABLE indicator will go out. Transmissions made over this channel will again be retransmitted by the repeater.

SUPERVISORY FUNCTIONS

Certain functions on the console are intended for supervisory personnel. These functions should only be used by authorized personnnel.

DISABLING A CONSOLE IN THE SYSTEM

The CONSOLE Disable key allows supervisory personnel to disconnect another console in the system. Once disabled, the console can be enabled by using the CONSOLE Enable switch. The CONSOLE key is used with the Keypad module to disable another console.

- Press and release the CONSOLE Disable key. The DISABLE indicator will go on and the alphanumeric display will show "OPR 000."
- Dial the intercom number of the console to be disabled using the keys on the Keypad module. Press the ENTER key.
- 3. The alphanumeric display at the disabled console will display the word "DISABLED."

NOTE: The DISABLE indicator is on while a console is being disabled and goes off when the console is disable. The DISABLE indicator flashes when a console cannot be disabled (e.g., invalid console number) and an error tone will sound on the speaker until the command is cleared. Press and release the CONSOLE Disable key to clear the command.

ENABLING A CONSOLE IN THE SYSTEM

The CONSOLE Enable key allows supervisory personnel to enable a console in the system.

- Press and release the CONSOLE Enable key. The ENABLE indicator will go on and the alphanumeric display will show "OPR 000."
- 2. Dial the intercom number of the console to be enabled using the keys on the Keypad module. Press the ENTER key.

NOTE: The ENABLE indicator is on while a console is being enabled and goes off when the console is enabled. The ENABLE indicator flashes when a console cannot be enabled (e.g., invalid console number) and an error tone will sound on the speaker until the command is cleared. Press and release the CONSOLE Enable key to clear the command.

PRIORITY OVERRIDE

The PRIORITY key allows supervisory personnel to override a channel in use by another dispatcher in the system. The interrupted dispatcher will hear an alert tone when the Channel is being overridden.

- Press and release the PRIORITY key. The ON indicator will come on.
- 2. Press the foot switch or TRANSMIT bar and speak into the microphone. The XMIT indicator will come on.
- 3. Release the foot switch or TRANSMIT bar when the transmission is completed. The XMIT indicator will go off.
- 4. Press and release the PRIORITY key again when the priority communications are completed. The ON indicator will go off.

CHANGING THE DISPLAY ON A RADIO CONTROL MODULE

A Display Radio Control module may be programmed to communicate with different channels. The methods available to program a Display Radio Control module are explained in the following paragraphs. Modules used when changing the display are shown in *Figure 3-7*.

NOTE: Only one Display Radio Control module can be changed at a time.

DISPLAY RADIO CONTROL MODULE

KEYPAD MODULE

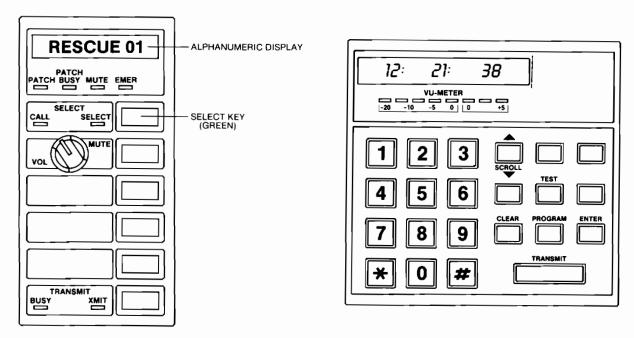


FIGURE 3-7. MODULES USED IN CHANGING A GROUP

USING THE CHANNEL LIST

- Press and release the PROGRAM key on the Keypad module. The Keypad module display will show "SEL CHAN."
- Press and release the SELECT key on the Display Radio Control module to be changed. The alphanumeric display on the Display Radio Control module will change to a blank display and all Display Radio Control module indicators will light. The Keypad module display will show "PROG CHAN."
- Press and release the SCROLL key (up or down) on the Keypad module. The available channel names will appear in the alphanumeric display. When the SCROLL down key is pressed the Keypad module display will shown "PREVIOUS." Pressing SCROLL up will display "NEXT."
- 4. Continue to press and release the SCROLL key until the desired channel appears.
- 5. Press ENTER on the Keypad module when the proper Channel name appears. The Display Radio Control module is now set for the channel shown in the alphanumeric display. All Display Radio Control module indicators will go off and the Keypad module display will show "PROG OK."

CHANGING THE DISPLAY ON A RADIO CONTROL MODULE continued

USING CHANNEL NUMBER

The Display Radio Control module may be programmed using a channel number, rather than scrolling through the permission list.

- 1. Press and release the PROGRAM key on the Keypad module. The Keypad module will display "SEL GRP."
- Press and release the SELECT key on the Display Radio Control module to be changed. The alphanumeric display on the Display Radio Control module will change to a blank display and all Display Radio Control module indicators will go on.
- 3. Enter the applicable channel number.
- 4. Press ENTER on the Keypad module. The new channel name will appear on the alphanumeric display.

SETTING THE CLOCK

The Keypad module clock may be set as follows:

- 1. Press and release the TEST key on the Keypad module. The Keypad module will display "TEST #00."
- Press the ENTER key.
- 3. The first displayed digit will flash. Pressing the SCROLL ▼ key will step the flashing digit to the right. Pressing the SCROLL ▲ key will step the flashing digit to the left.
 You may type in the correct time using the keypad when the first digit is flashing, or you may correct one or more digits by using the SCROLL keys.
- 4. Once the correct time is displayed, press the ENTER key.

This section identifies several events that may occur during normal operation of the console and explains ways the operator may respond to each event. These events (such as an incoming telephone or intercom call) are not initiated by the console operator, but must be responded to in some way.

Table 4-1 lists several events the console operator may encounter, along with possible actions. In many cases this table will provide all the operating information required to respond to an event. Procedures on telephone and intercom operation follow the table.

TABLE 4-1. OPERATING EVENTS

OPERATING EVENT	CONSOLE IDENTIFICATION	CONSOLE	ADDITIONAL INFORMATION		
		OPERATOR RESPONSE	PAGE	PARAGRAPH HEADING	
EMERGENCY DECLARATION	a. Alert tone b. Emergency indicators c. VU meter flashes	 Respond to emergency alert. Follow your standard emergency procedure. 	2-2	CONTROL MODULES	
INCOMING TELEPHONE CALL	a. Ringing b. Telephone LINE # CALL indicator flashing	Press LINE # CALL key by flashing indicator Press TELEPHONE TX key to transmit (unless using headset) Press RELEASE key to end call	3-7	TELEPHONE OPERATION	
INCOMING DIAL UP INTERCOM CALL	a. Ringing b. Intercom CALL indicator	Press INTERCOM key Press INTERCOM TX key to transmit (unless using headset) Press RELEASE key to turn off intercom	3-12	USING THE INTERCOM	
INCOMING HOTLINE INTERCOM CALL	a. Ringing b. Intercom CALL indicator	Press CONSOLE # Key Press INTERCOM TX key to transmit (unless uning headset) Press RELEASE key to turn off intercom.	3-12		
CONSOLE IS DISABLED	a. XMIT and BUSY indicators light on all modules b. DISABLED appears on keypad module display c. Console is inoperative		3-16	SUPERVISORY FUNCTIONS	

TABLE 4-1. OPERATING EVENTS continued

OPERATING EVENT	CONSOLE IDENTIFICATION	CONSOLE OPERATOR RESPONSE	ADDITIONAL INFORMATION	
			PAGE	PARAGRAPH HEADING
CONSOLE IS DISABLED	a. XMIT and BUSY indicators light on all modules b. DISABLED appears on keypad module display c. Console is inoperative		3-16	SUPERVISORY FUNCTIONS
PRIORITY OVERRIDE	a. Alert tone b. XMIT indicator goes out and BUSY indicator goes on		3-16	SUPERVISORY FUNCTIONS

ANSWERING A TELEPHONE CALL

You will hear ringing (unless disabled) on the speaker and the CALL indicator will flash on the LINE # CALL switch when there is an incoming telephone call. The CALL indicator will remain flashing until the call is answered or the call is cancelled.

NOTE: IF A HEADSET IS **NOT** USED, you can only hear the calling party when the TELEPHONE PTT key is released. Telephone audio will come through the Select speaker.

 Press and release the LINE # CALL key (where # is the number of the line with the flashing CALL indicator). The ACTIVE indicator will light on the RELEASE switch. The CALL indicator will flash slowly until the call is completed.

NOTE: If a headset is used steps 2 and 3 are not needed. Talk and listen through the headset the same as a standard telephone call. It is not necessary to press the TELEPHONE PTT key.

- 2. Press the TELEPHONE PTT key and speak into the console microphone to answer the call.
- Release the TELEPHONE PTT key when you have finished talking and listen to the calling party.
- When the call is completed, press the RELEASE key. The ACTIVE indicator will go off.

ANSWERING A DIAL UP INTERCOM CALL

An incoming intercom call will be signalled by ringing (if enabled) and a fast blinking CALL indicator. Answer an intercom call as follows:

Press and release the white INTERCOM key. The CALL indicator will flash slowly.

NOTE: If a headset is used, steps 2 and 3 are not needed. Talk and listen through the headset the same as a standard telephone call. It is not necessary to press the INTERCOM TX key.

ANSWERING A DIAL UP INTERCOM CALL continued

- Press the INTERCOM TX key and speak into the console microphone. The ON indicator will light when the intercom is working. The ERROR indicator lights if the intercom call cannot be placed.
- 3. Release the red INTERCOM TX key to listen for an intercom reply.
- 4. Press and release the RELEASE key to turn off the intercorn. The CALL indicator will go off.

ANSWERING THE HOTLINE INTERCOM

An incoming hotline intercom call will be signalled by ringing (if enabled) and a fast blinking CONSOLE # CALL indicator. Answer an intercom call as follows:

1. Press and release the white CONSOLE # key next to the flashing CALL indicator.

NOTE: If a headset is used, steps 2 and 3 are not needed. Talk and listen through the headset the same as a standard telephone call. It is not necessary to press the INTERCOM TX key.

- Press the INTERCOM TX key and speak into the console microphone. The ON indicator will light when the intercom is working. The ERROR indicator lights if the intercom call cannot be placed.
- Release the red INTERCOM TX key to listen for an intercom reply.
- 4. Press and release the RELEASE key to turn off the intercom. The CALL indicator will go off.

Some common operating problems are covered in this section. The table below will help you identify the problem and suggest possible corrective actions. Following the table are test procedures that can be run if your console is equipped with a Keypad module. If the problem can not be corrected or persists, contact your service personnel.

OPERATING PROBLEMS

PROBLEM	CHECK POINTS	
Console dead (no indicators on)	1. Check ac power	
	Check power circuit breaker and fuse.	
	3. Check backup battery supply	
Key or indicator inoperative	1. Run key/indicator test	
·	2. Call service if test fails or cannot be resolved.	
Console will not respond (indicators on)	Contact service personnel	

INDICATOR TEST

This test allows you to check all indicators on the console. Run this test before contacting service personnel if you suspect a problem with a console display or indicator.

- 1. Press and release the TEST key on the Keypad module. The Keypad module will display "TEST #00."
- 2. Type 01 through the keypad and press ENTER. The Keypad module will display "LED TEST."
- 3. Press and release any key on a module. All module indicators will light and the alphanumeric display will alternate between flashing zeros (0) and stars (*). Continue pressing keys until all indicators and displays of interest have been tested.
- 4. Press and release the TEST key on the Keypad module to exit the test mode.

KEY TEST

This test allows you to check all operating controls on the console. Run this test before contacting service personnel if you suspect a problem with a console operating control.

- 1. Press and release the TEST key on the Keypad module. The Keypad module will display "TEST #00."
- 2. Type 02 through the keypad and press ENTER. The Keypad module will display "BUT.TEST."
- Press and hold any key on any module (or rotate volume controls). The key name will appear in the Keypad module display. Continue until all keys and controls of interest have been tested.
- 4. Press and release the TEST key on the keypad module to exit the test.



GE Mobile Communications

General Electric Company Lynchburg, Virginia 24502