PROFESSIONAL DIGITAL TWO-WAY RADIO

MOTOTRBO™ XPR™ 5550/XPR 5580/XPR 5550e/XPR 5580e COLOR DISPLAY MOBILE USER GUIDE

Contents

Declaration of Conformity.....10

Important Safety Information.....12

Software Version.....13

Computer Software Copyrights....14

Basic Operations..... 15

Powering Up the Radio.....15
Turning Off the Radio..... 15
Adjusting the Volume.....15

Radio Controls..... 17

Volume/Channel Knob.....17
Setting Dual Knob Operation Preference..... 18
Keypad Microphone Buttons.....18

Capacity Max Operations.....21

Capacity Max Operations..... 22

Push-To-Talk (PTT) Button.....22
Programmable Buttons..... 22
Assignable Radio Functions..... 22
Assignable Settings or Utility Functions..... 25
Accessing Programmed Functions..... 25
Status Indicators..... 26
Icons.....26
Tones..... 32
Registration.....33
Zone and Channel Selections.....34
Selecting Zones..... 34
Selecting Zones by Using the Alias Search.....34
Selecting a Call Type..... 35
Selecting a Site..... 35

Roam Request..... 35
Site Lock On/Off.....36
Site Restriction.....36
Site Trunking 36
Calls.....37
Group Calls..... 38
Broadcast Call.....44
Private Call.....46
All Calls..... 52
Phone Calls.....56
Call Preemption.....65
Voice Interrupt.....66
Advanced Features.....67
Call Queue..... 67
Talkgroup Scan.....67
Bluetooth.....68
Indoor Location..... 72
Multi-Site Controls.....74
Home Channel Reminder.....75
Remote Monitor 76
Contacts Settings.....79
Call Indicator Settings..... 82
Call Log Features.....86
Call Alert Operation.....89
Emergency Operation..... 91
Text Messaging.....98
Text Entry Configuration..... 112
Privacy..... 118
Stun.....119
Lone Worker.....120
Password Lock Features.....120
Notification List.....123
Over-the-Air Programming 124
Selecting Third-Party Peripherals Connection Modes..... 124
Received Signal Strength Indicator..... 125
Front Panel Configuration..... 125
Wi-Fi Operation.....126
Utilities.....130

Connect Plus Operations..... 149

Additional Radio Controls in Connect Plus Mode..... 150

Push-To-Talk (PTT) Button.....150
Programmable Buttons..... 150
Assignable Radio Functions...151
Assignable Settings or Utility Functions..... 152

Identifying Status Indicators in Connect Plus Mode..... 153
Display Icons.....153
Call Icons..... 156
Advanced Menu Icons.....156
Sent Item Icons 157
Bluetooth Device Icons..... 157
LED Indicator..... 158
Indicator Tones..... 159
Alert Tones.....159
Switching Between Connect Plus and Non-Connect Plus Modes.....159

Making and Receiving Calls in Connect Plus Mode..... 161

Selecting a Site.....161
Roam Request..... 161
Site Lock On/Off.....161
Site Restriction.....161
Selecting a Zone.....162
Using Multiple Networks..... 163
Selecting a Call Type.....163
Receiving and Responding to a Radio Call..... 163
Receiving and Responding to a Group Call.....164
Receiving and Responding to a Private Call.....164
Receiving a Site All Call.....165
Receiving an Inbound Private Phone Call..... 165
Receiving an Inbound Phone Talkgroup Call..... 166
Inbound Phone Multi-Group Call.....167
Making a Radio Call.....167
Making a Call with the Channel Selector Knob..... 167
Making a Private Call with a One Touch Call Button.....169
Making a Call with the Programmable Manual Dial Button..... 170
Making an Outbound Private Phone Call with the Programmable Manual Dial Button..... 171
Making an Outbound Private Phone Call via the Phone Menu..... 171

Making an Outbound Private Phone Call from Contacts. 172
Waiting for the Channel Grant in an Outbound Private Phone Call..... 173
Making a Buffered Over-Dial in a Connected Outbound Private Phone Call..... 173
Making a Live Over-Dial in a Connected Outbound Private Phone Call..... 174

Advanced Features in Connect Plus Mode..... 175

Home Channel Reminder..... 175
Auto Fallback..... 175
Indications of Auto Fallback Mode..... 175
Making/Receiving Calls in Fallback Mode..... 176
Returning to Normal Operation..... 176
Radio Check..... 177
Sending a Radio Check..... 177
Remote Monitor..... 178
Initiating Remote Monitor..... 178
Scan..... 179
Starting and Stopping Scan... 179
Responding to a Transmission During a Scan..... 180
User Configurable Scan..... 180
Turning Scan On or Off..... 181
Editing the Scan List..... 181
Add or Delete a Group via the Add Members Menu..... 183
Understanding Scan Operation..... 185
Scan Talkback..... 185
Editing Priority for a Talkgroup..... 186
Contacts Settings..... 187
Making a Private Call from Contacts..... 187
Making a Call Alias Search.... 188
Adding a New Contact..... 188
Call Indicator Settings..... 189
Activating and Deactivating Call Ringers for Call Alert . 189
Activating and Deactivating Call Ringers for Private Calls..... 190

Activating and Deactivating Call Ringers for Text Message..... 190
Selecting a Ring Alert Type....191
Escalating Alarm Tone Volume.....191
Call Log Features.....191
Viewing Recent Calls..... 192
Deleting a Call from a Call List..... 192
Viewing Details from a Call List..... 192
Call Alert Operation.....193
Responding to Call Alerts.....193
Making a Call Alert from the Contact List..... 194
Making a Call Alert with the One Touch Access Button.....194
Emergency Operation.....195
Receiving an Incoming Emergency.....196
Saving the Emergency Details to the Alarm List.... 197
Deleting the Emergency Details..... 197
Responding to an Emergency Call.....198
Responding to an Emergency Alert..... 198
Ignore Emergency Revert Call.....199
Initiating an Emergency Call.. 199
Initiating an Emergency Call with Voice to Follow..... 199
Initiating an Emergency Alert. 200
Exiting Emergency Mode..... 200
Text Message Features..... 201
Sending a Quick Text Message..... 202
Sending a Quick Text Message with the One Touch Access Button..... 202
Accessing the Drafts Folder... 202
Managing Fail-to-Send Text Messages.....205
Managing Sent Text Messages.....205
Receiving a Text Message.....209
Reading a Text Message..... 209
Managing Received Text Messages.....209
Privacy..... 212

Making a Privacy-Enabled (Scrambled) Call..... 214
Security..... 214
Radio Disable..... 214
Radio Enable..... 215
Bluetooth Operation..... 217
Turning Bluetooth On and Off..... 218
Finding and Connecting to a Bluetooth Device..... 218
Finding and Connecting from a Bluetooth Device (Discoverable Mode)..... 219
Disconnecting from a Bluetooth Device..... 220
Switching Audio Route between Internal Radio Speaker and Bluetooth Device..... 220
Viewing Device Details..... 220
Deleting Device Name..... 221
Bluetooth Mic Gain..... 221
Indoor Location..... 222
Turning Indoor Location On or Off..... 222
Accessing Indoor Location Beacons Information..... 223
Notification List..... 224
Accessing the Notification List..... 224
Wi-Fi Operation..... 224
Turning Wi-Fi On or Off..... 224
Connecting to a Network Access Point..... 225
Refreshing the Network List... 226
Adding a Network..... 226
Viewing Details of Network Access Points..... 227
Removing Network Access Points..... 227
Utilities..... 228
Turning the Radio Tones/ Alerts On or Off..... 228
Setting the Tone Alert Volume Offset Level..... 229
Turning the Talk Permit Tone On or Off..... 229
Turning the Power Up Alert Tone On or Off..... 230
Setting the Power Level..... 231
Changing the Display Mode... 231
Adjusting the Display Brightness..... 232

Turning the Introduction Screen On or Off....232
Language....233
Turning the LED Indicator On or Off....233
Identifying Cable Type....234
Voice Announcement....234
Menu Timer....235
Turning Horns/Lights On or Off....235
Setting Dual Knob Operation Preference....236
Digital Mic AGC (Mic AGC-D)....236
Intelligent Audio....237
Turning the Acoustic Feedback Suppressor Feature On or Off....238
Turning GPS/GNSS On or Off....239
Accessing General Radio Information....240

Other Systems....251

Other Systems....252
Push-To-Talk (PTT) Button....252
Programmable Buttons....252
Assignable Radio Functions...252
Assignable Settings or Utility Functions....255
Accessing Programmed Functions....256
Status Indicators....256
Icons....256
Conventional Analog and Digital Modes....265
Icon Information....265
IP Site Connect....266
Capacity Plus--Single Site....266
Capacity Plus--Multi-Site....267
Zone and Channel Selections....268
Selecting Zones....268
Selecting Zones by Using the Alias Search....269
Selecting Channels....269
Calls....269
Group Calls....271
Private Calls....273

All Calls....277
Selective Calls....279
Phone Calls....280
Stopping Radio Calls....290
Talkaround....290
Advanced Features....291
Home Channel Reminder....291
Radio Check....292
Remote Monitor....294
Scan Lists....297
Scan....301
Vote Scan....303
Contacts Settings....304
Call Indicator Settings....308
Call Log Features....312
Call Alert Operation....315
Emergency Operation....317
Text Messaging Features....324
Text Entry Configuration....337
Job Tickets....343
Privacy....347
Multi-Site Controls....348
Security....349
Lone Worker....353
Bluetooth....354
Indoor Location....359
Notification List....361
Auto-Range Transponder System....361
Over-the-Air Programming....362
Transmit Inhibit....362
Selecting Third-Party Peripherals Connection Modes....363
Received Signal Strength Indicator....363
Password Lock Features....363
Front Panel Configuration....366
Wi-Fi Operation....367
Utilities....371

Authorized Accessories List....394

Authorized Accessories List....395

Antennas....395
Audio....397
Cables....398
Desktop Accessories....398
Mounting Kits....398

Speakers.....399
Miscellaneous Accessories.....399
Maritime Radio Use in the VHF Frequency Range.....400
Special Channel Assignments.....400
Operating Frequency Requirements.....400
Declaration of Compliance for the Use of Distress and Safety Frequencies.....402
Technical Parameters for Interfacing External Data Sources.....402
Limited Warranty.....403
MOTOROLA COMMUNICATION PRODUCTS..... 403
I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:..... 403
II. GENERAL PROVISIONS..... 404
III. STATE LAW RIGHTS:.....404
IV. HOW TO GET WARRANTY SERVICE..404
V. WHAT THIS WARRANTY DOES NOT COVER.....405
VI. PATENT AND SOFTWARE PROVISIONS..... 405
VII. GOVERNING LAW.....407

Declaration of Conformity

This declaration is applicable to your radio only if your radio is labeled with the FCC logo shown below.

Declaration of Conformity

Per FCC CFR 47 Part 2 Section 2.1077(a)

Responsible Party

Name: Motorola Solutions, Inc.

Address: 1303 East Algonquin Road, Schaumburg, IL 60196-1078, U.S.A.

Phone Number: 1-800-927-2744

Hereby declares that the product:

Model Name: **XPR 5550/XPR 5580/XPR 5550e/XPR 5580e**

conforms to the following regulations:

FCC Part 15, subpart B, section 15.107(a), 15.107(d) and section 15.109(a)

Class B Digital Device

As a personal computer peripheral, this device complies with Part 15 of the FCC Rules. This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Note:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed

and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or TV technician for help.

Important Safety Information

RF Energy Exposure and Product Safety Guide for Mobile Two-Way Radios

ATTENTION!

This radio is restricted to Occupational use only. Before using the radio, read the RF Energy Exposure and Product Safety Guide for Mobile Two-Way Radios which contains important operating instructions for safe usage and RF energy awareness and control for Compliance with applicable standards and Regulations.

For a list of Motorola-approved antennas and other accessories, visit the following website:

http://www.motorolasolutions.com

Any modification to this device, not expressly authorized by Motorola, may void the user's authority to operate this device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter has been approved by Industry Canada to operate with Motorola-approved antenna with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Software Version

All the features described in the following sections are supported by the software version **R02.50.10** or later.

See *Checking Firmware and Codeplug Versions* on page 146 to determine the software version of your radio.

Check with your dealer or system administrator for more information.

Computer Software Copyrights

The Motorola products described in this manual may include copyrighted Motorola computer programs stored in semiconductor memories or other media. Laws in the United States and other countries preserve for Motorola certain exclusive rights for copyrighted computer programs including, but not limited to, the exclusive right to copy or reproduce in any form the copyrighted computer program. Accordingly, any copyrighted Motorola computer programs contained in the Motorola products described in this manual may not be copied, reproduced, modified, reverse-engineered, or distributed in any manner without the express written permission of Motorola. Furthermore, the purchase of Motorola products shall not be deemed to grant either directly or by implication, estoppel, or otherwise, any license under the copyrights, patents or patent applications of Motorola, except for the normal non-exclusive license to use that arises by operation of law in the sale of a product.

The AMBE+2™ voice coding Technology embodied in this product is protected by intellectual property rights including patent rights, copyrights and trade secrets of Digital Voice Systems, Inc.

This voice coding Technology is licensed solely for use within this Communications Equipment. The user of this Technology is explicitly prohibited from attempting to decompile, reverse engineer, or disassemble the Object Code, or in any other way convert the Object Code into a human-readable form.

U.S. Pat. Nos. #5,870,405, #5,826,222, #5,754,974, #5,701,390, #5,715,365, #5,649,050, #5,630,011, #5,581,656, #5,517,511, #5,491,772, #5,247,579, #5,226,084 and #5,195,166.

Basic Operations

This chapter explains the operations to get you started on using the radio.

Powering Up the Radio

Follow the procedure to power up your radio.

Press the **On/Off** button.

- A tone sounds.
- The green LED lights up.
- The display shows `MOTOTRBO (TM)`, followed by a welcome message or image.
- The Home screen lights up.

Note:
There is no tone upon powering up if the Tones/Alerts function is disabled. See *Turning Radio Tones/Alerts On or Off* on page 131 for more information.

Check your battery if your radio does not power up. Make sure that it is charged and properly attached. Contact your dealer if your radio still does not power up.

Turning Off the Radio

Follow the procedure to turn off your radio.

Press and hold the **On/Off** button.

The radio may take up to 7 seconds to completely turn off.

The display shows `Powering Down`.

Adjusting the Volume

Follow the procedure to change the volume level of your radio.

Do one of the following:

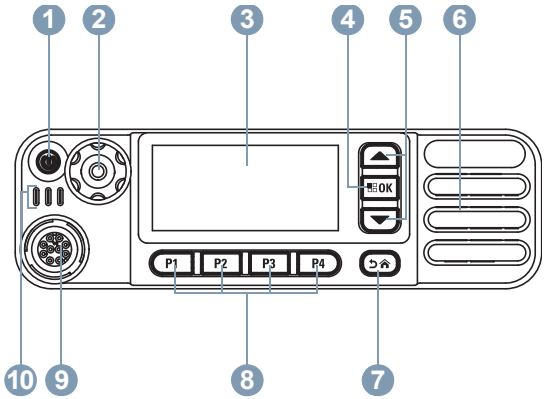
- Turn the **On/Off/Volume Control Knob** clockwise to increase the volume.
- Turn the **On/Off/Volume Control Knob** counterclockwise to decrease the volume.

Note:
Your radio can be programmed to have a minimum volume offset where the volume level cannot be lowered past the programmed minimum volume. Check with

your dealer or system administrator for more information.

Radio Controls

This chapter explains the buttons and functions to control the radio.



1 On/Off/Information Button
2 Volume/Channel Knob
3 Display
4 Menu/OK Button
5 Scroll Up/Down Buttons
6 Speaker
7 Return/Home Button
8 Front Programmable Buttons
9 Accessory Connector
10 LED Indicators

* These buttons are programmable.

Volume/Channel Knob

The **Volume/Channel Knob** can be programmed for dual volume and channel control, or for volume control only.

To adjust the volume, see *Adjusting the Volume* on page 15.

To change the channels, press and hold the **Volume/Channel Knob** until the channel selection state is displayed. Turn the **Volume/Channel Knob** to select the channel. Do one of the following to exit the channel selection state:

- Press the **Volume/Channel Knob**.
- Press OK.
- Press ⮌⌂.

- Wait for the menu timer to expire.

Setting Dual Knob Operation Preference

Follow the procedure to set the dual knob operation preference of the radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Dual Knob`. Press OK to select.
The display shows `Volume Only` and `Volume & Channel`.

5 Press ▲ or ▼ to the required setting. Press OK to select.
A ✓ appears beside the selected settings. The screen returns to the previous menu.

Keypad Microphone Buttons

You can use the 3 x 4 alphanumeric keypad on the 4-Way Navigation Keypad Microphone (Motorola part number RMN5127_) to access your radio features. Many characters require that you press a key multiple times. The table shows the number of times a key needs to be pressed to generate the required character.

Key	Number of Times Key is Pressed												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1 ,.?	1	.	,	?	!	@	&	'	%	—	:	*	#

Key	Number of Times Key is Pressed												
	1	2	3	4	5	6	7	8	9	10	11	12	13
2 ABC	A	B	C	2									
DEF 3	D	E	F	3									
4 GHI	G	H	I	4									
5 JKL	J	K	L	5									
MNO 6	M	N	O	6									
7 PQRS	P	Q	R	S	7								
8 TUV	T	U	V	8									
WXYZ 9	W	X	Y	Z	9								
0 ⇧	0	**Note:** Press to enter “0” and long press to activate the CAPS lock. Another long press to turn off the CAPS lock.											

Key	Number of Times Key is Pressed												
	1	2	3	4	5	6	7	8	9	10	11	12	13
	* or del												
		Note: Press during text entry to delete the character. Press during numeric entry to enter a “*”.											
	# or space												
		Note: Press during text entry to insert a space. Press during numeric entry to enter a “#”.											

Capacity Max Operations

Capacity Max Operations

Push-To-Talk (PTT) Button

The **PTT** button serves two basic purposes.

- While a call is in progress, the **PTT** button allows the radio to transmit to other radios in the call. The microphone is activated when the **PTT** button is pressed.
- While a call is not in progress, the **PTT** button is used to make a new call.

Press and hold the **PTT** button to talk. Release the **PTT** button to listen.

If the Talk Permit Tone or the **PTT** Sidetone is enabled, wait until the short alert tone ends before talking.

If the Channel Free Indication feature is enabled on your radio (programmed by your dealer), you will hear a short alert tone the moment the target radio (the radio that is receiving your call) releases the **PTT** button, indicating the channel is free for you to respond.

You hear a continuous Talk Prohibit Tone if your call is interrupted, for example when the radio receives an Emergency call. You should release the **PTT** button.

Programmable Buttons

Depending on the duration of a button press, your dealer can program the programmable buttons as shortcuts to radio functions.

Short press	Pressing and releasing rapidly.
Long press	Pressing and holding for the programmed duration.

Note:
See *Emergency Operation* on page 317 for more information on the programmed duration of the **Emergency** button.

Assignable Radio Functions

The following radio functions can be assigned to the programmable buttons by your dealer or system administrator.

Audio Ambience	Allows the user to select an environment the radio is operating in.
Audio Profiles	Allows the user to select the preferred audio profile.
Bluetooth® Audio Switch	Toggles audio routing between internal radio speaker and external Bluetooth-enabled accessory.
Contacts	Provides direct access to the Contacts list.
Call Alert	Provides direct access to the contacts list for you to select a contact to whom a Call Alert can be sent.
Call Log	Selects the call log list.
Emergency	Depending on the programming, initiates or cancels an emergency.
Ext Public Address (PA)	Toggles audio routing between the connected PA loudspeaker amplifier and the internal PA system of the radio.
Reset Home Channel	Sets a new home channel.
Silence Home Channel Reminder	Mutes the Home Channel Reminder.
Indoor Location	Toggles Indoor Location on or off.
Intelligent Audio	Toggles intelligent audio on or off.
Manual Dial	Initiates a Private Call by keying in any subscriber ID.
Manual Site Roam	Starts the manual site search.
Mic AGC	Toggles the internal microphone automatic gain control (AGC) on or off.
Notifications	Provides direct access to the Notifications list.
One Touch Access	Directly initiates a predefined Broadcast, Private, Phone or Group Call, a Call Alert or a Quick Text message.

Option Board Feature	Toggles option board feature(s) on or off for option board-enabled channels.
Phone	Provides direct access to the Phone Contacts list.
Privacy	Toggles privacy on or off.
Public Address (PA)	Toggles the internal PA system of the radio on or off.
Radio Alias and ID	Provides radio alias and ID.
Remote Monitor	Turns on the microphone of a target radio without it giving any indicators.
Site Info	Displays the current Capacity Max site name and ID. Plays site announcement voice messages for the current site when Voice Announcement is enabled.
Site Lock	When toggled on, the radio searches the current site only. When toggled off, the radio searches other sites in addition to the current site.
Telemetry Control	Controls the Output Pin on a local or remote radio.
Text Message	Selects the text message menu.
Trill Enhancement	Toggles trill enhancement on or off.
Voice Announcement	Toggles voice announcement on or off.
Voice Announcement for Channel	Plays zone and channel announcement voice messages for the current channel. This function is unavailable when Voice Announcement is disabled.
Wi-Fi	Toggles Wi-Fi on or off.
Zone Selection	Allows selection from a list of zones.

Assignable Settings or Utility Functions

The following radio settings or utility functions can be assigned to the programmable buttons.

Tones/Alerts	Toggles all tones and alerts on or off.
Backlight	Toggles display backlight on or off.
Channel Up/ Down	Depending on the programming, changes channel to previous or next channel.
Display Mode	Toggles the day/night display mode on or off.
Power Level	Toggles transmit power level between high and low.
Squelch	Toggles squelch level between tight and normal.

Accessing Programmed Functions

Follow the procedure to access programmed functions in your radio.

1 Do one of the following:

- Short or long press the programmed button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to the menu function, and press OK to select a function or enter a sub-menu.

3 Do one of the following:

- Press ↩ to return to the previous screen.
- Long press ↩ to return to the Home screen.

Your radio automatically exits the menu after a period of inactivity and returns to the Home screen.

The Menu Navigation Buttons are also available on a keypad microphone. See *Keypad Microphone Buttons* on page 18.

Status Indicators

This chapter explains the icons, LED indicators, and audio tones used in the radio.

Icons

The Liquid Crystal Display (LCD) of your radio shows the radio status, text entries, and menu entries. The following are the icons that appear on the radio display.

Call Icons

The following icons appear on the display during a call. These icons also appear in the Contacts list to indicate alias or ID type.

Bluetooth PC Call	Indicates a Bluetooth PC Call in progress. In the Contacts list, it indicates a Bluetooth PC Call alias (name) or ID (number).
Dispatch Call	The Dispatch Call contact type is used to send a text message to a dispatcher PC through a third-party Text Message Server.
Group Call/All Call	Indicates a Group Call or All Call in progress. In the Contacts list, it indicates a group alias (name) or ID (number).
Phone Call as Group/All Call	Indicates a Phone Call as Group Call or All Call in progress. In the Contacts list, it indicates a group alias (name) or ID (number).
Phone Call as Private Call	Indicates a Phone Call as Private Call in progress. In the Contacts list, it indicates a phone alias (name) or ID (number).
Private Call	Indicates a Private Call in progress. In the Contacts list, it indicates a subscriber alias (name) or ID (number).

Display Icons

The following icons appear on the status bar at the top of the radio display. The icons are arranged left

most in order of appearance or usage, and are channel-specific.

Tones Disable	Tones are turned off.
Battery	The number of bars (0 – 4) shown indicates the charge remaining in the battery. Blinks when the battery is low.
Bluetooth Connected	The Bluetooth feature is enabled. The icon stays lit when a remote Bluetooth device is connected.
Bluetooth Not Connected	The Bluetooth feature is enabled but there is no remote Bluetooth device connected.
Emergency	Radio is in Emergency mode.
GPS Available	GPS feature is enabled. The icon stays lit when a position fix is available.
GPS Not Available	GPS feature is enabled but is not receiving data from the satellite.
High Volume Data	Radio is receiving high volume data and channel is busy.
Indoor Location Available[2]	Indoor location status is on and available.
Indoor Location Unavailable[2]	Indoor location status is on but unavailable due to Bluetooth disabled or Beacons Scan suspended by Bluetooth.
Notification	Notification List has one or more missed events.

Option Board

The Option Board is enabled. (Option board enabled models only)

Option Board Non-Function

The Option Board is disabled.

Over-the-Air Programming Delay Timer

Indicates time left before automatic restart of radio.

Power Level

Radio is set at Low power or Radio is set at High power.

Received Signal Strength Indicator (RSSI)

The number of bars displayed represents the radio signal strength. Four bars indicate the strongest signal. This icon is only displayed while receiving.

Ring Only

Ringing mode is enabled.

Secure

The Privacy feature is enabled.

Silent Ring

Silent ring mode is enabled.

Site Roaming

The site roaming feature is enabled.

Unsecure

The Privacy feature is disabled.

Vibrate

Vibrate mode is enabled.

Vibrate and Ring mode is enabled.

Vibrate and Ring

Wi-Fi signal is excellent.

Wi-Fi Excellent[1]

Wi-Fi signal is excellent.

Wi-Fi Good[1]

Wi-Fi signal is average

Wi-Fi Average[1]

Wi-Fi signal is poor.

Wi-Fi Poor[1]

Wi-Fi signal is unavailable.

Wi-Fi Unavailable[1]

Advance Menu Icons

The following icons appear beside menu items that offer a choice between two options or as an indication that there is a sub-menu offering two options.

Indicates the option is selected.

Checkbox (Checked)

Indicates the option is not selected.

Checkbox (Empty)

Indicates the option selected for the menu item with a sub-menu.

Solid Black Box

1 Only applicable for XPR 5550e/XPR 5580e
2 Only applicable for models with the latest software and hardware.

Bluetooth Device Icons

The following icons appear next to items in the list of Bluetooth-enabled devices available to indicate the device type.

Bluetooth Audio Device

Bluetooth-enabled audio device, such as a headset.

Bluetooth Data Device

Bluetooth-enabled data device, such as a scanner.

Bluetooth PTT Device

Bluetooth-enabled PTT device, such as a PTT-Only Device (POD).

Mini Notice Icons

The following icons appear momentarily on the display after an action to perform a task is taken.

Failed action taken.

Failed Transmission (Negative)

Successful action taken.

Successful Transmission (Positive)

Transmitting. This is seen before indication for Successful Transmission or Failed Transmission.

Transmission in Progress (Transitional)

Sent Item Icons

The following icons appear at the top right corner of the display in the Sent Items folder.

In Progress

The text message to a subscriber alias or ID is pending transmission, followed by waiting for acknowledgement.

The text message to a group alias or ID is pending transmission.

Individual or Group Message Read

The text message has been read.

Individual or Group Message Unread

The text message has not been read.

Send Failed

The text message cannot be sent.

Sent Successfully

The text message has been successfully sent.

LED Indicator

The LED indicator shows the operational status of your radio.

Blinking Red	Radio has failed the self-test upon powering up. Radio is receiving or sending an emergency transmission. Radio is transmitting in low battery state. Radio has moved out of range if Auto-Range Transponder System is configured.
Solid Green	Radio is powering up. Radio is transmitting.
Blinking Green	Radio is receiving a non-privacy-enabled call or data. Radio is retrieving Over-the-Air Programming transmissions over the air. Radio is detecting activity over the air.

Note:

This activity may or may not affect the programmed channel of the radio due to the nature of the digital protocol.

Double Blinking Green	Radio is receiving a privacy-enabled call or data.
Solid Yellow	Radio is in Bluetooth Discoverable Mode.
Blinking Yellow	Radio is receiving a Call Alert.
Double Blinking Yellow	Radio has Auto Roaming enabled. Radio is actively searching for a new site. Radio has yet to respond to a Group Call Alert. Radio is locked. Radio is not connected to the system.

Tones

The following are the tones that sound through on the radio speaker.

High Pitched Tone

Low Pitched Tone

Audio Tones

Audio tones provide you with audible indications of the status, or response to data received on the radio.

Continuous Tone

A monotone sound. Sounds continuously until termination.

Periodic Tone

Sounds periodically depending on the duration set by the radio. Tone starts, stops, and repeats itself.

Repetitive Tone

A single tone that repeats itself until it is terminated by the user.

Momentary Tone

Sounds only once for a duration set by the radio.

Indicator Tones

Indicator tones provide you with audible indications of the status after an action to perform a task is taken.

Positive Indicator Tone

Negative Indicator Tone

Registration

There are a number of registration-related messages that the radio user may receive.

Registering

Typically, registration is sent to the system during power up, Talkgroup change, or during site roaming. If a radio fails registration on a site, the radio automatically attempts to roam to another site. The radio temporarily removes the site where registration was attempted from the roaming list.

The indication means that the radio is busy searching for a site to roam, or that the radio has found a site successfully but is waiting for a response to the registration messages from the radio.

When `Registering` is displayed on the radio, a tone sounds and the yellow LED double flashes to indicate a site search.

If the indications persist, the user should change locations or if allowed, manually roam to another site.

Out of Range

A radio is deemed to be out of range when the radio is unable to detect a signal from the system or from the current site. Typically, this indication means that the radio is outside of the geographic outbound radio frequency (RF) coverage range.

When `Out of Range` is displayed on the radio, a repetitive tone sounds and the red LED flashes.

Contact your dealer or system administrator if the radio still receives out of range indications while being in an area with good RF coverage.

Talkgroup Affiliation Failed

A radio tries to affiliate to the Talkgroup specified in the channels or Unified Knob Position (UKP) during registration.

A radio that is in affiliation fail state is unable to make or receive calls from the Talkgroup that the radio is trying to affiliate to.

When a radio fails to affiliate with a Talkgroup, `UKP Alias` is displayed in the home screen with a highlighted background.

Contact your dealer or system administrator if the radio receives affiliation failure indications.

Register Denied

Registration denied indicators are received when the registration with the system is not accepted.

The radio does not indicate to the radio user the specific reason the registration was denied. Normally, a registration is denied when the system operator has disabled the access of the radio to the system.

When a radio is denied registration, `RegisterDenied` is displayed on the radio and the yellow LED double flashes to indicate a site search.

Zone and Channel Selections

This chapter explains the operations to select a zone or channel on your radio.

The radio can be programmed with a maximum of 250 Capacity Max Zones with a maximum of 160 Channels per zone. Each Capacity Max zone contains a maximum of 16 assignable positions.

Selecting Zones

Follow the procedure to select the required zone on your radio.

1 Do one of the following:

- Press the programmed **Zone Selection** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Zone`. Press OK to select.
The display shows ✓ and the current zone.

3 Press ▲ or ▼ to the required zone. Press OK to select.
The display shows `<Zone> Selected` momentarily and returns to the selected zone screen.

Selecting Zones by Using the Alias Search

Follow the procedure to select the required zone on your radio by using the alias search.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Zone`. Press OK to select.
The display shows ✓ and the current zone.

3 Enter the first character of the required alias. The display shows a blinking cursor.

4 Enter the rest of the characters of the required alias.

The alias search is case-insensitive. If there are two or more entries with the same name, the display shows the entry listed first in the list.

The first text line shows the characters you entered. The following text lines show the shortlisted search results.

5 Press OK to select.
The display shows `<Zone> Selected` momentarily and returns to the selected zone screen.

Selecting a Call Type

Use the Channel Selector Knob to select a call type. This can be a Group Call, Broadcast Call, All Call, or Private Call, depending on how your radio is programmed. If you change the Channel Selector Knob to a different position (that has a call type assigned to it), this causes the radio to re-register with the Capacity Max System. The radio registers with the Talkgroup ID that has been programmed for the new Channel Selector Knob position call type.

Your radio does not operate when selected to an unprogrammed channel, use the Channel Selector Knob to select a programmed channel instead.

Once the required zone is displayed (if you have multiple zones in your radio), turn the programmed Channel Selector Knob to select the call type.

Selecting a Site

A site provides coverage for a specific area. In a multi-site network, the Capacity Max radio will automatically search for a new site when the signal level from the current site drops to an unacceptable level.

Roam Request

A Roam Request tells the radio to search for a different site, even if the signal from the current site is acceptable.

If there are no sites available,

- The radio display shows `Searching` and continues to search through the list of sites.

- The radio will return to the previous site, if the previous site is still available.

Note:
This is programmed by your dealer.

Press the programmed **Manual Site Roam** button. You hear a tone, indicating the radio has switched to a new site. The display shows `Site ID <Site Number>`.

Site Lock On/Off

When toggled on, the radio searches the current site only. When toggled off, the radio searches other sites in addition to the current site.

Press the programmed **Site Lock** button.

If the **Site Lock** function is toggled on:

- You hear a positive indicator tone, indicating the radio has locked to the current site.
- The display shows `Site Locked`.

If the **Site Lock** function is toggled off:

- You hear a negative indicator tone, indicating the radio is unlocked.
- The display shows `Site Unlocked`.

Site Restriction

In Capacity Max system, your radio administrator has the ability to decide which network sites your radio is and is not allowed to use. The radio does not have to be reprogrammed to change the list of allowed and disallowed sites. If your radio attempts to register at a disallowed site, your radio receives indication that the site is denied. The radio then searches for a different network site.

When experiencing site restrictions, your radio displays `RegisterDenied` and the yellow LED double flashes to indicate a site search.

Site Trunking

A site must be able to communicate with the Trunk Controller to be considered as System Trunking. If the site cannot communicate with the Trunk Controller in the system, a radio enters Site Trunking mode. While in Site Trunking, the radio provides a periodic audible and visual indication to the user to inform the user of their limited functionality.

When a radio is in Site Trunking, the radio displays `Site Trunking` and a repetitive tone sounds.

The radios in Site Trunking are still able to make group and individual voice calls as well as send text messages to other radios within the same site. Voice consoles, logging recorders, phone gateways, and data applications cannot communicate to the radios at the site.

Once in Site Trunking, a radio that is involved in calls across multiple sites will only be able to communicate with other radios within the same site. Communication to and from other sites would be lost.

Note:
If there are multiple sites that cover the current location of the radio and one of the sites enters Site Trunking, the radios roam to another site if within coverage.

Calls

This chapter explains the operations to receive, respond to, make, and stop calls.

You can select a subscriber alias or ID, or group alias or ID after you have selected a channel by using one of these features:

Alias Search	This method is used for Group, Private and All Calls only with a keypad microphone
Contacts List	This method provides direct access to the Contacts list.
Manual Dial (via Contacts)	This method is used for Private and Phone Calls only with a keypad microphone.
Programmed Number Keys	This method is used for Group, Private, and All Calls only with a keypad microphone.

Note:
You can only have **one** alias or ID assigned to a number key, but you can have more than one number key associated to an alias or ID. All the number keys on a keypad microphone can be assigned. See *Assigning Entries to Programmable Number*

	Keys on page 306 for more information.
Programmed One Touch Access Button	This method is used for Group, Private, and Phone Calls only. **Note:** You can only have one ID assigned to a **One Touch Access** button with a short or long programmable button press. Your radio can have multiple **One Touch Access** buttons programmed.
Programmable Button	This method is used for Phone Calls only.
Volume/Channel Selector Knob	This method manually selects a subscriber alias or ID, or group alias or ID.

The LED lights up solid green while the radio is transmitting and blinks green when the radio is receiving.

Note:
The LED lights up solid green while the radio is transmitting and double blinks green when the radio is receiving a privacy-enabled call.

To unscramble a privacy-enabled call, your radio must have the same Privacy Key, OR the same Key Value and Key ID (programmed by your dealer), as the transmitting radio (the radio you are receiving the call from).

See *Privacy* on page 347 for more information.

Group Calls

Your radio must be configured as part of a group to receive a call from or make a call to the group of users.

Making Group Calls

To make a call to a group of users, your radio must be configured as part of that group. Follow the procedure to make Group Calls on your radio.

1 Do one of the following:

- Select a channel with the active group alias or ID. See *Selecting a Call Type* on page 35.

- Press the programmed **One Touch Access** button.

2 Press the **PTT** button to make the call.
The green LED lights up. The first text line shows the **Group Call** icon and alias.

3 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled

4 Release the **PTT** button to listen.
The green LED lights up when the target radio responds. The display shows the **Group Call** icon, and alias or ID, and the transmitting radio alias or ID.

5 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period.

The call initiator can press to end a Group Call.

Making Group Calls by Using the Contacts List

Follow the procedure to make Group Calls on your radio by using the Contacts list.

1 Press OK to access the menu.

2 Press or to `Contacts`. Press OK to select.

3 Press or to the required alias or ID.

Press OK to select.

4 Hold the microphone 1 inch to 2 inches (2.5 cm to 5.0 cm) from your mouth.

5 Press the **PTT** button to make the call.
The green LED lights up.

The first line displays the subscriber alias or ID. The second line displays `Group Call` and the **Group Call** icon.

6 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

7 Release the **PTT** button to listen.
The green LED blinks when any user in the group responds. The display shows the **Group Call** icon, and alias or ID, and the transmitting radio alias or ID.

8 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period.

The call initiator can press to end the Group Call.

You hear a short tone. The display shows `Call Ended`.

Making Group Calls by Using the Programmable Number Key

Follow the procedure to make Group Calls on your radio by using the programmable number key.

1 Long press the programmed number key to the predefined alias or ID when you are on the Home screen.

If a number key is assigned to an entry in a particular mode, this feature is not supported when you long press the number key in another mode.

A negative indicator tone sounds if the number key is not associated to an entry.

2 Hold the microphone 1 inch to 2 inches (2.5 cm to 5.0 cm) from your mouth.

3 Press the **PTT** button to make the call.
The green LED lights up.

4 Release the **PTT** button to listen.
The green LED blinks when any user in the group responds.

5 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button,

indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period. The radio returns to the screen you were on before initiating the call.

The call initiator can press to end the Group Call.

See *Assigning Entries to Programmable Number Keys* on page 306 for more information.

Making Group Calls by Using the Alias Search

Follow the procedure to make any calls by using the alias search.

1 Press OK to access the menu.

2 Press or to `Contacts`. Press OK to select.
The display shows the entries in alphabetical order.

3 Press or to the required subscriber alias or ID. The first line of the display shows `Phone Number:`. The second line of the display shows a blinking cursor. Use the keypad to enter a telephone number.

4 Press OK to select. If the entry selected is empty, a negative indicator tone sounds and the display shows `Phone Call Invalid #.`

5 Press or to Call Phone and Press OK to select. If the access code was not preconfigured in the Contacts list, the first line of the display shows `Access Code:`. The second line of the display shows a blinking cursor. Enter the access code and press the OK button to proceed. If successful, the DTMF tone sounds. You hear the dialing tone of the telephone user. The first line of the display shows the subscriber alias or ID, and the RSSI icon. The second line of the display shows `Phone Call` and the Phone Call icon. If unsuccessful, a tone sounds and the display shows `Phone Call Failed`. Your radio returns to the Access Code input screen. If the access code was preconfigured in the Contacts

list, the radio returns to the screen you were on prior to initiating the call.

6 Press the **PTT** button to talk and release it to listen. The RSSI icon disappears during transmission.

7 To enter extra digits, if requested by the Phone Call, do one of the following.

- Press any keypad key to begin the input of the extra digits. The first line of the display shows `Extra Digits:`. The second line of the display shows a blinking cursor. Enter the extra digits and press the OK button to proceed. The DTMF tone sounds and the radio returns to the previous screen.
- Press **One Touch Access** button. The DTMF tone sounds. If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.

8 Press the end button to end the call. If deaccess code was not preconfigured in the Contacts list, the first line of the display shows `De-Access Code:`. The second line of the display shows a blinking cursor. Enter the deaccess code and press OK to proceed. The radio returns to the previous screen. The DTMF tone sounds and the display shows `Ending Phone Call`. If successful, a tone sounds and the display shows Phone Call Ended. Your radio returns to the Phone Call screen. If unsuccessful, your radio returns to the Phone Call screen. When you press the **PTT** button while in the Phone Contacts screen, as tone sounds and the display shows `Press OK to Place Phone Call`. When the telephone user ends the call, a tone sounds and the display shows `Phone Call Ended`. If the call ends while you are entering the extra digits requested by the Phone Call, your radio returns to the screen you were on prior to initiating the call.

9 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period. A tone sounds. The display shows `Call Ended`.

The call initiator can press to end the Group Call.

Note:

During the channel access, press to dismiss the call attempt and a tone sounds

button or to exit alias search. Press

button or to exit alias search. During the call, when you press One Touch Access button with the deaccess code preconfigured or enter the deaccess code as the input for extra digits, your radio attempts to end the call. During channel access and access/ deaccess code or extra digits transmission, you radio responds to On/Off button, Volume Knob, and Channel Rocker only. A tone sounds for every invalid input.

Responding to Group Calls

Follow the procedure to respond to Group Calls on your radio.

When you receive a Group Call:

- The green LED blinks.
- The display shows the **Group Call** icon at the top right corner.
- The first text line shows the caller alias.
- The second text line displays the group call alias.
- Your radio unmutes and the incoming call sounds through the speaker.

1 Do one of the following:

- If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.
- If the Voice Interrupt feature is enabled, press the **PTT** button to interrupt the audio from the transmitting radio and free the channel for you to respond.

The green LED lights up.

2 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.

- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

3 Release the **PTT** button to listen.

The call ends when there is no voice activity for a predetermined period.

Broadcast Call

A Broadcast Call is a one-way voice call from any user to an entire talkgroup.

The Broadcast Call feature allows only the call initiating user to transmit to the talkgroup, while the recipients of the call cannot respond.

The broadcast initiator can also end the broadcast call. To receive a call from a group of users, or to call a group of users, the radio must be configured as part of a group.

Making Broadcast Calls

Follow the procedure to make Broadcast Calls on your radio.

1 Do one of the following:

- Select a channel with the active group alias or ID. See *Selecting a Call Type* on page 35.
- Press the programmed **One Touch Access** button.

2 Press the **PTT** button to make the call.
The green LED lights up.The displays shows the **Group Call** icon and alias.

3 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

The call initiator can press to end the Broadcast Call.

Making Broadcast Calls Using the Contact List

Follow the procedure to make Broadcast Calls on your radio using the Contacts list.

1 Press to access the menu.

2 Press or to Contacts. Press to select.

3 Press ▲ or ▼ to the required alias or ID.

Press OK to select.

4 Press the **PTT** button to make the call.
The green LED blinks.

The first line displays the subscriber alias or ID. The second line displays `Group Call` and the **Group Call** icon.

5 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

The call initiator can press ⏻ to end the Broadcast Call.

Making Broadcast Calls Using the Programmable Number Key

Follow the procedure to make Broadcast Calls on your radio using the programmable number key.

1 Long press the programmed number key to the predefined alias or ID when you are on the Home screen.

If a number key is assigned to an entry in a particular mode, this feature is not supported when you long press the number key in another mode.

A negative indicator tone sounds if the number key is not associated to an entry.

2 Press the **PTT** button to make the call.
The green LED lights up.The display shows the **Group Call** icon at the top right corner. The first text line shows the caller alias.

3 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

The call initiator can press ⏻ to end the Broadcast Call.

Receiving Broadcast Calls

Follow the procedure to receive a Broadcast Call on your radio.

When you receive a Broadcast Call:

- The green LED blinks.
- The display shows the **Group Call** icon at the top right corner.
- The first text line shows the caller alias.
- The second text line displays the group call alias.
- Your radio unmutes and the incoming call sounds through the speaker.

Note:
Recipient users are not allowed to Talkback during a Broadcast Call. The display shows `Talkback Prohibit`. The Talkback Prohibit Tone will sound momentarily if the **PTT** button is pressed during a Broadcast Call.

Private Call

A Private Call is a call from an individual radio to another individual radio.

There are two ways to set up a Private Call.

- The first call type is called Off Air Call Set-Up (OACSU). OACSU sets up the call after performing a radio presence check and completes the call automatically.
- The second type is called Full Off Air Call Set-Up (FOACSU). FOACSU also sets up the call after performing a radio presence check. However, FOACSU calls require user acknowledgement to complete the call and allows the user to either Accept or Decline the call.

The type of call is configured by the system administrator.

Note:
Both the call initiator and recipient are able to terminate an on-going Private Call by pressing .

Making Private Calls

Your radio must be programmed for you to initiate a Private Call. You hear a negative indicator tone when you initiate the call if this feature is not enabled.If the target radio is not available, you hear a short tone and see `Party Not Available` on the display. Follow the procedure to make Private Calls on your radio.

1 Do one of the following:

- Select a channel with the active subscriber alias or ID. See *Selecting a Call Type* on page 35.
- Press the programmed **One Touch Access** button.

2 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

3 Press the **PTT** button to make the call.
The green LED lights up.The display shows the **Private Call** icon, the subscriber alias, and call status.

4 Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.

5 Release the **PTT** button to listen.
The green LED lights up when the target radio responds.

6 The call ends when there is no voice activity for a predetermined period. You will hear a short tone.The display shows `Call Ended`.

Both the call initiator and recipient are able to terminate an on-going Private Call by pressing .

Making Private Calls by Using the Programmable Number Key

Follow the procedure to make Private Calls on your radio by using the programmable number key.

1 Long press the programmed number key to the predefined alias or ID when you are on the Home screen.

If a number key is assigned to an entry in a particular mode, this feature is not supported when you long press the number key in another mode.

A negative indicator tone sounds if the number key is not associated to an entry.

2 Press the **PTT** button to make the call.
The green LED lights up. The display shows the **Private Call** icon at the top right corner. The first text line shows the caller alias. The second text line shows the call status.

3 Release the **PTT** button to listen.

The green LED blinks when the target radio responds. The display shows the destination alias.

4 The call ends when there is no voice activity for a predetermined period. You will hear a short tone.The display shows `Call Ended`.

Both the call initiator and recipient are able to terminate an on-going Private Call by pressing .

See *Assigning Entries to Programmable Number Keys* on page 306 for more information.

Making Private Calls by Using the Alias Search

1 Press OK to access the menu.

2 Press or to `Contacts`. Press OK to select.
The display shows the entries in alphabetical order.

3 Press or to the required subscriber alias or ID. The first line of the display shows `Phone Number:`. The second line of the display shows a blinking cursor. Use the keypad to enter a telephone number.

4 Press OK to select. If the entry selected is empty, a negative indicator tone sounds and the display shows Phone Call Invalid #.

5 Press or to Call Phone and Press OK to select. If the access code was not preconfigured in the Contacts list, the first line of the display shows `Access Code:`. The second line of the display shows a blinking cursor. Enter the access code and press the OK button to proceed. If successful, the DTMF tone sounds. You hear the dialing tone of the telephone user. The first line of the display shows the subscriber alias or ID, and the RSSI icon. The second line of the display shows `Phone Call` and the Phone Call icon. If unsuccessful, a tone sounds and the display shows `Phone Call Failed`. Your radio returns to the Access Code input screen. If the access code was preconfigured in the Contacts list, the radio returns to the screen you were on before initiating the call.

6 Press the **PTT** button to talk and release it to listen. The RSSI icon disappears during transmission.

7 To enter extra digits, if requested by the Phone Call, do one of the following.

- Press any keypad key to begin the input of the extra digits. The first line of the display shows `Extra Digits:`. The second line of the display shows a blinking cursor. Enter the extra digits and press the OK button to proceed. The DTMF tone sounds and the radio returns to the previous screen.
- Press **One Touch Access** button. The DTMF tone sounds. If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.

8 Press the end key to end the call. If deaccess code was not preconfigured in the Contacts list, the first line of the display shows `De-Access Code:`. The second line of the display shows a blinking cursor.

Enter the deaccess code and press OK to proceed. The radio returns to the previous screen. The DTMF tone sounds and the display shows `Ending Phone Call`. If successful, a tone sounds and the display shows Phone Call Ended. Your radio returns to the Phone Call screen. If unsuccessful, your radio returns to the Phone Call screen. When you press the **PTT** button while in the Phone Contacts screen, as tone sounds and the display shows `Press OK to Place Phone Call`. When the telephone user ends the call, a tone sounds and the display shows `Phone Call Ended`. If the call ends while you are entering the extra digits requested by the Phone Call, your radio returns to the screen you were on before initiating the call.

9 The call ends when there is no voice activity for a predetermined period. You will hear a short tone.The display shows `Call Ended`.

Both the call initiator and recipient are able to terminate an on-going Private Call by pressing the end key.

Note:

During the channel access, press the end key to dismiss the call attempt and a tone sounds

button or to exit alias search. Press OK button or to exit alias search. During the call, when you press One Touch Access button with the deaccess code preconfigured or enter the deaccess code as the input for extra digits, your radio attempts to end the call.

Making a Private Call with a One Touch Call Button

The One Touch Call feature allows you to easily make a Private Call to a pre-defined Private Call alias or ID. This feature can be assigned to a short or long programmable button press.

You can ONLY have one alias or ID assigned to a One Touch Call button. Your radio can have multiple One Touch Call buttons programmed.

1 Press the programmed **One Touch Call** button to make a Private Call to the pre-defined Private Call alias or ID.

2 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

3 Press the **PTT** button to make the call.

The LED lights up solid green.

The display shows the Private Call alias or ID.

4 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.

5 Release the **PTT** button to listen.

When the target radio responds, the LED blinks green.

If there is no voice activity for a predetermined period of time, the call ends.

Both the call initiator and recipient are able to terminate an on-going Private Call by pressing .

Making Private Calls by Using the Manual Dial

Follow the procedure to make Private Calls on your radio by using the manual dial.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Contacts. Press OK to select.

3 Press ▲ or ▼ to Manual Dial. Press OK to select.

4 Press ▲ or ▼ to Radio Number. Press OK to select.

5 Do one of the following:

- Enter the subscriber ID, and press OK to proceed.
- Edit the previously dialed subscriber ID, and press OK to proceed.

6 Press the **PTT** button to make the call.
The green LED lights up. The display shows the destination alias.

7 Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.

8 Release the **PTT** button to listen.
The green LED lights up when the target radio responds. The display shows the transmitting user alias or ID.

9 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.
The call ends when there is no voice activity for a predetermined period. A tone sounds. The display shows Call Ended.
Both the call initiator and recipient are able to terminate an on-going Private Call by pressing ↩.

Responding to Private Calls

When you receive a Private Call:

- The green LED blinks.
- Your radio unmutes and the incoming call sounds through the speaker.

Note:
Depending on how your radio is configured, either Off Air Call Set-Up (OACSU) or Full Off

Air Call Set-Up (FOACSU), responding to Private Calls may or may not require user acknowledgement.

For the OACSU configuration, your radio unmutes and the call connects automatically.

The following are methods on how to respond to Private Calls configured as FOACSU.

- To decline a Private Call, do one of the following:
  - Press ▲ or ▼ to `Reject` and press OK to decline a Private Call.
  - Press ↩ to decline a Private Call.

- To accept a Private Call, do one of the following:
  - Press ▲ or ▼ to `Accept` and press OK to answer a Private Call.
  - Press the **PTT** button on any entry.

- The green LED lights up.

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.

- Release the **PTT** button to listen.

  The call ends when there is no voice activity for a predetermined period. A tone sounds.The display shows `Call Ended`.

Note:
Both the call initiator and recipient are able to terminate an on-going Private Call by pressing ↩.

All Calls

An All Call is a call from an individual radio to every radio on the site or every radio at a group of sites, depending on system configuration. An All Call is used to make important announcements, requiring full attention from the user. The users on the system cannot respond to an All Call.

Capacity Max supports Site All Call and Multi-site All Call. The system administrator may configure one or both of these in your radio.

Note:
Subscribers can support System-Wide All Calls but Motorola infrastructure does not support System-Wide All Calls.

Making All Calls

Your radio must be programmed for you to make an All Call. Follow the procedure to make All Calls on your radio.

1 Select a channel with the active All Call group alias or ID. See *Selecting a Call Type* on page 35.

2 Press the **PTT** button to make the call.
The green LED lights up. The display shows the **Group Call** icon and either `All Call, Site All Call, or Multi Site Call` depending on the type of configuration.

3 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

Users on the channel cannot respond to an All Call.

The call initiator can press to end the All Call.

Making All Calls by Using the Programmable Number Key

Follow the procedure to make All Calls on your radio by using the programmable number key.

1 Long press the programmed number key assigned to the predefined alias or ID when you are on the Home screen.

If a number key is assigned to an entry in a particular mode, this feature is not supported when you long press the number key in another mode.

A negative indicator tone sounds if the number key is not associated to an entry.

2 Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

3 Press the **PTT** button to make the call.
The green LED lights up.The display shows the **Group Call** icon and either `All Call, Site All Call, or Multi Site Call` depending on the type of configuration.

4 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.

- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

The call initiator can press to end the All Call.

See *Assigning Entries to Programmable Number Keys* on page 306 for more information.

Making All Calls by Using the Alias Search

1 Press OK to access the menu.

2 Press or to `Contacts`. Press OK to select.
The display shows the entries in alphabetical order.

3 Press or to the required subscriber alias or ID. The first line of the display shows `Phone Number:`. The second line of the display shows a blinking cursor. Use the keypad to enter a telephone number.

4 Press OK to select. If the entry selected is empty, a negative indicator tone sounds and the display shows Phone Call Invalid #.

5 Press or to Call Phone. Press OK to select. If the access code was not preconfigured in the Contacts list, the first line of the display shows `Access Code:`. The second line of the display shows a blinking cursor. Enter the access code and press the OK button to proceed. If successful, the DTMF tone sounds. You hear the dialing tone of the telephone user. The first line of the display shows the subscriber alias or ID, and the RSSI icon. The second line of the display shows `Phone Call` and the Phone Call icon. If unsuccessful, a tone sounds and the display shows `Phone Call Failed`. Your radio returns to the Access Code input screen. If the access code was preconfigured in the Contacts list, the radio returns to the screen you were on prior to initiating the call.

6 Press the **PTT** button to talk and release it to listen. The RSSI icon disappears during transmission.

7 To enter extra digits, if requested by the Phone Call, do one of the following.

- Press any keypad key to begin the input of the extra digits. The first line of the display shows `Extra Digits:`. The second line of the display shows a blinking cursor. Enter the extra digits and press the OK button to proceed. The DTMF tone sounds and the radio returns to the previous screen.
- Press **One Touch Access** button. The DTMF tone sounds. If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.

8 Press the end key to end the call. If deaccess code was not preconfigured in the Contacts list, the first line of the display shows `De-Access Code:`. The second line of the display shows a blinking cursor.

Enter the deaccess code and press OK to proceed. The radio returns to the previous screen. The DTMF tone sounds and the display shows `Ending Phone Call`. If successful, a tone sounds and the display shows Phone Call Ended. Your radio returns to the Phone Call screen. If unsuccessful, your radio returns to the Phone Call screen. When you press the **PTT** button while in the Phone Contacts screen, as tone sounds and the display shows `Press OK to Place Phone Call`. When the telephone user ends the call, a tone sounds and the display shows `Phone Call Ended`. If the call ends while you are entering the extra digits requested by the Phone Call, your radio returns to the screen you were on prior to initiating the call.

Note:

The call initiator can press the end key to end the All Call.

Receiving All Calls

When you receive an All Call:

- A tone sounds.
- The green LED blinks.
- The display shows the **Group Call** icon at the top right corner.

- The first text line shows the caller alias ID.
- The second text line displays either `All Call`, `Site All Call`, or `Multi Site Call` depending on the type of configuration.
- Your radio unmutes and the incoming call sounds through the speaker.

The radio returns to the screen before receiving the All Call when the call ends.

If the Channel Free Indication feature is enabled, you hear a short alert tone when the transmitting radio releases the **PTT** button, indicating the channel is free for you to use. You cannot respond to an All Call.

Note:
The radio stops receiving the All Call if you switch to a different channel while receiving the call. You are not able to continue with any menu navigation or editing until the call ends during an All Call.

Phone Calls

A Phone Call is a call from an individual radio to a telephone.

In Capacity Max, your radio is able to receive calls and talkback even if the Phone Call capability is disabled.

The Phone Call capability can be enabled by assigning and setting up phone numbers on the system. Check with your system administrator to determine how your radio has been programmed.

Making Phone Calls

Follow the procedure to make Phone Calls on your radio.

1 Press the programmed **One Touch Access** button to the predefined alias or ID.

If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds. If the access code is not preconfigured in the Contact List, the display shows `Access Code:`.

2 Enter the access code, and press OK to proceed.

The access or deaccess code cannot be more than 10 characters.

3 Press the **PTT** button to respond to the call.

4 Release the **PTT** button to listen.

5 Enter extra digits with the keypad if requested by the call, and press OK to proceed.

If the call ends while you are entering the extra digits requested by the call, your radio returns to the screen you were on before initiating the call.

The DTMF Tone sounds. Your radio returns to the previous screen.

6 Press ⏻ to end the call.

7 Do one of the following:

- If the deaccess code was not preconfigured, enter the deaccess code when the display shows `De-Access Code:`, and press OK to proceed.

  The radio returns to the previous screen.
- Press the programmed **One Touch Access** button.

  If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.

The DTMF Tone sounds and the display shows `Ending Phone Call.`

If the call ends successfully:

- A tone sounds.
- The display shows `Call Ended`.

If the call fails to end, the radio returns to the Phone Call screen. Repeat the last two steps or wait for the telephone user to end the call.

Making Phone Calls by Using the Contacts List

Follow the procedure to make Phone Calls on your radio by using the Contacts list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.
The display shows the entries in alphabetical order.

3 Press ▲ or ▼ to the required alias or ID.

Press OK to select.

When you press the **PTT** button while on the Phone Contacts screen:

- The first line of the display shows `Phone Number:`.
- The second line of the display shows a blinking cursor.

If the selected entry is empty:

- A negative indicator tone sounds.
- The display shows `Phone Call Invalid #`.

4 Press ▲ or ▼ to `Call Phone`. Press OK to select.
The display shows `Access Code:` if the access code was not preconfigured.

5 Enter the access code, and press OK to proceed.

The access or deaccess code cannot be more than 10 characters.

The first text line shows `Calling`. The second text line shows the subscriber alias or ID, and the **Phone Call** icon.

If the call is successful:

- The DTMF Tone sounds.
- You hear the dialing tone of the telephone user.
- The first text line shows the subscriber alias or ID, and the **RSSI** icon.
- The second text line shows `Phone Call`, and the **Phone Call** icon.

If the call is unsuccessful:

- A tone sounds.
- The display shows `Phone Call Failed` and then, `Access Code:`.
- Your radio returns to the screen you were on prior to initiating the call if the access code has been preconfigured in the Contacts list.

6 Press the **PTT** button to respond to the call.
The **RSSI** icon disappears.

7 Release the **PTT** button to listen.

8 Enter extra digits with the keypad if requested by the call, and press OK to proceed.

If the call ends while you are entering the extra digits requested by the call, your radio returns to the screen you were on prior to initiating the call.

The DTMF Tone sounds. Your radio returns to the previous screen.

9 Press ⟲ to end the call.

10 If the deaccess code was not preconfigured, enter the deaccess code when the display shows `De-Access Code:`, and press OK to proceed. The radio returns to the previous screen. The DTMF Tone sounds and the display shows `Ending Phone Call`.

If the call ends successfully:

- A tone sounds.
- The display shows `Call Ended`.

If the call fails to end, the radio returns to the Phone Call screen. Repeat Step 9 and Step 10, or wait for the telephone user to end the call. When you press the PTT button while in the Phone Contacts screen, as tone sounds and the display shows `Press OK to Place Phone Call`.

When the telephone user ends the call, a tone sounds and the display shows `Phone Call Ended`.

If the call ends while you are entering the extra digits requested by the Phone Call, your radio returns to the screen you were on prior to initiating the call.

Note:

During the channel access, press ⟲ to dismiss the call attempt and a tone sounds.

During the call, when you press **One Touch Access** button with the deaccess code preconfigured or enter the deaccess code as the input for extra digits, your radio attempts to end the call.

During channel access and access/ deaccess code or extra digits transmission, you radio responds to **On/Off** button, **Volume Knob**, and **Channel Rocker** only. A tone sounds for every invalid input.

Making Phone Calls by Using the Alias Search

1 Press OK to access the menu.

2 Press ▲ or ▼ to Contacts. Press OK to select.
The display shows the entries in alphabetical order.

3 Press ▲ or ▼ to the required subscriber alias or ID. The first line of the display shows Phone Number:. The second line of the display shows a blinking cursor. Use the keypad to enter a telephone number.

4 Press OK to select. If the entry selected is empty, a negative indicator tone sounds and the display shows Phone Call Invalid #.

5 Press ▲ or ▼ to Call Phone and Press OK to select. If the access code was not preconfigured in the Contacts list, the first line of the display shows Access Code:. The second line of the display shows a blinking cursor. Enter the access code and press the OK button to proceed. If successful, the DTMF tone sounds. You hear the dialing tone of the telephone user. The first line of the display shows the subscriber alias or ID, and the RSSI icon. The second line of the display shows Phone Call and the Phone Call icon. If unsuccessful, a tone sounds and the display shows Phone Call Failed. Your radio returns to the Access Code input screen. If the access code was preconfigured in the Contacts list, the radio returns to the screen you were on prior to initiating the call.

6 Press the **PTT** button to talk and release it to listen. The RSSI icon disappears during transmission.

7 To enter extra digits, if requested by the Phone Call, do one of the following.

- Press any keypad key to begin the input of the extra digits. The first line of the display shows Extra Digits:. The second line of the display shows a blinking cursor. Enter the extra digits and press the OK button to proceed. The DTMF tone sounds and the radio returns to the previous screen.

- Press **One Touch Access** button. The DTMF tone sounds. If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.

8 Press ⏻ to end the call. If deaccess code was not preconfigured in the Contacts list, the first line of the display shows `De-Access Code:`. The second line of the display shows a blinking cursor.

Enter the deaccess code and press OK to proceed. The radio returns to the previous screen. The DTMF tone sounds and the display shows `Ending Phone Call`. If successful, a tone sounds and the display shows Phone Call Ended. Your radio returns to the Phone Call screen. If unsuccessful, your radio returns to the Phone Call screen. When you press the **PTT** button while in the Phone Contacts screen, as tone sounds and the display shows `Press OK to Place Phone Call`. When the telephone user ends the call, a tone sounds and the display shows `Phone Call Ended`. If the call ends while you are entering the extra digits requested by the Phone Call, your radio returns to the screen you were on prior to initiating the call.

Note:

During the channel access, press ⏻ to dismiss the call attempt and a tone sounds

button or to exit alias search. Press OK

button or ⏻ to exit alias search. During the call, when you press One Touch Access button with the deaccess code preconfigured or enter the deaccess code as the input for extra digits, your radio attempts to end the call. During channel access and access/ deaccess code or extra digits transmission, you radio responds to On/Off button, Volume Knob, and Channel Rocker only. A tone sounds for every invalid input.

Making Phone Calls by Using the Manual Dial

Follow the procedure to make Phone Calls on your radio by using the manual dial.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to Manual Dial. Press OK to select.

4 Press ▲ or ▼ to Phone Number. Press OK to select.
The display shows Number: and a blinking cursor.

5 Enter the telephone number, and press OK to proceed.
The display shows Access Code: and a blinking cursor if the access code was not preconfigured.

6 Enter the access code, and press OK to proceed.
The access or deaccess code cannot be more than 10 characters.

7 The green LED lights up. The display shows the **Phone Call** icon at the top right corner. The first text line shows the subscriber alias. The second text line shows the call status.

If the call is successful:

- The DTMF Tone sounds.
- You hear the dialing tone of the telephone user.
- The first text line shows the subscriber alias.
- The display continues to show the **Phone Call** icon at the top right corner.

If the call is unsuccessful:

- A tone sounds.
- The display shows Phone Call Failed and then, Access Code:.
- Your radio returns to the screen you were on before initiating the call if the access code has been preconfigured in the Contacts list.

8 Press ⏻ to end the call.

9 Do one of the following:

- If the deaccess code was not preconfigured, enter the deaccess code when the display shows De-Access Code:, and press OK to proceed.
  The radio returns to the previous screen.
- Press the programmed **One Touch Access** button.

If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.

The DTMF Tone sounds and the display shows `Ending Phone Call`.

If the call ends successfully:

- A tone sounds.
- The display shows `Call Ended`.

If the call fails to end, the radio returns to the Phone Call screen. Repeat Step 11 and Step 12, or wait for the telephone user to end the call.

Note:

When you press **PTT** button while in the Phone Contacts screen, a tone sounds and the display shows `Press OK to Place Phone Call`.

When the telephone user ends the call, a tone sounds and the display shows `Call Ended`.

If the call ends while you are entering the extra digits requested by the Phone Call, your radio returns to the screen you were on before initiating the call.

During the channel access, press to dismiss the call attempt and a tone sounds.

During the call, when you press **One Touch Access** button with the deaccess code preconfigured or enter the deaccess code as the input for extra digits, your radio attempts to end the call.

During channel access and access/ deaccess code or extra digits transmission, you radio responds to **On/Off** button, **Volume Knob**, and **Channel Rocker** only. A tone sounds for every invalid input.

Dual Tone Multi Frequency

The Dual Tone Multi Frequency (DTMF) feature allows the radio to operate in a radio system with an interface to the telephone systems.

You can turn off the DTMF tone by disabling all radio tones and alerts. See *Turning Radio Tones/Alerts On or Off* on page 131 for more information.

Initiating DTMF Calls
Follow the procedure to initiate DTMF Calls on your radio.

1 Press and hold the **PTT** button to initiate a Dual Tone Multi Frequency (DTMF) call.

2 Enter the desired number, * or # .
You can turn off the DTMF tone by disabling all radio tones and alerts. See *Turning Radio Tones/ Alerts On or Off* on page 131.

Responding to Phone Calls as Group Calls
Follow the procedure to respond to Phone Calls as Group Calls on your radio.

When you receive a Phone Call as a Group Call:

- The display shows the **Phone Call** icon at the top right corner.
- The display shows `Phone Call`.
- The green LED blinks.
- Your radio unmutes and the incoming call sounds through the speaker.

1 Press the **PTT** button to respond to the call.

2 Release the **PTT** button to listen.

3 Press ⏻ to end the call.
The display shows `Ending Phone Call`.

Note:
If Phone Call capability is not enabled in your radio, the radio is not able to terminate a phone call as a group call. The telephone user must end the call. The recipient user is only allowed to talkback during the call.

If the call ends successfully:

- A tone sounds.
- The display shows `Call Ended`.

If the call fails to end, the radio returns to the Phone Call screen. Repeat Step *3* or wait for the telephone user to end the call.

Responding to Phone Calls as All Calls
When you receive a Phone Call as an All Call, the receiving radio is unable to talkback or respond. The recipient user is also not allowed to end the All Call.

When you receive a Phone Call as an All Call:

- The display shows the **Phone Call** icon at the top right corner.
- The display shows either `All Call`, `Site All Call`, or `Multi Site Call` depending on the type of configuration and `Phone Call`.
- The green LED blinks.
- Your radio unmutes and the incoming call sounds through the speaker.

Responding to Phone Calls as Private Calls

Follow the procedure to respond to Phone Calls as Private Calls on your radio.

When you receive a Phone Call as a Private Call:

- The display shows the **Phone Call** icon at the top right corner.
- The display shows `Phone Call`.
- The green LED blinks.
- Your radio unmutes and the incoming call sounds through the speaker.

1 Press the **PTT** button to respond to the call.

2 Release the **PTT** button to listen.

3 Press ⏻ to end the call.

The display shows `Ending Phone Call`.

Note:
If Phone Call capability is not enabled in your radio, the radio is not able to terminate a phone call as a private call. The telephone user must end the call. The recipient user is only allowed to talkback during the call.

If the call ends successfully:

- A tone sounds.
- The display shows `Call Ended`.

If the call fails to end, the radio returns to the Phone Call screen. Repeat Step 3 or wait for the telephone user to end the call.

Call Preemption

Call Preemption allows a radio to stop any in-progress voice transmission and initiate a priority transmission.

With the Call Preemption feature, the system interrupts and preempts ongoing calls in instances where trunked channels are unavailable.

Higher priority calls such as an Emergency Call or an All Call preempt the transmitting radio to accommodate the higher priority call. If no other Radio Frequency (RF) channels are available, an Emergency Call preempts an All Call as well.

Voice Interrupt

Voice Interrupt allows the user to shut down an in-progress voice transmission.

This feature uses reverse channel signaling to stop the in-progress voice transmission of a radio, if the interrupting radio is configured to Voice Interrupt, and the transmitting radio is configured to be Voice Call Interruptible. The interrupting radio is then allowed to make a voice transmission to the participant in the stopped call.

The Voice Interrupt feature significantly improves the probability of successfully delivering a new transmission to the intended parties when a call is in progress.

Voice Interrupt is accessible to the user only if this feature has been set up in the radio. Check with your dealer or system administrator for more information.

Enabling Voice Interrupt

Follow the procedure to initiate Voice Interrupt on your radio.

Your radio must be programmed to allow you to use this feature. Check with your dealer or system administrator for more information.

1 Press the **PTT** button during an on-going call to interrupt the transmission.

On the interrupted radio, the display shows `Call Interrupted`. The radio sounds a negative indicator tone until the **PTT** button is released.

2 Wait for acknowledgement.
If successful:

- A positive indicator tone sounds.

If unsuccessful:

- A negative indicator tone sounds.

3 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

Advanced Features

This chapter explains the operations of the features available in your radio.

Note:
Your dealer or system administrator may have customized your radio for your specific needs. Check with your dealer or system administrator for more information.

Call Queue

When there are no resources available to process a call, Call Queue enables the call request to be placed in the system queue for the next available resources.

You hear a Call Queue Tone after pressing the **PTT** button indicating that the radio has entered Call Queue State. The **PTT** button may be released once the Call Queue Tone is heard.

If the call setup is successful, the following occur:

- The green LED blinks.
- If enabled, the Talk Permit Tone sounds.
- The display shows the call type icon, ID or alias.
- The radio user has up to 4 seconds to press the **PTT** button to begin voice transmission.

If the call setup is unsuccessful, the following occur:

- If enabled, the Reject Tone sounds.
- The display shows the failure notice screen momentarily.
- The call is terminated and the radio exits the call setup.

Talkgroup Scan

This feature allows your radio to monitor and join calls for groups defined by a Digital Receive Group List. The Digital Receive Group List is programmed by the system administrator. When the radio detects a call in progress on one of these talkgroups, the radio plays the transmission. User can then push the **PTT** button and reply to that Talkgroup.

Your radio is only allowed to join a Talkgroup scan call at the site where another radio has already registered with using that Talkgroup, at the desired site.

Note:
Check with your system administrator to determine how your radio has been programmed.

Bluetooth

This feature allows you to use your radio with a Bluetooth-enabled device (accessory) via a Bluetooth connection. Your radio supports both Motorola and COTS (Commercially available Off-The-Shelf) Bluetooth-enabled devices.

Bluetooth operates within a range of 10 meters (32 feet) line of sight. This is an unobstructed path between your radio and your Bluetooth-enabled device. It is not recommended that you leave your radio behind and expect your Bluetooth-enabled device to work with a high degree of reliability when they are separated.

At the fringe areas of reception, both voice and tone quality will start to sound "garbled" or "broken". To correct this problem, simply position your radio and Bluetooth-enabled device closer to each other (within the 10-meter defined range) to re-establish clear audio reception. The Bluetooth function of your radio has a maximum power of 2.5 mW (4 dBm) at the 10-meter range.

Your radio can support up to three simultaneous Bluetooth connections with Bluetooth-enabled devices of unique types. For example, a headset, a scanner, and a PTT-Only Device (POD). Multiple connections with Bluetooth-enabled devices of the same type are not supported.

Refer to the user manual of your respective Bluetooth-enabled device for more details on the full capabilities of your Bluetooth-enabled device.

Note:
If disabled via the CPS, all Bluetooth-related features are disabled and the Bluetooth device database is erased.

Turning Bluetooth On and Off

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Bluetooth`. Press OK to select.

3 Press ▲ or ▼ to `My Status`. Press OK to select.
The display shows `On` and `Off`. The current status is indicated by a ✓.

4 Do one of the following:

- Press ▲ or ▼ to `On`. Press OK to select. The display shows ✓ beside `On`.
- Press ▲ or ▼ to `Off`. Press OK to select. The display shows ✓ beside `Off`.

Connecting to Bluetooth Devices

Turn on your Bluetooth-enabled device and place it in pairing mode.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Bluetooth`. Press OK to select.

3 Press ▲ or ▼ to `Devices`. Press OK to select.

4 Do one of the following:

- Press ▲ or ▼ to the required device. Press OK to select.
- Press ▲ or ▼ to `Find Devices` to locate available devices. Press ▲ or ▼ to the required device. Press OK to select.

5 Press ▲ or ▼ to `Connect`. Press OK to select.

Your Bluetooth-enabled device may require additional steps to complete the pairing. Refer to the user manual of your Bluetooth-enabled device.

The display shows `Connecting to <Device>`.

Wait for acknowledgment.

If successful:

- A positive indicator tone sounds.
- The display shows `<Device> Connected` and the **Bluetooth Connected** icon.
- The display shows ✓ beside the connected device.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows `Connecting Failed`.

Note:
If pin code is required, refer *Accessing Radios by Using Passwords* on page 120.

Connecting to Bluetooth Devices in Discoverable Mode

Turn on your Bluetooth-enabled device and place it in pairing mode.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Bluetooth`. Press OK to select.

3 Press ▲ or ▼ to `Find Me`. Press OK to select. The radio can now be found by other Bluetooth-enabled devices for a programmed duration. This is called Discoverable Mode.

Wait for acknowledgment.

If successful:

- A positive indicator tone sounds.
- The display shows `<Device> Connected` and the **Bluetooth Connected** icon.
- The display shows ✓ beside the connected device.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows `Connecting Failed`.

Disconnecting from Bluetooth Devices

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Bluetooth`. Press OK to select.

3 Press ▲ or ▼ to `Devices`. Press OK to select.

4 Press ▲ or ▼ to the required device. Press OK to select.

5 Press ▲ or ▼ to `Disconnect`. Press OK to select.
The display shows `Disconnecting from <Device>`.

Note:
Your Bluetooth-enabled device may require additional steps to disconnect. Refer to respective user manuals of any Bluetooth-enabled devices.

Wait for acknowledgment.

- A tone sounds.
- The display shows `<Device> Disconnected` and the **Bluetooth Connected** icon disappears.
- The ✓ disappears beside the connected device.

Switching Audio Route between Internal Radio Speaker and Bluetooth Device

Follow the procedure to toggle audio routing between internal radio speaker and external Bluetooth device.

Press the programmed **Bluetooth Audio Switch** button.

The display shows one of the following results:

- A tone sounds. The display shows `Route Audio to Radio`.
- A tone sounds. The display shows `Route Audio to Bluetooth`.

Viewing Device Details

Follow the procedure to view the device details on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Bluetooth`. Press OK to select.

3 Press ▲ or ▼ to `Devices`. Press OK to select.

4 Press ▲ or ▼ to the required device. Press OK to select.

5 Press ▲ or ▼ to `View Details`. Press OK to select.

Deleting Device Name

You can remove a disconnected device from the list of Bluetooth-enabled devices.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Bluetooth. Press OK to select.

3 Press ▲ or ▼ to Devices. Press OK to select.

4 Press ▲ or ▼ to the required device. Press OK to select.

5 Press ▲ or ▼ to Delete. Press OK to select. The display shows Device Deleted.

Bluetooth Mic Gain

This feature allows the user to control the microphone gain value of the connected Bluetooth-enabled device.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Bluetooth. Press OK to select.

3 Press ▲ or ▼ to BT Mic Gain. Press OK to select.

4 Press ▲ or ▼ to the BT Mic Gain type and the current values. Press OK to select. You can edit the values here.

5 Press ▲ or ▼ to increase or to decrease values. Press OK to select.

Indoor Location

Note:
Indoor Location feature is applicable for models with the latest software and hardware. Check with your dealer or system administrator for more information.

Indoor Location can be used to keep track of radio users location while indoors. When Indoor Location is activated, the radio is in a limited discoverable mode. Dedicated beacons are used to locate the radio and determine its position.

Turning Indoor Location On or Off

You can turn on or turn off Indoor Location by performing one of the following actions.

- Access this feature via the menu.
  a) Press OK to access the menu.
  a) Press ▲ or ▼ to `Bluetooth` and press OK to select.
  a) Press ▲ or ▼ to `Indoor Location` and press OK to select.
  b) Press OK to turn on Indoor Location.
  The display shows `Indoor Location On`. You hear a good key tone.

  One of the following scenarios occurs.

  - If successful, the Indoor Location Available icon appears on the Home screen display.
  - If unsuccessful, the display shows `Turning On Failed`. You hear a bad key tone.

  c) Press OK to turn off Indoor Location.
  The display shows `Indoor Location Off`. You hear a good key tone.

  One of the following scenarios occurs.

  - If successful, the Indoor Location Available icon disappears on the Home screen display.
  - If unsuccessful, the display shows `Turning Off Failed`. You hear a bad key tone.

- Access this feature via the programmed button.
  a) Long press the programmed **Indoor Location** button to turn on Indoor Location.
  The display shows `Indoor Location On`. You hear a positive tone.

  One of the following scenarios occurs.

  - If successful, the Indoor Location Available icon appears on the Home screen display.
  - If unsuccessful, the display shows `Turning On Failed`. If unsuccessful, you hear a negative tone.

  b) Press the programmed **Indoor Location** button to turn off Indoor Location.
  The display shows `Indoor Location Off`. You hear a positive tone.

One of the following scenarios occurs.

- If successful, the Indoor Location Available icon disappears on the Home screen display.
- If unsuccessful, the display shows `Turning Off Failed`. If unsuccessful, you hear a negative tone.

Accessing Indoor Location Beacons Information

Displays information on Indoor Location Beacons

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Bluetooth` and press OK to select.

3 Press ▲ or ▼ to `Indoor Location` and press OK to select.

4 Press ▲ or ▼ to `Beacons` and press OK to select.

The display shows the beacons information.

Multi-Site Controls

Starting Manual Site Search

Follow the procedure to start manual site search when the received signal strength is poor in order to attempt to find a site with better signal. .

If the radio finds a new site:

- A positive indicator tone sounds.

If the radio fails to find a new site:

- A negative indicator tone sounds.

Site Lock On/Off

When toggled on, the radio searches the current site only. When toggled off, the radio searches other sites in addition to the current site.

Press the programmed **Site Lock** button.

If the **Site Lock** function is toggled on:

- You hear a positive indicator tone, indicating the radio has locked to the current site.
- The display shows `Site Locked`.

If the **Site Lock** function is toggled off:

- You hear a negative indicator tone, indicating the radio is unlocked.
- The display shows `Site Unlocked`.

Accessing Neighbor Sites List

This feature allows the user to check the adjacent sites list of the current home site. Follow the procedure to access the Neighbor Sites List:

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`.Press OK to select.

3 Press ▲ or ▼ to `Radio Info`. Press OK to select.

4 Press ▲ or ▼ to `Neighbor Sites`. Press OK to select.

Home Channel Reminder

This feature provides a reminder when the radio is not set to the home channel for a period of time.

If this feature is enabled when your radio is not set to the home channel for a period of time, the following occurs periodically:

- The Home Channel Reminder tone and announcement sound.
- The first line of the display shows `Non`.
- The second line shows `Home Channel`.

Muting the Home Channel Reminder

When the Home Channel Reminder occurs, you can temporarily mute the reminder.

Press the **Silence Home Channel Reminder** programmable button.
The first line of the display shows `HCR` and the second line shows `Silenced`.

Setting New Home Channels

When the Home Channel Reminder occurs, you can set a new home channel.

1 Do one of the following:

- Press the **Reset Home Channel** programmable button to set the current channel as the new Home Channel. Skip the following steps.

The first line of the display shows the channel alias and the second line shows `New Home Ch`.

- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Home Channel`. Press OK to select.

5 Press ▲ or ▼ to the desired new home channel alias. Press OK to select.
The display shows ✓ beside the selected home channel alias.

Remote Monitor

This feature is used to turn on the microphone of a target radio with a subscriber alias or ID. You can use this feature to remotely monitor any audible activity surrounding the target radio.

Both your radio and the target radio must be programmed to allow you to use this feature.

If initiated, the green LED blinks once on the target radio. This feature automatically stops after a programmed duration or when there is any user operation on the target radio.

Initiating Remote Monitors

Follow the procedure to initiate Remote Monitor on your radio.

1 Press the programmed **Remote Monitor** button.

2 Press ▲ or ▼ to the required alias or ID.
Press OK to select.
The display shows a transitional mini notice, indicating the request is in progress. The green LED lights up.

3 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.

- The audio from the monitored radio starts playing for a programmed duration, and the display shows `Rem. Monitor`. Once the timer expires, an alert tone sounds, and the LED turns off.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Initiating Remote Monitors by Using the Contacts List

Follow the procedure to initiate Remote Monitor on your radio by using the Contacts list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID.

Press OK to select.

4 Press ▲ or ▼ to `Remote Mon.`. Press OK to select.

The display shows a transitional mini notice, indicating the request is in progress. The green LED lights up.

5 Wait for acknowledgment.

If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.
- The audio from the monitored radio starts playing for a programmed duration, and the display shows `Rem. Monitor`. Once the timer expires, an alert tone sounds, and the LED turns off.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Initiating Remote Monitors by Using the Manual Dial

Follow the procedure to initiate Remote Monitor on your radio by using the manual dial.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to `Manual Dial`. Press OK to select.

4 Press ▲ or ▼ to `Radio Number`. Press OK to select.

5 Do one of the following:

- Enter the subscriber alias or ID, and press OK to proceed.
- Edit the previously dialed ID, and press OK to proceed.

6 Press ▲ or ▼ to `Remote Mon.`. Press OK to select.
The display shows a transitional mini notice, indicating the request is in progress. The green LED lights up.

7 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.
- The audio from the monitored radio starts playing for a programmed duration, and the display shows `Rem. Monitor`. Once the timer expires, an alert tone sounds, and the LED turns off.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Stopping Remote Monitors

Follow the procedure to stop Remote Monitor on your radio.

1 Press the programmed **Transmit Interrupt Remote Dekey** button.
The display shows a transitional mini notice, indicating the request is in progress. The green LED lights up.

2 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Contacts Settings

Contacts provides address book capabilities on your radio. Each entry corresponds to an alias or ID that you use to initiate a call. The entries are alphabetically sorted.

Each entry, depending on context, associates with the different call types: Group Call, Private Call, Broadcast Call, Site All Call, Multi-site All Call, PC Call or Dispatch Call.

PC Call and Dispatch Call are data-related. They are only available with the applications. Refer to the data applications documentation for further details.

Additionally, Contacts menu allows you to assign each entry to a programmable number key or more on a keypad microphone. If an entry is assigned to a number key, your radio can perform a quick dial on the entry.

Note:
You see a checkmark before each number key that is assigned to an entry. If the checkmark is before `Empty`, you have not assign a number key to the entry.

Each entry within Contacts displays the following information:

- Call Type
- Call Alias
- Call ID

Note:

If the Privacy feature is enabled on a channel, you can make privacy-enabled Group Calls, Private Calls, All Calls, and Phone Calls on that channel. Only target radios with the same Privacy Key, or the same Key Value and Key ID as your radio will be able to decrypt the transmission.

Assigning Entries to Programmable Number Keys

Follow the procedure to assign entries to programmable number keys on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID.

Press OK to select.

4 Press ▲ or ▼ to `Program Key`. Press OK to select.

5 Do one of the following:

- If the desired number key has not been assigned to an entry, press ▲ or ▼ to the desired number key. Press OK to select.
- If the desired number key has been assigned to an entry, the display shows `The Key is Already Assigned` and then, the first text line shows `Overwrite?`. Do one of the following:

  Press ▲ or ▼ to `Yes`. Press OK to select.

  The radio sounds a positive indicator tone and the display shows `Contact Saved` and a positive mini notice.

  Press ▲ or ▼ to `No` to return to the previous step.

Each entry can be associated to different number keys. You see a ✓ before each number key that is assigned to an entry. If the ✓ is before `Empty`, that number key is not assigned.

If a number key is assigned to an entry in a particular mode, this feature is not supported when you long press the number key in another mode.

The screen automatically returns to the previous menu.

Removing Associations Between Entries and Programmable Number Keys

Follow the procedure to remove the associations between entries and programmable number keys on your radio.

1 Do one of the following:

- Long press the programmed number key to the required alias or ID. Proceed to Step *4*.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID.

Press OK to select.

4 Press ▲ or ▼ to `Program Key`. Press OK to select.

5 Press ▲ or ▼ to `Empty`. Press OK to select.

The first text line shows `Clear from all keys`.

6 Press ▲ or ▼ to `Yes`. Press OK to select.

Note:
When an entry is deleted, the association between the entry and its programmed number key(s) is removed.

A positive indicator tone sounds. The display shows `Contact Saved`.

The screen automatically returns to the previous menu.

Adding New Contacts

Follow the procedure to add new contacts on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Contacts. Press OK to select.

3 Press ▲ or ▼ to New Contact. Press OK to select.

4 Press ▲ or ▼ to select contact type Radio Contact or Phone Contact. Press OK to select.

5 Enter the contact number with the keypad, and press OK to proceed.

6 Enter the contact name with the keypad, and press OK to proceed.

7 Press ▲ or ▼ to the required ringer type. Press OK to select.
A positive indicator tone sounds. The display shows a positive mini notice.

Call Indicator Settings

Activating or Deactivating Call Ringers for Private Calls

Follow the procedure to activate or deactivate call ringers for Private Calls on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alerts. Press OK to select.

5 Press ▲ or ▼ to Call Ringers. Press OK to select.

6 Press ▲ or ▼ to Private Call. Press OK to select.

7 Press ▲ or ▼ to the required tone. Press OK to select.
If enabled ✓ appears besides Enabled. If disabled, ✓ disappears beside Enabled.

Activating or Deactivating Call Ringers for Text Messages

Follow the procedure to activate or deactivate call ringers for text messages on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alerts. Press OK to select.

5 Press ▲ or ▼ to Call Ringers. Press OK to select.

6 Press ▲ or ▼ to Text Message. Press OK to select.
The display shows ✓ and the current tone.

7 Press ▲ or ▼ to the required tone. Press OK to select. The display shows ✓ beside the selected tone.

Activating or Deactivating Call Ringers for Call Alerts

Follow the procedure to activate or deactivate call ringers for Call Alerts on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alert. Press OK to select.

5 Press ▲ or ▼ to Call Ringers. Press OK to select.

6 Press ▲ or ▼ to Call Alert. Press OK to select.

7 Press ▲ or ▼ to the required tone. Press OK to select. The display shows ✓ beside the selected tone.

Activating or Deactivating Call Ringers for Selective Calls

Follow the procedure to activate or deactivate call ringers for Selective Calls on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alerts. Press OK to select.

5 Press ▲ or ▼ to Call Ringers. Press OK to select.

6 Press ▲ or ▼ to Selective Call. Press OK to select.

The display shows ✓ and the current tone.

7 Press ▲ or ▼ to the required tone. Press OK to select. The display shows ✓ beside the selected tone.

Activating or Deactivating Call Ringers for Telemetry Status with Text

Follow the procedure to activate or deactivate call ringers for telemetry status with text on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Tones/Alert`. Press OK to select.

5 Press ▲ or ▼ to `Call Ringers`. Press OK to select.

6 Press ▲ or ▼ to `Telemetry`. Press OK to select.
The current tone is indicated by a ✓

Assigning Ring Styles

The radio can be programmed to sound one of ten predefined ringing tones when receiving a Call Alert or a Text Message from a particular contact. The radio sounds out each ring style as you navigate through the list. Follow the procedure to assign ring styles on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.
The entries are alphabetically sorted.

3 Press ▲ or ▼ to the required alias or ID. Press OK to select.

4 Press ▲ or ▼ to Edit. Press OK to select.

5 Press ▲ or ▼ to Edit Ringtone. Press OK to select.

6 Press ▲ or ▼ to the required tone. Press OK to select.

A ✓ appears beside the selected tone.

Escalating Alarm Tone Volume

The radio can be programmed to continually alert, when a radio call remains unanswered. This is done by automatically increasing the alarm tone volume over time. This feature is known as Escalert.

Call Log Features

Your radio keeps track of all recent outgoing, answered, and missed Private Calls. The call log feature is used to view and manage recent calls.

Missed Call Alerts may be included in the call logs, depending on the system configuration on your radio.

You can perform the following tasks in each of your call lists:

- Store Alias or ID to Contacts
- Delete Call
- Delete All Calls
- View Details

Viewing Recent Calls

Follow the procedure to view recent calls on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Call Log. Press OK to select.

3 Press ▲ or ▼ to the preferred list. Press OK to select.

The options are Missed, Answered, and Outgoing lists.

The display shows the most recent entry.

4 Press ▲ or ▼ to view the list.

You can start a Private Call with the alias or ID the display is currently showing by pressing the **PTT** button.

Storing Aliases or IDs from the Call List

Follow the procedure to store aliases or IDs on your radio from the Call list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Call Log`. Press OK to select.

3 Press ▲ or ▼ to the required list. Press OK to select.

4 Press ▲ or ▼ to the required alias or ID. Press OK to select.

5 Press ▲ or ▼ to `Store`. Press OK to select.
The display shows a blinking cursor.

6 Enter the rest of the characters of the required alias. Press OK to select.
You can store an ID without an alias.
The display shows a positive mini notice.

Deleting Calls from the Call List

Follow the procedure to delete calls on your radio from the Call list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Call Log`. Press OK to select.

3 Press ▲ or ▼ to the required list. Press OK to select.
If the list is empty:

- A tone sounds.
- The display shows `List Empty`.

4 Press ▲ or ▼ to the required alias or ID. Press OK to select.

5 Press ▲ or ▼ to `Delete Entry?`. Press OK to select.

6 Do one of the following:

- Press OK to select `Yes` to delete the entry.
  The display shows `Entry Deleted`.
- Press ▲ or ▼ to `No`. Press OK to select.
  The radio returns to the previous screen.

Deleting All Calls from the Call List

Follow the procedure to delete all calls on your radio from the Call list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Call Log`. Press OK to select.

3 Press ▲ or ▼ to the required list. Press OK to select.

4 Press ▲ or ▼ to the required alias or ID. Press OK to select.

5 Press ▲ or ▼ to `Delete All`. Press OK to select.

6 Do one of the following:

- Press OK to select `Yes` to delete all entries.
  The display shows a positive mini notice.
- Press ▲ or ▼ to `No`. Press OK to select.
  The radio returns to the previous screen.

Viewing Details from the Call List

Follow the procedure to view details on your radio from the Call list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Call Log`. Press OK to select.

3 Press ▲ or ▼ to the required list. Press OK to select.

4 Press ▲ or ▼ to the required alias or ID. Press OK to select.

5 Press ▲ or ▼ to `View Details`. Press OK to select.
The display shows the details.

Call Alert Operation

Call Alert paging enables you to alert a specific radio user to call you back when they are able to do so.

This feature is applicable for subscriber aliases or IDs only and is accessible through the menu via Contacts, manual dial, or a programmed **One Touch Access** button.

In Capacity Max, the Call Alert feature allows a radio user or a dispatcher to send an alert to another radio user requesting the radio user to call back the initiating radio user when available. Voice communication is not involved in this feature.

The Call Alert Operation can be configured by the dealer or the system administrator in two ways:

- The radio is configured to allow the user to press the **PTT** button to respond directly to the call initiator by making a Private Call.
- The radio is configured to allow the user to press the **PTT** button and continue with other Talkgroup communication. Pressing the **PTT** button on the call alert entry will not allow the user to respond to the call initiator. The user must navigate to the Missed Call Log option at the Call Log menu and respond to the Call Alert from there.

An Off Air Call Set-Up (OACSU) private call allows the user to respond immediately while an Full Off Air Call Set-Up (FOACSU) private call requires user

acknowledgement for the call. OACSU type calls are therefore, recommended to be used for the call alert feature. See *Private Call* on page 46.

Making Call Alerts

Follow the procedure to make Call Alerts on your radio.

1 Press the programmed **One Touch Access** button.
The display shows `Call Alert` and the subscriber alias or ID. The green LED lights up.

2 Wait for acknowledgment.
If the Call Alert acknowledgment is received, the display shows a positive mini notice.

If the Call Alert acknowledgment is not received, the display shows a negative mini notice.

Making Call Alerts by Using the Contacts List

Follow the procedure to make Call Alerts on your radio by using the Contacts list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID.
Press OK to select.

4 Press ▲ or ▼ to `Call Alert`. Press OK to select.
The display shows `Call Alert` and the subscriber alias or ID. The green LED lights up.

5 Wait for acknowledgment.
If the Call Alert acknowledgment is received, the display shows a positive mini notice.

If the Call Alert acknowledgment is not received, the display shows a negative mini notice.

Responding to Call Alerts

Follow the procedure to respond to Call Alerts on your radio.

When you receive a Call Alert:

- A repetitive tone sounds.
- The yellow LED blinks.

- The display shows the notification list listing a Call Alert with the alias or ID of the calling radio.

  Depending on the configuration by your dealer or system administrator, you can respond to a Call Alert by doing one of the following:

  - Press the **PTT** button and respond with a Private Call directly to the caller.
  - Press the **PTT** button to continue normal talkgroup communication.

    The Call Alert is moved to the Missed Call option at the Call Log menu. You can respond to the caller from the Missed Called log.

See *Notification List* on page 123 and *Call Log Features* on page 86 for more information.

Emergency Operation

An Emergency Alarm is used to indicate a critical situation. You are able to initiate an Emergency at any time even when there is activity on the current channel.

In Capacity Max, the receiving radio can only support a single Emergency Alarm at a time. If initiated, a second Emergency Alarm will override the first alarm.

When an Emergency Alarm is received, the recipient may choose to either delete the alarm and exit the Alarm List, or respond to the Emergency Alarm by pressing the **PTT** button and transmitting non-emergency voice.

Your dealer or system administrator can set the duration of a button press for the programmed **Emergency** button, except for long press, which is similar with all other buttons:

Short Press	Duration between 0.05 seconds and 0.75 seconds.
Long Press	Duration between 1.00 second and 3.75 seconds.

The **Emergency** button is assigned with the Emergency On/Off feature. Check with your dealer for the assigned operation of the **Emergency** button.

Note:

If short press the **Emergency** button is assigned to turn on the Emergency mode, then long press the **Emergency** button is assigned to exit the Emergency mode.

If long press the **Emergency** button is assigned to turn on the Emergency mode, then short press the **Emergency** button is assigned to exit the Emergency mode.

Your radio supports three Emergency Alarms:

- Emergency Alarm
- Emergency Alarm with Call
- Emergency Alarm with Voice to Follow

In addition, each alarm has the following types:

Regular	Radio transmits an alarm signal and shows audio and/or visual indicators.
Silent	Radio transmits an alarm signal without any audio or visual indicators. Radio receives calls without any sound through the speaker, until the programmed *hot mic* transmission period is over and/or you press the **PTT** button.
Silent with Voice	Radio transmits an alarm signal without any audio or visual indicators, but allow incoming calls to sound through the speaker.

Note:
Only one of the Emergency Alarms above can be assigned to the programmed **Emergency** button or the **Emergency** footswitch.

Sending Emergency Alarms

This feature allows you to send an Emergency Alarm, a non-voice signal, which triggers an alert indication on a group of radios. Follow the procedure to send Emergency Alarms on your radio.

Your radio does not display any audio or visual indicators during Emergency mode when it is set to Silent.

1 Press the programmed **Emergency On** button. You see one of these results:

- The display shows `Tx Alarms` and the destination alias.
- The display shows `Tx Telegram` and the destination alias.

The green LED lights up. The **Emergency** icon appears.

Note:
If programmed, the Emergency Search tone sounds. This tone is muted when the

radio transmits or receives voice, and stops when the radio exits Emergency mode. The Emergency Search tone can be programmed by the dealer or system administrator.

2 Wait for acknowledgment.
If successful:

- The Emergency tone sounds.
- The green LED blinks.
- The display shows `Alarm Sent`.

If unsuccessful after all retries have been exhausted:

- A tone sounds.
- The display shows `Alarm Failed`.

The radio exits the Emergency Alarm mode and returns to the Home screen.

Note:

When configured for Emergency Alarm only, the emergency process consists only of the Emergency Alarm delivery. The emergency ends when an acknowledgement is received from the system, or when channel access attempts have been exhausted.

No voice call is associated with the sending of an Emergency Alarm when operating as Emergency Alarm Only.

Sending Emergency Alarms with Call

This feature allows you to send an Emergency Alarm with Call to a group of radios or a dispatcher. Upon acknowledgement by the infrastructure within the group, a group of radios can communicate over a programmed Emergency channel. Follow the procedure to send Emergency Alarms with call on your radio.

The radio must be configured for Emergency Alarm and Call to perform an emergency call after the alarm process.

1 Press the programmed **Emergency On** button.
You see the following:
The display shows `Tx Alarm` and the destination alias. The **Emergency** icon appears. The green LED lights up.

Note:
If programmed, the Emergency Search tone sounds. This tone is muted when the

radio transmits or receives voice, and stops when the radio exits Emergency mode.

If an Emergency Alarm acknowledgment is successful received:

- The Emergency tone sounds.
- The green LED blinks.
- The display shows `Alarm Sent`.
- Your radio enters the Emergency call mode when the display shows `Emergency` and the destination group alias.

If an Emergency Alarm acknowledgment is not successfully received:

- All retries are exhausted.
- A low-pitched tone sounds.
- The display shows `Alarm Failed`.
- The radio exits the Emergency Alarm mode.

2 Press the **PTT** button to initiate a voice transmission.
The green LED lights up.The display shows the **Group Call** icon.

3 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

4 Release the **PTT** button to listen.
The display shows the caller and group aliases.

5 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

6 Press the **Emergency Off** button to exit the Emergency mode.
The radio returns to the Home screen.

Note:
Depending on how your radio is programmed, you may or may not hear a Talk Permit tone. Your radio dealer or system administrator can provide more information on how your radio has been programmed for Emergency.

Note:
The Emergency Call initiator may press

to end an on-going emergency call. The radio returns to a call idle state but the emergency call screen remains open.

Sending Emergency Alarms with Voice to Follow

This feature allows you to send an Emergency Alarm with Voice to Follow to a group of radios. Your radio microphone is automatically activated, allowing you to communicate with the group of radios without pressing the **PTT** button. This activated microphone state is also known as *hot mic*.

Note:
Your radio cannot detect a non-IMPRES microphone that is attached to the rear accessory connector.

When no microphone is detected at the specified programmed connector, your radio checks the alternative connector. Here, your radio gives priority to the detected microphone.

If your radio has Emergency Cycle Mode enabled, repetitions of *hot mic* and receiving period are made for a programmed duration. During Emergency Cycle Mode, received calls sound through the speaker.

If you press the **PTT** button during the programmed receiving period, you hear a prohibit tone, indicating that you should release the **PTT** button. The radio ignores the **PTT** button press and remains in Emergency mode.

If you press the **PTT** button during *hot mic*, and continue to press it after the *hot mic* duration expires, the radio continues to transmit until you release the **PTT** button.

If the Emergency Alarm request fails, the radio does not retry to send the request, and enters the *hot mic* state directly.

Note:
Some accessories may not support *hot mic*. Check with your dealer or system administrator for more information.

Follow the procedure to send Emergency Alarms with voice to follow on your radio.

1 Press the programmed **Emergency On** button or the **Emergency** footswitch.
You see one of these results:

- The display shows `Tx Alarm` and the destination alias.
- The display shows `Tx Telegram` and the destination alias.

The green LED lights up. The **Emergency** icon appears.

2 Once the display shows `Alarm Sent`, speak clearly into the microphone.

The radio automatically stops transmitting when:

- The cycling duration between *hot mic* and receiving calls expires, if Emergency Cycle Mode is enabled.
- The *hot mic* duration expires, if Emergency Cycle Mode is disabled.

3 Press the **Emergency Off** button to exit the Emergency mode.
The radio returns to the Home screen.

Receiving Emergency Alarms

The receiving radio can only support a single Emergency Alarm at a time. If initiated, a second Emergency Alarm will override the first alarm. Follow the procedure to receive and view Emergency Alarms on your radio.

When you receive an Emergency Alarm:

- A tone sounds.
- The red LED blinks.
- The display shows the Emergency Alarm List, the Emergency Talkgroup ID or alias, and the ID or alias of the transmitting radio.

1 Press OK to view the alarm.

2 Press OK to view the action options and details of the entry in the Alarm List.

3 Press and select `Yes` to exit the Alarm list.
The radio returns to the home screen with an **Emergency Icon** displayed at the top, indicating the unresolved Emergency Alarm. The **Emergency Icon** disappears once the entry in the Alarm List is deleted.

4 Press OK to access the menu.

5 Select `Alarm List` to revisit the Alarm list.

6 The tone sounds and the red LED blinks until you exit the Emergency mode. However, the tone can be silenced. Do one of the following:

- Press the **PTT** button to call the group of radios which received the Emergency Alarm.
- Press any programmable button.

Responding to Emergency Alarms

When an Emergency Alarm is received, the recipient may choose to either delete the alarm and exit the Alarm List, or respond to the Emergency Alarm by pressing the **PTT** button and transmitting non-emergency voice. Follow the procedure to respond to Emergency Alarms on your radio.

1 If the Emergency Alarm Indication is enabled, the Emergency Alarm List appears when the radio receives an Emergency Alarm. Press ⏶ or ⏷ to the required alias or ID.

2 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to transmit non-emergency voice to the same group the Emergency Alarm targeted.
The green LED lights up.

3 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

4 Release the **PTT** button to listen.
When the emergency initiating radio responds:

- The red LED blinks.
- The display shows the **Emergency Call** icon, the Emergency Talkgroup ID or alias, and the ID or alias of the transmitting radio.

Note:
If the Emergency Call Indication is not enabled, the display shows the **Group Call** icon, Emergency Talkgroup ID or alias, and the ID or alias of the transmitting radio.

Responding to Emergency Alarms with Call

Follow the procedure to respond to Emergency Alarms with Call on your radio.

When you receive an Emergency Call:

- The Emergency Call Tone sounds if the Emergency Call Indication and Emergency Call Decode Tone is enabled. The Emergency Call Tone will not sound if only the Emergency Call Indication is enabled.
- The display shows the **Emergency Call** icon at the top right corner.
- The text line shows the Emergency Talkgroup ID or alias, and the ID or alias of the transmitting radio.
- Your radio unmutes and the incoming call sounds through the speaker.

1 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call. The green LED lights up.

2 Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.

3 Release the **PTT** button to listen.
When the emergency initiating radio responds:

- The red LED blinks.
- The display shows the **Emergency Call** icon, the Emergency Talkgroup ID or alias, and the ID or alias of the transmitting radio.

Note:
If the Emergency Call Indication is not enabled, the display shows the **Group Call** icon, Emergency Talkgroup ID or alias, and the ID or alias of the transmitting radio.

Text Messaging

Your radio is able to receive data, for example a text message, from another radio or a text message application.

There are 2 types of text messages, DMR Short Text Message and text message.

The maximum length of characters when you send and receive a text message is 280 characters which includes the subject line. You see the subject line

when you receive messages from e-mail applications. The maximum length of 280 characters is applicable only for models with the latest software and hardware. Check with your dealer or system administrator for more information.

For DMR Short Text Message, the maximum length is 23 characters.

The radio exits the current screen once the inactivity timer expires.

Note:

Long press ⌂ at any time to return to the Home screen.

Text Messages

The text messages are stored in an Inbox, and sorted according to the most recently received.

Viewing Text Messages

Follow the procedure to view text messages on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Messages`. Press OK to select.

3 Press ▲ or ▼ to `Inbox`. Press OK to select.

If the Inbox is empty:

- The display shows `List Empty`.
- A tone sounds, if the Keypad Tone is turned on.

4 Press ▲ or ▼ to the required message.

Press OK to select.

The display shows a subject line if the message is from an e-mail application.

Viewing Telemetry Status Text Messages

Follow the procedure to view a telemetry status text message from the inbox.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Messages`. Press OK to select.

3 Press ▲ or ▼ to Inbox. Press OK to select.

4 Press ▲ or ▼ to the required message.

Press OK to select.

You cannot reply to a Telemetry Status text message.

The display shows Telemetry: <Status Text Message>.

5 Long press ↩ to return to the Home screen.

Responding to Text Messages

Follow the procedure to respond to text messages on your radio.

When you receive a text message:

- The display shows the Notification list with the alias or ID of the sender.
- The display shows the **Message** icon.

Note:
The radio exits the Text Message alert screen and sets up a Private or Group Call to the sender of the message if the **PTT** button is pressed.

1 Do one of the following:

- Press ▲ or ▼ to Read. Press OK to select.

  The display shows the text message. The display shows a subject line if the message is from an e-mail application.
- Press ▲ or ▼ to Read Later. Press OK to select.

  The radio returns to the screen you were on prior to receiving the text message.
- Press ▲ or ▼ to Delete. Press OK to select.

2 Do one of the following:

- Press OK to return to inbox.
- Press OK a second time to reply, forward, or delete the text message.

Responding to Text Messages with Quick Text
Follow the procedure to respond to text messages with Quick Text messages on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step 3.
- Press OK to access the menu.

2 Press ▲ or ▼ to Messages. Press OK to select.

3 Press ▲ or ▼ to Inbox. Press OK to select.

4 Press ▲ or ▼ to the required message.
Press OK to select.
The display shows a subject line if the message is from an e-mail application.

5 Press OK to access the sub-menu.

6 Press ▲ or ▼ to Reply. Press OK to select.

7 Press ▲ or ▼ to Quick Reply. Press OK to select.

8 Press ▲ or ▼ to the required message.
Press OK to select.
The display shows a transitional mini notice, confirming the message is being sent.

9 Wait for acknowledgment.
If successful:

- A tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A tone sounds.
- The display shows a negative mini notice.
- The radio returns to the Resend option screen.

Resending Text Messages

Follow the procedure to resend text messages on your radio.

When you are at the Resend option screen:

Press OK to resend the same message to the same subscriber or group alias or ID.
If successful:

- A tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A tone sounds.
- The display shows a negative mini notice.
- The radio returns to the Resend option screen.

Forwarding Text Messages

Follow the procedure to forward text messages on your radio.

When you are at the Resend option screen:

1 Press ▲ or ▼ to Forward, and press OK to send the same message to another subscriber or group alias or ID.

2 Press ▲ or ▼ to the required alias or ID.

Press OK to select.
The display shows a transitional mini notice, confirming your message is being sent.

3 Wait for acknowledgment.
If successful:

- A tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A tone sounds.
- The display shows a negative mini notice.

Note:
You can also manually select a target radio address (see *Forwarding Text Messages by Using the Manual Dial* on page 328).

Forwarding Text Messages by Using the Manual Dial

Follow the procedure to forward text messages by using the manual dial on your radio.

1 Press ▲ or ▼ to Forward. Press OK to select.

2 Press OK to send the same message to another subscriber or group alias or ID.

3 Press ▲ or ▼ to Manual Dial. Press OK to select.
The display shows Radio Number:.

4 Enter the subscriber ID, and press OK to proceed.
The display shows a transitional mini notice, confirming your message is being sent.

5 Wait for acknowledgment.
If successful:

- A tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A tone sounds.
- The display shows a negative mini notice.

Editing Text Messages

Select Edit to edit the message.

Note:
If a subject line is present (for messages received from an e-mail application), you cannot edit it.

1 Press ▲ or ▼ to Edit. Press OK to select.
The display shows a blinking cursor.

2 Use the keypad to edit your message.

- Press ◀ to move one space to the left.
- Press ▶ or #⇧ to move one space to the right.
- Press *⌫ to delete any unwanted characters.

- Long press # to change text entry method.

3 Press OK once message is composed.

4 Do one of the following:

- Press ▲ or ▼ to Send and press OK to send the message.
- Press ▲ or ▼ to Save and press OK to save the message to the Drafts folder.
- Press ↩ to edit the message.
- Press ↩ to choose between deleting the message or saving it to the Drafts folder.

Writing Text Messages

Follow the procedure to write text message on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step 3.
- Press OK to access the menu.

2 Press ▲ or ▼ to Messages. Press OK to select.

3 Press ▲ or ▼ to Compose. Press OK to select.
A blinking cursor appears.

4 Use the keypad to type your message.

Press ◀ to move one space to the left.

Press ▶ or # to move one space to the right.

Press * to delete any unwanted characters.

Long press # to change text entry method.

5 Press OK once message is composed.
Do one of the following:

- Press OK to send the message.

- Press . Press or to choose among editing, deleting, or saving the message. Press to select.

Sending Text Messages

Follow the procedure to send text message on your radio.

It is assumed that you have a newly written text message or a saved text message.

Select the message recipient. Do one of the following:

- Press or to the required alias or ID. Press to select.
- Press or to `Manual Dial`. Press to select.Key in the subscriber ID. The first line of the display shows `Radio Number:`. The second line of the display shows a blinking cursor. Key in the subscriber alias or ID. Press .

The display shows transitional mini notice, confirming your message is being sent.

If successful:

- A tone sounds.
- The display shows positive mini notice.

If unsuccessful:

- A low tone sounds.
- The display shows negative mini notice.
- The message is moved to the Sent Items folder.
- The message is marked with a Send Failed icon.

Note:
For a newly written text message, the radio returns you to the `Resend` option screen.

Deleting Text Messages from the Inbox

Follow the procedure to delete text messages from the Inbox on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.

- Press OK to access the menu.

2 Press ▲ or ▼ to Messages. Press OK to select.

3 Press ▲ or ▼ to Inbox. Press OK to select.

If the Inbox is empty:

- The display shows List Empty.
- A tone sounds.

4 Press ▲ or ▼ to the required message.

Press OK to select.

The display shows a subject line if the message is from an e-mail application.

5 Press OK to access the sub-menu.

6 Press ▲ or ▼ to Delete. Press OK to select.

7 Press ▲ or ▼ to Yes. Press OK to select. The display shows a positive mini notice. The screen returns to the Inbox.

Deleting All Text Messages from the Inbox

Follow the procedure to delete all text messages from the Inbox on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to Messages. Press OK to select.

3 Press ▲ or ▼ to Inbox. Press OK to select.

If the Inbox is empty:

- The display shows List Empty.
- A tone sounds.

4 Press ▲ or ▼ to Delete All. Press OK to select.

5 Press ▲ or ▼ to Yes. Press OK to select. The display shows a positive mini notice.

Sent Text Messages

Once a message is sent to another radio, it is saved in Sent Items folder. The most recent sent text message is always added to the top of the Sent Items folder. You can resend, forward, edit, or delete a Sent text message.

The Sent Items folder is capable of storing a maximum of 30 last sent messages. When the folder is full, the next sent text message automatically replaces the oldest text message in the folder.

If you exit the message sending screen while the message is being sent, the radio updates the status of the message in the Sent Items folder without providing any indication in the display or via sound.

If the radio changes mode or powers down before the status of the message in Sent Items folder is updated, the radio cannot complete any In-Progress messages and automatically marks it with a **Send Failed** icon.

The radio supports a maximum of five In-Progress messages at one time. During this period, the radio cannot send any new message and automatically marks it with a **Send Failed** icon.

If you long press ⏻ at any time, the radio returns to the Home screen.

Note:
If the channel type, for example a conventional digital or Capacity Plus channel, is not a match, you can only edit, forward, or delete a Sent message.

Viewing Sent Text Messages

Follow the procedure to view sent text messages on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to Messages. Press OK to select.

3 Press ▲ or ▼ to Sent Items. Press OK to select.

If the Sent Items folder is empty:

- The display shows List Empty.
- A low tone sounds, if the Keypad Tone is turned on.

4 Press ▲ or ▼ to the required message.

Press OK to select.
The icon at the top right corner of the screen indicates the status of the message. See *Sent Item Icons* on page 262.

Sending Sent Text Messages
Follow the procedure to send a sent text messages on your radio.

When you are viewing a Sent message:

1 Press OK .

2 You can either resend or forward the sent text message. Do one of the following:

- ▼ to Resend. Press OK to select.
- ▼ to Forward. Press OK to select.

The display shows a transitional mini notice, confirming your message is being sent.

3 Wait for acknowledgment.
If successful:

- A tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A tone sounds.
- The display shows a negative mini notice.
- The radio proceeds to the Resend option screen. See *Resending Text Messages* on page 102 for more information.

Deleting Sent Text Messages from the Sent Items Folder
Follow the procedure to delete sent text messages from the Sent Items folder on your radio.

When you are viewing a Sent message:

1 Press OK.

2 Press ▲ or ▼ to Delete. Press OK to select.

Deleting All Sent Text Messages from the Sent Items Folder

Follow the procedure to delete all sent text messages from the Sent Items folder on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to Messages. Press OK to select.

3 Press ▲ or ▼ to Sent Items. Press OK to select.

If Sent Items is empty:

- The display shows List Empty.
- A tone sounds.

4 Press ▲ or ▼ to Delete All. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to Yes. Press OK to select.

  The display shows a positive mini notice.
- Press ▲ or ▼ to No. Press OK to select.

  The radio returns to the previous screen.

Saved Text Messages

You can save a text message to send it at a later time.

If a PTT button press or a mode change causes the radio to exit the text message writing/editing screen while you are in the process of writing or editing a text message, your current text message is automatically saved to the Drafts folder.

The most recent saved text message is always added to the top of the Drafts list.

The Drafts folder stores a maximum of ten (10) last saved messages. When the folder is full, the next saved text message automatically replaces the oldest text message in the folder.

Viewing Saved Text Messages
Follow the procedure to view saved text message on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to Messages. Press OK to select.

3 Press ▲ or ▼ to Drafts. Press OK to select.

4 Press ▲ or ▼ to the required message.
Press OK to select.

Editing Saved Text Messages
Follow the procedure to edit saved text message on your radio.

1 Press OK while viewing the message.

2 Press ▲ or ▼ to Edit. Press OK to select.
A blinking cursor appears.

3 Use the keypad to type your message.

Press ◀ to move one space to the left.

Press ▶ or # to move one space to the right.

Press * to delete any unwanted characters.

Long press # to change text entry method.

4 Press OK once message is composed.
Do one of the following:

- Press ▲ or ▼ to Send. Press OK to send the message.

- Press . Press or to choose between saving or deleting the message. Press OK to select.

Deleting Saved Text Messages from the Drafts Folder

Follow the procedure to delete saved text message from drafts on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press or to Messages. Press OK to select.

3 Press or to Drafts. Press OK to select.

4 Press or to the required message.

Press OK to select.

5 Press or to Delete. Press OK to delete the text message.

Quick Text Messages

Your radio supports a maximum of 50 Quick Text messages as programmed by your dealer.

While Quick Text messages are predefined, you can edit each message before sending it.

Sending Quick Text Messages

Follow the procedure to send predefined Quick Text messages on your radio to a predefined alias.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.
- Press the programmed **One Touch Access** button. Proceed to Step *6*.

  The display shows a transitional mini notice, confirming your message is being sent.
- Press OK to access the menu.

2 Press ▲ or ▼ to Messages. Press OK to select.

3 Press ▲ or ▼ to Quick Text. Press OK to select.

4 Press ▲ or ▼ to the required Quick Text message. Press OK to select.

5 Do the following to select the recipient and send the message.

The display shows a transitional mini notice, confirming that your message is being sent.

6 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.
- The radio proceeds to the Resend option screen. See *Resending Text Messages* on page 102 for more information.

Text Entry Configuration

Your radio allows you to configure different text.

You can configure the following settings for entering text on your radio:

- Word Predict
- Word Correct
- Sentence Cap
- My Words

Your radio supports the following text entry methods:

- Numbers
- Symbols
- Predictive or Multi-Tap
- Language (If programmed)

Note:

Press ↩ at any time to return to the previous screen or long press ↩ to return to the Home Screen. The radio exits the

current screen once the inactivity timer expires.

Enabling or Disabling Word Correct

The in-built dictionary cannot recognize the supplies alternative word choice when the word entered into the text editor.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Text Entry`. Press OK to select.

5 Press ▲ or ▼ to `Word Correct`. Press OK to select.

6 Do one of the following:

- Press ▲ or ▼ to `Word Correct`. Press OK to select.
- Press to enable Word Correct. If enabled ✓ appears besides `Enabled`.
- Press to disable Word Correct. If disabled, ✓ disappears beside `Enabled`.

Enabling or Disabling Word Predict

Word Predict: Your radio can learn common word sequences that you often enter. It then predicts the next word you may want to use after you enter the first word of a common word sequence into the text editor.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to Text Entry. Press OK to select.

5 Press ▲ or ▼ to Word Predict. Press OK to select.

6 Do one of the following:

- Press OK to enable the Word Predict. If enabled ✓ appears besides Enabled.
- Press OK to disable Microphone Dynamic Distortion Control. If disabled, ✓ disappears beside Enabled.

Sentence Cap

This feature is used to automatically enable capitalization of the first letter in the first word for every new sentence.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Text Entry. Press OK to select.

5 Press ▲ or ▼ to Sentence Cap. Press OK to select.

6 Do one of the following:

- Press OK to enable Sentence Cap. If enabled ✓ appears besides Enabled.
- Press OK to disable Sentence Cap. If disabled, ✓ disappears beside Enabled.

Viewing Custom Words

You can add your own custom words into the in-built dictionary of your radio. Your radio maintains a list to contain these words.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Utilities`. Press OK to select.
3. Press Press ▲ or ▼ to `Radio Settings`. Press OK to select.
4. Press ▲ or ▼ to `Text Entry`. Press OK to select.
5. Press ▲ or ▼ to `My Words`. Press OK to select.
6. Press ▲ or ▼ to `List of Words`. Press OK to select.
   The display shows the list of custom words.

Editing Custom Words

You can edit custom words saved in your radio

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Utilities`. Press OK to select.
3. Press ▲ or ▼ to `Radio Settings`. Press OK to select.
4. Press ▲ or ▼ to `Text Entry`. Press OK to select.
5. Press ▲ or ▼ to `My Words`. Press OK to select.
6. Press ▲ or ▼ to `List of Words`. Press OK to select.
   Display shows the list of custom words.

7 Press ▲ or ▼ to the required word. Press OK to select.

8 Press ▲ or ▼ to Edit. Press OK to select.

9 Use the keypad to edit your custom word.

- Press ◀ to move one space to the left.
- Press ▶ key to move one space to the right.
- Press the * key to delete any unwanted characters.
- Long press # to change text entry method.

10 Press OK once your custom word is completed.

The display shows transitional mini notice, confirming your custom word is being saved.

- If the custom word is saved, a tone sounds and the display shows positive mini notice.
- If the custom word is not saved, a low tone sounds and the display show negative mini notice.

Adding Custom Words

You can add custom words into the in-built radio dictionary.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Text Entry. Press OK to select.

5 Press ▲ or ▼ to My Words. Press OK to select.

6 Press ▲ or ▼ to Add New Word. Press OK to select.
Display shows the list of custom words.

7 Use the keypad to edit your custom word.

- Press ◀ to move one space to the left.
- Press ▶ key to move one space to the right.
- Press the * key to delete any unwanted characters.
- Long press # to change text entry method.

8 Press OK once your custom word is completed.

The display shows transitional mini notice, confirming your custom word is being saved.

- If the custom word is saved, a tone sounds and the display show positive mini notice.
- If the custom word is not saved, a low tone sounds and the display show negative mini notice.

Deleting a Custom Word

Follow the procedure to delete the custom words saved in your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Text Entry`. Press OK to select.

5 Press ▲ or ▼ to `My Words`. Press OK to select.

6 Press ▲ or ▼ to the required word. Press OK to select.

7 Press ▲ or ▼ to `Delete`. Press OK to select.

8 Choose one of the following.

- At `Delete Entry?`, press OK to select `Yes`. The display shows `Entry Deleted`.

- Press ▲ or ▼ to No. Press OK to return to the previous screen.

Deleting All Custom Words

Follow the procedure to delete all custom words from the in-built dictionary of your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Text Entry. Press OK to select.

5 Press ▲ or ▼ to My Words. Press OK to select.

6 Press ▲ or ▼ to Delete All. Press OK to select.

7 Do one of the following:

- At Delete Entry?, press OK to select Yes. The display shows All Entries Deleted.
- Press ▲ or ▼ to No to return to the previous screen. Press OK to select.

Privacy

This feature helps to prevent eavesdropping by unauthorized users on a channel by the use of a software-based scrambling solution. The signaling and user identification portions of a transmission are not scrambled.

Your radio must have privacy enabled on the channel to send a privacy-enabled transmission, although this is not a necessary requirement for receiving a transmission. While on a privacy-enabled channel, the radio is still able to receive clear or unscrambled transmissions.

Your radio only supports Enhanced Privacy. To unscramble a privacy-enabled call or data transmission, your radio must be programmed to have the same Key Value and Key ID for Enhanced Privacy as the transmitting radio.

If your radio receives a scrambled call that is of a different Key Value and Key ID, you will hear nothing at all for Enhanced Privacy.

Note:
This feature is not applicable in Citizens Band channels that are in the same frequency.

The green LED lights up when the radio is transmitting, and blinks rapidly when the radio is receiving an ongoing privacy-enabled transmission.

Note:
Some radio models may not offer this Privacy feature, or may have a different configuration. Check with your dealer or system administrator for more information.

Turning Privacy On or Off

Follow the procedure to turn privacy on or off on your radio.

1 Do one of the following:

- Press the programmed **Privacy** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Privacy`. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to `On`. Press OK to select. The display shows ✓ beside `On`.
- Press ▲ or ▼ to `Off`. Press OK to select. The display shows ✓ beside `Off`.

Stun

Your radio can be disabled (stunned) or enabled (revived) in the system from the console. For

example, you may want to disable a stolen radio to prevent unauthorized users from using it, and enable the radio when it is recovered.

When a radio is stunned, the radio cannot request nor receive any user initiated services on the system that performed the Stun procedure. However, the radio can switch to another system. The radio continues to send GPS location reports and can be remote monitored when it was stunned.

Note:
Check with your dealer or system administrator for more information.

Lone Worker

This feature prompts an emergency to be raised if there is no user activity, such as any radio button press or activation of the channel selector, for a predefined time.

Following no user activity for a programmed duration, the radio pre-warns the user via an audio indicator once the inactivity timer expires.

If there is still no acknowledgment by the user before the predefined reminder timer expires, the radio initiates an emergency condition as programmed by the dealer or system administrator.

See *Emergency Operation* on page 91 for more information.

Note:
Check with your dealer or system administrator for more information.

Password Lock Features

This feature allows you to restrict access to the radio by asking for a password when the device is turned on

You can use a keypad microphone or **Scroll Up/ Down** buttons to enter the password.

Accessing Radios by Using Passwords

Follow the procedure to access your radio by using a password.

1 Enter the current four-digit password.

The use of **Emergency** footswitch cancels out password input to access the radio.

- Use a keypad microphone.

- Press ▲ or ▼ to edit the numeric value of each digit, and press OK to enter and move to the next digit.

2 Press OK to enter the password.
If successful, the radio powers up.

If unsuccessful:

- After the first and second attempt, the display shows `Wrong Password`. Repeat Step *1*.
- After the third attempt, the display shows `Wrong Password` and then, `Radio Locked`. A tone sounds. The yellow LED double blinks. Your radio enters into locked state for 15 minutes.

Note:
In locked state, your radio responds to inputs from **On/Off/Volume Control Knob** and programmed **Backlight** button only.

Unlocking Radios in Locked State

Your radio is unable to receive any call, including emergency calls, in locked state. Follow the procedure to unlock your radio in locked state.

1 Power up the radio.
Your radio restarts the 15-minutes timer for locked state.

2 Wait for 15 minutes.
Your radio responds only to **On/Off** button in locked state.

3 Repeat the steps in *Accessing Radios by Using Passwords* on page 120 to access the radio.

Turning Password Lock On or Off

Follow the procedure to turn password lock on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to Passwd Lock. Press OK to select.

5 Enter the current four-digit password.

- Use a keypad microphone.
- Press ▲ or ▼ to edit the numeric value of each digit, and press OK to enter and move to the next digit.

  A positive indicator tone sounds for every digit pressed.

6 Press OK to enter the password.

If the password is incorrect, the display shows Wrong Password and automatically returns to the previous menu.

7 Do one of the following:

- Press ▲ or ▼ to Turn On. Press OK to select.

  The display shows ✓ beside Turn On.
- Press ▲ or ▼ to Turn Off. Press OK to select.

  The display shows ✓ beside Turn Off.

Changing Passwords

Follow the procedure to change passwords on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Passwd Lock. Press OK to select.

5 Enter the current four-digit password, and press OK to proceed.

If the password is incorrect, the display shows `Wrong Password` and automatically returns to the previous menu.

6 Press ▲ or ▼ to `Change PWD`. Press OK to select.

7 Enter a new four-digit password, and press OK to proceed.

8 Re-enter the new four-digit password, and press OK to proceed.
If successful, the display shows `Password Changed`.

If unsuccessful, the display shows `Passwords Do Not Match`.

The screen automatically returns to the previous menu.

Notification List

Your radio has a Notification list that collects all your unread events on the channel, such as unread text messages, telegrams, missed calls and call alerts.

The display shows the **Notification** icon when the Notification list has one or more events.

For text messaging and missed call/call alert notification events, the maximum number are 30 text messages and 10 missed calls/call alerts. This maximum number depends on individual feature (job tickets or text messages or missed calls/ call alerts) list capability.

Accessing Notification List

Follow the procedure to access the Notification list on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Notification`. Press OK to select.

3 Press ▲ or ▼ to the required event. Press OK to select.

4 Long press ↩ to return to the Home screen.

Over-the-Air Programming

Your dealer can remotely update your radio via Over-the-Air Programming (OTAP) without physical connection. Additionally, some settings can also be configured via OTAP.

When your radio undergoes OTAP, the green LED blinks.

When your radio receives high volume data:

- The display shows the **High Volume Data** icon.
- The channel becomes busy.
- A negative tone sounds if you press the **PTT** button.

When OTAP completes, depending on the configuration:

- A tone sounds. The display shows `Updating Restarting`. Your radio restarts by powering off and on again.
- You can select `Restart Now` or `Postpone`. When you select `Postpone`, your radio returns to the previous screen. The display shows the **OTAP Delay Timer** icon until the automatic restart occurs.

When your radio powers up after automatic restart:

- If successful, the display shows `Sw Update Completed`.
- If unsuccessful, the display shows `Sw Update Failed`.

See *Checking Software Update Information* on page 146 for the updated software version.

Selecting Third-Party Peripherals Connection Modes

Follow the procedure to select one of the following third-party peripherals connection modes:

- Motorola
- PC and Audio
- Data Accessory
- Telemetry
- Generic

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`.Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`.Press OK to select.

4 Press ▲ or ▼ to Cable Type. Press OK to select.

5 Press ▲ or ▼ to the required connection mode. Press OK to select.
The display shows the selected connection mode. The screen returns to the previous menu.

Received Signal Strength Indicator

This feature allows you to view the Received Signal Strength Indicator (RSSI) values.

The display shows the RSSI icon at the top right corner. See *Display Icons* on page 256 for more information on the RSSI icon.

Viewing RSSI Values

Follow the procedure to view RSSI values on your radio.

When you are at the Home screen:

Long press ⌂ to return to the Home screen.

Front Panel Configuration

You are able to customize certain feature parameters in Front Panel Configuration (FPC) to enhance the use of your radio.

Entering Front Panel Configuration Mode

Follow the procedure to enter front panel programming mode on your radio.

Long press ⌂ at any time to return to the Home screen.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Program Radio. Press OK to select.

Editing FPC Mode Parameters

Use the following buttons as required while navigating through the feature parameters.

- , – Scroll through options, increase/ decrease values, or navigate vertically.
- OK – Select the option or enter a sub-menu.
- – Short-press to return to previous menu or to exit the selection screen. Long-press to return to Home screen.

Wi-Fi Operation

Wi-Fi® is a registered trademark of Wi-Fi Alliance®.

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

This feature allows you to setup and connect to a Wi-Fi® network. Wi-Fi supports updates for radio firmware, codeplug, and resources such as language packs and voice announcement.

Turning Wi-Fi On or Off

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

The programmed **Wi-Fi On or Off** button is assigned by your dealer or system administrator. Check with your dealer or system administrator to determine how your radio has been programmed.

You can turn on or turn off Wi-Fi® by performing one of the following actions.

- Press the programmed **Wi-Fi On or Off** button. Voice Announcement sounds Turning On Wi-Fi or Turning Off Wi-Fi.

- Access this feature via the menu.
  a) Press OK to access the menu.
  b) Press or to `WiFi` and press OK to select.
  c) Press or to `WiFi Status` and press OK to select.

  Press OK to turn on Wi-Fi. The display shows ✓ beside Enabled.

  Press OK to turn off Wi-Fi. The ✓ disappears from beside Enabled.

Connecting to a Network Access Point

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

When you turn on Wi-Fi®, the radio scans and connects to a network access point.

You can also connect to a network access point via the menu.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `WiFi` and press OK to select.

3 Press ▲ or ▼ to `Networks` and press OK to select.

4 Press ▲ or ▼ to a network access point and press OK to select.

5 Press ▲ or ▼ to `Connect` and press OK to select.

6 Enter the password and press OK.
When the connection is successful, the radio displays a notice and the network access point is saved into the profile list.

Refreshing the Network List

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

- Perform the following actions to refresh the network list.
  a) Press OK to access the menu.
  b) Press ▲ or ▼ to `WiFi` and press OK to select.
  c) Press ▲ or ▼ to `Networks` and press OK to select.
  When you enter the Networks menu, the radio automatically refreshes the network list.

- If you are already in the Networks menu, perform the following action to refresh the network list.

a) Press ▲ or ▼ to Refresh and press OK to select.

The radio refreshes and displays the latest network list.

Adding a Network

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

If a preferred network is not in the available network list, perform the following actions to add a network.

1 Press OK to access the menu.

2 Press ▲ or ▼ to WiFi and press OK to select.

3 Press ▲ or ▼ to Networks and press OK to select.

4 Press ▲ or ▼ to Add Network and press OK to select.

5 Enter the Service Set Identifier (SSID) and press OK.

6 Press ▲ or ▼ to Open and press OK to select.

7 Enter the password and press OK.

The radio displays to indicate that the network is successfully saved.

Viewing Details of Network Access Points

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

Perform the following actions to view details of network access points.

1 Press OK to access the menu.

2 Press ▲ or ▼ to WiFi and press OK to select.

3 Press ▲ or ▼ to Networks and press OK to select.

4 Press ▲ or ▼ to a network access point and press OK to select.

5 Press ▲ or ▼ to View Details and press OK to select.

For a connected network access point, the Service Set Identifier (SSID), Security Mode, Media Access Control (MAC) address, and Internet Protocol (IP) address are displayed.

For a non-connected network access point, the Service Set Identifier (SSID) and Security Mode are displayed.

Removing Network Access Points

Note:
This feature is applicable to XPR 5550e/XPR 5580e only. Enterprise network access points that are added via CPS can only be removed via CPS.

Perform the following actions to remove network access points from the profile list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to WiFi and press OK to select.

3 Press ▲ or ▼ to Networks and press OK to select.

4 Press ▲ or ▼ to the selected network access point and press OK to select.

5 Press ▲ or ▼ to Remove and press OK to select.

6 Press ▲ or ▼ to Yes and press OK to select.

The radio displays to indicate that the selected network access point is successfully removed.

Utilities

This chapter explains the operations of the utility functions available in your radio.

Power Levels

You can customize the power setting to high or low for each channel.

High This enables communication with radios located at a considerable distance from you.

Low This enables communication with radios in closer proximity.

Note:
This feature is not applicable in Citizens Band channels that are in the same frequency.

Setting Power Levels

Follow the procedure to set the power levels on your radio.

1 Do one of the following:

- Press the programmed **Power Level** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Power`. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to `High`. Press OK to select.

  The display shows ✓ beside `High`.
- Press ▲ or ▼ to `Low`. Press OK to select.

  The display shows ✓ beside `Low`.

6 Long press ↩ to return to the Home screen.

Turning Radio Tones/Alerts On or Off

You can enable and disable all radio tones and alerts, if needed, except for incoming Emergency alert tone. Follow the procedure to turn tones and alerts on or off on your radio.

1 Do one of the following:

- Press the programmed **Tones/Alerts** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Tones/Alerts`. Press OK to select.

5 Press ▲ or ▼ to `All Tones`. Press OK to select.

6 Press OK to enable or disable all tones and alerts.

If enabled ✓ appears besides `Enabled`.

If disabled, ✓ disappears beside `Enabled`.

Turning Keypad Tones On or Off

Follow the procedure to turn keypad tones on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Tones/Alerts`. Press OK to select.

5 Press ▲ or ▼ to Keypad Tones. Press OK to select.

6 Press OK to enable or disable keypad tones. The display shows one of the following results:

- If enabled ✓ appears besides Enabled.
- If disabled, ✓ disappears beside Enabled.

Setting Tones/Alerts Volume Offset Levels

This feature adjusts the volume of the tones or alerts, allowing it to be higher or lower than the voice volume. Follow the procedure to set the tones and alerts volume offset levels on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alerts. Press OK to select.

5 Press ▲ or ▼ to Vol. Offset. Press OK to select.

6 Press ▲ or ▼ to the required volume offset level.
A feedback tone sounds with each corresponding volume offset level.

7 Do one of the following:

- Press OK to select. The required volume offset level is saved.
- Press ↩ to exit. The changes are discarded.

Turning Talk Permit Tone On or Off

Follow the procedure to turn Talk Permit Tone on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alerts. Press OK to select.

5 Press ▲ or ▼ to Talk Permit. Press OK to select.

6 Press OK to enable or disable the Talk Permit Tone.
The display shows one of the following results:

- If enabled ✓ appears besides Enabled.
- If disabled, ✓ disappears beside Enabled.

Turning Power Up Tone On or Off

Follow the procedure to turn Power Up Tone on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alerts. Press OK to select.

5 Press ▲ or ▼ to Power Up. Press OK to select.

6 Press OK to enable or disable the Power Up Tone.
If enabled ✓ appears besides Enabled.

If disabled, ✓ disappears beside Enabled.

Setting Text Message Alert Tones

You can customize the text message alert tone to Momentary or Repetitive for each entry in the

Contacts list. Follow the procedure to set the text message alert tones on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Contacts. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID.
Press OK to select.

4 Press ▲ or ▼ to Message Alert. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to Momentary. Press OK to select.
  The display shows ✓ beside Momentary.
- Press ▲ or ▼ to Repetitive. Press OK to select.
  The display shows ✓ beside Repetitive.

Changing Display Modes

You can change the display mode of the radio between Day or Night, as needed. This feature affects the color palette of the display. Follow the procedure to change the display mode of your radio.

1 Do one of the following:

- Press the programmed **Display Mode** button. Skip the following steps.
- Press OK to access the menu.

2 Press ▲ or ▼ to Utilities.Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Display. Press OK to select.
The display shows Day Mode and Night Mode.

5 Press ▲ or ▼ to the required setting. Press OK to select.
The display shows ✓ beside the selected setting.

Adjusting Display Brightness

Follow the procedure to adjust the display brightness on your radio. Display brightness cannot be adjusted when Auto Brightness is enabled.

1 Do one of the following:

- Press the programmed **Brightness** button. Proceed to Step *5*.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Brightness`. Press OK to select.
The display shows the progress bar.

5 Press ▲ or ▼ to decrease or increase the display brightness. Press OK to select.
The setting value is varied from 1 to 8.

Turning Horns/Lights On or Off

Your radio is able to notify you of an incoming call via the horns and lights feature. When activated, an incoming call sounds the horn and turns on the lights of your vehicle. This feature needs to be installed through your radio rear accessory connector by your dealer. Follow the procedure to turn all horns and lights on or off on your radio.

1 Do one of the following:

- Press the programmed **Horns/Lights** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Horns/Lights. Press OK to select.

5 Press OK to enable or disable Horns/Lights. The display shows one of the following results:

- If enabled ✓ appears besides Enabled.
- If disabled, ✓ disappears beside Enabled.

Turning LED Indicators On or Off

Follow the procedure to turn the LED indicators on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to LED Indicator. Press OK to select.

5 Press OK to enable or disable the LED indicator. The display shows one of the following results:

- If enabled ✓ appears besides Enabled.
- If disabled, ✓ disappears beside Enabled.

Turning Public Address System On or Off

Follow the procedure to enable or disable the internal public address (PA) system of your radio.

1 Do one of the following:

- Press the programmed **Public Address** button. Skip the following steps.
- Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Public Address. Press OK to select.

5 Press OK to enable or disable Public Address.

- If enabled ✓ appears besides Enabled.
- If disabled, ✓ disappears beside Enabled.

Turning External Public Address System On or Off

Follow the procedure to enable or disable the external public address (PA) system of your radio.

1 Do one of the following:

- Press the programmed **Ext Public Address** button. Skip the following steps.
- Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to External Public Address. Press OK to select.

5 Press OK to enable or disable external public address.

- If enabled ✓ appears besides Enabled.
- If disabled, ✓ disappears beside Enabled.

Turning Introduction Screen On or Off

You can enable and disable the Introduction Screen by following the procedure.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 ▲ or ▼ to Display. Press OK to select.

5 ▲ or ▼ to Intro Screen. Press OK to select.

6 Press OK to enable or disable the Introduction Screen.
The display shows one of the following results:

- If enabled ✓ appears besides Enabled.
- If disabled, ✓ disappears beside Enabled.

Setting Languages

Follow the procedure to set the languages on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Languages. Press OK to select.

5 Press ▲ or ▼ to the required language.
Press OK to select.
The display shows ✓ beside the selected language.

Identifying Cable Type

Do the following steps to select the type of cable your radio uses.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Cable Type`. Press OK to select.

5 The current cable type is indicated by a ✓.

Turning Voice Announcement On or Off

This feature enables the radio to audibly indicate the current zone or channel the user has just assigned, or the programmable button the user has just pressed. This is typically useful when the user has difficulty reading the content shown on the display. This audio indicator can be customized according to customer requirements.

Turning Option Board On or Off

Option board capabilities within each channel can be assigned to programmable buttons. A channel can support up to 6 option board features. Follow the procedure to turn option board on or off on your radio.

Press the programmed **Option Board** button.

Text-to-Speech

The Text-to-Speech feature can only be enabled by your dealer or system administrator. If Text-to-Speech is enabled, the Voice Announcement feature is automatically disabled. If Voice Announcement is enabled, then the Text-to-Speech feature is automatically disabled.

This feature enables the radio to audibly indicate the following features:

- Current Channel
- Current Zone
- Programmed button feature on or off
- Content of received text messages
- Content of received Job Tickets

This audio indicator can be customized per customer requirements. This feature is typically useful when the user is in a difficult condition to read the content shown on the display.

Setting Text-to-Speech

Follow the procedure to set the Text-to-Speech feature.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Voice Announcement. Press OK to select.

5 Press ▲ or ▼ to any of the following features. Press OK to select.

The available features are as follows:

- All
- Messages
- Job Tickets
- Channel
- Zone
- Program Button

✓ appears beside the selected setting.

Setting Menu Timer

You can set the time your radio stays in the menu before it automatically switches to the Home screen. Follow the procedure to set the menu timer.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Display. Press OK to select.

5 Press ▲ or ▼ to Menu Timer. Press OK to select.

6 Press ▲ or ▼ to the required setting. Press OK to select.

Turning Digital Microphone AGC On or Off

The Digital Microphone Automatic Gain Control (AGC) controls the microphone gain of the radio automatically while transmitting on a digital system. This feature suppresses loud audio or boosts soft audio to a preset value in order to provide a consistent level of audio. Follow the procedure to turn Digital Microphone AGC on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Mic AGC-D`. Press OK to select.

5 Press OK to enable or disable Digital Microphone AGC.
The display shows one of the following results:

- If enabled ✓ appears besides `Enabled`.
- If disabled, ✓ disappears beside `Enabled`.

Turning Intelligent Audio On or Off

Your radio automatically adjusts the audio volume to overcome current background noise in the environment, inclusive of both stationary and non-stationary noise sources. This is a receive-only feature and does not affect transmission audio. Follow the procedure to turn Intelligent Audio on or off on your radio.

Note:
This feature is not applicable during a Bluetooth session.

1 Do one of the following:

- Press the programmed **Intelligent Audio** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Intelligent Audio. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to On. Press OK to select. The display shows ✓ beside On.
- Press ▲ or ▼ to Off. Press OK to select. The display shows ✓ beside Off.

Turning the Acoustic Feedback Suppressor Feature On or Off

This feature allows you to minimize acoustic feedback in received calls.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to AF Suppressor and press OK to select.
You can also use or to change the selected option.

5 Do one of the following.

- Press OK to enable Acoustic Feedback Suppressor. The display shows ✓ beside Enabled.
- Press OK to disable Acoustic Feedback Suppressor. The ✓ disappears from beside Enabled.

Turning Trill Enhancement On or Off

You can enable this feature when you are speaking in a language that contains many words with alveolar trill (rolling “R”) pronunciations. Follow the procedure to turn Trill Enhancement on or off on your radio.

1 Do one of the following:

- Press the programmed **Trill Enhancement** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Trill Enhance`. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to `On`. Press OK to select. The display shows ✓ beside `On`.
- Press ▲ or ▼ to `Off`. Press OK to select. The display shows ✓ beside `Off`.

Audio Ambience

You can customize the audio ambience for your radio according to your environment.

Default	This is the default setting.
Loud	This setting enables Noise Suppressor and increases speaker loudness for use in noisy surroundings.
Work Group	This setting enables AF Suppressor and disables AGC for use when a group of radios are near to each other.

Setting Audio Ambience

Follow the procedure to set the audio ambience on your radio according to your environment.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Audio Ambience`. Press OK to select.

5 Press ▲ or ▼ to the required setting. Press OK to select.

The settings are as follows.

- Choose `Default` for the default factory settings.
- Choose `Loud` to increase speaker loudness when using in noisy surroundings.
- Choose `Work Group` to reduce acoustic feedback when using with a group of radios that are near to each other.

The display shows ✓ beside the selected setting.

Audio Profiles

You can customize the audio profiles for your radio according to your preference.

Default	This is the default setting.
Level 1, Level 2, and Level 3	These settings are intended to compensate for noise-induced hearing loss that is typical for adults in their 40's, 50's, and 60's or over.
Treble Boost, Mid Boost, and Bass Boost	These settings are intended for a tinnier sound, a more nasal sound, and a deeper sound.

Setting Audio Profiles

Follow the procedure to set audio profiles on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Audio Profiles`. Press OK to select.

5 Press ▲ or ▼ to the required setting. Press OK to select.

The settings are as follows.

- Choose `Default` to disable the previously selected audio profile and return to the default factory settings.
- Choose `Level 1`, `Level 2`, or `Level 3` for audio profiles intended to compensate for noise-induced hearing loss that is typical for adults over 40 years of age.
- Choose `Treble Boost`, `Mid Boost`, or `Bass Boost` for audio profiles that align with your preference for tinnier, more nasal, or deeper sounds.

- `Default`
- `Level 1`, `Level 2`, or `Level 3`
- `Treble Boost`, `Mid Boost`, or `Bass Boost`

The display shows ✓ beside the selected setting.

Turning the Global Positioning System (GPS) On or Off

Global Positioning System (GPS) is a satellite navigation system that determines the radio's precise location. Follow the procedure to turn GPS on or off on your radio.

Press the programmed **GPS** button to toggle the feature on or off.

General Radio Information

Your radio contains information on various general parameters.

The general information of your radio are as follows.

- Radio alias and ID.
- Firmware and Codeplug versions.
- Software update.
- GPS information.
- Site information.

Note:
You return to the previous screen when you press , and to the Home screen when you long press , at any time. The radio exits the current screen once the inactivity timer expires.

Checking Radio Alias and ID

Follow the procedure to check the radio alias and ID on your radio.

1 Do one of the following:

- Press the programmed **Radio Alias and ID** button. Skip the steps below.

  A positive indicator tone sounds.
- Press OK to access the menu.

You can press the programmed **Radio Alias and ID** button to return to the previous screen.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Info`. Press OK to select.

4 Press ▲ or ▼ to `My ID`. Press OK to select.
The first text line shows the radio alias. The second text line shows the radio ID.

Checking Firmware and Codeplug Versions
Follow the procedure to check the firmware and codeplug versions on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Info`. Press OK to select.

4 Press ▲ or ▼ to `Versions`. Press OK to select.
The display shows the current firmware and codeplug versions.

Checking Software Update Information
This feature shows the date and time of the latest software update carried out via OTAP or Wi-Fi. Follow the procedure to check the software update information on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press or to Radio Info. Press OK to select.

4 Press or to SW Update. Press OK to select.
The display shows the date and time of the latest software update.

Software Update menu is only available after at least one successful OTAP or Wi-Fi session. See *Over-the-Air Programming* on page 362 for more information.

Checking GPS/GNSS Information

Displays the GPS/GNSS information on your radio, such as values of:

- Latitude
- Longitude
- Altitude
- Direction
- Velocity
- Horizontal Dilution of Precision (HDOP)
- Satellites
- Version

1 Press OK to access the menu.

2 Press or to Utilities. Press OK to select.

3 or to Radio Info. Press OK to select.

4 or to GPS Info. Press OK to select.

5 or to the required item.Press OK to select.The display shows the requested GPS/GNSS information.

Displaying Site Information

Follow the procedure to display the current Linked Capacity Plus site name your radio is on.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Info. Press OK to select.

4 Press ▲ or ▼ to Site Info. Press OK to select.

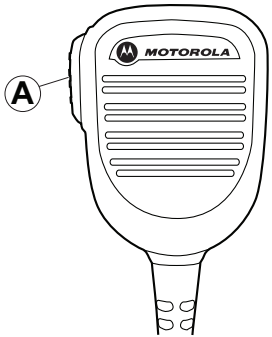
The display shows the current site name of Capacity Plus-Multi-Site.

Connect Plus Operations

Additional Radio Controls in Connect Plus Mode

Push-To-Talk (PTT) Button

The **PTT** button on the side of the radio (Ⓐ) serves two basic purposes:



- While a call is in progress, the **PTT** button allows the radio to transmit to other radios in the call.

  Press and hold the **PTT** button to talk. Release the **PTT** button to listen.

  The microphone is activated when the **PTT** button is pressed.
- While a call is not in progress, the **PTT** button is used to make a new call (see *Making a Radio Call* on page 167).

If the Talk Permit Tone is enabled, wait until the short alert tone ends before talking.

Programmable Buttons

Your dealer can program the programmable buttons as shortcuts to radio functions depending on the duration of a button press:

Short press	Pressing and releasing rapidly.
Long press	Pressing and holding for the programmed duration.

Note:
The programmed duration of a button press is applicable for all assignable radio/utility functions or settings. See *Emergency Operation* on page 195 for more information on the programmed duration of the **Emergency** button.

Assignable Radio Functions

Bluetooth® Audio Switch	Toggles audio routing between internal radio speaker and external Bluetooth-enabled accessory.
Busy Queue Cancellation	Exits the busy mode when a non-Emergency call in the Busy Queue was initiated. Emergency calls, once accepted into the Busy Queue, cannot be cancelled.
Call Log	Selects the call log list.
Contacts	Provides direct access to the Contacts list.
Channel Announcement	Plays zone and channel announcement voice messages for the current channel.
Emergency On/Off	Depending on the programming, initiates or cancels an emergency.
Ring Alert Type	Provides direct access to the Ring Alert Type Setting.
Reset Home Channel	Sets a new home channel.
Silence Home Channel Reminder	Mutes the Home Channel Reminder.
Horns/Lights	Toggles horns and lights feature on or off.
Indoor Location	Toggles Indoor Location on or off.
Intelligent Audio	Toggles intelligent audio on or off.
Manual Dial	Depending on the programming, initiates a Private or Phone Call by keying in any subscriber ID or phone number.
One Touch Access	Directly initiates a predefined Private Call, a Call Alert or a Quick Text message.
Privacy	Toggles privacy on or off.
Radio Check	Determines if a radio is active in a system.

Radio Enable	Allows a target radio to be remotely enabled.
Radio Disable	Allows a target radio to be remotely disabled.
Remote Monitor	Turns on the microphone of a target radio without it giving any indicators.
Roam Request	Requests to search for a different site.
Scan	Toggles scan on or off.
Site Lock On/Off	When toggled on, the radio searches the current site only. When toggled off, the radio searches other sites in addition to the current site.
Text Message	Selects the text message menu.
Voice Announcement On/Off	Toggles voice announcement on or off.
Wi-Fi	Toggles Wi-Fi on or off.
Zone	Allows selection from a list of zones.

Assignable Settings or Utility Functions

AF Suppressor	Toggles the Acoustic Feedback Suppressor feature on or off.
All Tones/Alerts	Toggles all tones and alerts on or off.
Backlight Brightness	Adjusts the brightness level.
Channel Up/ Down	Depending on the programming, changes channel to previous or next channel.
Display Mode	Toggles the day/night display mode on or off.
Global Positioning System (GPS)	Toggles the satellite navigation system on or off.
Power Level	Toggles transmit power level between high and low.

Unassigned	Indicates that the button function has not yet been assigned.

Identifying Status Indicators in Connect Plus Mode

Display Icons

The following are icons that appear on the display of the radio.

	Received Signal Strength Indicator (RSSI) The number of bars displayed represents the radio signal strength. Four bars indicate the strongest signal. This icon is only displayed while receiving.
	Bluetooth Not Connected The Bluetooth feature is enabled but there is no remote Bluetooth device connected.
	Bluetooth Connected The Bluetooth feature is enabled. The icon stays lit when a remote Bluetooth device is connected.
	High Volume Data Radio is receiving high volume data and channel is busy.
	Indoor Location Available[4] Indoor location status is on and available.
	Indoor Location Unavailable[4] Indoor location status is on but unavailable due to Bluetooth disabled or Beacons Scan suspended by Bluetooth.
	Notification List has items to review.
	Power Level

	Radio is set at Low power or Radio is set at High power.
	Tones Disable Tones are turned off.
	Option Board The Option Board is enabled.
	Option Board Non-Function The Option Board is disabled.
	GPS/GNSS Available The GPS/GNSS feature is enabled. The icon stays lit when a position fix is available.
	GPS/GNSS Not Available/Out of Range The GPS/GNSS feature is enabled but is not receiving data from the satellite.

	Scan Scan feature is enabled.
	Emergency Radio is in Emergency mode.
	Secure The Privacy feature is enabled.
	Unsecure The Privacy feature is disabled.
	Site Roaming The site roaming feature is enabled.
	Battery The number of bars (0 – 4) shown indicates the charge remaining in the battery. Blinks when the battery is low.
	Contact Radio contact is available.

	Call Log Radio call log.
	Message Incoming message.
	Ring Only Ringing mode is enabled.
	Silent Ring Silent ring mode is enabled.
	Vibrate Vibrate mode is enabled.
	Vibrate and Ring Vibrate and Ring mode is enabled.

	Wi-Fi Excellent[3] Wi-Fi signal is excellent.
	Wi-Fi Good[3] Wi-Fi signal is good.
	Wi-Fi Average[3] Wi-Fi signal is average.
	Wi-Fi Poor[3] Wi-Fi signal is poor.
	Wi-Fi Unavailable[3] Wi-Fi signal is unavailable.

.

3 Only applicable for XPR 5550e/XPR 5580e
4 Only applicable for models with the latest software and hardware.

Call Icons

The following icons appear on the radio's display during a call. These icons also appear in the Contacts list to indicate ID type.

	Private Call Indicates a Private Call in progress. In the Contacts list, it indicates a subscriber alias (name) or ID (number).
	Group Call/Site All Call Indicates a Group Call or Site All Call in progress. In the Contacts list, it indicates a group alias (name) or ID (number).
	Phone Call as Private Call Indicates a Phone Call as Private Call in progress.
	Bluetooth PC Call Indicates a Bluetooth PC Call in progress. In the Contacts list, it indicates a Bluetooth PC Call alias (name) or ID (number).
	Dispatch Call The Dispatch Call contact type is used to send a text message to a dispatcher PC through a third-party Text Message Server.

Advanced Menu Icons

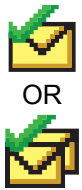
The following icons appear beside menu items that offer a choice between two options or as an indication that there is a sub-menu offering two options.

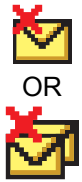
	Checkbox (Empty) Indicates the option is not selected.
	Checkbox (Checked) Indicates the option is selected.
	Solid Black Box

	Indicates the option selected for the menu item with a sub-menu.

Sent Item Icons

The following icons appear at the top right corner of the radio's display in the Sent Items folder.

	**Sent Successfully** The text message is sent successfully.
	In-Progress • The text message to a group alias or ID is pending transmission. • The text message to a subscriber alias or ID is pending transmission, followed by waiting for acknowledgement.

	Individual or Group Message Read The text message has been read.
	Individual or Group Message Unread The text message has not been read.
	**Send Failed** The text message has not been sent.

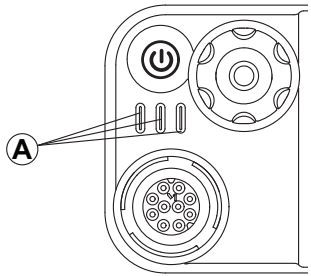
Bluetooth Device Icons

The following icons also appear next to items in the list of Bluetooth-enabled devices available to indicate the device type.

	Bluetooth Data Device Bluetooth-enabled data device, such as a scanner.
	Bluetooth Audio Device Bluetooth-enabled audio device, such as a headset.
	Bluetooth PTT Device Bluetooth-enabled PTT device, such as a PTT-Only Device (POD).

LED Indicator

The LED indicator (Ⓐ) shows the operational status of your radio.



Blinking red	Radio is transmitting at low battery condition, receiving an emergency transmission or has failed the self-test upon powering up, or has moved out of range if radio is configured with Auto-Range Transponder System.
Rapidly blinking red	Radio is receiving over-the-air file transfer (Option Board firmware file, Network Frequency file or Option Board Codeplug file) or upgrading to a new Option Board firmware file.
Blinking green and yellow	Radio is receiving a Call Alert, received a text message or Scan is enabled and is receiving activity.

Solid yellow	Radio is in Bluetooth Discoverable Mode.
Double blinking yellow	Radio is actively searching for a new site.
Blinking yellow	Radio is receiving a Call Alert or Scan is enabled and is idle (radio will remain muted to any activity).
Solid green	Radio is powering up or transmitting.
Blinking green	Radio is powering up, receiving a non-privacy- enabled call or data.
Double blinking green	Radio is receiving a privacy-enabled call.

Indicator Tones

High pitched tone Low pitched tone

	Positive Indicator Tone
	Negative Indicator Tone

Alert Tones

Alert tones provide you with audible indications of the status, or response to data received on the radio.

Continuous Tone	A monotone sound. Sounds continuously until termination.
Periodic Tone	Sounds periodically depending on the duration set by the radio. Tone starts, stops, and repeats itself.
Repetitive Tone	A single tone that repeats itself until it is terminated by the user.
Momentary Tone	Sounds only once for a short period of time defined by the radio.

Switching Between Connect Plus and Non-Connect Plus Modes

To switch to a non-Connect Plus mode, you must change to another zone, if programmed by your

dealer or system administrator. Check with your dealer or system administrator to see if your radio has been programmed with non-Connect Plus zones, and what features are available while operating in non-Connect Plus zones.

Making and Receiving Calls in Connect Plus Mode

Selecting a Site

A site provides coverage for a specific area. A Connect Plus site has a site controller and a maximum of 15 repeaters. In a multi-site network, the Connect Plus radio will automatically search for a new site when the signal level from the current site drops to an unacceptable level.

Roam Request

A Roam Request tells the radio to search for a different site, even if the signal from the current site is acceptable.

If there are no sites available,

- The radio display shows `Searching` and continues to search through the list of sites.
- The radio will return to the previous site, if the previous site is still available.

Note:
This is programmed by your dealer.

Press the programmed **Roam Request** button. You hear a tone, indicating the radio has switched to a new site. The display shows `Site ID <Site Number>`.

Site Lock On/Off

When toggled on, the radio searches the current site only. When toggled off, the radio searches other sites in addition to the current site.

Press the programmed **Site Lock** button.

If the **Site Lock** function is toggled on:

- You hear a positive indicator tone, indicating the radio has locked to the current site.
- The display shows `Site Locked`.

If the **Site Lock** function is toggled off:

- You hear a negative indicator tone, indicating the radio is unlocked.
- The display shows `Site Unlocked`.

Site Restriction

Your Connect Plus radio system administrator has the ability to decide which network sites your radio is and

is not allowed to use. Your radio does not need to be reprogrammed to change the list of allowed and disallowed sites. If your radio attempts to register at a disallowed site, you see a brief message stating: `Site <number given> Not Allowed`. The radio then searches for a different network site.

Selecting a Zone

The radio can be programmed with a maximum of 16 Connect Plus Zones and each Connect Plus zone contains a maximum of 16 assignable positions on the Channel Selector Knob.

Each assignable knob position can be used to start one of the following voice call types:

- Group Call
- Multigroup Call
- Site All Call
- Private Call

1 Access the Zone feature by performing one of the following actions:

Radio Controls	Steps
Programmed Zone Selection button	Press the programmed **Zone Selection** button.
Radio menu	**1** OK to access the menu. **2** ▲ or ▼ to `Zone` and press OK to select.

The current zone is displayed and indicated by a ✓.

2 Select the required zone.

Radio Control	Steps
▲ or ▼	▲ or ▼ and scroll to the required zone.

3 Press OK to select.
The display shows `<Zone> Selected` momentarily and returns to the selected zone screen.

Using Multiple Networks

If your radio has been programmed to use multiple Connect Plus networks, you can select a different network by switching to the Connect Plus zone that is assigned to the desired network. These network-to-zone assignments are configured by your dealer through radio programming.

Selecting a Call Type

Use the Channel Selector Knob to select a call type. This can be a Group Call, Multi-group Call, Site All Call or Private Call, depending on how your radio is programmed. If you change the Channel Selector Knob to a different position (that has a call type assigned to it), this causes the radio to re-register with the Connect Plus site. The radio registers with the Registration Group ID that has been programmed for the new Channel Selector Knob position call type.

If you select a position that has no call type assigned to it, your radio sounds a continuous tone and the display shows `Unprogrammed`. Your radio does not operate when selected to an unprogrammed channel, use the Channel Selector Knob to select a programmed channel instead.

Once the required zone is displayed (if you have multiple zones in your radio), turn the programmed Channel Selector Knob to select the call type.

Receiving and Responding to a Radio Call

Once the channel, subscriber ID or call type is displayed, you can proceed to receive and respond to calls.

The LED lights up solid green while the radio is transmitting and blinks green when the radio is receiving.

Note:
The LED lights up solid green while the radio is transmitting and double blinks green when the radio is receiving a privacy-enabled call. To unscramble a privacy-enabled call, your radio must have the same Privacy Key, OR the same Key Value and Key ID (programmed by your dealer), as the transmitting radio (the radio you are receiving the call from).

Note:
See *Privacy* on page 212 for more information.

Receiving and Responding to a Group Call

To receive a call from a group of users, your radio must be configured as part of that group.

When you receive a Group Call (while on the Home screen), the LED blinks green.The Group Call icon appears in the top right corner. The first text line shows the caller alias. The second text line displays the group call alias. Your radio unmutes and the incoming call sounds through the radio's speaker.

1 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
The LED lights up solid green.

2 Wait for one of the Talk Permit Tone to finish (if enabled), and speak clearly into the microphone.

3 Release the **PTT** button to listen.
If there is no voice activity for a predetermined period of time, the call ends.

Note:
See *Making a Group Call* on page 167 for details on making a Group Call.

Receiving and Responding to a Private Call

A Private Call is a call from an individual radio to another individual radio.

When you receive a Private Call, the LED blinks green. The first line of the display shows the subscriber alias or ID, and the RSSI icon. The second line displays `Private Call` and the Private Call icon. Your radio unmutes and the incoming call sounds through the speaker of the radio.

1 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

2 Press the **PTT** button to respond to the call.
The LED lights up solid green.

3 Wait for the Talk Permit Tone to finish (if enabled), and speak clearly into the microphone.

4 Release the **PTT** button to listen.

If there is no voice activity for a predetermined period of time, the call ends.

The display shows `Call Ended`.

See *Making a Private Call* on page 168 for details on making a Private Call.

Receiving a Site All Call

A Site All Call is a call from an individual radio to every radio on the site. It is used to make important announcements requiring the user's full attention.

When you receive an Site All Call, a tone sounds and the LED blinks green.

The Group Call icon appears in the top right corner. The first text line shows the caller alias. The second text line displays `Site All Call`. Your radio unmutes and the incoming call sounds through the radio speaker.

Once the Site All Call ends, the radio returns to the previous screen before receiving the call. A Site All Call does not wait for a predetermined period of time before ending.

You cannot respond to an Site All Call.

Note:
See *Making a Site All Call* on page 169 for details on making a Site All Call.

Note:
The radio stops receiving the Site All Call if you switch to a different channel while receiving the call. During a Site All Call, you will **not** be able to use any programmed button functions until the call ends.

Receiving an Inbound Private Phone Call

When you receive an Inbound Private Phone Call, the Phone Call as Private Call icon appears in the top right corner. The first text line shows `Phone Call`.

1 Press and hold the **PTT** button to answer and talk. Release the **PTT** button to listen.

2 Long press ⏻ to end the call.
The first line of the display shows `Ending`. The second line of the display shows `Phone Call...`. The display returns to the Phone Call screen.

The display shows `Phone Call Ended`.

Making a Buffered Over-Dial in an Inbound Phone Private Call

During the call, the Phone Call as Private Call icon appears in the top right corner. The first text line of the display shows `Phone Call`.

1 Use the keypad to enter the digits and press the OK button.

Press * followed by # within 2 seconds to insert a pause. The `P` replaces * and # on the display.

The Phone Call as Private Call icon appears in the top right corner. The first text line of the display shows the entered digits.

2 Long press the end key to end the call.

The first line of the display shows `Ending`. The second line of the display shows `Phone Call...`. The display returns to the Phone Call screen.

The display shows `Phone Call Ended`.

Making a Live Over-Dial in an Inbound Phone Private Call

During the call, the Phone Call as Private Call icon appears in the top right corner. The first text line of the display shows `Phone Call`.

1 Press the **PTT** button and use the keypad to enter the digits.
The Phone Call as Private Call icon appears in the top right corner. The first text line of the display shows the Live Dial digits.

2 Long press the end key to end the call.

The first line of the display shows `Ending`. The second line of the display shows `Phone Call...`. The display returns to the Phone Call screen.

The display shows `Phone Call Ended`.

Receiving an Inbound Phone Talkgroup Call

When you receive an Inbound Phone Talkgroup Call, the Group Call icon appears in the top right corner. The first text line shows `Call1`.

Press the **PTT** button to talk and release it to listen.

Inbound Phone Multi-Group Call

When you receive an Inbound Phone Multi-Group Call, the Group Call icon appears in the top right corner. The first text line shows `Multigroup Call`. The radio unmutes and the incoming multi-group call sounds through the radio's speaker.

Making a Radio Call

After selecting your channel, you can select a subscriber alias or ID, or group alias or ID by using:

- The Channel Selector Knob.
- A programmed **One Touch Access** button – The One Touch Access feature allows you to make a Private Call to a predefined ID easily. This feature can be assigned to a short or long programmable button press. You can **ONLY** have one ID assigned to a **One Touch Access** button. Your radio can have multiple **One Touch Access** buttons programmed.
- The Contacts list (see *Contacts Settings* on page 187).

Note:
Your radio must have the Privacy feature enabled on the channel to send a privacy-enabled transmission. Only target radios with the same Key Value and Key ID as your radio will be able to unscramble the transmission.

Note:
See *Privacy* on page 212 for more information.

Making a Call with the Channel Selector Knob

Making a Group Call

To make a call to a group of users, your radio must be configured as part of that group.

1 Select the channel with the active group alias or ID. See *Selecting a Call Type* on page 163.

2 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

3 Press the **PTT** button to make the call.
The LED lights up solid green. The Group Call icon appears in the top right corner. The first text line shows the group call alias.

4 Wait for the Talk Permit Tone to finish (if enabled), and speak clearly into the microphone.

5 Release the **PTT** button to listen.

When the target radio responds, the LED blinks green, the radio unmutes and the response sounds through the radio's speaker. You see the Group Call icon, the group alias or ID, and transmitting radio alias or ID on your display.

If there is no voice activity for a predetermined period of time, the call ends. Radio returns to the screen you were on prior to initiating the call.

Making a Private Call

While you can receive and/or respond to a Private Call initiated by an authorized individual radio, your radio must be programmed for you to initiate a Private Call.

You will hear a negative indicator tone, when you make a Private Call via the **One Touch Access** button, or the Channel Selector Knob, if this feature is not enabled.

1 Do one of the following.

- Select the channel with the active subscriber alias or ID. See *Selecting a Call Type* on page 163.
- Press the programmed **One Touch Access** button.

2 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

3 Press the **PTT** button to make the call.
The LED lights up solid green. The Private Call icon appears on the top right corner. The first text line shows the target subscriber alias. The second text line displays the call status.

4 Wait for the Talk Permit Tone to finish (if enabled), and speak clearly into the microphone.

5 Release the **PTT** button to listen.

When the target radio responds, the LED blinks green.

If there is no voice activity for a predetermined period of time, the call ends. You hear a short tone. The display shows `Call Ended`.

Your radio may be programmed to perform a radio presence check prior to setting up the Private Call. If

the target radio is not available, you hear a short tone and see negative mini notice on the display.

Making a Site All Call

This feature allows you to transmit to all users on the site that are currently not engaged in another call. Your radio must be programmed to allow you to use this feature.

Users on the channel/site cannot respond to an Site All Call.

1 Select the channel with the active Site All Call group alias. See *Selecting a Call Type* on page 163.

2 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

3 Press the **PTT** button to make the call.
The LED lights up solid green. The Group Call icon appears in the top right corner. The first text line shows `Site All Call`.

4 Wait for the Talk Permit Tone to finish (if enabled), and speak clearly into the microphone.

Making a Multi-group Call

This feature allows you to transmit to all users on multiple groups. Your radio must be programmed to allow you to use this feature.

Note:
Users on the groups cannot respond to a Multi-group Call.

1 Turn the Channel Selector Knob to select the Multi-group alias or ID.

2 Press the **PTT** button to make the call.

The LED lights up solid green. The display shows the Multi-group alias or ID.

Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.

Making a Private Call with a One Touch Call Button

Note:
Programmable buttons press must be initiated from the Home screen.

The One Touch Call feature allows you to easily make a Private Call to a pre-defined Private Call alias

or ID. This feature can be assigned to a short or long programmable button press.

You can ONLY have one alias or ID assigned to a One Touch Call button. Your radio can have multiple One Touch Call buttons programmed.

1 Press the programmed **One Touch Call** button to make a Private Call to the pre-defined Private Call alias or ID.

2 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

3 Press the **PTT** button to make the call.

The LED lights up solid green.

The display shows the Private Call alias or ID.

4 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.

5 Release the **PTT** button to listen.

When the target radio responds, the LED blinks green.

If there is no voice activity for a predetermined period of time, the call ends.

Making a Call with the Programmable Manual Dial Button

Making a Private Call

1 Press the programmed **Manual Dial** button to enter into the Manual Dial screen.
The display shows `Number:`.

2 Use the keypad to enter a subscriber alias or Private ID.

3 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

4 Press the **PTT** button to make the call.
The LED lights up solid green. The Private Call icon appears in the top right corner. The first text line shows the subscriber alias. The second text line displays the call status.

5 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.

6 Release the **PTT** button to listen.

When the target radio responds, the LED blinks green.

If there is no voice activity for a predetermined period of time, the call ends. You hear a short tone. The display shows `Call Ended`.

Making an Outbound Private Phone Call with the Programmable Manual Dial Button

1 Press the programmed **Manual Dial** button to enter into the Manual Dial screen.
The display shows `Number:`.

2 Use the keypad to enter a telephone number, and press OK to place a call to the entered number.

Press ◀ to delete any unwanted characters. Press * followed by # within 2 seconds to insert a pause. The `P` replaces * and # on the display.

If successful, the first line of the display shows `Phone Call`. The second line of the display shows the dialed telephone number.

If an invalid telephone number is selected, the display shows a negative mini notice, `Phone Call Failed`, `Resource Not Available`, or `Invalid Permissions`.

If OK is pressed with no telephone number entered, the radio sounds a positive indicator tone then a negative indicator tone. The display remains the same.

3 Long press ⌂ to end the call.

The first line of the display shows `Ending`. The second line of the display shows `Phone Call...`.

The display shows `Phone Call Ended`.

Making an Outbound Private Phone Call via the Phone Menu

1 OK to access the menu.

2 ▲ or ▼ to `Phone` and press OK to select.

3 Press OK to select `Manual Dial`.
The first line of the display shows `Number`, the second line of the display shows a blinking cursor.

4 Use the keypad to enter a telephone number, and press OK to place a call to the entered number.

Press ◄ to delete any unwanted characters. Press * followed by # within 2 seconds to insert a pause. The P replaces * and # on the display.

If successful, the first line of the display shows Phone Call. The second line of the display shows the dialed telephone number.

If an invalid telephone number is selected, the display shows a negative mini notice, Phone Call Failed, Resource Not Available, or Invalid Permissions.

If OK is pressed with no telephone number entered, the radio sounds a positive indicator tone then a negative indicator tone. The display remains the same.

5 Long press ⌂ to end the call.

The first line of the display shows Ending. The second line of the display shows Phone Call....

The display shows Phone Call Ended.

Making an Outbound Private Phone Call from Contacts

Note:
If the Phone Manual Dial is disabled in MOTOTRBO Connect Plus Option Board CPS, the Phone Number item will **not** be displayed in the Menu.

1 OK to access the menu.

2 ▲ or ▼ to Contacts and press OK to select.

3 ▲ or ▼ to Manual Dial and press OK to select.

4 ▲ or ▼ to Phone Number and press OK to select.
The first line of the display shows Number, the second line of the display shows a blinking cursor.

5 Use the keypad to enter a telephone number, and press OK to place a call to the entered number.

If the **PTT** button is pressed, the display shows a negative mini notice, `Press OK to Send` and returns to the previous screen.

Press ◀ to delete any unwanted characters. Press * followed by # within 2 seconds to insert a pause. The `P` replaces * and # on the display.

If successful, the first line of the display shows `Phone Call`. The second line of the display shows the dialed telephone number.

If OK is pressed with no telephone number entered, the radio sounds a positive indicator tone then a negative indicator tone. The display remains the same.

6 Long press ⏻ to end the call.

The first line of the display shows `Ending`. The second line of the display shows `Phone Call...`.

The display shows `Phone Call Ended`.

Waiting for the Channel Grant in an Outbound Private Phone Call

When you make a Private Phone Call, the first line of the display shows `Phone Call`. The second line of the display shows the dialed telephone number.

When the call is connected, the Phone Call as Private Call icon appears in the top right corner. The first line of the display shows the telephone number.

If unsuccessful, the display shows a negative mini notice, `Phone Call Failed`, `Resource Not Available`, or `Invalid Permissions`.

Long press ⏻ to end the call.

The display returns to the previous screen.

Making a Buffered Over-Dial in a Connected Outbound Private Phone Call

During the call, the Phone Call as Private Call icon appears in the top right corner. The first text line of the display shows the telephone number.

1 Use the keypad to enter the digits.

Press ◀ to delete any unwanted characters. Press * followed by # within 2 seconds to insert a pause. The P replaces * and # on the display.

The first text line of the display shows Extra Digits, the second text line of the display shows the entered extra digits.

2 Press the OK button.

If the **PTT** button is pressed, the display shows a negative mini notice, Press OK to Send and returns to the previous screen.

The Phone Call as Private Call icon appears in the top right corner. The first text line of the display shows the telephone number with the over-dial digits appended.

3 Do one of the following.

- Press ↩ to return to the Phone Call screen.
- Long press ↩ to end the call.

Making a Live Over-Dial in a Connected Outbound Private Phone Call

During the call, the Phone Call as Private Call icon appears in the top right corner. The first text line of the display shows the telephone number.

1 Press the **PTT** button and use the keypad to enter the digits.
The Phone Call as Private Call icon appears in the top right corner. The first text line of the display shows the telephone number with the over-dial digits appended.

2 Long press ↩ to end the call.

The first line of the display shows Ending. The second line of the display shows Phone Call....

The display shows Phone Call Ended.

Advanced Features in Connect Plus Mode

Home Channel Reminder

This feature provides a reminder when the radio is not set to the home channel for a period of time.

If this feature is enabled via the CPS, the Home Channel Reminder tone and announcement sound, the first line of the display shows `Non` and the second line shows `Home Channel` periodically when the radio is not set to the home channel for a period of time.

You can respond to the reminder by performing one of the following actions:

- Return to the home channel.
- Mute the reminder temporarily via the programmable button.
- Set a new home channel via the programmable button.

Auto Fallback

Auto Fallback is a system feature that allows you to continue to make and receive non-emergency calls on the selected Group Contact in the event of certain types of Connect Plus system failures.

If one of these failures occurs, your radio attempts to roam to a different Connect Plus site. This search process may result in your radio finding an operable Connect Plus site, or it may result in your radio finding a “Fallback Channel” (if your radio is enabled for Auto Fallback). A Fallback Channel is a repeater that is normally part of an operable Connect Plus site, but is currently unable to communicate with either its site controller or the Connect Plus network. In Fallback mode, the repeater operates as a single digital repeater. Auto Fallback Mode supports non-emergency Group Calls only. No other call types are supported in Fallback Mode.

Indications of Auto Fallback Mode

When your radio is using a Fallback channel, you hear the intermittent “Fallback Tone” approximately once every 15 seconds (except while transmitting). The display periodically shows a brief message, “Fallback Channel”. Your radio only permits PTT on

the selected Group Contact (Group Call, Multigroup Call, or Site All Call). It does not allow you to make other types of calls.

Making/Receiving Calls in Fallback Mode

Note:
Calls are heard only by radios that are monitoring the same Fallback channel and selected to the same Group. Calls are not networked to other sites or other repeaters.

Emergency voice calls or Emergency Alerts are not available in Fallback mode. If you press the emergency button in Fallback mode, the radio provides an invalid key press tone. Display-equipped radios also show the message, “Feature not available”.

Private (radio to radio) and Phone calls are not available in Fallback mode. If you attempt a call to a private contact, you will receive a denial tone. At this point you should select a desired group contact. Other non-supported calls include Remote Monitor, Call Alert, Radio Check, Radio Enable, Radio Disable, Text messaging, Location Updates, and packet data calls.

Enhanced Traffic Channel Access (ETCA) is not supported in Auto Fallback mode. If two or more radio users press **PTT** at the same time (or at almost the same time), it is possible that both radios transmit until **PTT** is released. In this event, it is possible that none of the transmissions will be understood by receiving radios.

Making calls in Fallback mode is similar to normal functioning. Simply select the group contact you wish to use (using the radio’s normal channel selection method), and then press the **PTT** to start your call. It is possible that the channel may be in use already by another group. If the channel is in use, you receive a busy tone and the display will say “Channel Busy”. You may select Group, Multi-group or Site All Call contacts using your radio’s normal channel selection method. While the radio is operating on the Fallback Channel, the Multigroup operates just like other Groups. It is only heard by radios that are currently selected to the same Multi-group.

Returning to Normal Operation

If the site returns to normal trunking operation while you are in range of your Fallback repeater, your radio automatically exits Auto Fallback mode. You hear a

registration “beep” when the radio successfully registers. If you are in the range of an operable site (that is not in Fallback mode), you may press the Roam Request button (if programmed for your radio) to force your radio to search for and register on an available site. If no other site is available, your radio returns to Auto Fallback mode after searching is complete. If you drive out of coverage of your Fallback repeater, your radio enters Search mode (display indicates “Searching”).

Radio Check

If enabled, this feature allows you to determine if another radio is active in a system without disturbing the user of that radio. No audible or visual notification is shown on the target radio.

This feature is only applicable for subscriber aliases or IDs.

Sending a Radio Check

1 Access the Radio Check feature.

Radio Control	Steps
Programmed Radio Check button	1 Press the programmed **Radio Check** button. 2 ▲ or ▼ to the required subscriber alias or ID and press OK to select.
Menu	1 OK to access the menu. 2 ▲ or ▼ to `Contacts` and press OK to select. 3 ▲ or ▼ to the required subscriber alias or ID and press OK to select. 4 ▲ or ▼ to `Radio Check` and press OK to select.

The display shows the Target Alias, indicating the request is in progress. The LED lights up solid green.

2 Wait for acknowledgement.

If the target radio is active in the system, a tone sounds and the display briefly shows `Target Radio Available`.

If the target radio is not active in the system, a tone sounds and the display briefly shows `Target Radio Not Available`.

Radio returns to the subscriber alias or ID screen when initiated via Menu.

Radio returns to the Home Screen if initiated via the programmable button.

Remote Monitor

Use the Remote Monitor feature to turn on the microphone of a target radio (subscriber alias or IDs only). The green LED will blink once on the target subscriber. You can use this feature to monitor, remotely, any audible activity surrounding the target radio.

Your radio must be programmed to allow you to use this feature.

Initiating Remote Monitor

Note:
Remote Monitor automatically stops after a programmed duration or when there is any attempt to initiate transmission, change channels or power down the radio.

1 Access the Remote Monitor feature.

Radio Control	Steps
Programmed Remote Monitor Button	1 Press the programmed **Remote Monitor** button. 2 ▲ or ▼ to the required subscriber alias or ID and press OK to select.
Menu	1 OK to access the menu. 2 ▲ or ▼ to `Contacts` and press OK to select.

Radio Control	Steps
	3 ▲ or ▼ to the required subscriber alias or ID and press OK to select. 4 ▲ or ▼ to `Manual Dial` and press OK to select. 5 ▲ or ▼ to `Remote Mon.` and press OK to select.

The first text line shows `Rem. Monitor`. The second text line displays the Target Alias, indicating the request is in progress. The LED lights up blinking green.

2 Wait for acknowledgement.

If successful, a positive indicator tone sounds and the display momentarily shows `Rem. Monitor Successful`. Your radio starts playing audio from the monitored radio for a programmed duration and display shows `Rem. Monitor`, followed by target alias. Once the timer expires, the radio sounds an alert tone and the LED turns off.

If unsuccessful, the radio sounds a negative indicator tone the display shows `Rem. Monitor Failed`.

Scan

This feature allows your radio to monitor and join calls for groups defined in a pre-programmed scan list. When scan is enabled, the scan icon appears on the status bar and the LED blinks yellow when idle.

Starting and Stopping Scan

Note:
This procedure turns the Scan feature On or Off for all Connect Plus zones with the same Network ID as your currently selected zone. It is important to note that even when the Scan feature is turned on via this procedure, scan may still be disabled for some (or all) groups on your scan list. See *Editing the Scan List* on page 181 for more information.

You can start and stop scanning by pressing the programmed **Scan** button **OR** follow the procedure described next.

1 OK to access the menu.

2 ▲ or ▼ to Scan and press OK to select.

3 ▲ or ▼ to Turn On or Turn Off and press OK to select.

- The display shows Scan On if scan is enabled.
- The Scan menu shows Turn Off if scan is enabled.
- The display shows Scan Off if scan is disabled.
- The Scan menu shows Turn On if scan is disabled.

Responding to a Transmission During a Scan

During scanning, your radio stops on a group where activity is detected. The radio continuously listens for any member in the scan list when idle on the control channel.

1 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

2 Press the **PTT** button during hang time.
The LED lights up solid green.

3 Wait for the Talk Permit Tone to finish (if enabled), and speak clearly into the microphone.

4 Release the **PTT** button to listen.

If you do not respond within the hang time, the radio returns to scanning other groups.

User Configurable Scan

If the Edit List menu is enabled, a user is able to Add and Remove the scan members from the Add Member menu. A Scan List member must be a regular Group Contact (i.e. not Multi-group or Site All Call/Network Wide All Call) that is currently assigned to a Channel Selector position in a Connect Plus Zone with the same Network ID as the currently selected Zone. The Talkgroup alias must not match any Talkgroup that has been included in the current Zone's Scan List.

Scan can be turned on or off from the menu or by pressing a programmed **Scan On/Off** button.

This feature functions only when the radio is not currently involved in a call. If you are presently listening to a call, your radio cannot scan for other group calls, and is therefore unaware they are in progress. Once your call is finished, your radio returns to the control channel time slot and is able to scan for groups that are in the scan list.

Turning Scan On or Off

Note:
This procedure turns the Scan feature On or Off for all zones with the same Network ID as your currently selected zone. It is important to note that even when the Scan feature is turned on via this procedure, scan may still be disabled for some (or all) groups on your scan list. See the next section for more information.

If Scan is turned on, the Scan icon appears on your display. When Scan is on and you are not participating in a call, the LED blinks green and yellow.

The procedure for turning Scan on or off depends on how your radio is programmed. If programmed with a Scan On/Off button, use the button to toggle the feature on or off. If your radio has been programmed so that Scan can be turned on or off via the menu, follow the procedure described next.

1 OK to access the menu.

2 ▲ or ▼ to `Scan` and press OK to select.

3 ▲ or ▼ to `Turn On` or `Turn Off` and press OK to select.

- The display shows `Scan On` momentarily if scan is disabled.
- The display shows `Scan Off` momentarily if scan is enabled.

Editing the Scan List

Note:
If the scan list entry happens to be the radio's currently selected group, the radio listens for activity on this group regardless of whether the

list entry currently shows a check mark or not. Whenever a radio is not in a call, the radio listens for activity on its Selected Group, Multigroup, the Site All Call, and its Default Emergency Revert Group (if configured for one). This operation cannot be disabled. If Scan is enabled the radio will also listen for activity on enabled Zone Scan List members.

Your scan list determines which groups can be scanned. The list is created when your radio is programmed. If your radio has been programmed to allow you to edit the scan list, you can,

- Enable/disable scan for individual groups on the list.
- Add and Remove the scan members from the Add Member menu. Refer to *Add or Delete a Group via the Add Members Menu* on page 183.

Note:
A Scan List member must be a regular Group Contact (i.e. not Multigroup or Site All Call/ Network Wide All Call) that is currently assigned to a Channel Selector position in a Connect Plus Zone with the same Network ID as the currently selected Zone.

The Talkgroup alias must not match any Talkgroup that has been included in the current Zone's Scan List.

1 OK to access the menu.

2 ▲ or ▼ to `View/Edit List` and press OK to select.

3 ▲ or ▼ to the desired Group name.

If a check mark precedes the Group name, then scan is currently enabled for this Group.

If there is no check mark preceding the Group name, then scan is currently disabled for this Group.

4 OK to select the desired Group.

The display shows `Enable` if scan is currently disabled for the Group.

The display shows `Disable` if scan is currently enabled for the Group.

5 Select the displayed option (Enable or Disable) and press OK to select.
Depending on which option was selected, the radio momentarily displays Scan Enabled or Scan Disabled as confirmation.

The radio displays the Zone scan list again. If scan was enabled for the Group, the check mark displays before the Group name. If scan was disabled for the Group, the check mark is removed before the Group name.

Add or Delete a Group via the Add Members Menu

The Connect Plus radio does not allow a duplicate group number or a duplicate group alias to be placed on a zone scan list (or to be shown as a “scan candidate”). Thus, the list of “scan candidates” described in steps *6* and *7* sometimes changes after adding or deleting a group from the zone scan list.

If your radio has been programmed to allow you to edit the scan list, you can use the Add Members menu to add a group to the scan list of the currently selected zone, or to delete a group from the san list of the currently selected zone.

1 OK to access the menu.

2 ▲ or ▼ to Scan option and press OK to select.

3 ▲ or ▼ to <Add Members> and press OK to select.
The display shows “Add Members from Zone n” (n = the Connect Plus zone number of the first Connect Plus zone in your radio with the same Network ID as your currently selected zone).

4 Do one of the following.

- If the group you want to add to the scan list is assigned to a channel selector position in that zone, go to step *6*.
- If the group you want to add to the scan list is assigned to a channel selector position in a different Connect Plus zone, go to step *5*.

5 ▲ or ▼ to scroll a list of Connect Plus zones that have the same Network ID as the currently selected zone.

6 After locating the Connect Plus zone where the desired group is assigned to a channel selector position, press OK to select.

Your radio displays the first entry in a list of groups assigned to a channel position in that zone. The groups on the list are called “scan candidates”, because they can be added to the scan list of your currently selected zone (or they are already on the zone scan list).

If the zone does not have any groups that can be added to the scan list, the radio displays `No Candidates`.

7 ▲ or ▼ to scroll through the list of candidate groups.

If a plus sign (+) is displayed immediately before the group alias, this indicates the group is currently on the scan list for the selected zone.

If the plus sign (+) is not displayed immediately before the alias, the group is not currently on the scan list, but can be added.

8 Press OK when the desired group alias is displayed.

If this group is not currently on the scan list for the currently selected zone, the `Add` (Group Alias) message is displayed.

If this group is already on the scan list for the currently selected zone, the `Delete` (Group Alias) message is displayed.

9 Press OK to accept the displayed message (`Add` or `Delete`).

If deleting a group from the list, you will know the operation is successful because the plus sign (+) will no longer display immediately before the alias.

If adding a group to the list, you will know the operation is successful because the plus sign (+) will display before the alias.

If you are attempting to add a group, and the list is already full, the radio displays `List Full`. If this

should occur, it will be necessary to delete a group from the scan list prior to adding a new one.

10 When finished, press ⌂ as many times as necessary to return to the desired menu.

Understanding Scan Operation

Note:
If the Radio joins a call for a Zone Scan List member from a different Zone and Call Hang Timer expires before you are able to respond, in order to respond, you must navigate to the Zone and Channel of the Scan List Member and start a new call.

There are some circumstances in which you can miss calls for groups that are in your scan list. When you miss a call for one of the following reasons, this does not indicate a problem with your radio. This is a normal scan operation for Connect Plus.

- Scan feature is not turned on (check for the scan icon on the display).
- Scan list member has been disabled via the menu (see *Editing the Scan List* on page 181).
- You are participating in a call already.
- No member of the scanned group is registered at your site (Multisite systems only).

Scan Talkback

If your radio scans into a call from the selectable group scan list, and if the **PTT** button is pressed during the scanned call, the operation of the radio depends on whether Scan Talkback was enabled or disabled during radio programming. For more information on how your radio is programmed, contact your radio dealer (or your radio system administrator).

Scan Talkback Disabled	The radio leaves the scanned call and attempts to transmit on the contact for the currently selected channel position. After the Call Hang Time on the currently selected contact expires, the radio returns to the home channel and starts the Scan Hang Time Timer. The radio resumes group scan after its Scan Hang Time Timer expires.
Scan Talkback Enabled	If the **PTT** button is pressed during the Group Hang Time of the scanned call,

the radio attempts to transmit to the scanned group.

Note:
If you scan into a call for a group that is not assigned to a channel position in the currently selected zone and you miss the Hang Time of the call, switch to the proper zone and then select the channel position of the group to talk back to that group.

Editing Priority for a Talkgroup

The Priority Monitor feature allows the radio to automatically receive transmission from the talkgroup with higher priority when it is in another call. A tone sounds when the radio switches to the call with higher priority.

There are two levels of priority for the talkgroups: `P1` and `P2`. `P1` has higher priority than `P2`.

Note:
If Default Emergency Revert Group ID is configured in MOTOTRBO Connect Plus Option Board CPS, there are three levels of priority for talkgroups: P0, P1 and P2. P0 is the permanent Emergency Revert Group ID and the highest priority. Check with your dealer or system administrator for more information.

1. OK to access the menu.
2. ▲ or ▼ to `Scan` and press OK to select.
3. ▲ or ▼ to `View/Edit List` and press OK to select.
4. ▲ or ▼ to the required talkgroup and press OK to select.
5. ▲ or ▼ to `Edit Priority` and press OK to select.
6. ▲ or ▼ to the required priority level and press OK to select.
   The display shows positive mini notice before returning to the previous screen. The priority icon appears on the left of the talkgroup.

Contacts Settings

Note:
You can add, or edit subscriber IDs for Connect Plus Contacts. Deleting subscriber IDs can only be performed by your dealer.

If the Privacy feature is enabled on a channel, you can make a privacy-enabled voice call on that channel. Only target radios with the same Privacy Key, or the same Key Value and Key ID as your radio are able to unscramble the transmission.

Contacts provide “address-book” capabilities on your radio. Each entry corresponds to an alias or ID that you use to initiate a call.

Each zone provides a Contact List with up to 100 contacts. The following contact types are available:

- Private Call
- Group Call
- Multigroup Call
- Site All Call Voice
- Site All Call Text
- Dispatch Call

The Dispatch Call contact type is used to send a text message to a dispatcher PC through a third-party Text Message Server.

Making a Private Call from Contacts

1. OK to access the menu.
2. ▲ or ▼ to Contacts and press OK to select.
   The entries are alphabetically sorted.
3. Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
4. Press the **PTT** button to make the call.
   The LED lights up solid green.
5. Wait for the Talk Permit Tone to finish (if enabled), and speak clearly into the microphone.
6. Release the **PTT** button to listen.

   When the target radio responds, the LED blinks green and the display shows the transmitting user's ID.

If there is no voice activity for a predetermined period of time, the call ends.

You hear a short tone. The display shows `Call Ended`.

Making a Call Alias Search

You can also use alias or alphanumeric search to retrieve the required subscriber alias.

This feature is only applicable while in Contacts.

1 OK to access the menu.

2 ▲ or ▼ to `Contacts` and press OK to select.
The entries are alphabetically sorted.

3 Key in the first character of the required alias, and then press ▲ or ▼ to locate the required alias.

4 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

5 Press the **PTT** button to make the call.
The LED lights up solid green. The display shows the destination alias.

6 Wait for the Talk Permit Tone to finish (if enabled), and speak clearly into the microphone.

7 Release the **PTT** button to listen.
When the target radio responds, the LED blinks green.
If there is no voice activity for a predetermined period of time, the call ends.
The display shows `Call Ended`.

Adding a New Contact

1 OK to access the menu.

2 ▲ or ▼ to `Contacts` and press OK to select.

3 ▲ or ▼ to `New Contact` and press OK to select.

4 Use the keypad to enter the contact number and press OK to confirm.

5 Use the keypad to enter the contact name and press OK to confirm.

6 If adding a Radio Contact, ▲ or ▼ to the required ringer type and press OK to select. The radio sounds a positive indicator tone and the display shows `Contact Saved`.

Call Indicator Settings

Activating and Deactivating Call Ringers for Call Alert

You can select, or turn on or off ringing tones for a received Call Alert.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities` and press OK to select.

3 Press ▲ or ▼ to `Radio Settings` and press OK to select.

4 Press ▲ or ▼ to `Tones/Alert` and press OK to select.

5 Press ▲ or ▼ to `Call Ringers` and press OK to select.

6 Press ▲ or ▼ to `Call Alert` and press OK to select.
The current tone is indicated by a ✓.

7 Press ▲ or ▼ to the required tone and press OK to select.
✓ appears beside selected tone.

Activating and Deactivating Call Ringers for Private Calls

You can turn on or off the ringing tones for a received Private Call.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to Tones/Alerts and press OK to select.

5 ▲ or ▼ to Call Ringers and press OK to select.

6 ▲ or ▼ to Private Call and press OK to select.

7 Press OK to enable/disable the Private Call ringing tones.

The display shows ✓ beside Enabled, if Private Call ringing tones are enabled.

The ✓ is not displayed when Private Call ringing tones are disabled.

Activating and Deactivating Call Ringers for Text Message

You can turn on or off the ringing tones for a received Text Message.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to Tones/Alerts and press OK to select.

5 or to Call Ringers and press OK to select.

6 or to Text Message and press OK to select.

The current tone is indicated by a ✓.

7 or to the required tone and press OK to select.

✓ appears beside selected tone.

Selecting a Ring Alert Type

Note:
The programmed **Ring Alert Type** button is assigned by your dealer or system administrator. Check with your dealer or system administrator to determine how your radio has been programmed.

You can program the radio calls to one predetermined vibrate call. If All Tones status is disabled, the radio displays the All Tone Mute icon. If All Tones status is enabled, the related ring alert type is displayed.

The radio sounds one vibration if it is a momentary ring style. The radio vibrates repetitively if it is a repetitive ring style. When set to Ring and Vibrate, the radio sounds a specific ring tone if there is any incoming radio transaction (for example, Call Alert or Message). It sounds like a good key tone or missed call.

Escalating Alarm Tone Volume

You can program your radio to continually alert you when a radio call remains unanswered. This is done by automatically increasing the alarm tone volume over time. This feature is known as Escalert.

Call Log Features

Your radio keeps track of all recent outgoing, answered, and missed Private Calls. Use the call log feature to view and manage recent calls.

You can perform the following tasks in each of your call lists:

- Delete
- View Details

Viewing Recent Calls

The lists are `Missed`, `Answered`, and `Outgoing`.

1 OK to access the menu.

2 ▲ or ▼ to `Call Log` and press OK to select.

3 ▲ or ▼ to preferred list and press OK to select.
The display shows the most recent entry at the top of the list.

4 ▲ or ▼ to view the list.
Press the **PTT** button to start a Private Call with the current selected alias or ID.

Deleting a Call from a Call List

1 OK to access the menu.

2 ▲ or ▼ to `Call Log` and press OK to select.

3 ▲ or ▼ to the required list and press OK to select.
When you select a call list and it contains no entries, the display shows `List Empty`, and sounds a low tone if Keypad Tones are turned on .

4 ▲ or ▼ to the required alias or ID and press OK to select.

5 ▲ or ▼ to `Delete` and press OK to select.

6 Do one of the following:

- Press OK to select `Yes` to delete the entry. The display shows `Entry Deleted`.
- ▲ or ▼ to `No`, and press the OK button to return to the previous screen.

Viewing Details from a Call List

1 OK to access the menu.

2 ▲ or ▼ to Call Log and press OK to select.

3 ▲ or ▼ to the required list and press OK to select.

4 ▲ or ▼ to the required alias or ID and press OK to select.

5 ▲ or ▼ to View Details and press OK to select.
Display shows details.

Call Alert Operation

Call Alert paging enables you to alert a specific radio user to call you back when they are able to do so.

This feature is accessible through the menu via Contacts, manual dial or a programmed **One Touch Access** button.

Responding to Call Alerts

Follow the procedure to respond to Call Alerts on your radio.

When you receive a Call Alert:

- A repetitive tone sounds.
- The yellow LED blinks.
- The display shows the notification list listing a Call Alert with the alias or ID of the calling radio.

  Depending on the configuration by your dealer or system administrator, you can respond to a Call Alert by doing one of the following:

  - Press the **PTT** button and respond with a Private Call directly to the caller.
  - Press the **PTT** button to continue normal talkgroup communication.

    The Call Alert is moved to the Missed Call option at the Call Log menu. You can respond to the caller from the Missed Called log.

See *Notification List* on page 123 and *Call Log Features* on page 86 for more information.

Making a Call Alert from the Contact List

1 OK to access the menu.

2 ▲ or ▼ to Contacts and press OK to select.

3 Use one of the steps described next to select the required subscriber alias or ID:

- select the subscriber alias directly
  - ▲ or ▼ to the required subscriber alias and press OK to select.
- use the Manual Dial menu
  - ▲ or ▼ to Manual Dial and press OK to select.
  - The Manual Dial text entry screen shall be displayed. Enter the Subscriber ID and press OK.

4 ▲ or ▼ to Call Alert and press OK to select.

The display shows Call Alert: <Subscriber Alias or ID>Call Alert and the subscriber alias or ID, indicating that the Call Alert has been sent.

The LED lights up solid green when your radio is sending the Call Alert.

If the Call Alert acknowledgement is received, the display shows Call Alert Successful.

If the Call Alert acknowledgement is not received, the display shows Call Alert Failed.

Making a Call Alert with the One Touch Access Button

Press the programmed **One Touch Access** button to make a Call Alert to the predefined alias. The display shows Call Alert and the subscriber alias or ID, indicating that the Call Alert has been sent.

The LED lights up solid green when your radio is sending the Call Alert.

If the Call Alert acknowledgement is received, the display shows Call Alert Successful.

If the Call Alert acknowledgement is not received, the display shows `Call Alert Failed`.

Emergency Operation

Note:
If your radio is programmed for Silent or Silent with Voice emergency initiation, in most cases it automatically exits silent operation after the Emergency Call or Emergency Alert is finished. The exception to this rule is when Emergency Alert is the configured Emergency Mode and Silent is the configured Emergency Type. If your radio is programmed in this manner, the silent operation continues until you cancel silent operation by pressing **PTT** or the button configured for Emergency Off.

Emergency voice calls and Emergency Alerts are not supported when operating in Connect Plus Auto Fallback mode. For more information see the *Auto Fallback* on page 175.

An Emergency Alert is used to indicate a critical situation. You can initiate an Emergency at any time on any screen display, even when there is activity on the current channel. Pressing the **Emergency** button initiates the programmed Emergency mode. The programmed Emergency mode may also be initiated by triggering the optional Man Down feature. The Emergency feature may be disabled in your radio.

Your dealer can set the duration of a button press for the programmed **Emergency** button, except for long press, which is similar with all other buttons:

Short press	Between 0.05 seconds and 0.75 seconds.
Long press	Between 1.00 second and 3.75 seconds.

The **Emergency** button is assigned with the Emergency On/Off feature. Check with your dealer for the assigned operation of the **Emergency** button.

- If the short press for the **Emergency** button is assigned to turn on the Emergency mode, then the long press for the **Emergency** button is assigned to exit the Emergency mode.
- If the long press for the **Emergency** button is assigned to turn on the Emergency mode, then the short press for the **Emergency** button is assigned to exit the Emergency mode.

When your radio is selected to a Connect Plus zone, it supports three Emergency modes:

Emergency Call	You must press the **PTT** button to talk on the assigned emergency time slot.
Emergency Call with Voice to Follow	For the first transmission on the assigned emergency time slot, the microphone is automatically unmuted and you may talk without pressing the **PTT** button. The microphone stays “hot” in this fashion for a time period programmed into the radio. For subsequent transmissions in the same Emergency call, you must press the **PTT** button.
Emergency Alert	An Emergency Alert is not a voice call. It is an emergency notification that is sent to radios that are configured to receive these alerts. The radio sends an emergency alert via the control channel of the currently registered site. The Emergency Alert is received by radios in the Connect Plus network that are programmed to receive them (no matter which network site they are registered to).

Only one of the Emergency Modes can be assigned to the Emergency button per zone. In addition, each Emergency mode has the following types:

Regular	Radio initiates an Emergency and shows audio and/or visual indicators.
Silent	Radio initiates an Emergency without any audio or visual indicators. The radio suppresses all audio or visual indications of the Emergency until you press the **PTT** button to start a voice transmission.
Silent with Voice	The same as Silent operation, except that the radio also unmutes for some voice transmissions.

Receiving an Incoming Emergency

Your radio may be programmed to sound an alert tone and also display information about the incoming Emergency. If so programmed, upon receiving the incoming Emergency, the display shows the Emergency Details screen with the emergency icon,

the Alias or ID of the radio that requested the Emergency, the Group Contact being used for the Emergency, and one additional line of information. The additional information is the name of the zone that contains the Group Contact.

At the present time, the radio displays only the most recently decoded Emergency. If a new Emergency is received before the prior Emergency is cleared, the details for the new Emergency replace the details of the previous Emergency.

Depending on how your radio has been programmed, the Emergency Details screen (or Alarm List screen) will stay on your radio's display even after the Emergency ends. You can save the emergency details to the Alarm List, or you can delete the emergency details as described in the following sections.

Saving the Emergency Details to the Alarm List

Saving the emergency details to the Alarm List allows you to view the details again at a later time by selecting Alarm List from the Main Menu.

1 While the Emergency Details (or Alarm List) screen is displayed, press .
The **Exit Alarm List** screen displays.

2 Perform one of the following actions:

- Select **Yes** and press OK to save the emergency details to the Alarm List, and to exit the Emergency Details (or Alarm List) screen.
- Select **No** and press OK to return to the Emergency Details (or Alarm List) screen.

Deleting the Emergency Details

1 While the Emergency Details screen is displayed, press .
The **Delete** screen displays.

2 Perform one of the following actions:

- Select **Yes** and press OK to delete the emergency details.
- Select **No** and press OK to return to the Emergency Details screen.

Responding to an Emergency Call

Note:
If you do not respond to the Emergency Call within the time allotted for the Emergency Call Hang Time, the Emergency call will end. If you want to speak to the group after the Emergency Call Hang Time expires, you must first select the channel position assigned to the group (if not already selected). Then, press **PTT** to start a non-Emergency Call to the group.

1 When receiving an Emergency Call, press any button to stop all Emergency Call received indications.

2 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

3 Press the **PTT** button to initiate a voice transmission on the Emergency group.
All radios that are monitoring this group hear your transmission.

4 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
The LED lights up green.

5 Release the **PTT** button to listen.
When the emergency initiating radio responds, the LED blinks green. You see the Group Call icon, the group ID, and transmitting radio ID on your display.

Responding to an Emergency Alert

Note:
The Group contact used for the Emergency Alert should not be used for voice communication. This could prevent other radios from sending and receiving Emergency Alerts on the same group.

An Emergency Alert from a radio indicates that the user is in an urgent situation. You may respond to the alert by initiating a private call to the radio who declared the emergency, initiating a group call to a designated talk group, sending the radio a Call Alert, initiating a Remote Monitor of that radio, etc. The proper response is determined by your organization and the individual situation.

Ignore Emergency Revert Call

This feature enhancement is to provide an option for the radio to ignore an active Emergency Revert Call.

To enable Ignore Emergency Revert Call, the radio must be configured at the Connect Plus Customer Programming Software (CPCPS).

When the feature is enabled, the radio does not display Emergency Call indications and does not receive any audio on the default Emergency Revert Group ID.

Check with your dealer or system administrator for more information.

Initiating an Emergency Call

Note:
If your radio is set to Silent, it does not display any audio or visual indicators during Emergency mode until you press the **PTT** button to initiate a voice transmission.

If your radio is set to Silent with Voice, it does not initially display any audio or visual indicators that the radio is in Emergency mode. However, your radio unmutes for the transmissions of radios responding to your emergency. The emergency indicators only appear once you press the **PTT** button to initiate a voice transmission from your radio.

For both “Silent” and “Silent with Voice” operation, the radio automatically exits silent operation after the Emergency Call is finished.

1. Press the programmed **Emergency** button.
2. Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
3. Press the **PTT** button to initiate a voice transmission on the Emergency group.

   When you release the **PTT** button, the Emergency call continues for the time allotted for the Emergency Call Hang Time.

   If you press the **PTT** button during this time, the Emergency call continues.

Initiating an Emergency Call with Voice to Follow

Your radio must be programmed for this type of operation.

When enabled for this operation, when you press the programmed **Emergency** button, and when your

radio receives the time slot assignment, the microphone is automatically activated without pressing the **PTT** button. This activated microphone state is also known as “hot mic”. The “hot mic” applies to the first voice transmission from your radio during the Emergency call. For subsequent transmissions in the same Emergency call, you must press the **PTT** button.

1 Press the programmed **Emergency** button.

2 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

3 The microphone remains active for the “hot mic” time specified in your radio's codeplug programming.
During this time, the LED lights up green.

4 Press and hold the **PTT** button to talk longer than the programmed duration.

Initiating an Emergency Alert

Note:
If your radio is programmed for “Silent” or “Silent with Voice”, it will not provide any audio or visual indications that it is sending an Emergency Alert. If programmed for “Silent”, the silent operation continues indefinitely until you press PTT or the button configured for “Emergency Off”. If programmed for “Silent with Voice”, the radio automatically cancels silent operation when the site controller broadcasts the Emergency Alert.

Press the orange **Emergency** button.
Upon transmitting the Emergency Alert to the site controller, the radio’s display shows the Emergency icon, the Group contact used for the Emergency Alert, and `TX Alarm`.

Once the Emergency Alert is successfully sent and is being broadcast for other radios to hear, a positive indicator tone sounds and the radio’s display shows `Alarm Sent`. If the Emergency Alert is unsuccessful, a negative indicator tone sounds and the radio displays `Alarm Failed`.

Exiting Emergency Mode

Note:
If the Emergency call ends due to the expiration of the Emergency Hang Time, but the emergency condition is not over, press the

Emergency button again to restart the process.

If you initiate an Emergency Alert by pressing the programmed **Emergency** button, your radio automatically exits Emergency mode after receiving a response from the Connect Plus system.

If you initiate an Emergency call by pressing the programmed **Emergency** button, your radio will be assigned a channel automatically when one becomes available. Once your radio has transmitted a message indicating the emergency, you cannot cancel your Emergency call. However, if you pressed the button by accident or the emergency no longer exists, you may wish to say this over the assigned channel. When you release the **PTT** button, the Emergency call is discontinued after the Emergency Call Hang Time expires.

If your radio was configured for Emergency with Voice to Follow, use the “hot mic” period to explain your error, then press and release the **PTT** button to discontinue the transmission. The Emergency call is discontinued after the Emergency Call Hang Time expires.

Text Message Features

Your radio is able to receive data, for example a text message, from another radio or a text message application.

The maximum length of characters when you send and receive a text message is 280 characters which includes the subject line. You see the subject line when you receive messages from e-mail applications.

Note:
The maximum length of 280 characters is applicable only for models with the latest software and hardware. On older hardware, the text message will be truncated to the maximum length of 140 characters. Check with your dealer or system administrator for more information.

The radio exits the current screen once the inactivity timer expires.

Note:

Long press ⮌⌂ at any time to return to the Home screen.

Sending a Quick Text Message

Your radio supports a maximum of 10 Quick Text messages as programmed by your dealer.

While Quick Text messages are predefined, you can edit each message before sending it.

If you are sending the message, select the recipient by

- ▲ or ▼ to the required alias and press OK to select.
- ▲ or ▼ to `Manual Dial`, and press OK to select. The first line of the display shows `Number:`. The second line of the display shows a blinking cursor. Key in the subscriber alias or ID and press OK.

The display shows `Sending Message`, confirming your message is being sent.

If the message is sent successfully, a tone sounds and the display shows `Message Sent`.

If the message cannot be sent, a low tone sounds and the display shows `Message Send Failed`.

If the text message fails to send, the radio returns you to the `Resend` option screen (see *Managing Fail-to-Send Text Messages* on page 205).

Sending a Quick Text Message with the One Touch Access Button

Press the programmed **One Touch Access** button to send a predefined Quick Text message to a predefined alias.
The display shows `Sending Message`, confirming your message is being sent.

If the message is sent, a tone sounds and the display shows `Message Sent`.

If the message cannot be sent, a low tone sounds and the display shows `Message Send Failed`.

If the text message fails to send, the radio returns you to the `Resend` option screen (see *Managing Fail-to-Send Text Messages* on page 205).

Accessing the Drafts Folder

The Drafts folder stores a maximum of ten (10) last saved messages. When the folder is full, the next

saved text message automatically replaces the oldest text message in the folder.

Note:
You can edit saved text message before sending it. Only available with a keypad microphone (see *Editing and Sending a Saved Text Message* on page 203. Long press ⌂ at any time to return to the Home screen.

Viewing a Saved Text Message

1 Access the **Text Message** feature.

Radio Controls	Steps
Programmed Text Message button	Press the programmed **Text Message** button.
Menu	1 OK to access the menu. 2 ▲ or ▼ to Messages and press OK to select.

2 ▲ or ▼ to Drafts and press OK to select.

3 ▲ or ▼ to the required message and press OK to select.

Editing and Sending a Saved Text Message

1 Press OK again while viewing the message.

2 ▲ or ▼ to Edit and press OK to select. A blinking cursor appears.

3 Use the keypad to type your message.

Press ◀ to move one space to the left. Press ▶ or the # key to move one space to the right. Press the * key to delete any unwanted characters. Long press # to change text entry method.

4 Press OK once message is composed.

5 Select the message recipient by

- ▲ or ▼ to the required alias and press OK to select.
- ▲ or ▼ to `Manual Dial`, and press OK to select. The first line of the display shows `Number:`. The second line of the display shows a blinking cursor. Key in the subscriber alias or ID and press OK.

The display shows `Sending Message`, confirming your message is being sent.

If the message is sent successfully, a tone sounds and the display shows `Message Sent`.

If the message cannot be sent, a low tone sounds and the display shows `Message Send Failed`.

If the text message cannot be sent, it is moved to the Sent Items folder and marked with a Send Failed icon.

Deleting a Saved Text Message from Drafts

1 Access the **Text Message** feature.

Radio Controls	Steps
Programmed Text Message button	Press the programmed **Text Message** button.
Menu	1 OK to access the menu. 2 ▲ or ▼ to `Messages` and press OK to select.

2 ▲ or ▼ to `Drafts` and press OK to select.

3 ▲ or ▼ to the required message and press OK to select.

4 ▲ or ▼ to `Delete` and press OK to delete the text message.

Managing Fail-to-Send Text Messages

You can select one of the following options while at the Resend option screen:

- Resend
- Forward
- Edit

Resending a Text Message

Press OK to resend the same message to the same subscriber/group alias or ID.

If the message is sent successfully, a tone sounds and the display shows the positive mini notice.

If the message cannot be sent, the display shows the negative mini notice.

Forwarding a Text Message

Select Forward to send the message to another subscriber/group alias or ID.

1 ▲ or ▼ to Forward and press OK to select.

2 Select the message recipient by ▲ or ▼ to the required alias or ID and press OK to select.

The display shows Sending Message, confirming your message is being sent.

If the message is sent successfully, a tone sounds and the display shows Message Sent.

If the message cannot be sent, a low tone sounds and the display shows Message Send Failed.

Managing Sent Text Messages

Once a message is sent to another radio, it is saved in Sent Items. The most recent sent text message is always added to the top of the Sent Items list.

The Sent Items folder is capable of storing a maximum of thirty (30) last sent messages. When the folder is full, the next sent text message automatically replaces the oldest text message in the folder.

Note:

Long press ↩ at any time to return to the Home screen.

Viewing a Sent Text Message

1 Access the **Text Message** feature.

Radio Controls	Steps
Programmed Text Message button	Press the programmed **Text Message** button.
Menu	1 OK to access the menu. 2 ▲ or ▼ to `Messages` and press OK to select.

2 ▲ or ▼ to `Sent Items` and press OK to select.

3 ▲ or ▼ to the required message and press OK to select.

The icon at the top right corner of the screen indicates the status of the message (see *Sent Item Icons* on page 157).

Sending a Sent Text Message

You can select one of the following options while viewing a sent text message:

- Resend
- Forward
- Edit
- Delete

1 Press OK again while viewing the message.

2 ▲ or ▼ to one of the following options and press OK to select.

Option	Steps
`Forward`	Select `Forward` to send the selected text message to another subscriber/group alias or ID (see *Forwarding a Text Message* on page 205).

Option	Steps
Delete	Select Delete to delete the text message.
Resend	Select Resend to resend the selected text message to the same subscriber/group alias or ID. The display shows Sending Message, confirming that the same message is being sent to the same target radio. If the message is sent successfully, a tone sounds and the display shows Message Sent. If the message cannot be sent, a low tone sounds and the display shows Message Send Failed. If the message fails to send, the radio returns you to the Resend option screen. Press OK to resend the message to the same subscriber/group alias or ID.

Option	Steps
	Note: If you exit the message sending screen while the message is being sent, the radio updates the status of the message in the Sent Items folder without providing any indication in the display or via sound.
	Note: If the radio changes mode or powers down before the status of the message in Sent Items is updated, the radio cannot complete any In-Progress messages and automatically marks it with a Send Failed icon.
	Note: The radio supports a maximum of five (5) In-Progress messages at one time. During this period, the radio

Option	Steps
	cannot send any new message and automatically marks it with a Send Failed icon.

If you exit the message sending screen while the message is being sent, the radio updates the status of the message in the Sent Items folder without providing any indication in the display or via sound.

If the radio changes mode or powers down before the status of the message in Sent Items is updated, the radio cannot complete any In-Progress messages and automatically marks it with a Send Failed icon.

The radio supports a maximum of five (5) In-Progress messages at one time. During this period, the radio cannot send any new message and automatically marks it with a Send Failed icon.

Deleting All Sent Text Messages from Sent Items

1 Access the **Text Message** feature by performing one of the following actions:

Radio Controls	Steps
Programmed Text Message button	Press the programmed **Text Message** button.
Menu	1 OK to access the menu. 2 ▲ or ▼ to Messages and press OK to select.

2 ▲ or ▼ to Sent Items and press OK to select.

When you select Sent Items and it contains no text messages, the display shows List Empty, and sounds a low tone if Keypad Tones are turned on..

3 ▲ or ▼ to Delete All and press OK to select.

4 Choose one of the following.

- or to Yes and press to select. The display shows positive mini notice.
- or to No and press to return to the previous screen.

Receiving a Text Message

When your radio receives a message, the display shows the Notification List with the alias or ID of the sender and the Message icon.

You can select one of the following options when receiving a text message:

- Read
- Read Later
- Delete

Reading a Text Message

1 or to Read? and press to select.

Selected message in the Inbox opens.

2 Do one of the following:

- Press to return to the Inbox.
- Press a second time to reply, forward, or delete the text message.

Managing Received Text Messages

Use the Inbox to manage your text messages. The Inbox is capable of storing a maximum of 30 messages.

Text messages in the Inbox are sorted according to the most recently received.

Your radio supports the following options for text messages:

- Reply (via Quick Text)
- Forward
- Delete
- Delete All

Note:
If the channel type is not a match, you can only forward, delete, or delete all Received messages.

Long press at any time to return to the Home screen.

Viewing a Text Message from the Inbox

1 OK to access the menu.

2 ▲ or ▼ to Messages and press OK to select.

3 ▲ or ▼ to Inbox and press OK to select.

4 ▲ or ▼ toview the messages.

5 Do one of the following:

- Press OK to select the current message, and press OK again to reply, forward, or delete that message.
- Long press ↩ to return to the Home screen.

Replying to a Text Message from the Inbox

1 Access the **Text Message** feature.

Radio Controls	Steps
Programmed Text Message button	Press the programmed **Text Message** button.
Menu	1 OK to access the menu. 2 ▲ or ▼ to Messages and press OK to select.

2 ▲ or ▼ to Inbox and press OK to select.

3 ▲ or ▼ to the required message and press OK to select.

4 Press OK once more to access the sub-menu.

5 Use your keypad to write/edit your message.

6 Press OK once message is composed.

The display shows `Sending Message`, confirming your message is being sent.

If the message is sent successfully, a tone sounds and the display shows `Message Sent`.

If the message cannot be sent, a low tone sounds and the display shows `Message Send Failed`.

If the message cannot be sent, the radio returns you to the `Resend` option screen (see *Managing Fail-to-Send Text Messages* on page 205).

Deleting a Text Message from the Inbox

1 Access the **Text Message** feature by performing one of the following actions:

Radio Controls	Steps
Programmed Text Message button	Press the programmed **Text Message** button.
Menu	1 OK to access the menu. 2 ▲ or ▼ to `Messages` and press OK to select.

2 ▲ or ▼ to `Inbox` and press OK to select.

3 ▲ or ▼ to the required message and press OK to select.

4 Press OK once more to access the sub-menu.

5 ▲ or ▼ to `Delete` and press OK to select.

6 ▲ or ▼ to `Yes` and press OK to select. The display shows `Message Deleted`, and the screen returns to the Inbox.

Deleting All Text Messages from the Inbox

1 Access the **Text Message** feature by performing one of the following actions:

Radio Controls	Steps
Programmed Text Message button	Press the programmed **Text Message** button.
Menu	1 OK to access the menu. 2 ▲ or ▼ to `Messages` and press OK to select.

2 ▲ or ▼ to `Inbox` and press OK to select.

When you select `Inbox` and it contains no text messages, the display shows `List Empty`, and sounds a low tone if Keypad Tones are turned on (see *Turning Keypad Tones On or Off* on page 131).

3 ▲ or ▼ to `Delete All` and press OK to select.

4 ▲ or ▼ to `Yes` and press OK to select. The display shows `Inbox Cleared`.

Privacy

If enabled, this feature helps to prevent eavesdropping by unauthorized users on a channel by the use of a software-based scrambling solution. The signaling and user identification portions of a transmission are not scrambled.

Your radio must have privacy enabled on the current channel selector position to send a privacy-enabled transmission, although this is not a necessary requirement for receiving a transmission. While on a privacy-enabled channel selector position, the radio is still able to receive clear (unscrambled) transmissions.

Your radio supports Enhanced Privacy.

To unscramble a privacy-enabled call transmission, your radio must be programmed to have the same

Key Value and Key ID (for Enhanced Privacy) as the transmitting radio.

If your radio receives a scrambled call that is of a different Key Value and Key ID, you hear nothing at all (Enhanced Privacy).

If the radio has a privacy type assigned, the Home screen shows the Secure or Unsecure icon, except when the radio is sending or receiving an Emergency call or alarm.

The LED lights up solid green while the radio is transmitting and blinks green rapidly when the radio is receiving an ongoing privacy-enabled transmission.

You can access this feature by performing one of the following actions:

- Press the programmed **Privacy** button to toggle privacy on or off.
- Using the Radio Menu as described by the steps described next.

Note:
Some radio models may not offer this Privacy feature. Check with your dealer or system administrator for more information.

1 OK to access the menu.

2 ▲ or ▼ to `Utilities` and press OK to select.

3 ▲ or ▼ to `Radio Settings` or ▲ or ▼ to `Connect Plus` and press OK to select.

4 ▲ or ▼ to `Enhanced Privacy`.

If the display shows `Turn On`, press OK to enable Privacy. The radio displays a message confirming your selection.

If the display shows `Turn Off`, press OK to disable Privacy. The radio displays a message confirming your selection.

If the radio has a privacy type assigned, the secure or unsecure icon appears on the status bar, except when the radio is sending or receiving an Emergency Alert.

Making a Privacy-Enabled (Scrambled) Call

Toggle privacy on using the programmed privacy button or by using the menu. Your radio must have the Privacy feature enabled for the currently selected channel position to send a privacy-enabled transmission. When privacy is enabled for the currently selected channel position, all voice transmissions made by your radio will be scrambled. This includes Group Call, Multigroup Call, talk-back during scanned calls, Site All Call, Emergency Call, and Private Call. Only receiving radios with the same Key Value and Key ID as your radio will be able to unscramble the transmission.

Security

You can enable or disable any radio in the system. For example, you might want to disable a stolen radio, to prevent the thief from using it, and enable that radio, when it is recovered.

Note:
Performing Radio Disable and Enable is limited to radios with these functions enabled. Check with your dealer or system administrator for more information.

Radio Disable

1 Access this feature by

Radio Controls	Steps
Radio Disable button	1 Press the programmed **Radio Disable** button. 2 ▲ or ▼ to the required alias or ID and press OK to select.
Radio menu	1 OK to access the menu. 2 ▲ or ▼ to `Contacts` and press OK to select. The entries are alphabetically sorted. 3 Use one of the steps described next to select the required subscriber alias or ID: • Select the required alias or ID directly.

Radio Controls	Steps
	• or to the required alias or ID and press OK to select. • Use the Manual Dial menu • or to Manual Dial and press OK to select. • or to Radio Number and press OK to select. • The first line of the display shows Radio Number:. The second line of the display shows a blinking cursor. Use the keypad to enter the subscriber alias or ID and press OK.

Radio Controls	Steps
	4 or to Radio Disable and press OK to select.

The display shows Radio Disable: <Target Alias or ID> and the LED blinks green.

2 Wait for acknowledgement.

If successful, a positive indicator tone sounds and the display shows Radio Disable Successful.

If not successful, a negative indicator tone sounds and the display shows Radio Disable Failed.

Radio Enable

1 Access this feature by

Radio Controls	Steps
Radio Enable button	**1** Press the programmed **Radio Enable** button. **2** ▲ or ▼ to the required alias or ID and press OK to select.
Radio menu	**1** OK to access the menu. **2** ▲ or ▼ to `Contacts` and press OK to select. The entries are alphabetically sorted. **3** Use one of the steps described next to select the required subscriber alias or ID • Select the required alias or ID directly.

Radio Controls	Steps
	• ▲ or ▼ to the required alias or ID and press OK to select. • Use the `Manual Dial` menu • ▲ or ▼ to `Manual Dial` and press OK to select. • ▲ or ▼ to `Radio Number` and press OK to select. • The first line of the display shows `Radio Number:`. The second line of the display shows a blinking cursor. Use the keypad to enter the subscriber alias or ID and press OK.

Radio Controls	Steps
	4 or to Radio Enable and press OK to select.

The display shows Radio Enable: <Subscriber Alias or ID> and the LED lights up solid green.

2 Wait for acknowledgement.

If successful, a positive indicator tone sounds and the display shows Radio Enable Successful.

If not successful, a negative indicator tone sounds and the display shows Radio Enable Failed.

Bluetooth Operation

Note:
If disabled via the CPS, all Bluetooth-related features are disabled and the Bluetooth device database is erased.

This feature allows you to use your radio with a Bluetooth-enabled device (accessory) via a wireless Bluetooth connection. Your radio supports both Motorola and COTS (Commercially available Off-The-Shelf) Bluetooth-enabled devices.

Bluetooth operates within a range of 10 meters (32 feet) line of sight. This is an unobstructed path between your radio and your Bluetooth-enabled device.

It is not recommended that you leave your radio behind and expect your Bluetooth-enabled device to work with a high degree of reliability when they are separated.

At the fringe areas of reception, both voice and tone quality will start to sound “garbled” or “broken”. To correct this problem, simply position your radio and Bluetooth-enabled device closer to each other (within the 10-meter/32 feet defined range) to re-establish clear audio reception. Your radio’s Bluetooth function has a maximum power of 2.5 mW (4 dBm) at the 10-meter/32 feet range.

Your radio can support up to 4 simultaneous Bluetooth connections with Bluetooth-enabled devices of unique types. For example, a headset, and a PTT-Only Device (POD). Multiple connections with

Bluetooth-enabled devices of the same type are not supported.

Refer to your respective Bluetooth-enabled device's user manual for more details on your Bluetooth-enabled device's full capabilities.

Turning Bluetooth On and Off

1 OK to access the menu.

2 ▲ or ▼ to `Bluetooth` and press OK to select.

3 ▲ or ▼ to `My Status` and press OK to select.
The display shows `On` and `Off`. The current status is indicated by a ✓.

4 Do one of the following:

- ▲ or ▼ to `On` and press OK to select.
The display shows `On` and a ✓ appears left of the selected status.
- ▲ or ▼ to `Off` and press OK to select.
The display shows `Off` and a ✓ appears left of the selected status.

Finding and Connecting to a Bluetooth Device

Do not turn off your Bluetooth-enabled device or press ↩ during the finding and connecting operation as this cancels the operation.

1 Turn on your Bluetooth-enabled device and place it in pairing mode. Refer to respective Bluetooth-enabled device's user manual.

2 On your radio, press OK to access the menu.

3 ▲ or ▼ to `Bluetooth` and press OK to select.

4 ▲ or ▼ to `Devices` and press OK to select.

5 Do one of the following:

- ▲ or ▼ to the required device and press OK to select.
- ▲ or ▼ to `Find Devices` to locate available devices. ▲ or ▼ to the required device and press OK to select.

6 ▲ or ▼ to `Connect` and press OK to select.
Display shows `Connecting to <Device>`. Your Bluetooth-enabled device may require additional steps to complete the pairing. Refer to respective Bluetooth-enabled device's user manual.

If successful, the radio display shows `<Device>Connected`. A tone sounds and ✓ appears besides the connected device. The Bluetooth Connected icon appears on the status bar.

If unsuccessful, the radio display shows `Connecting Failed`.

Finding and Connecting from a Bluetooth Device (Discoverable Mode)

Do not turn off your Bluetooth or your radio during the finding and connecting operation as this may cancel the operation.

1 Turn Bluetooth On.
See *Turning Bluetooth On and Off* on page 218.

2 OK to access the menu.

3 ▲ or ▼ to `Bluetooth` and press OK to select.

4 ▲ or ▼ to `Find Me` and press OK to select.
Your radio can now be found by other Bluetooth-enabled devices for a programmed duration. This is called Discoverable Mode.

5 Turn on your Bluetooth-enabled device and pair it with your radio.
Refer to respective Bluetooth-enabled device's user manual.

Disconnecting from a Bluetooth Device

1. On your radio, press OK to access the menu.
2. ▲ or ▼ to `Bluetooth` and press OK to select.
3. ▲ or ▼ to `Devices` and press OK to select.
4. ▲ or ▼ to the required device and press OK to select.
5. ▲ or ▼ to `Disconnect` and press OK to select.
   Display shows `Disconnecting from <Device>`.
   Your Bluetooth-enabled device may require additional steps to disconnect. Refer to respective Bluetooth-enabled device's user manual.

The radio display shows `<Device> Disconnected`. A positive indicator tone sounds and ✓ disappears beside the connected device. The Bluetooth Connected icon disappears on the status bar.

Switching Audio Route between Internal Radio Speaker and Bluetooth Device

You can toggle audio routing between internal radio speaker and external Bluetooth-enabled accessory.

Press the programmed **Bluetooth Audio Switch** button.

- A tone sounds and display shows `Route Audio to Radio`.
- A tone sounds and display shows `Route Audio to Bluetooth`.

Viewing Device Details

1. OK to access the menu.
2. ▲ or ▼ to `Bluetooth` and press OK to select.
3. ▲ or ▼ to `Devices` and press OK to select.

4 ▲ or ▼ to the required device and press OK to select.

5 ▲ or ▼ to View Details and press OK to select.

Deleting Device Name

You can remove a disconnected device from the list of Bluetooth-enabled devices.

1 OK to access the menu.

2 ▲ or ▼ to Bluetooth and press OK to select.

3 ▲ or ▼ to Devices and press OK to select.

4 ▲ or ▼ to the required device and press OK to select.

5 ▲ or ▼ to Delete and press OK to select.
The display shows Device Deleted.

Bluetooth Mic Gain

Allows control of the connected Bluetooth-enabled device's microphone gain value.

1 OK to access the menu.

2 ▲ or ▼ to Bluetooth and press OK to select.

3 ▲ or ▼ to BT Mic Gain and press OK to select.

4 ▲ or ▼ to the BT Mic Gain type and the current values.

To edit values, press OK to select.

5 or to increase or to decrease values and press OK to select.

Indoor Location

Note:
Indoor Location feature is applicable for models with the latest software and hardware. Check with your dealer or system administrator for more information.

Indoor Location can be used to keep track of radio users location while indoors. When Indoor Location is activated, the radio is in a limited discoverable mode. Dedicated beacons are used to locate the radio and determine its position.

Turning Indoor Location On or Off

You can turn on or turn off Indoor Location by performing one of the following actions.

- Access this feature via the menu.
  a) Press OK to access the menu.
  a) Press or to `Bluetooth` and press OK to select.
  a) Press or to `Indoor Location` and press OK to select.
  b) Press OK to turn on Indoor Location. The display shows `Indoor Location On`. You hear a good key tone.

  One of the following scenarios occurs.

  - If successful, the Indoor Location Available icon appears on the Home screen display.
  - If unsuccessful, the display shows `Turning On Failed`. You hear a bad key tone.

  c) Press OK to turn off Indoor Location. The display shows `Indoor Location Off`. You hear a good key tone.

  One of the following scenarios occurs.

  - If successful, the Indoor Location Available icon disappears on the Home screen display.

- If unsuccessful, the display shows `Turning Off Failed`. You hear a bad key tone.

- Access this feature via the programmed button.
  a) Long press the programmed **Indoor Location** button to turn on Indoor Location.
  The display shows `Indoor Location On`. You hear a positive tone.

  One of the following scenarios occurs.

  - If successful, the Indoor Location Available icon appears on the Home screen display.
  - If unsuccessful, the display shows `Turning On Failed`. If unsuccessful, you hear a negative tone.

  b) Press the programmed **Indoor Location** button to turn off Indoor Location.
  The display shows `Indoor Location Off`.
  You hear a positive tone.

  One of the following scenarios occurs.

  - If successful, the Indoor Location Available icon disappears on the Home screen display.
  - If unsuccessful, the display shows `Turning Off Failed`. If unsuccessful, you hear a negative tone.

Accessing Indoor Location Beacons Information

Displays information on Indoor Location Beacons

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Bluetooth` and press OK to select.

3 Press ▲ or ▼ to `Indoor Location` and press OK to select.

4 Press ▲ or ▼ to `Beacons` and press OK to select.

The display shows the beacons information.

Notification List

Your radio has a Notification List that collects all your “unread” events on the channel, such as unread text messages, missed calls, and call alerts.

The Notification icon appears on the status bar when the Notification List has one or more events.

The list supports a maximum of forty (40) unread events. When it is full, the next event automatically replaces the oldest event.

Note:
After the events are read, they are removed from the Notification List.

Accessing the Notification List

1 OK to access the menu.

2 ▲ or ▼ to `Notification` and press OK to select.

3 ▲ or ▼ to the required event and press OK to select.

Long press ⌂ to return to the Home Screen.

Wi-Fi Operation

Wi-Fi® is a registered trademark of Wi-Fi Alliance®.

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

This feature allows you to setup and connect to a Wi-Fi® network. Wi-Fi supports updates for radio firmware, codeplug, and resources such as language packs and voice announcement.

Turning Wi-Fi On or Off

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

The programmed **Wi-Fi On or Off** button is assigned by your dealer or system administrator. Check with your dealer or system administrator to determine how your radio has been programmed.

You can turn on or turn off Wi-Fi® by performing one of the following actions.

- Press the programmed **Wi-Fi On or Off** button. Voice Announcement sounds Turning On Wi-Fi or Turning Off Wi-Fi.

- Access this feature via the menu.

  a) Press OK to access the menu.

  b) Press ▲ or ▼ to `WiFi` and press OK to select.

  c) Press ▲ or ▼ to `WiFi Status` and press OK to select.

  Press OK to turn on Wi-Fi. The display shows ✓ beside Enabled.

  Press OK to turn off Wi-Fi. The ✓ disappears from beside Enabled.

Connecting to a Network Access Point

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

When you turn on Wi-Fi®, the radio scans and connects to a network access point.

You can also connect to a network access point via the menu.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `WiFi` and press OK to select.

3 Press ▲ or ▼ to `Networks` and press OK to select.

4 Press ▲ or ▼ to a network access point and press OK to select.

5 Press ▲ or ▼ to `Connect` and press OK to select.

6 Enter the password and press OK.

When the connection is successful, the radio displays a notice and the network access point is saved into the profile list.

Refreshing the Network List

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

- Perform the following actions to refresh the network list.
  a) Press OK to access the menu.
  b) Press ▲ or ▼ to WiFi and press OK to select.
  c) Press ▲ or ▼ to Networks and press OK to select.
  When you enter the Networks menu, the radio automatically refreshes the network list.
- If you are already in the Networks menu, perform the following action to refresh the network list.
  a) Press ▲ or ▼ to Refresh and press OK to select.
  The radio refreshes and displays the latest network list.

Adding a Network

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

If a preferred network is not in the available network list, perform the following actions to add a network.

1. Press OK to access the menu.
2. Press ▲ or ▼ to WiFi and press OK to select.
3. Press ▲ or ▼ to Networks and press OK to select.
4. Press ▲ or ▼ to Add Network and press OK to select.

5 Enter the Service Set Identifier (SSID) and press OK.

6 Press ▲ or ▼ to Open and press OK to select.

7 Enter the password and press OK.

The radio displays to indicate that the network is successfully saved.

Viewing Details of Network Access Points

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

Perform the following actions to view details of network access points.

1 Press OK to access the menu.

2 Press ▲ or ▼ to WiFi and press OK to select.

3 Press ▲ or ▼ to Networks and press OK to select.

4 Press ▲ or ▼ to a network access point and press OK to select.

5 Press ▲ or ▼ to View Details and press OK to select.

For a connected network access point, the Service Set Identifier (SSID), Security Mode, Media Access Control (MAC) address, and Internet Protocol (IP) address are displayed.

For a non-connected network access point, the Service Set Identifier (SSID) and Security Mode are displayed.

Removing Network Access Points

Note:
This feature is applicable to XPR 5550e/XPR 5580e only. Enterprise network access points that are added via CPS can only be removed via CPS.

Perform the following actions to remove network access points from the profile list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to WiFi and press OK to select.

3 Press ▲ or ▼ to Networks and press OK to select.

4 Press ▲ or ▼ to the selected network access point and press OK to select.

5 Press ▲ or ▼ to Remove and press OK to select.

6 Press ▲ or ▼ to Yes and press OK to select.

The radio displays to indicate that the selected network access point is successfully removed.

Utilities

Turning the Radio Tones/Alerts On or Off

You can enable and disable all radio tones and alerts (except for the incoming Emergency alert tone) if needed.

Press the programmed **All Tones/Alerts** button to toggle all tones on or off, or follow the procedure described next to access this feature via the radio menu.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to Tones/Alerts and press OK to select.

5 ▲ or ▼ to All Tones and press OK to select.

6 Press OK to enable/disable all tones and alerts.

The display shows ✓ beside Enabled.

The ✓ disappears from beside Enabled.

Setting the Tone Alert Volume Offset Level

You can adjust the Tone Alert Volume Offset level if needed. This feature adjusts the volume of the tones/alerts, allowing it to be higher or lower than the voice volume.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to Tones/Alerts and press OK to select.

5 ▲ or ▼ to Vol. Offset and press OK to select.

6 ▲ or ▼ to the required volume value.
The radio sounds a feedback tone with each corresponding volume value.

7 Do one of the following:

- Press OK to keep the required displayed volume value.
- Press ↩ to exit without changing the current volume offset settings.

Turning the Talk Permit Tone On or Off

You can enable and disable the Talk Permit Tone if needed.

1 OK to access the menu.

2 or to Utilities and press OK to select.

3 or to Radio Settings and press OK to select.

4 or to Tones/Alerts and press OK to select.

5 or to Talk Permit and press OK to select.

6 Press OK to enable/disable the Talk Permit Tone.

The display shows ✓ beside Enabled.

The ✓ disappears from beside Enabled.

Turning the Power Up Alert Tone On or Off

You can enable and disable the Power Up Alert Tone if needed.

1 OK to access the menu.

2 or to Utilities and press OK to select.

3 or to Radio Settings and press OK to select.

4 or to Tones/Alerts and press OK to select.

5 or to Power Up and press OK to select.

6 Press OK to enable/disable the Power Up Alert Tone.

The display shows ✓ beside Enabled.

The ✓ disappears from beside Enabled.

Setting the Power Level

You can customize your radio's power setting to high or low for each Connect Plus zone.

`High` enables communication with tower sites in Connect Plus mode located at a considerable distance from you. `Low` enables communication with tower sites in Connect Plus mode in closer proximity.

Press the programmed **Power Level** button to toggle transmit power level between high and low.

Follow the procedure described next to access this feature via the radio menu.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Utilities` and press OK to select.
3. Press ▲ or ▼ to `Radio Settings` and press OK to select.
4. Press ▲ or ▼ to `Power` and press OK to select.
5. Press ▲ or ▼ to the required setting and press OK to select.
   ✓ appears beside selected setting. At any time, long press ↩ to return to the Home screen. Screen returns to the previous menu.

Changing the Display Mode

You can change radio's display mode between Day or Night, as needed. This affects the color palette of the display.

1. OK to access the menu.
2. ▲ or ▼ to `Utilities` and press OK to select.
3. ▲ or ▼ to `Radio Settings` and press OK to select.

4 ▲ or ▼ to Display and press OK to select.
The display shows Day Mode and Night Mode.

5 ▲ or ▼ to the required setting and press OK to enable. ✓ appears besides selected setting.

Adjusting the Display Brightness

You can adjust the display brightness of the radio as needed.

Note:
Display brightness cannot be adjusted when Auto Brightness is enabled.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to Display and press OK to select.

5 ▲ or ▼ to Brightness and press OK to select.
The display shows a progress bar.

6 Decrease display brightness by pressing ▲ or increase the display brightness by pressing ▼.
Select from setting of 1 to 8. Press OK to confirm your entry.

Turning the Introduction Screen On or Off

You can enable and disable the Introduction Screen if needed.

1 OK to access the menu.

2 or to Utilities and press OK to select.

3 or to Radio Settings and press OK to select.

4 or to Display and press OK to select.

5 or to Intro Screen and press OK to select.

6 Press OK to enable/disable the Introduction Screen.

The display shows ✓ beside Enabled.

The ✓ disappears from beside Enabled.

Language

You can set your radio display to be in your required language.

1 OK to access the menu.

2 or to Utilities and press OK to select.

3 or to Radio Settings and press OK to select.

4 or to Languages and press OK to select.

5 or to the required language and press OK to enable. ✓ appears beside selected language.

Turning the LED Indicator On or Off

You can enable and disable the LED Indicator if needed.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to LED Indicator and press OK to select.

5 Press OK to enable/disable the LED Indicator.

The display shows ✓ beside Enabled.

The ✓ disappears from beside Enabled.

Identifying Cable Type

You can select the type of cable your radio uses.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to Cable Type and press OK to select.

5 The current cable type is indicated by a ✓.

Voice Announcement

This feature enables the radio to audibly indicate the current Zone or Channel the user has just assigned, or programmable button press. This audio indicator can be customized per customer requirements. This is typically useful when the user is in a difficult condition to read the content shown on the display.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to Voice Announcement and press OK to select.

You can also use or to change the selected option.

5 Do one of the following:

- Press OK to enable Voice Announcement. The display shows ✓ beside Enabled.
- Press OK to disable Voice Announcement. The ✓ disappears from beside Enabled.

Menu Timer

Set the period of time your radio stays in the menu before it automatically switches to the Home screen.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to Display and press OK to select.

5 ▲ or ▼ to Menu Timer and press OK to select.

6 ▲ or ▼ to the required setting and press OK to select.

Turning Horns/Lights On or Off

This feature needs to be installed through your radio's rear accessory connector by your dealer.

Your radio is able to notify you of an incoming call via the horns and lights feature. When activated, an incoming call sounds your vehicle's horn and turns on its lights.

Press the programmed **Horns/Lights** button to toggle horns and light feature on or off.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to Horn/Lights and press OK to select.

5 Press OK to enable/disable Horns/Lights.

The display shows ✓ beside Enabled.

The ✓ disappears from beside Enabled.

Setting Dual Knob Operation Preference

Your radio has a dual-purpose **Volume/Channel Knob**. Disabling the dual-purpose option sets the knob to work as a Volume Knob only.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to Dual Knob and press OK to select.

5 The display shows Volume Only and Volume & Ch. ▲ or ▼ to the required setting and press OK to select.

✓ appears beside selected setting.

Screen returns to the previous menu.

Digital Mic AGC (Mic AGC-D)

This feature controls the your radio's microphone gain automatically while transmitting on a digital system. It suppresses loud audio or boosts soft audio to a preset value in order to provide a consistent level of audio.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Settings and press OK to select.

4 ▲ or ▼ to Mic AGC-D and press OK to select.

5 Do one of the following:

- Press OK to enable **Mic AGC-D**. The display shows ✓ beside Enabled.
- Press OK to disable **Mic AGC-D**. The ✓ disappears from beside Enabled.

Intelligent Audio

Your radio can automatically adjust its audio volume to overcome background noise in the environment, inclusive of all stationary and non-stationary noise sources. This feature is a Receive-only feature and does not affect Transmit audio.

1 OK to access the menu.

Radio Control	Steps
Menu	1 OK to access the menu. 2 ▲ or ▼ to Radio Settings and press OK to select. 3 ▲ or ▼ to Radio Settings and press OK to select. 4 ▲ or ▼ to Intelligent Audio and press OK to select. **Note:** You can also use or to change the selected option. 5 Do one of the following:

Radio Control	Steps
	• Press OK to enable Intelligent Audio. The display shows ✓ beside Enabled. • Press OK to disable Intelligent Audio. The ✓ disappears from beside Enabled.

2 ▲ or ▼ to `Utilities` and press OK to select.

3 ▲ or ▼ to `Radio Settings` and press OK to select.

4 ▲ or ▼ to `Intelligent Audio` and press OK to select.

5 Do one of the following:

- Press OK to enable Intelligent Audio. The display shows ✓ beside Enabled.
- Press OK to disable Intelligent Audio. The ✓ disappears from beside Enabled.

See Authorized Accessories List on page 394 for recommended Bluetooth-enabled audio accessories with in-built Automatic Volume Control for similar performance.

Turning the Acoustic Feedback Suppressor Feature On or Off

This feature allows you to minimize acoustic feedback in received calls.

1 OK to access the menu.

2 ▲ or ▼ to `Utilities` and press OK to select.

3 ▲ or ▼ to `Radio Settings` and press OK to select.

4 or to AF Suppressor and press OK to select.

You can also use or to change the selected option.

5 Do one of the following.

- Press OK to enable Acoustic Feedback Suppressor. The display shows ✓ beside Enabled.
- Press OK to disable Acoustic Feedback Suppressor. The ✓ disappears from beside Enabled.

Turning GPS/GNSS On or Off

Global Navigation Satellite System (GNSS) is a satellite navigation system that determines the radio's precise location. GNSS includes Global Positioning System (GPS), Global Navigation Satellite System (GLONASS), and BeiDou Navigation Satellite System (BDS).

Press the programmed **GPS/GNSS** button to toggle the feature on or off.

Note:
Selected radio models may offer GPS, GLONASS, and BDS. GNSS constellation is configured via CPS. Check with your dealer or system administrator to determine how your radio has been programmed.

1 Press OK to access the menu.

2 Press or to Utilities. Press OK to select.

3 Press or to Radio Settings. Press OK to select.

4 Press or to GPS. Press OK to select.

5 Press OK to enable/disable GPS/GNSS.

If enabled ✓ appears besides Enabled.

If disabled, ✓ disappears beside Enabled.

See *Checking the GPS/GNSS Information* on page 249 for details on retrieving GPS/GNSS information.

Accessing General Radio Information

Your radio contains information on the following:

- Battery
- Degree of Tilt (Accelerometer)
- Radio Model Number Index
- Option Board Over-the-Air (OTA) Codeplug CRC
- Site Number
- Site Info
- Radio Alias and ID
- Firmware and Codeplug Versions
- GPS Information

Press ⟲ at any time to return to the previous screen or long press ⟲ to return to the Home screen. The radio exits the current screen once the inactivity timer expires.

Checking the Radio Model Number Index

This index number identifies your radio's model-specific hardware. Your radio system administrator may ask for this number when preparing a new Option Board codeplug for your radio.

1 OK to access the menu.

2 ▲ or ▼ to `Utilities` and press OK to select.

3 ▲ or ▼ to `Radio Info` and press OK to select.

4 ▲ or ▼ to `Model Index` and press OK to select.
The display shows the Model Number Index.

Checking the CRC of the Option Board OTA Codeplug File

Follow the instructions below if your radio system administrator asks you to view the Option Board OTA Codeplug File CRC (Cyclic Redundancy Check). This menu option only appears if the Option Board received its last codeplug update OTA.

1 OK to access the menu.

2 or to Utilities and press OK to select.

3 or to Radio Info and press OK to select.

4 or to OB OTA CPcrc and press OK to select.
The display shows some letters and numbers. Communicate this information to your radio system administrator exactly as shown.

Displaying the Site ID (Site Number)

Note:
If you are not currently registered at a site, the display shows Not Registered.

The radio briefly shows the Site ID as it registers with a Connect Plus site. Following registration, the radio does not generally indicate the Site number. To display the registered Site number, do the following:

1 OK to access the menu.

2 or to Utilities and press OK to select.

3 or to Radio Info and press OK to select.

4 or to Site Number and press OK to select.
The display shows the Network ID and the Site Number.

Checking the Site Info

Note:
If you are not currently registered at a site, the display shows Not Registered.

The Site Info feature provides information that can be useful to a service technician. It consists of the following information:

- Repeater number of current Control Channel repeater.
- RSSI: Last signal strength value measured from Control Channel repeater.

- Neighbor List sent by Control Channel repeater (five numbers separated by commas).

If you are requested to use this feature, please report the displayed information exactly as it appears on the screen.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Info and press OK to select.

4 ▲ or ▼ to Site Info and press OK to select.
The display shows the Site Info.

Checking the Radio ID

This feature displays the ID of your radio.

Follow the procedure described next to access this feature via the radio screen.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Info and press OK to select.

4 ▲ or ▼ to My ID and press OK to select.
The display shows the radio ID.

Checking the Firmware Version and Codeplug Version

Displays the firmware version on your radio.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Info and press OK to select.

4 ▲ or ▼ to Versions and press OK to select.
The display a list with the following information:

- (Radio) Firmware Version
- (Radio) Codeplug Version
- Option Board Firmware Version
- Option Board Frequency Version
- Option Board Hardware Version
- Option Board Codeplug Version

Checking for Updates

Connect Plus provides the ability to update certain files (Option Board Codeplug, Network Frequency File and Option Board Firmware File) over-the-air.

Note:
Check with the dealer or network administrator to determine whether this feature has been enabled for your radio.

Any display Connect Plus radio has the ability to show its current Option Board OTA Codeplug CRC, Frequency File version or Option Board firmware file version via a menu option. In addition, display radios that have been enabled for over-the-air file transfer can display the version of a "pending file". A "pending file" is a Frequency File or Option Board firmware file that the Connect Plus radio knows about via system messaging, but the radio has not yet collected all of the file's packets. If a display Connect Plus radio has a pending file, the menu provides options to:

- See the version number of the pending file.
- See what percentage of packets has been collected so far.
- Request the Connect Plus radio to resume collecting file packets.

If the radio is enabled for Connect Plus over-the-air file transfer, there may be times when the radio automatically joins a file transfer without first notifying the radio user. While the radio is collecting file packets, the LED rapidly blinks red and the radio displays the High Volume Data icon on the Home Screen status bar.

Note:
The Connect Plus radio cannot collect file packets and receive calls at the same time. If you wish to cancel the file transfer, press and release the **PTT** button. This causes the radio to request a call on the selected Contact Name, and it will also cancel the file transfer

for that radio until the process resumes at a later time.

There are several things that can make the file transfer process start again. The first example applies to all over-the-air file types. The other examples apply only to the Network Frequency File and Option Board Firmware File:

- The radio system administrator re-initiates the over-the-air file transfer.
- The Option Board's pre-defined timer expires, which causes the Option Board to automatically resume the process of collecting packets.
- The timer has not yet expired, but the radio user requests the file transfer to resume via the menu option.

After the Connect Plus radio finishes downloading all file packets, it must upgrade to the newly acquired file. For the Network Frequency File, this is an automatic process and does not require a radio reset. For the Option Board Codeplug File, this is an automatic process that will cause a brief interruption to service as the Option Board loads the new codeplug information and re-acquires a network site. How quickly the radio upgrades to a new Option Board firmware file depends on how the radio has been configured by the dealer or system administrator. The radio will either upgrade immediately after collecting all file packets, or it will wait until the next time that the user turns the radio on.

Note:
Check with your dealer or system administrator to determine how your radio has been programmed.

The process of upgrading to a new Option Board firmware file takes several seconds, and it requires the Connect Plus Option Board to reset the radio. Once the upgrade starts, the radio use will not be able to make or receive calls until the process is completed.

Firmware File
Firmware Up to Date

Note:
If the Option Board firmware file is not Up to Date (and if the radio has partially collected a more recent Option Board firmware file version) the radio displays a list with additional options; `Version`, `%Received`, and `Download`.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Info and press OK to select.

4 ▲ or ▼ to Updates and press OK to select.

5 ▲ or ▼ to Firmware and press OK to select.
The display shows Firmware is Up to Date.

Pending Firmware – Version

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Info and press OK to select.

4 ▲ or ▼ to Updates and press OK to select.

5 ▲ or ▼ to Firmware and press OK to select.

6 ▲ or ▼ to Version and press OK to select.

If there is a pending Option Board firmware file, the display shows the pending firmware version number.

If there is a pending Option Board firmware file, the display shows Firmware is Up to Date.

Pending Firmware – % Received

1 OK to access the menu.

2 or to Utilities and press OK to select.

3 or to Radio Info and press OK to select.

4 or to Updates and press OK to select.

5 or to Firmware and press OK to select.

6 or to %Received and press OK to select.
The screen displays the percentage of firmware file packets collected so far.

Note:
When at 100%, the radio needs to be power cycled Off and then On to initiate the firmware upgrade.

Pending Firmware – Download

If the Connect Plus radio has previously left an OTA Option Board Firmware File Transfer with a partial file, the unit automatically rejoins the file transfer (if still ongoing) when an internal timer expires. If you want the unit to rejoin an ongoing Option Board Firmware File transfer prior to expiration of this internal timer, use the Download option as described below.

1 OK to access the menu.

2 or to Utilities and press OK to select.

3 or to Radio Info and press OK to select.

4 or to Updates and press OK to select.

5 or to Firmware and press OK to select.

6 ▲ or ▼ to Download and press OK to select.
The display shows the following:

Download Available	Start Download
No Download Available	Download not available

7 Do one of the following:

- Select Yes and press OK to start the download.
- Select No and press OK to return to the previous menu.

Frequency File

Frequency File Up to Date

Note:
If the Frequency File is not Up to Date (and if the radio has partially collected a more recent frequency file version) the radio displays a list with additional options; Version, %Received, and Download.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Info and press OK to select.

4 ▲ or ▼ to Frequency and press OK to select.
The display shows Freq. File is Up to Date.

Frequency File Pending – Version

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Info and press OK to select.

4 ▲ or ▼ to Updates and press OK to select.

5 ▲ or ▼ to Frequency and press OK to select.

6 ▲ or ▼ to Version and press OK to select.
If there is a pending Frequency File, the display shows the pending Frequency File version number.

Frequency File Pending – % Received

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 ▲ or ▼ to Radio Info and press OK to select.

4 ▲ or ▼ to Updates and press OK to select.

5 ▲ or ▼ to %Received and press OK to select.
The screen displays the percentage of frequency file packets collected so far.

Frequency File Pending – Download

If the Connect Plus radio has previously left an OTA Network Frequency File Transfer with a partial file, the unit automatically rejoins the file transfer (if still ongoing) when an internal timer expires. If you want the unit to rejoin an ongoing Network Frequency File transfer prior to expiration of this internal timer, use the Download option as described below.

1 OK to access the menu.

2 ▲ or ▼ to Utilities and press OK to select.

3 or to Radio Info and press OK to select.

4 or to Updates and press OK to select.

5 or to Frequency and press OK to select.

6 or to Download and press OK to select.

Download Currently Unavailable	Download not available
Download Currently Available	Start Download

7 Do one of the following:

- Select Yes and press to start the download.
- Select No and press to return to the previous menu.

Checking the GPS/GNSS Information

Displays the GPS/GNSS information on your radio, such as values of:

- Latitude
- Longitude
- Altitude
- Direction
- Velocity
- Horizontal Dilution of Precision (HDOP)
- Satellites
- Version

1 OK to access the menu.

2 or to Utilities and press OK to select.

3 or to Radio Info and press OK to select.

4 or to GPS Info and press OK to select.

5 ▲ or ▼ to the required item and press OK to select.
The display shows the requested GPS/GNSS information.

See *Turning GPS/GNSS On or Off* on page 239 for details on GPS/GNSS.

Other Systems

Other Systems

Push-To-Talk (PTT) Button

The **PTT** button serves two basic purposes.

- While a call is in progress, the **PTT** button allows the radio to transmit to other radios in the call. The microphone is activated when the **PTT** button is pressed.
- While a call is not in progress, the **PTT** button is used to make a new call.

Press and hold the **PTT** button to talk. Release the **PTT** button to listen.

If the Talk Permit Tone or the **PTT** Sidetone is enabled, wait until the short alert tone ends before talking.

If the Channel Free Indication feature is enabled on your radio (programmed by your dealer), you will hear a short alert tone the moment the target radio (the radio that is receiving your call) releases the **PTT** button, indicating the channel is free for you to respond.

You hear a continuous Talk Prohibit Tone if your call is interrupted, for example when the radio receives an Emergency call. You should release the **PTT** button.

Programmable Buttons

Depending on the duration of a button press, your dealer can program the programmable buttons as shortcuts to radio functions.

Short press	Pressing and releasing rapidly.
Long press	Pressing and holding for the programmed duration.

Note:
See *Emergency Operation* on page 317 for more information on the programmed duration of the **Emergency** button.

Assignable Radio Functions

The following radio functions can be assigned to the programmable buttons.

Audio Ambience	Allows the user to select an environment the radio is operating in.
Audio Profiles	Allows the user to select the preferred audio profile.
Bluetooth® Audio Switch	Toggles audio routing between internal radio speaker and external Bluetooth-enabled accessory.
Call Alert	Provides direct access to the contacts list for you to select a contact to whom a Call Alert can be sent.
Call Forwarding	Toggles Call Forwarding on or off.
Call Log	Selects the call log list.
Channel Announcement	Plays zone and channel announcement voice messages for the current channel.
Contacts	Provides direct access to the Contacts list.
Emergency	Depending on the programming, initiates or cancels an emergency.
Ext Public Address (PA)	Toggles audio routing between the connected PA loudspeaker amplifier and the internal PA system of the radio.
Indoor Location	Toggles Indoor Location on or off.
Intelligent Audio	Toggles intelligent audio on or off.
Manual Dial	Initiates a Private Call by keying in any subscriber ID.
Manual Site Roam[5]	Starts the manual site search.
Mic AGC	Toggles the internal microphone automatic gain control (AGC) on or off.
Monitor	Monitors a selected channel for activity.

Notifications	Provides direct access to the Notifications list.
Nuisance Channel Delete[5]	Temporarily removes an unwanted channel, except for the Selected Channel, from the scan list. The Selected Channel refers to the selected zone or channel combination of the user from which scan is initiated.
One Touch Access	Directly initiates a predefined Private, Phone or Group Call, a Call Alert or a Quick Text message.
Option Board Feature	Toggles option board feature(s) on or off for option board-enabled channels.
Permanent Monitor[5]	Monitors a selected channel for all radio traffic until function is disabled.
Phone	Provides direct access to the Phone Contacts list.
Privacy	Toggles privacy on or off.
Public Address (PA)	Toggles the internal PA system of the radio on or off.
Radio Alias and ID	Provides radio alias and ID.
Radio Check	Determines if a radio is active in a system.
Radio Disable	Allows a target radio to be remotely disabled.
Radio Enable	Allows a target radio to be remotely enabled.
Remote Monitor	Turns on the microphone of a target radio without it giving any indicators.
Repeater/ Talkaround[5]	Toggles between using a repeater and communicating directly with another radio.
Reset Home Channel	Sets a new home channel.
Silence Home Channel Reminder	Mutes the Home Channel Reminder.
Scan [6]	Toggles scan on or off.

Site Info	Displays the current site name and ID of Capacity Plus-Multi-Site. Plays site announcement voice messages for the current site when Voice Announcement is enabled.
Site Lock[5]	When toggled on, the radio searches the current site only. When toggled off, the radio searches other sites in addition to the current site.
Telemetry Control	Controls the Output Pin on a local or remote radio.
Text Message	Selects the text message menu.
Transmit Interrupt Remote Dekey	Stops an ongoing interruptible call to free the channel.
Trill Enhancement	Toggles trill enhancement on or off.
Voice Announcement	Toggles voice announcement on or off.
Voice Operating Transmission (VOX)	Toggles VOX on or off.
Wi-Fi	Toggles Wi-Fi on or off.
Zone Selection	Allows selection from a list of zones.

Assignable Settings or Utility Functions

The following radio settings or utility functions can be assigned to the programmable buttons.

Tones/Alerts	Toggles all tones and alerts on or off.
Backlight	Toggles display backlight on or off.

5 Not applicable in Capacity Plus.
6 Not applicable in Capacity Plus--Single Site

Channel Up/ Down	Depending on the programming, changes channel to previous or next channel.
Display Mode	Toggles the day/night display mode on or off.
Power Level	Toggles transmit power level between high and low.
Squelch	Toggles squelch level between tight and normal.

Accessing Programmed Functions

Follow the procedure to access programmed functions in your radio.

1 Do one of the following:

- Short or long press the programmed button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to the menu function, and press OK to select a function or enter a sub-menu.

3 Do one of the following:

- Press ↩ to return to the previous screen.
- Long press ↩ to return to the Home screen.

Your radio automatically exits the menu after a period of inactivity and returns to the Home screen.

The Menu Navigation Buttons are also available on a keypad microphone. See *Keypad Microphone Buttons* on page 18.

Status Indicators

This chapter explains the icons, LED indicators, and audio tones used in the radio.

Icons

The Liquid Crystal Display (LCD) of your radio shows the radio status, text entries, and menu entries. The following are the icons that appear on the radio display.

Display Icons

The following icons appear on the status bar at the top of the radio display. The icons are arranged left

most in order of appearance or usage, and are channel-specific.

Battery	The number of bars (0 – 4) shown indicates the charge remaining in the battery. Blinks when the battery is low.
Bluetooth Not Connected	The Bluetooth feature is enabled but there is no remote Bluetooth device connected.
Call Log	Radio call log.
Contact	Radio contact is available.
Emergency	Radio is in Emergency mode.
Flexible Receive List	Flexible receive list is enabled.
GPS Available	GPS feature is enabled. The icon stays lit when a position fix is available.
GPS Not Available	GPS feature is enabled but is not receiving data from the satellite.
High Volume Data	Radio is receiving high volume data and channel is busy.
Indoor Location Available[10]	Indoor location status is on and available.
	Indoor location status is on but unavailable due to Bluetooth disabled or Beacons Scan

Indoor Location Unavailable[10]	suspended by Bluetooth.
Job Ticket Notification	Notification List has items to review.
Message	Incoming message.
Monitor	Selected channel is being monitored.
Notification	Notification List has one or more missed events.
Option Board	The Option Board is enabled. (Option board enabled models only)
	The Option Board is disabled.

Option Board Non-Function	
Over-the-Air Programming Delay Timer	Indicates time left before automatic restart of radio.
Power Level	Radio is set at Low power or Radio is set at High power.
Received Signal Strength Indicator (RSSI)	The number of bars displayed represents the radio signal strength. Four bars indicate the strongest signal. This icon is only displayed while receiving.
Ring Only	Ringing mode is enabled.

Scan[7]	Scan feature is enabled.
Scan- Priority 1[7]	Radio detects activity on channel/group designated as Priority 1.
Scan- Priority 2[7]	Radio detects activity on channel/group designated as Priority 2.
Secure	The Privacy feature is enabled.
Sign In	Radio is signed in to the remote server.
Sign Out	Radio is signed out of the remote server.
Silent Ring	Silent ring mode is enabled.
Site Roaming[8]	The site roaming feature is enabled.
Talkaround[7]	In the absence of a repeater, radio is currently configured for direct radio to radio communication.
Tones Disable	Tones are turned off.
Unsecure	The Privacy feature is disabled.
Vibrate	Vibrate mode is enabled.
	Vibrate and Ring mode is enabled.

Vibrate and Ring

Vote scan feature is enabled.

Vote Scan

Wi-Fi signal is excellent.

Wi-Fi Excellent[9]

Wi-Fi signal is excellent.

Wi-Fi Good[9]

Wi-Fi signal is average

Wi-Fi Average[9]

Wi-Fi signal is poor.

Wi-Fi Poor[9]

Wi-Fi signal is unavailable.

Wi-Fi Unavailable[9]

Call Icons

The following icons appear on the display during a call. These icons also appear in the Contacts list to indicate alias or ID type.

Indicates a Bluetooth PC Call in progress.

Bluetooth PC Call

In the Contacts list, it indicates a Bluetooth PC Call alias (name) or ID (number).

The Dispatch Call contact type is used to send a text message to a

7 Not applicable in Capacity Plus
8 Not applicable in Capacity Plus--Single-Site
9 Only applicable for XPR 5550e/XPR 5580e
10 Only applicable for models with the latest software and hardware.

Dispatch Call	dispatcher PC through a third-party Text Message Server.
Group Call/All Call	Indicates a Group Call or All Call in progress. In the Contacts list, it indicates a group alias (name) or ID (number).
Phone Call as Group/All Call	Indicates a Phone Call as Group Call or All Call in progress. In the Contacts list, it indicates a group alias (name) or ID (number).
Phone Call as Private Call	Indicates a Phone Call as Private Call in progress. In the Contacts list, it indicates a phone alias (name) or ID (number).
Private Call	Indicates a Private Call in progress. In the Contacts list, it indicates a subscriber alias (name) or ID (number).

Advance Menu Icons

The following icons appear beside menu items that offer a choice between two options or as an indication that there is a sub-menu offering two options.

Checkbox (Checked)	Indicates the option is selected.
Checkbox (Empty)	Indicates the option is not selected.
Solid Black Box	Indicates the option selected for the menu item with a sub-menu.

Mini Notice Icons

The following icons appear momentarily on the display after an action to perform a task is taken.

Failed Transmission (Negative)	Failed action taken.
	Successful action taken.

Successful Transmission (Positive)

Transmission in Progress (Transitional)

Transmitting. This is seen before indication for Successful Transmission or Failed Transmission.

Sent Item Icons

The following icons appear at the top right corner of the display in the Sent Items folder.

In Progress

The text message to a subscriber alias or ID is pending transmission, followed by waiting for acknowledgement.

The text message to a group alias or ID is pending transmission.

Individual or Group Message Read

The text message has been read.

Individual or Group Message Unread

The text message has not been read.

Send Failed

The text message cannot be sent.

Sent Successfully

The text message has been successfully sent.

Bluetooth Device Icons

The following icons appear next to items in the list of Bluetooth-enabled devices available to indicate the device type.

Bluetooth Audio Device

Bluetooth-enabled audio device, such as a headset.

Bluetooth-enabled data device, such as a scanner.

Bluetooth Data Device

Bluetooth PTT Device

Bluetooth-enabled PTT device, such as a PTT-Only Device (POD).

Job Tickets Icons

All Jobs

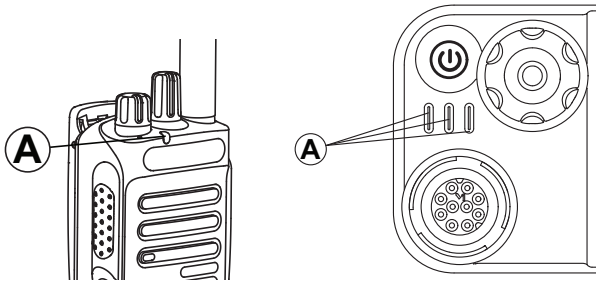
Indicates all jobs listed.

New Jobs

Indicates new jobs.

LED Indicators

LED indicators show the operational status of your radio.



Blinking Red	Radio has failed the self-test upon powering up. Radio is receiving or sending an emergency transmission. Radio is transmitting in low battery state. Radio has moved out of range if Auto-Range Transponder System is configured.
Solid Green	Radio is powering up. Radio is transmitting.
Blinking Green	Radio is receiving a non-privacy-enabled call or data.

	Radio is retrieving Over-the-Air Programming transmissions over the air. Radio is detecting activity over the air. **Note:** This activity may or may not affect the programmed channel of the radio due to the nature of the digital protocol. There is no LED indication when the radio is detecting activity over the air in Capacity Plus.
Double Blinking Green	Radio is receiving a privacy-enabled call or data.
Solid Yellow	Radio is monitoring a conventional channel.
Blinking Yellow	Radio is scanning for activity. Radio is receiving a Call Alert. All Capacity Plus-Multi-Site channels are busy.
Double Blinking Yellow	Radio has Auto Roaming enabled. Radio is actively searching for a new site. Radio has yet to respond to a Group Call Alert. Radio is locked. Radio is not connected to the repeater while in Capacity Plus. All Capacity Plus channels are busy.

Tones

The following are the tones that sound through on the radio speaker.

☐	High Pitched Tone
■	Low Pitched Tone

Indicator Tones

Indicator tones provide you with audible indications of the status after an action to perform a task is taken.

■☐	Positive Indicator Tone
☐■	Negative Indicator Tone

Audio Tones
Audio tones provide you with audible indications of the status, or response to data received on the radio.

Continuous Tone	A monotone sound. Sounds continuously until termination.
Periodic Tone	Sounds periodically depending on the duration set by the radio. Tone starts, stops, and repeats itself.
Repetitive Tone	A single tone that repeats itself until it is terminated by the user.
Momentary Tone	Sounds only once for a duration set by the radio.

Conventional Analog and Digital Modes

Each channel in your radio can be configured as a conventional analog or conventional digital channel.

Use the **Channel Rocker** to switch between an analog or a digital channel.

Certain features are unavailable when switching from digital to analog mode. The icons for digital features reflect this change by appearing “grayed out”. The disabled features are hidden in the menu.

Your radio also has features available in both analog and digital modes. The minor differences in the way each feature works do **not** affect the performance of your radio.

Note:
Your radio also switches between digital and analog modes during a dual mode scan. See *Scan* on page 301 for more information.

Icon Information

Throughout this publication, the icons described are used tow indicate features supported in either the conventional analog or conventional digital mode, or made available with a keypad-enabled microphone.

Indicates a conventional **Analog Mode-Only** feature.

Indicates a conventional **Digital Mode-Only** feature.

Indicates a **Keypad-Enabled Microphone-Only** feature.

For features that are available in **both** conventional analog and digital modes, both icons are **not** shown.

IP Site Connect

This feature allows your radio to extend conventional communication beyond the reach of a single site by connecting to different available sites by using an Internet Protocol (IP) network. This is a conventional multi-site mode.

When the radio moves out of range from one site and into the range of another, the radio connects to the repeater of the new site to send or receive calls or data transmissions. This is done either automatically or manually depending on your settings.

In an automatic site search, the radio scans through all available sites when the signal from the current site is weak or when the radio is unable to detect any signal from the current site. The radio then locks on to the repeater with the strongest Received Signal Strength Indicator (RSSI) value.

In a manual site search, the radio searches for the next site in the roam list that is currently in range but which may not have the strongest signal and locks on to the repeater.

Note:
Each channel can only have either Scan or Roam enabled, not both at the same time.

Channels with this feature enabled can be added to a particular roam list. The radio searches the channels in the roam list during the automatic roam operation to locate the best site. A roam list supports a maximum of 16 channels, including the selected channel.

Note:
You cannot manually add or delete an entry in the roam list. Check with your dealer or system administrator for more information.

Capacity Plus--Single Site

Capacity Plus-Single Site is a single-site trunking configuration of the MOTOTRBO radio system, which uses a pool of channels to support hundreds of users and up to 254 Groups. This feature allows your radio

to efficiently utilize the available number of programmed channels while in Repeater Mode.

You hear a negative indicator tone if you try to access a feature not applicable to Capacity Plus-Single Site via a programmable button press.

Your radio also has features that are available in conventional digital mode, IP Site Connect, and Capacity Plus. However, the minor differences in the way each feature works does **not** affect the performance of your radio.

Check with your dealer or system administrator for more information on this configuration.

Capacity Plus--Multi-Site

Capacity Plus-Multi-Site is a multi-channel trunking configuration of the MOTOTRBO radio system, combining the best of both Capacity Plus and IP Site Connect configurations.

Capacity Plus--Multi-Site allows your radio to extend trunking communication beyond the reach of a single site, by connecting to different available sites which are connected via an Internet Protocol (IP) network. It also provides an increase in capacity by efficiently utilizing the combined available number of programmed channels supported by each of the available sites.

When the radio moves out of range from one site and into the range of another, it connects to the new site's repeater to send or receive calls/data transmissions. Depending on your settings, this is done automatically or manually.

If the radio is set to do this automatically, it scans through all available sites when the signal from the current site is weak or when the radio is unable to detect any signal from the current site. It then locks on to the repeater with the strongest Received Signal Strength Indicator (RSSI) value.

In a manual site search, the radio searches for the next site in the roam list that is currently in range (but which may not have the strongest signal) and locks on to it.

Any channel with Capacity Plus--Multi-Site enabled can be added to a particular roam list. The radio searches these channels during the automatic roam operation to locate the best site.

Note:
You cannot manually add or delete an entry to the roam list. Check with your dealer or system administrator for more information.

Similar to Capacity Plus--Single Site, icons of features not applicable to Capacity Plus--Multi-Site are not available in the menu. You hear a negative indicator tone if you try to access a feature not applicable to Capacity Plus--Multi-Site via a programmable button press.

Zone and Channel Selections

This chapter explains the operations to select a zone or channel on your radio.

A zone is a group of channels. Your radio supports up to 99 channels and 2 zones, with a maximum of 99 channels per zone.

Transmissions are sent and received on a channel. Each channel may have been programmed differently to support different groups of users or supplied with different features.

Selecting Zones

Follow the procedure to select the required zone on your radio.

1 Do one of the following:

- Press the programmed **Zone Selection** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Zone`. Press OK to select.
The display shows ✓ and the current zone.

3 Press ▲ or ▼ to the required zone. Press OK to select.
The display shows `<Zone> Selected` momentarily and returns to the selected zone screen.

Selecting Zones by Using the Alias Search

Follow the procedure to select the required zone on your radio by using the alias search.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Zone`. Press OK to select.
   The display shows ✓ and the current zone.
3. Enter the first character of the required alias.
   The display shows a blinking cursor.
4. Enter the rest of the characters of the required alias.
   The alias search is case-insensitive. If there are two or more entries with the same name, the display shows the entry listed first in the list.
   The first text line shows the characters you entered. The following text lines show the shortlisted search results.
5. Press OK to select.
   The display shows `<Zone> Selected` momentarily and returns to the selected zone screen.

Selecting Channels

Follow the procedure to select the required channel on your radio after you have selected a zone.

Do one of the following:

- Press the **Scroll Up/Down** button.
- Use the **Volume/Channel Knob**.
- Press the programmed **Channel Up** or **Channel Down** button.

Calls

This chapter explains the operations to receive, respond to, make, and stop calls.

You can select a subscriber alias or ID, or group alias or ID after you have selected a channel by using one of these features:

Alias Search	This method is used for Group, Private and All Calls only with a keypad microphone

Contacts List	This method provides direct access to the Contacts list.
Manual Dial (via Contacts)	This method is used for Private and Phone Calls only with a keypad microphone.
Programmed Number Keys	This method is used for Group, Private, and All Calls only with a keypad microphone.

Note:
You can only have **one** alias or ID assigned to a number key, but you can have more than one number key associated to an alias or ID. All the number keys on a keypad microphone can be assigned. See *Assigning Entries to Programmable Number Keys* on page 306 for more information.

Programmed One Touch Access Button	This method is used for Group, Private, and Phone Calls only.

Note:
You can only have one ID assigned to a **One Touch Access** button with a short or long programmable button press. Your radio can have multiple **One Touch Access** buttons programmed.

Programmable Button	This method is used for Phone Calls only.
Volume/Channel Selector Knob	This method manually selects a subscriber alias or ID, or group alias or ID.

The LED lights up solid green while the radio is transmitting and blinks green when the radio is receiving.

Note:
The LED lights up solid green while the radio is transmitting and double blinks green when the radio is receiving a privacy-enabled call.

To unscramble a privacy-enabled call, your radio must have the same Privacy Key, OR the same Key Value and Key ID (programmed by your dealer), as the transmitting radio (the radio you are receiving the call from).

See *Privacy* on page 347 for more information.

Group Calls

Your radio must be configured as part of a group to receive a call from or make a call to the group of users.

Making Group Calls

Follow the procedure to make Group Calls on your radio.

1 Do one of the following:

- Select a channel with the active group alias or ID.
- Press the programmed **One Touch Access** button.

2 Press the **PTT** button to make the call.
The green LED lights up. The first text line shows the **Group Call** icon and alias.

3 Release the **PTT** button to listen.
The green LED lights up when the target radio responds. The display shows the **Group Call** icon, and alias or ID, and the transmitting radio alias or ID.

4 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period. The radio returns to the screen you were on prior to initiating the call.

Making Group Calls by Using the Contacts List

Follow the procedure to make Group Calls on your radio by using the Contacts list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Contacts. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID.
Press OK to select.

4 Press the **PTT** button to make the call.
The green LED lights up.

5 Release the **PTT** button to listen.
The green LED blinks when any user in the group responds. The display shows the **Group Call** icon, and alias or ID, and the transmitting radio alias or ID.

6 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.
The call ends when there is no voice activity for a predetermined period.

Making Group Calls by Using the Programmable Number Key

Follow the procedure to make Group Calls on your radio by using the programmable number key.

1 Long press the programmed number key to the predefined alias or ID when you are on the Home screen.
If a number key is assigned to an entry in a particular mode, this feature is not supported when you long press the number key in another mode.
A negative indicator tone sounds if the number key is not associated to an entry.

2 Hold the microphone 1 inch to 2 inches (2.5 cm to 5.0 cm) from your mouth.

3 Press the **PTT** button to make the call.
The green LED lights up.

4 Release the **PTT** button to listen.
The green LED blinks when any user in the group responds.

5 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button,

indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period. The radio returns to the screen you were on before initiating the call.

See *Assigning Entries to Programmable Number Keys* on page 306 for more information.

Responding to Group Calls

Follow the procedure to respond to Group Calls on your radio.

When you receive a Group Call:

- The green LED blinks.
- The display shows the **Group Call** icon at the top right corner.
- The first text line shows the caller alias.
- The second text line displays the group call alias.
- Your radio unmutes and the incoming call sounds through the speaker.

1 Do one of the following:

- If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.
- If the Transmit Interrupt Remote Dekey feature is enabled, press the **PTT** button to stop an ongoing interruptible call and free the channel for you to respond.

The green LED lights up.

2 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
-

3 Release the **PTT** button to listen.

The call ends when there is no voice activity for a predetermined period.

Private Calls

A Private Call is a call from an individual radio to another individual radio.

There are two ways to set up a Private Call. The first type sets up the call after performing a radio presence check, while the second type sets up the

call immediately. Only one of these types can be programmed to your radio by your dealer.

Making Private Calls

Your radio must be programmed for you to initiate a Private Call. You hear a negative indicator tone when you initiate the call when this feature is not enabled.

There are two types of Private Calls. The first type, where a radio presence check is performed before setting up the call, while the other sets up the call immediately.

Only **one** of these call types can be programmed to your radio by your dealer.

A negative indicator tone sounds when you make a Private Call via the Menu, **One Touch Access** button, the programmed number keys, or the Volume/ Channel Selector Knob, when this feature is not enabled.

Use the Text Message or Call Alert features to contact an individual radio. For more information, see *Text Messaging Features* on page 324 or *Call Alert Operation* on page 315.

1 Do one of the following:

- Select a channel with the active subscriber alias or ID.
- Press the programmed **One Touch Access** button.

2 Press the **PTT** button to make the call.

The green LED lights up. The display shows the **Private Call** icon, the subscriber alias, and call status.

3 Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.

4 Release the **PTT** button to listen.
The green LED blinks when the target radio responds.

5 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period. A tone sounds. The display shows `Call Ended`.

Making Private Calls by Using the Contacts List

Follow the procedure to make Private Calls on your radio by using the Contacts list.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Contacts`. Press OK to select.
3. Press ▲ or ▼ to the required alias or ID.
   Press OK to select.
4. Press the **PTT** button to make the call.
   The green LED lights up. The display shows the destination alias.
5. Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
6. Release the **PTT** button to listen.
   The green LED blinks when the target radio responds. The display shows the transmitting user alias or ID.
7. If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.
   The call ends when there is no voice activity for a predetermined period. A tone sounds. The display shows `Call Ended`.

Making Private Calls by Using the Manual Dial

Follow the procedure to make Private Calls on your radio by using the manual dial.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Contacts`. Press OK to select.
3. Press ▲ or ▼ to `Manual Dial`. Press OK to select.
4. Press ▲ or ▼ to `Radio Number`. Press OK to select.

5 Do one of the following:

- Enter the subscriber ID, and press OK to proceed.
- Edit the previously dialed subscriber ID, and press OK to proceed.

6 Press the **PTT** button to make the call.
The green LED lights up. The display shows the destination alias.

7 Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.

8 Release the **PTT** button to listen.
The green LED lights up when the target radio responds. The display shows the transmitting user alias or ID.

9 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.
The call ends when there is no voice activity for a predetermined period. A tone sounds. The display shows `Call Ended`.

Making Private Calls by Using the Programmable Number Key

Follow the procedure to make Private Calls on your radio by using the programmable number key.

1 Long press the programmed number key to the predefined alias or ID when you are on the Home screen.
If a number key is assigned to an entry in a particular mode, this feature is not supported when you long press the number key in another mode.
A negative indicator tone sounds if the number key is not associated to an entry.

2 Press the **PTT** button to make the call.
The green LED lights up. The display shows the **Private Call** icon at the top right corner. The first text line shows the caller alias. The second text line shows the call status.

3 Release the **PTT** button to listen.

The green LED blinks when the target radio responds. The display shows the destination alias.

4 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period. A tone sounds. The radio returns to the screen you were on before initiating the call.

See *Assigning Entries to Programmable Number Keys* on page 306 for more information.

Responding to Private Calls

Follow the procedure to respond to Private Calls on your radio.

When you receive a Private Call:

- The green LED blinks.
- Your radio unmutes and the incoming call sounds through the speaker.

1 Do one of the following:

- If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.
- If the Transmit Interrupt Remote Dekey feature is enabled, press the **PTT** button to stop an ongoing interruptible call and free the channel for you to respond.

The green LED lights up.

2 Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.

3 Release the **PTT** button to listen.

The call ends when there is no voice activity for a predetermined period.

All Calls

An All Call is a call from an individual radio to every radio on the channel. An All Call is used to make important announcements, requiring full attention

from the user. The users on the channel cannot respond to an All Call.

Receiving All Calls

When you receive an All Call:

- A tone sounds.
- The green LED blinks.
- The display shows the **Group Call** icon at the top right corner.
- The first text line shows the caller alias ID.
- The second text line displays `All Call`.
- Your radio unmutes and the incoming call sounds through the speaker.

The radio returns to the screen before receiving the All Call when the call ends.

An All Call does not wait for a predetermined period before ending.

If the Channel Free Indication feature is enabled, you hear a short alert tone when the transmitting radio releases the **PTT** button, indicating the channel is free for you to use. You cannot respond to an All Call.

Note:
The radio stops receiving the All Call if you switch to a different channel while receiving the call. You are not able to continue with any menu navigation or editing until the call ends during an All Call.

Making All Calls

Your radio must be programmed for you to make an All Call. Follow the procedure to make All Calls on your radio.

1 Select a channel with the active All Call group alias or ID.

2 Press the **PTT** button to make the call.
The green LED lights up. The display shows the **Group Call** icon and `All Call`.

3 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

Users on the channel cannot respond to an All Call.

Making All Calls by Using the Programmable Number Key

Follow the procedure to make All Calls on your radio by using the programmable number key.

1 Long press the programmed number key assigned to the predefined alias or ID when you are on the Home screen.

If a number key is assigned to an entry in a particular mode, this feature is not supported when you long press the number key in another mode.

A negative indicator tone sounds if the number key is not associated to an entry.

2 Press the **PTT** button to make the call.
The green LED lights up.

3 Release the **PTT** button to listen.
The green LED lights up when the target radio responds. You cannot respond to an All Call at the moment.

4 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period. The radio returns to the screen you were on prior to initiating the call.

For a Private Call, you hear a short tone when the call ends.

See *Assigning Entries to Programmable Number Keys* on page 306 for more information.

Selective Calls

A Selective Call is a call from an individual radio to another individual radio. It is a Private Call on an analog system.

Making Selective Calls

Your radio must be programmed for you to initiate a Selective Call. Follow the procedure to make Selective Calls on your radio.

1 Select a channel with the active subscriber alias or ID.

2 Press the **PTT** button to make the call.
The green LED lights up. The display shows the **Private Call** icon, the subscriber alias, and call status.

3 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

4 Release the **PTT** button to listen.
The green LED lights up when the target radio responds.

5 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period.

6 The display shows `Call Ended`.

Responding to Selective Calls

Follow the procedure to respond to Selective Calls on your radio.

When you receive a Selective Call:

- The green LED blinks.
- The first text line shows the **Private Call** icon and the caller alias or `Selective Call` or `Alert with Call`.
- Your radio unmutes and the incoming call sounds through the speaker.

1 Press the **PTT** button to respond to the call.
The green LED lights up.

2 Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.

3 Release the **PTT** button to listen.

The call ends when there is no voice activity for a predetermined period. A tone sounds.The display shows `Call Ended`.

Phone Calls

Making Phone Calls

Follow the procedure to make Phone Calls on your radio.

1 Press the programmed **One Touch Access** button to the predefined alias or ID.

If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds. If the

access code is not preconfigured in the Contact List, the display shows `Access Code:`.

2 Enter the access code, and press OK to proceed.

The access or deaccess code cannot be more than 10 characters.

3 Press the **PTT** button to respond to the call.

4 Release the **PTT** button to listen.

5 Enter extra digits with the keypad if requested by the call, and press OK to proceed.

If the call ends while you are entering the extra digits requested by the call, your radio returns to the screen you were on before initiating the call.

The DTMF Tone sounds. Your radio returns to the previous screen.

6 Press ⏻ to end the call.

7 Do one of the following:

- If the deaccess code was not preconfigured, enter the deaccess code when the display shows `De-Access Code:`, and press OK to proceed.

  The radio returns to the previous screen.
- Press the programmed **One Touch Access** button.

  If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.

The DTMF Tone sounds and the display shows `Ending Phone Call`.

If the call ends successfully:

- A tone sounds.
- The display shows `Call Ended`.

If the call fails to end, the radio returns to the Phone Call screen. Repeat the last two steps or wait for the telephone user to end the call.

Making Phone Calls by Using the Contacts List

Follow the procedure to make Phone Calls on your radio by using the Contacts list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.
The display shows the entries in alphabetical order.

3 Press ▲ or ▼ to the required alias or ID.

Press OK to select.

When you press the **PTT** button while on the Phone Contacts screen:

- The first line of the display shows `Phone Number:`.
- The second line of the display shows a blinking cursor.

If the selected entry is empty:

- A negative indicator tone sounds.
- The display shows `Phone Call Invalid #`.

4 Press ▲ or ▼ to `Call Phone`. Press OK to select.
The display shows `Access Code:` if the access code was not preconfigured.

5 Enter the access code, and press OK to proceed.

The access or deaccess code cannot be more than 10 characters.

The first text line shows `Calling`. The second text line shows the subscriber alias or ID, and the **Phone Call** icon.

If the call is successful:

- The DTMF Tone sounds.
- You hear the dialing tone of the telephone user.
- The first text line shows the subscriber alias or ID, and the **RSSI** icon.
- The second text line shows `Phone Call`, and the **Phone Call** icon.

If the call is unsuccessful:

- A tone sounds.

- The display shows `Phone Call Failed` and then, `Access Code:`.
- Your radio returns to the screen you were on prior to initiating the call if the access code has been preconfigured in the Contacts list.

6 Press the **PTT** button to respond to the call. The **RSSI** icon disappears.

7 Release the **PTT** button to listen.

8 Enter extra digits with the keypad if requested by the call, and press OK to proceed.

If the call ends while you are entering the extra digits requested by the call, your radio returns to the screen you were on prior to initiating the call.

The DTMF Tone sounds. Your radio returns to the previous screen.

9 Press ⏻ to end the call.

10 If the deaccess code was not preconfigured, enter the deaccess code when the display shows `De-Access Code:`, and press OK to proceed.

The radio returns to the previous screen. The DTMF Tone sounds and the display shows `Ending Phone Call`.

If the call ends successfully:

- A tone sounds.
- The display shows `Call Ended`.

If the call fails to end, the radio returns to the Phone Call screen. Repeat Step *9* and Step *10*, or wait for the telephone user to end the call. When you press the PTT button while in the Phone Contacts screen, as tone sounds and the display shows `Press OK to Place Phone Call`.

When the telephone user ends the call, a tone sounds and the display shows `Phone Call Ended`.

If the call ends while you are entering the extra digits requested by the Phone Call, your radio returns to the screen you were on prior to initiating the call.

Note:

During the channel access, press ⏻ to dismiss the call attempt and a tone sounds.

During the call, when you press **One Touch Access** button with the deaccess code preconfigured or enter the deaccess code as the input for extra digits, your radio attempts to end the call.

During channel access and access/ deaccess code or extra digits transmission, you radio responds to **On/Off** button, **Volume Knob**, and **Channel Rocker** only. A tone sounds for every invalid input.

Making Phone Calls by Using the Manual Dial

Follow the procedure to make Phone Calls on your radio by using the manual dial.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to `Manual Dial`. Press OK to select.

4 Press ▲ or ▼ to `Phone Number`. Press OK to select.
The display shows `Number:` and a blinking cursor.

5 Enter the telephone number, and press OK to proceed.
The display shows `Access Code:` and a blinking cursor if the access code was not preconfigured.

6 Enter the access code, and press OK to proceed.
The access or deaccess code cannot be more than 10 characters.

7 The green LED lights up. The display shows the **Phone Call** icon at the top right corner. The first text line shows the subscriber alias. The second text line shows the call status.

If the call is successful:

- The DTMF Tone sounds.
- You hear the dialing tone of the telephone user.
- The first text line shows the subscriber alias.

- The display continues to show the **Phone Call** icon at the top right corner.

If the call is unsuccessful:

- A tone sounds.
- The display shows `Phone Call Failed` and then, `Access Code:`.
- Your radio returns to the screen you were on before initiating the call if the access code has been preconfigured in the Contacts list.

8 Press ⏻ to end the call.

9 Do one of the following:

- If the deaccess code was not preconfigured, enter the deaccess code when the display shows `De-Access Code:`, and press OK to proceed.

  The radio returns to the previous screen.

- Press the programmed **One Touch Access** button.

  If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.

The DTMF Tone sounds and the display shows `Ending Phone Call.`

If the call ends successfully:

- A tone sounds.
- The display shows `Call Ended.`

If the call fails to end, the radio returns to the Phone Call screen. Repeat Step 11 and Step 12, or wait for the telephone user to end the call.

Note:

When you press **PTT** button while in the Phone Contacts screen, a tone sounds and the display shows `Press OK to Place Phone Call.`

When the telephone user ends the call, a tone sounds and the display shows `Call Ended.`

If the call ends while you are entering the extra digits requested by the Phone Call, your radio returns to the screen you were on before initiating the call.

During the channel access, press ⏻ to dismiss the call attempt and a tone sounds.

During the call, when you press **One Touch Access** button with the deaccess code preconfigured or enter the deaccess code as the input for extra digits, your radio attempts to end the call.

During channel access and access/ deaccess code or extra digits transmission, you radio responds to **On/Off** button, **Volume Knob**, and **Channel Rocker** only. A tone sounds for every invalid input.

Making Group, Private, Phone or All Calls by Using the Alias Search

Follow the procedure to make any calls by using the alias search.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.
The display shows the entries in alphabetical order.

3 Press ▲ or ▼ to the required subscriber alias or ID. The first line of the display shows `Phone Number:`. The second line of the display shows a blinking cursor. Use the keypad to enter a telephone number.

4 Press OK to select. If the entry selected is empty, a negative indicator tone sounds and the display shows Phone Call Invalid #.

5 Press ▲ or ▼ to Call Phone and Press OK to select. If the access code was not preconfigured in the Contacts list, the first line of the display shows `Access Code:`. The second line of the display shows a blinking cursor. Enter the access code and press the OK button to proceed. If successful, the DTMF tone sounds. You hear the dialing tone of the telephone user. The first line of the display shows the subscriber alias or ID, and the RSSI icon. The second line of the display shows `Phone Call` and the Phone Call icon. If unsuccessful, a tone sounds and the display shows `Phone Call Failed`. Your radio

returns to the Access Code input screen. If the access code was preconfigured in the Contacts list, the radio returns to the screen you were on prior to initiating the call.

6 Press the **PTT** button to talk and release it to listen. The RSSI icon disappears during transmission.

7 To enter extra digits, if requested by the Phone Call, do one of the following.

- Press any keypad key to begin the input of the extra digits. The first line of the display shows `Extra Digits:`. The second line of the display shows a blinking cursor. Enter the extra digits and press the OK button to proceed. The DTMF tone sounds and the radio returns to the previous screen.
- Press **One Touch Access** button. The DTMF tone sounds. If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.

8 Press the end button to end the call. If deaccess code was not preconfigured in the Contacts list, the first line of the display shows `De-Access Code:`. The second line of the display shows a blinking cursor.

Enter the deaccess code and press OK to proceed. The radio returns to the previous screen. The DTMF tone sounds and the display shows `Ending Phone Call`. If successful, a tone sounds and the display shows Phone Call Ended. Your radio returns to the Phone Call screen. If unsuccessful, your radio returns to the Phone Call screen. When you press the **PTT** button while in the Phone Contacts screen, as tone sounds and the display shows `Press OK to Place Phone Call`. When the telephone user ends the call, a tone sounds and the display shows `Phone Call Ended`. If the call ends while you are entering the extra digits requested by the Phone Call, your radio returns to the screen you were on prior to initiating the call.

Note:

During the channel access, press the end button to dismiss the call attempt and a tone sounds

button or to exit alias search. Press OK

button or the end button to exit alias search. During the

call, when you press One Touch Access button with the deaccess code preconfigured or enter the deaccess code as the input for extra digits, your radio attempts to end the call. During channel access and access/deaccess code or extra digits transmission, you radio responds to On/Off button, Volume Knob, and Channel Rocker only. A tone sounds for every invalid input.

Dual Tone Multi Frequency

The Dual Tone Multi Frequency (DTMF) feature allows the radio to operate in a radio system with an interface to the telephone systems.

You can turn off the DTMF tone by disabling all radio tones and alerts. See *Turning Radio Tones/Alerts On or Off* on page 131 for more information.

Initiating DTMF Calls

Follow the procedure to initiate DTMF Calls on your radio.

1 Press and hold the **PTT** button to initiate a Dual Tone Multi Frequency (DTMF) call.

2 Enter the desired number, * or # .

You can turn off the DTMF tone by disabling all radio tones and alerts. See *Turning Radio Tones/Alerts On or Off* on page 131.

Responding to Phone Calls as Group Calls

Follow the procedure to respond to Phone Calls as Group Calls on your radio.

When you receive a Phone Call as a Group Call:

- The display shows the **Phone Call** icon at the top right corner.
- The display shows the group alias and `Phone Call`.

If Phone Call capability is not enabled on your radio, the first line of the display shows `Unavailable` and your radio mutes the call. Your radio returns to the previous screen when the call ends.

1 Press the **PTT** button to respond to the call.

2 Release the **PTT** button to listen.

3 Press ⏻ to end the call.
The display shows `Ending Phone Call`.

If the call ends successfully:

- A tone sounds.
- The display shows `Call Ended`.

If the call fails to end, the radio returns to the Phone Call screen. Repeat this step or wait for the telephone user to end the call.

Responding to Phone Calls as All Calls

When you receive a Phone Call as an All Call, you can respond to or end the call, only if an All Call type is assigned to the channel. Follow the procedure to respond to Phone Calls as All Calls on your radio.

When you receive a Phone Call as an All Call:

- The display shows the **Phone Call** icon at the top right corner.
- The display shows `All Call` and `Phone Call`.

If Phone Call capability is not enabled on your radio, the first line of the display shows `Unavailable` and your radio mutes the call.

Your radio returns to the previous screen when the call ends.

1 Press the **PTT** button to respond to the call.

2 Release the **PTT** button to listen.

3 Press to end the call.
The display shows `Ending Phone Call`.

If the call ends successfully:

- A tone sounds.
- The display shows `All Call` and `Call Ended`.

If the call fails to end, the radio returns to the Phone Call screen. Repeat Step 3 or wait for the telephone user to end the call.

Responding to Phone Calls as Private Calls

Follow the procedure to respond to Phone Calls as Private Calls on your radio.

When you receive a Phone Call as a Private Call:

- The display shows the **Phone Call** icon at the top right corner.
- The display shows the caller alias or `Phone Call`.

If Phone Call capability is not enabled on your radio, the first line of the display shows `Unavailable` and your radio mutes the call. Your radio returns to the previous screen when the call ends.

1 Press the **PTT** button to respond to the call.

2 Release the **PTT** button to listen.

3 Press ⏻ to end the call.
The display shows `Ending Phone Call`.

If the call ends successfully:

- A tone sounds.
- The display shows `Call Ended`.

If the call fails to end, the radio returns to the Phone Call screen. Repeat this step or wait for the telephone user to end the call.

Stopping Radio Calls

This feature allows you to stop an ongoing Group or Private Call to free the channel for transmission. For example, when a radio experiences a “stuck microphone” condition where the **PTT** button is inadvertently pressed by the user. Your radio must be programmed to allow you to use this feature. Follow the procedure to stop calls on your radio.

1 Press the programmed **Transmit Interrupt Remote Dekey** button.
The display shows `Remote Dekey`.

2 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows `Remote Dekey Success`.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows `Remote Dekey Failed`.

Note:
Check with your dealer or system administrator for more information.

Talkaround

This feature allows you to continue communication when your repeater is not operating, or when your radio is out of range from the repeater but within talking range of other radios.

The talkaround setting is retained even after powering down.

Note:
This feature is not applicable in Capacity Plus--Single-Site, Capacity Plus--Multi-Site, and Citizens Band channels that are in the same frequency.

Toggling Between Repeater and Talkaround Modes

Follow the procedure to toggle between Repeater and Talkaround modes on your radio.

1 Do one of the following:

- Press the programmed **Repeater/Talkaround** button. Skip the following steps.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Talkaround`. Press OK to select.
If enabled ✓ appears besides `Enabled`. If disabled, ✓ disappears beside `Enabled`.

The screen automatically returns to the previous screen.

Advanced Features

This chapter explains the operations of the features available in your radio.

Note:
Your dealer or system administrator may have customized your radio for your specific needs. Check with your dealer or system administrator for more information.

Home Channel Reminder

This feature provides a reminder when the radio is not set to the home channel for a period of time.

If this feature is enabled via the CPS, when your radio is not set to the home channel for a period of time, the following occurs periodically:

- The Home Channel Reminder tone and announcement sound.
- The first line of the display shows `Non`.
- The second line shows `Home Channel`.

Muting the Home Channel Reminder

When the Home Channel Reminder occurs, you can temporarily mute the reminder.

Press the **Silence Home Channel Reminder** programmable button.
The first line of the display shows `HCR` and the second line shows `Silenced`.

Setting New Home Channels

When the Home Channel Reminder occurs, you can set a new home channel.

1 Do one of the following:

- Press the **Reset Home Channel** programmable button to set the current channel as the new Home Channel. Skip the following steps.

  The first line of the display shows the channel alias and the second line shows `New Home Ch`.

- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Home Channel`. Press OK to select.

5 Press ▲ or ▼ to the desired new home channel alias. Press OK to select.
The display shows ✓ beside the selected home channel alias.

Radio Check

This feature allows you to determine if another radio is active in a system without disturbing the radio user. No audible or visual notification is shown on the target radio. This feature is only applicable for

subscriber aliases or IDs. Your radio must be programmed to allow you to use this feature.

Sending Radio Checks

Follow the procedure to send radio checks on your radio.

1 Press the programmed **Radio Check** button.

2 Press ▲ or ▼ to the required alias or ID.

Press OK to select.

The display shows a transitional mini notice, indicating the request is in progress. The green LED lights up.

Wait for acknowledgment.

If you press OK when the radio is waiting for acknowledgment, a tone sounds, the radio terminates all retries, and exits Radio Check mode.

If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

The radio returns to the subscriber alias or ID screen.

Sending Radio Checks by Using the Manual Dial

Follow the procedure to send radio checks on your radio by using the manual dial.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to `Manual Dial`. Press OK to select.

4 Press ▲ or ▼ to `Radio Number`. Press OK to select.

5 Do one of the following:

- Enter the subscriber alias or ID, and press OK to proceed.

- Edit the previously dialed ID, and press OK to proceed.

6 Press ▲ or ▼ to Radio Check. Press OK to select.
The display shows a transitional mini notice, indicating the request is in progress. The green LED lights up.

7 Wait for acknowledgment.

If you press ↩ when the radio is waiting for acknowledgement, a tone sounds, the radio terminates all retries, and exits Radio Check mode.

If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

The radio returns to the subscriber alias or ID screen.

Remote Monitor

This feature is used to turn on the microphone of a target radio with a subscriber alias or ID. You can use this feature to remotely monitor any audible activity surrounding the target radio.

Both your radio and the target radio must be programmed to allow you to use this feature.

If initiated, the green LED blinks once on the target radio. This feature automatically stops after a programmed duration or when there is any user operation on the target radio.

Initiating Remote Monitors

Follow the procedure to initiate Remote Monitor on your radio.

1 Press the programmed **Remote Monitor** button.

2 Press ▲ or ▼ to the required alias or ID.

Press OK to select.
The display shows a transitional mini notice, indicating the request is in progress. The green LED lights up.

3 Wait for acknowledgment.

If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.
- The audio from the monitored radio starts playing for a programmed duration, and the display shows `Rem. Monitor`. Once the timer expires, an alert tone sounds, and the LED turns off.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Initiating Remote Monitors by Using the Contacts List

Follow the procedure to initiate Remote Monitor on your radio by using the Contacts list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID.
Press OK to select.

4 Press ▲ or ▼ to `Remote Mon.`. Press OK to select.
The display shows a transitional mini notice, indicating the request is in progress. The green LED lights up.

5 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.
- The audio from the monitored radio starts playing for a programmed duration, and the display shows `Rem. Monitor`. Once the timer expires, an alert tone sounds, and the LED turns off.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Initiating Remote Monitors by Using the Manual Dial

Follow the procedure to initiate Remote Monitor on your radio by using the manual dial.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to `Manual Dial`. Press OK to select.

4 Press ▲ or ▼ to `Radio Number`. Press OK to select.

5 Do one of the following:

- Enter the subscriber alias or ID, and press OK to proceed.
- Edit the previously dialed ID, and press OK to proceed.

6 Press ▲ or ▼ to `Remote Mon.`. Press OK to select.
The display shows a transitional mini notice, indicating the request is in progress. The green LED lights up.

7 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.
- The audio from the monitored radio starts playing for a programmed duration, and the display shows `Rem. Monitor`. Once the timer expires, an alert tone sounds, and the LED turns off.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Stopping Remote Monitors

Follow the procedure to stop Remote Monitor on your radio.

1 Press the programmed **Transmit Interrupt Remote Dekey** button.
The display shows a transitional mini notice, indicating the request is in progress. The green LED lights up.

2 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Scan Lists

Scan lists are created and assigned to individual channels or groups. Your radio scans for voice activity by cycling through the channel or group sequence specified in the scan list for the current channel or group.

Your radio can support up to 250 scan lists, with a maximum of 16 members in a list. Each scan list supports a mixture of both analog and digital entries.

You can add, delete, or prioritize channels by editing a scan list.

You can attach a new scan list to your radio via Front Panel Programming. See *Front Panel Configuration* on page 125 for more information.

The **Priority** icon appears on the left of the member alias, if set, to indicate whether the member is on a Priority 1 or Priority 2 channel list. You cannot have multiple Priority 1 or Priority 2 channels in a scan list. There is no **Priority** icon if priority is set to **None**.

Note:
This feature is not applicable in Capacity Plus.

Viewing Entries in the Scan List

Follow the procedure to view the entries in the Scan list on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Scan. Press OK to select.

3 Press ▲ or ▼ to Scan List. Press OK to select.

4 Press ▲ or ▼ to view each member on the list.

Viewing Entries in the Scan List by Using the Alias Search

Follow the procedure to view entries in the Scan list on your radio by using the alias search.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Scan. Press OK to select.

3 Press ▲ or ▼ to Scan List. Press OK to select.

4 Enter the first character of the required alias. The display shows a blinking cursor.

5 Enter the rest of the characters of the required alias.

The alias search is case-insensitive. If there are two or more entries with the same name, the display shows the entry listed first in the list.

The first text line shows the characters you entered. The following text lines show the shortlisted search results.

Adding New Entries to the Scan List

Follow the procedure to add new entries to the Scan list on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Scan. Press OK to select.

3 Press ▲ or ▼ to Scan List. Press OK to select.

4 Press ▲ or ▼ to Add Member. Press OK to select.

5 Press ▲ or ▼ to the required alias or ID.
Press OK to select.

6 Press ▲ or ▼ to the required priority level.
Press OK to select.
The display shows a positive mini notice and then, `Add Another?`.

7 Do one of the following:

- Press ▲ or ▼ to `Yes` to add another entry. Press OK to select. Repeat Step *5* and Step *6*.
- Press ▲ or ▼ to `No` to save the current list. Press OK to select.

Adding New Entries to the Scan List by Using the Alias Search

Follow the procedure to add new entries to the Scan list on your radio by using the alias search.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Scan`. Press OK to select.

3 Press ▲ or ▼ to `Scan List`. Press OK to select.

4 Press ▲ or ▼ to `Add Member`. Press OK to select.

5 Enter the first character of the required alias.
The display shows a blinking cursor.

6 Enter the rest of the characters of the required alias.
The alias search is case-insensitive. If there are two or more entries with the same name, the display shows the entry listed first in the list.
The first text line shows the characters you entered. The following text lines show the shortlisted search results.

7 Press OK to select.

8 Press ▲ or ▼ to the required priority level.
Press OK to select.
The display shows a positive mini notice and then, `Add Another?`.

9 Do one of the following:

- Press ▲ or ▼ to `Yes` to add another entry. Press OK to select. Repeat Step 5 to Step 8.
- Press ▲ or ▼ to `No` to save the current list. Press OK to select.

Deleting Entries from the Scan List
Follow the procedure to delete entries on your radio from the Scan list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Scan`. Press OK to select.

3 Press ▲ or ▼ to `Scan List`. Press OK to select.

4 Press ▲ or ▼ to the required alias or ID.
Press OK to select.

5 Press ▲ or ▼ to `Delete`. Press OK to select.
The display shows `Delete Entry?`.

6 Do one of the following:

- Press ▲ or ▼ to `Yes` to delete the entry.
  Press OK to select.
  The display shows a positive mini notice.
- Press ▲ or ▼ to `No` to return to the previous screen. Press OK to select.

7 Repeat Step *4* to Step *6* to delete other entries.

8 Long press ⌂ to return to the Home screen after deleting all required aliases or IDs.

Setting Priority for Entries in the Scan List

Follow the procedure to set priorities for entries in the Scan list on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Scan`. Press OK to select.

3 Press ▲ or ▼ to `Scan List`. Press OK to select.

4 Press ▲ or ▼ to the required alias or ID. Press OK to select.

5 Press ▲ or ▼ to `Edit Priority`. Press OK to select.

6 Press ▲ or ▼ to the required priority level. Press OK to select.
The display shows a positive mini notice before returning to the previous screen. The **Priority** icon appears on the left of the member alias.

Scan

Your radio cycles through the programmed scan list for the current channel looking for voice activity when you start a scan.

Note:
This feature is not applicable in Capacity Plus.

The LED blinks yellow and the scan icon appears on the status bar.

During a dual-mode scan, if you are on a digital channel, and your radio locks onto an analog channel, it automatically switches from digital mode to analog mode for the duration of the call which is also true for the reverse.

There are two ways of initiating scan:

Main Channel Scan (Manual)	Your radio scans all the channels or groups in your scan list. On

	entering scan, your radio may, depending on the settings, automatically start on the last scanned active channel or group, or on the channel where scan was initiated.
Auto Scan (Automatic)	Your radio automatically starts scanning when you select a channel or group that has Auto Scan enabled.

Turning Scan On or Off

Follow the procedure to turn scan on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Scan`. Press OK to select.

3 Press ▲ or ▼ to `Scan State`. Press OK to select.

4 Press ▲ or ▼ to the required scan state and press OK to select.

If scan is enabled:

- The display shows `Scan On` and **Scan** icon.
- The yellow LED blinks.

If scan is disabled:

- The display shows `Scan Off`.
- The **Scan** icon disappears.
- The LED turns off.

Responding to Transmissions During Scanning

During scanning, your radio stops on a channel or group where activity is detected. The radio stays on that channel for a programmed duration known as hang time. Follow the procedure to respond to transmissions during scanning on your radio.

1 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button during hang time. The green LED lights up.

2 Release the **PTT** button to listen.

The radio returns to scanning other channels or groups if you do not respond within the hang time.

Deleting Nuisance Channels

If a channel continually generates unwanted calls or noise, termed as Nuisance Channel, you can temporarily remove the unwanted channel from the scan list. This capability does not apply to the channel designated as the Selected Channel. Follow the procedure to delete nuisance channels on your radio.

1 When your radio locks on to an unwanted or nuisance channel, press the programmed **Nuisance Channel Delete** button until you hear a tone.

A nuisance channel can only be deleted by using the programmed **Nuisance Channel Delete** button. This feature is not accessible through the menu.

2 Release the **Nuisance Channel Delete** button. The nuisance channel is deleted.

Restoring Nuisance Channels

Follow the procedure to restore nuisance channels on your radio.

Do one of the following:

- Turn the radio off and then power it on again.
- Stop and restart a scan via the programmed **Scan** button or menu.
- Change the channel using the **Channel Up/ Down** button.

Vote Scan

Vote Scan provides you with wide area coverage in areas where there are multiple base stations transmitting identical information on different analog channels.

Your radio scans analog channels of multiple base stations and performs a voting process to select the strongest received signal. Once that is established, your radio unmutes to transmissions from that base station.

During a vote scan, the yellow LED blinks and the display shows the **Vote Scan** icon.

Follow the same procedures as *Responding to Transmissions During Scanning* on page 302 to respond to a transmission during a vote scan.

Contacts Settings

Contacts provides address book capabilities on your radio. Each entry corresponds to an alias or ID that you use to initiate a call. The entries are alphabetically sorted.

Each entry, depending on context, associates with the different call types: Group Call, Private Call, All Call, PC Call, or Dispatch Call.

PC Call and Dispatch Call are data-related. They are only available with the applications. Refer to the data applications documentation for further details.

Additionally, Contacts menu allows you to assign each entry to a programmable number key or more on a keypad microphone. If an entry is assigned to a number key, your radio can perform a quick dial on the entry.

Note:
You see a checkmark before each number key that is assigned to an entry. If the checkmark is before `Empty`, you have not assign a number key to the entry.

Each entry within Contacts displays the following information:

- Call Type
- Call Alias
- Call ID

Note:

If the Privacy feature is enabled on a channel, you can make privacy-enabled Group Calls, Private Calls, and All Calls on that channel. Only target radios with the same Privacy Key, or the same Key Value and Key ID as your radio will be able to decrypt the transmission.

Making Group Calls by Using the Contacts List

Follow the procedure to make Group Calls on your radio by using the Contacts list.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Contacts`. Press OK to select.
3. Press ▲ or ▼ to the required alias or ID. Press OK to select.
4. Press the **PTT** button to make the call.

The green LED lights up.

5 Release the **PTT** button to listen.
The green LED blinks when any user in the group responds. The display shows the **Group Call** icon, and alias or ID, and the transmitting radio alias or ID.

6 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period.

Making Private Calls by Using the Contacts List

Follow the procedure to make Private Calls on your radio by using the Contacts list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID.

Press OK to select.

4 Press the **PTT** button to make the call.
The green LED lights up. The display shows the destination alias.

5 Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.

6 Release the **PTT** button to listen.
The green LED blinks when the target radio responds. The display shows the transmitting user alias or ID.

7 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

The call ends when there is no voice activity for a predetermined period. A tone sounds. The display shows `Call Ended`.

Assigning Entries to Programmable Number Keys

Follow the procedure to assign entries to programmable number keys on your radio.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Contacts`. Press OK to select.
3. Press ▲ or ▼ to the required alias or ID. Press OK to select.
4. Press ▲ or ▼ to `Program Key`. Press OK to select.
5. Do one of the following:
   - If the desired number key has not been assigned to an entry, press ▲ or ▼ to the desired number key. Press OK to select.
   - If the desired number key has been assigned to an entry, the display shows `The Key is Already Assigned` and then, the first text line shows `Overwrite?`. Do one of the following:

     Press ▲ or ▼ to `Yes`. Press OK to select.

     The radio sounds a positive indicator tone and the display shows `Contact Saved` and a positive mini notice.

     Press ▲ or ▼ to `No` to return to the previous step.

Each entry can be associated to different number keys. You see a ✓ before each number key that is assigned to an entry. If the ✓ is before `Empty`, that number key is not assigned.

If a number key is assigned to an entry in a particular mode, this feature is not supported when you long press the number key in another mode.

The screen automatically returns to the previous menu.

Removing Associations Between Entries and Programmable Number Keys

Follow the procedure to remove the associations between entries and programmable number keys on your radio.

1 Do one of the following:

- Long press the programmed number key to the required alias or ID. Proceed to Step *4*.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID.
Press OK to select.

4 Press ▲ or ▼ to `Program Key`. Press OK to select.

5 Press ▲ or ▼ to `Empty`. Press OK to select.
The first text line shows `Clear from all keys`.

6 Press ▲ or ▼ to `Yes`. Press OK to select.

Note:
When an entry is deleted, the association between the entry and its programmed number key(s) is removed.

A positive indicator tone sounds. The display shows `Contact Saved`.

The screen automatically returns to the previous menu.

Adding New Contacts

Follow the procedure to add new contacts on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to `New Contact`. Press OK to select.

4 Press ▲ or ▼ to select contact type `Radio Contact` or `Phone Contact`. Press OK to select.

5 Enter the contact number with the keypad, and press OK to proceed.

6 Enter the contact name with the keypad, and press OK to proceed.

7 Press ▲ or ▼ to the required ringer type. Press OK to select.
A positive indicator tone sounds. The display shows a positive mini notice.

Setting Default Contact
Follow the procedure to set the default contact on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID. Press OK to select.

4 Press ▲ or ▼ to `Set as Default`. Press OK to select.
A positive indicator tone sounds. The display shows a positive mini notice. The display shows ✓ beside the selected default alias or ID.

Call Indicator Settings

Activating or Deactivating Call Ringers for Call Alerts
Follow the procedure to activate or deactivate call ringers for Call Alerts on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alert. Press OK to select.

5 Press ▲ or ▼ to Call Ringers. Press OK to select.

6 Press ▲ or ▼ to Call Alert. Press OK to select.

7 Press ▲ or ▼ to the required tone. Press OK to select. The display shows ✓ beside the selected tone.

Activating or Deactivating Call Ringers for Private Calls

Follow the procedure to activate or deactivate call ringers for Private Calls on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alerts. Press OK to select.

5 Press ▲ or ▼ to Call Ringers. Press OK to select.

6 Press ▲ or ▼ to Private Call. Press OK to select.

7 Press ▲ or ▼ to the required tone. Press OK to select.

If enabled ✓ appears besides Enabled. If disabled, ✓ disappears beside Enabled.

Activating or Deactivating Call Ringers for Selective Calls

Follow the procedure to activate or deactivate call ringers for Selective Calls on your radio.

1. Press OK to access the menu.
2. Press ▲ or ▼ to Utilities. Press OK to select.
3. Press ▲ or ▼ to Radio Settings. Press OK to select.
4. Press ▲ or ▼ to Tones/Alerts. Press OK to select.
5. Press ▲ or ▼ to Call Ringers. Press OK to select.
6. Press ▲ or ▼ to Selective Call. Press OK to select.
   The display shows ✓ and the current tone.
7. Press ▲ or ▼ to the required tone. Press OK to select. The display shows ✓ beside the selected tone.

Activating or Deactivating Call Ringers for Text Messages

Follow the procedure to activate or deactivate call ringers for text messages on your radio.

1. Press OK to access the menu.
2. Press ▲ or ▼ to Utilities. Press OK to select.
3. Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alerts. Press OK to select.

5 Press ▲ or ▼ to Call Ringers. Press OK to select.

6 Press ▲ or ▼ to Text Message. Press OK to select.
The display shows ✓ and the current tone.

7 Press ▲ or ▼ to the required tone. Press OK to select. The display shows ✓ beside the selected tone.

Activating or Deactivating Call Ringers for Telemetry Status with Text

Follow the procedure to activate or deactivate call ringers for telemetry status with text on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alert. Press OK to select.

5 Press ▲ or ▼ to Call Ringers. Press OK to select.

6 Press ▲ or ▼ to Telemetry. Press OK to select.
The current tone is indicated by a ✓

Assigning Ring Styles

The radio can be programmed to sound one of ten predefined ringing tones when receiving a Call Alert or a Text Message from a particular contact. The radio sounds out each ring style as you navigate

through the list. Follow the procedure to assign ring styles on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Contacts. Press OK to select.
The entries are alphabetically sorted.

3 Press ▲ or ▼ to the required alias or ID.
Press OK to select.

4 Press ▲ or ▼ to Edit. Press OK to select.

5 Press ▲ or ▼ to Edit Ringtone. Press OK to select.

6 Press ▲ or ▼ to the required tone. Press OK to select.
A ✓ appears beside the selected tone.

Escalating Alarm Tone Volume

The radio can be programmed to continually alert, when a radio call remains unanswered. This is done by automatically increasing the alarm tone volume over time. This feature is known as Escalert.

Call Log Features

Your radio keeps track of all recent outgoing, answered, and missed Private Calls. The call log feature is used to view and manage recent calls.

Missed Call Alerts may be included in the call logs, depending on the system configuration on your radio. You can perform the following tasks in each of your call lists:

- Store Alias or ID to Contacts
- Delete Call
- Delete All Calls
- View Details

Viewing Recent Calls

Follow the procedure to view recent calls on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Call Log. Press OK to select.

3 Press ▲ or ▼ to the preferred list. Press OK to select.

The options are Missed, Answered, and Outgoing lists.

The display shows the most recent entry.

4 Press ▲ or ▼ to view the list.

You can start a Private Call with the alias or ID the display is currently showing by pressing the **PTT** button.

Deleting Calls from the Call List

Follow the procedure to delete calls on your radio from the Call list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Call Log. Press OK to select.

3 Press ▲ or ▼ to the required list. Press OK to select.

If the list is empty:

- A tone sounds.
- The display shows List Empty.

4 Press ▲ or ▼ to the required alias or ID.

Press OK to select.

5 Press ▲ or ▼ to Delete Entry?. Press OK to select.

6 Do one of the following:

- Press OK to select Yes to delete the entry.

  The display shows Entry Deleted.
- Press ▲ or ▼ to No. Press OK to select.

  The radio returns to the previous screen.

Viewing Details from the Call List

Follow the procedure to view details on your radio from the Call list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Call Log`. Press OK to select.

3 Press ▲ or ▼ to the required list. Press OK to select.

4 Press ▲ or ▼ to the required alias or ID. Press OK to select.

5 Press ▲ or ▼ to `View Details`. Press OK to select.
The display shows the details.

Storing Aliases or IDs from the Call List

Follow the procedure to store aliases or IDs on your radio from the Call list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Call Log`. Press OK to select.

3 Press ▲ or ▼ to the required list. Press OK to select.

4 Press ▲ or ▼ to the required alias or ID. Press OK to select.

5 Press ▲ or ▼ to `Store`. Press OK to select.
The display shows a blinking cursor.

6 Enter the rest of the characters of the required alias. Press OK to select.
You can store an ID without an alias.
The display shows a positive mini notice.

Call Alert Operation

Call Alert paging enables you to alert a specific radio user to call you back when they are able to do so.

This feature is applicable for subscriber aliases or IDs only and is accessible through the menu via Contacts, manual dial, or a programmed **One Touch Access** button.

Making Call Alerts

Follow the procedure to make Call Alerts on your radio.

1. Press the programmed **One Touch Access** button.
   The display shows `Call Alert` and the subscriber alias or ID. The green LED lights up.
2. Wait for acknowledgment.
   If the Call Alert acknowledgment is received, the display shows a positive mini notice.

   If the Call Alert acknowledgment is not received, the display shows a negative mini notice.

Making Call Alerts by Using the Contacts List

Follow the procedure to make Call Alerts on your radio by using the Contacts list.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Contacts`. Press OK to select.
3. Press ▲ or ▼ to the required alias or ID.
   Press OK to select.
4. Press ▲ or ▼ to `Call Alert`. Press OK to select.
   The display shows `Call Alert` and the subscriber alias or ID. The green LED lights up.
5. Wait for acknowledgment.
   If the Call Alert acknowledgment is received, the display shows a positive mini notice.

   If the Call Alert acknowledgment is not received, the display shows a negative mini notice.

Making Call Alerts by Using the Manual Dial

Follow the procedure to make Call Alerts on your radio by using the manual dial.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Contacts`. Press OK to select.
3. Press ▲ or ▼ to `Manual Dial`. Press OK to select.
   The display shows a blinking cursor.
4. Enter the subscriber ID and press OK to proceed.
5. Press ▲ or ▼ to `Call Alert`. Press OK to select.
   The display shows `Call Alert` and the subscriber alias or ID. The green LED lights up.
6. Wait for acknowledgment.
   If the Call Alert acknowledgment is received, the display shows a positive mini notice.
   If the Call Alert acknowledgment is not received, the display shows a negative mini notice.

Responding to Call Alerts

Follow the procedure to respond to Call Alerts on your radio.

When you receive a Call Alert:

- A repetitive tone sounds.
- The yellow LED blinks.
- The display shows the notification list listing a Call Alert with the alias or ID of the calling radio.

  Depending on the configuration by your dealer or system administrator, you can respond to a Call Alert by doing one of the following:

  - Press the **PTT** button and respond with a Private Call directly to the caller.
  - Press the **PTT** button to continue normal talkgroup communication.

    The Call Alert is moved to the Missed Call option at the Call Log menu. You can respond to the caller from the Missed Called log.

See *Notification List* on page 123 and *Call Log Features* on page 86 for more information.

Emergency Operation

An Emergency Alarm is used to indicate a critical situation. You are able to initiate an Emergency at any time even when there is activity on the current channel.

Your dealer can set the duration of a button press for the programmed **Emergency** button, except for long press, which is similar with all other buttons:

Short Press	Duration between 0.05 seconds and 0.75 seconds.
Long Press	Duration between 1.00 second and 3.75 seconds.

The **Emergency** button is assigned with the Emergency On/Off feature. Check with your dealer for the assigned operation of the **Emergency** button.

Note:

If short press the **Emergency** button is assigned to turn on the Emergency mode, then long press the **Emergency** button is assigned to exit the Emergency mode.

If long press the **Emergency** button is assigned to turn on the Emergency mode, then short press the **Emergency** button is assigned to exit the Emergency mode.

Your radio supports three Emergency Alarms:

- Emergency Alarm
- Emergency Alarm with Call
- Emergency Alarm with Voice to Follow

In addition, each alarm has the following types:

Regular	Radio transmits an alarm signal and shows audio and/or visual indicators.
Silent	Radio transmits an alarm signal without any audio or visual indicators. Radio receives calls without any sound through the speaker, until the programmed *hot mic* transmission period is over and/or you press the **PTT** button.
Silent with Voice	Radio transmits an alarm signal without any audio or visual indicators, but allow incoming calls to sound through the speaker.

Receiving Emergency Alarms

Follow the procedure to receive Emergency Alarms on your radio.

When you receive an Emergency Alarm:

- A tone sounds.
- The red LED blinks.
- The display shows the **Emergency** icon, and the Emergency caller alias or if there is more than one alarm, all emergency caller aliases are displayed in an Alarm List.

1 Do one of the following:

- If only one alarm, press OK to view more details.
- If more than one alarm, press ▲ or ▼ to the required alias, and press OK to view more details.

2 Press OK to view the action options.

3 Press ↩ and select `Yes` to exit the Alarm list.

4 Press OK to access the menu.

5 Select `Alarm List` to revisit the Alarm list.

6 The tone sounds and the LED blinks red until you exit the Emergency mode. However, the tone can be silenced. Do one of the following:

- Press the **PTT** button to call the group of radios which received the Emergency Alarm.
- Press any programmable button.
- Exit Emergency mode. See *Exiting Emergency Mode After Receiving the Emergency Alarm* on page 319.

Responding to Emergency Alarms

Follow the procedure to respond to Emergency Alarms on your radio.

1 Make sure the display shows the Alarm List. Press ▲ or ▼ to the required alias or ID.

2 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button,

indicating the channel is free for you to respond.
Press the **PTT** button to transmit non-emergency voice to the same group the Emergency Alarm targeted.
The green LED lights up. Your radio remains in the Emergency mode.

3 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

4 Release the **PTT** button to listen.
When the emergency initiating radio responds:

- The green LED blinks.
- The display shows the **Group Call** icon and ID, transmitting radio ID, and the Alarm list.

Emergency voice can only be transmitted by the emergency initiating radio. All other radios, including the emergency receiving radio, transmit non-emergency voice.

Exiting Emergency Mode After Receiving the Emergency Alarm

Follow the procedure to exit Emergency mode after receiving Emergency alarm.

Delete the alarm items.

Sending Emergency Alarms

This feature allows you to send an Emergency Alarm, a non-voice signal, which triggers an alert indication on a group of radios. Follow the procedure to send Emergency Alarms on your radio.

Your radio does not display any audio or visual indicators during Emergency mode when it is set to Silent.

1 Press the programmed **Emergency On** button.
You see one of these results:

- The display shows `Tx Alarms` and the destination alias.
- The display shows `Tx Telegram` and the destination alias.

The green LED lights up. The **Emergency** icon appears.

Note:
If programmed, the Emergency Search tone sounds. This tone is muted when the radio transmits or receives voice, and stops when the radio exits Emergency mode. The Emergency Search tone can be programmed via the CPS.

2 Wait for acknowledgment.
If successful:

- The Emergency tone sounds.
- The green LED blinks.
- The display shows `Alarm Sent`.

If unsuccessful after all retries have been exhausted:

- A tone sounds.
- The display shows `Alarm Failed`.

The radio exits the Emergency Alarm mode and returns to the Home screen.

Sending Emergency Alarms with Call

This feature allows you to send an Emergency Alarm with Call to a group of radios. Upon acknowledgement by a radio within the group, the group of radios can communicate over a programmed Emergency channel.

Follow the procedure to send Emergency Alarms with call on your radio.

1 Press the programmed **Emergency On** button or the **Emergency** footswitch. The display shows Sending Alarm, which alternates with your radio ID.
You see one of these results:

- The display shows `Tx Telegram` and the destination alias.

The green LED lights up. The **Emergency** icon appears.

Note:
If programmed, the Emergency Search tone sounds. This tone is muted when the radio transmits or receives voice, and stops when the radio exits Emergency mode. The Emergency Search tone can be programmed by your dealer or system administrator.

2 Wait for acknowledgment.
If successful:

- The Emergency tone sounds.
- The green LED blinks.
- The display shows `Alarm Sent`.
- Your radio enters the Emergency call mode when the display shows `Emergency` and the destination group alias.

3 Press the **PTT** button to make the call.
The green LED lights up. The display shows the **Group Call** icon.

4 Do one of the following:

- Wait for the Talk Permit Tone to end and speak clearly into the microphone if enabled.
- Wait for the **PTT** Sidetone to end and speak clearly into the microphone if enabled.

5 Release the **PTT** button to listen.
The display shows the caller and group aliases.

6 If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond to the call.

7 Press the **Emergency Off** button to exit the Emergency mode.
The radio returns to the Home screen.

Sending Emergency Alarms with Voice to Follow

This feature allows you to send an Emergency Alarm with Voice to Follow to a group of radios. Your radio microphone is automatically activated, allowing you to communicate with the group of radios without pressing the **PTT** button. This activated microphone state is also known as *hot mic*.

Note:
Your radio cannot detect a non-IMPRES microphone that is attached to the rear accessory connector.

When no microphone is detected at the specified programmed connector, your radio checks the alternative connector. Here, your radio gives priority to the detected microphone.

If your radio has Emergency Cycle Mode enabled, repetitions of *hot mic* and receiving period are made for a programmed duration. During Emergency Cycle Mode, received calls sound through the speaker.

If you press the **PTT** button during the programmed receiving period, you hear a prohibit tone, indicating that you should release the **PTT** button. The radio ignores the **PTT** button press and remains in Emergency mode.

If you press the **PTT** button during *hot mic*, and continue to press it after the *hot mic* duration expires, the radio continues to transmit until you release the **PTT** button.

If the Emergency Alarm request fails, the radio does not retry to send the request, and enters the *hot mic* state directly.

Note:
Some accessories may not support *hot mic*. Check with your dealer or system administrator for more information.

Follow the procedure to send Emergency Alarms with voice to follow on your radio.

1 Press the programmed **Emergency On** button or the **Emergency** footswitch.
You see one of these results:

- The display shows `Tx Alarm` and the destination alias.
- The display shows `Tx Telegram` and the destination alias.

The green LED lights up. The **Emergency** icon appears.

2 Once the display shows `Alarm Sent`, speak clearly into the microphone.

The radio automatically stops transmitting when:

- The cycling duration between *hot mic* and receiving calls expires, if Emergency Cycle Mode is enabled.
- The *hot mic* duration expires, if Emergency Cycle Mode is disabled.

3 Press the **Emergency Off** button to exit the Emergency mode.
The radio returns to the Home screen.

Reinitiating Emergency Mode

This feature is only applicable to the radio sending the Emergency Alarm. Follow the procedure to reinitiate Emergency mode on your radio.

Do one of the following:

- Change the channel while the radio is in Emergency mode.

  The radio exits the Emergency mode, and reinitiates Emergency, if Emergency Alarm is enabled on the new channel.
- Press the programmed **Emergency On** button during an Emergency initiation or transmission state.

  The radio exits this state, and reinitiates Emergency.

Exiting Emergency Mode After Sending the Emergency Alarm

This feature is only applicable to the radio sending the Emergency Alarm.

Your radio exits Emergency mode when:

- An acknowledgment is received (for Emergency Alarm only).
- All retries to send the alarm have been exhausted.
- Your radio is turned off.

Note:
Your radio does not reinitiate the Emergency mode automatically when it is powered up again.

Follow the procedure to exit Emergency mode on your radio.

Do one of the following:

- Press the programmed **Emergency Off** button.
- Change the channel to a new channel that has no emergency system configured.

  The display shows `No Emergency`.

Deleting an Alarm Item from the Alarm List

Follow the procedure to delete the alarm items from the Alarm List, to exit Emergency mode.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Alarm List`. Press OK to select.
3. Press ▲ or ▼ to the required alarm item. Press OK to select.
4. Press ▲ or ▼ to `Delete`. Press OK to select.

Text Messaging Features

Your radio is able to receive data, for example a text message, from another radio or an e-mail application.

The maximum length of characters when you send and receive a text message is 280 characters which includes the subject line. You see the subject line when you receive messages from e-mail applications.

Note:
The maximum length of 280 characters is applicable only for models with the latest software and hardware. On older hardware, the text message will be truncated to the maximum length of 140 characters. Check with your dealer or system administrator for more information.

The Inbox is capable of storing a maximum of 30 messages.

The radio exits the current screen once the inactivity timer expires. Text messages in the typing screen are automatically saved to the Drafts folder.

If you long press at any time, you return to the Home screen.

Note:
If the channel type is not a match, you can only edit, forward, or delete Sent text messages; forward, delete, or delete all Received text messages; and edit or forward Fail-to-Send text messages.

Text Messages

The text messages are stored in an Inbox, and sorted according to the most recently received.

Viewing Text Messages

Follow the procedure to view text messages on your radio.

1 Press OK to access the menu.

2 Press or to Messages. Press OK to select.

3 Press or to Inbox. Press OK to select.

If the Inbox is empty:

- The display shows List Empty.

- A tone sounds, if the Keypad Tone is turned on.

4 Press ▲ or ▼ to the required message.

Press OK to select.
The display shows a subject line if the message is from an e-mail application.

Viewing Telemetry Status Text Messages
Follow the procedure to view a telemetry status text message from the inbox.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Messages`. Press OK to select.

3 Press ▲ or ▼ to `Inbox`. Press OK to select.

4 Press ▲ or ▼ to the required message.

Press OK to select.

You cannot reply to a Telemetry Status text message.

The display shows `Telemetry: <Status Text Message>`.

5 Long press ↩ to return to the Home screen.

Responding to Text Messages
Follow the procedure to respond to text messages on your radio.

When you receive a text message:

- The display shows the Notification list with the alias or ID of the sender.
- The display shows the **Message** icon.

Note:
The radio exits the Text Message alert screen and sets up a Private or Group Call to the sender of the message if the **PTT** button is pressed.

1 Do one of the following:

- Press ▲ or ▼ to `Read`. Press OK to select.

The display shows the text message. The display shows a subject line if the message is from an e-mail application.

- Press ▲ or ▼ to `Read Later`. Press OK to select.

  The radio returns to the screen you were on prior to receiving the text message.

- Press ▲ or ▼ to `Delete`. Press OK to select.

2 Do one of the following:

- Press OK to return to inbox.
- Press OK a second time to reply, forward, or delete the text message.

Responding to Text Messages with Quick Text
Follow the procedure to respond to text messages with Quick Text messages on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step 3.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Messages`. Press OK to select.

3 Press ▲ or ▼ to `Inbox`. Press OK to select.

4 Press ▲ or ▼ to the required message.

Press OK to select.
The display shows a subject line if the message is from an e-mail application.

5 Press OK to access the sub-menu.

6 Press ▲ or ▼ to `Reply`. Press OK to select.

7 Press ▲ or ▼ to `Quick Reply`. Press OK to select.

8 Press ▲ or ▼ to the required message.

Press OK to select.
The display shows a transitional mini notice, confirming the message is being sent.

9 Wait for acknowledgment.
If successful:

- A tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A tone sounds.
- The display shows a negative mini notice.
- The radio returns to the `Resend` option screen.

Resending Text Messages

Follow the procedure to resend text messages on your radio.

When you are at the `Resend` option screen:

Press OK to resend the same message to the same subscriber or group alias or ID.
If successful:

- A tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A tone sounds.
- The display shows a negative mini notice.
- The radio returns to the `Resend` option screen.

Forwarding Text Messages

Follow the procedure to forward text messages on your radio.

When you are at the `Resend` option screen:

1 Press ▲ or ▼ to `Forward`, and press OK to send the same message to another subscriber or group alias or ID.

2 Press ▲ or ▼ to the required alias or ID.

Press OK to select.
The display shows a transitional mini notice, confirming your message is being sent.

3 Wait for acknowledgment.
If successful:

- A tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A tone sounds.
- The display shows a negative mini notice.

Note:
You can also manually select a target radio address (see *Forwarding Text Messages by Using the Manual Dial* on page 328).

Forwarding Text Messages by Using the Manual Dial

Follow the procedure to forward text messages by using the manual dial on your radio.

1 Press ▲ or ▼ to `Forward`. Press OK to select.

2 Press OK to send the same message to another subscriber or group alias or ID.

3 Press ▲ or ▼ to `Manual Dial`. Press OK to select.
The display shows `Radio Number:`.

4 Enter the subscriber ID, and press OK to proceed.
The display shows a transitional mini notice, confirming your message is being sent.

5 Wait for acknowledgment.
If successful:

- A tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A tone sounds.
- The display shows a negative mini notice.

Editing Text Messages

Select `Edit` to edit the message.

Note:
If a subject line is present (for messages received from an e-mail application), you cannot edit it.

1 Press ▲ or ▼ to Edit. Press OK to select.
The display shows a blinking cursor.

2 Use the keypad to edit your message.

- Press ◀ to move one space to the left.
- Press ▶ or # to move one space to the right.
- Press * to delete any unwanted characters.
- Long press # to change text entry method.

3 Press OK once message is composed.

4 Do one of the following:

- Press ▲ or ▼ to Send and press OK to send the message.
- Press ▲ or ▼ to Save and press OK to save the message to the Drafts folder.
- Press ↩ to edit the message.
- Press ↩ to choose between deleting the message or saving it to the Drafts folder.

Writing Text Messages

Follow the procedure to write text message on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step 3.
- Press OK to access the menu.

2 Press ▲ or ▼ to Messages. Press OK to select.

3 Press ▲ or ▼ to Compose. Press OK to select.
A blinking cursor appears.

4 Use the keypad to type your message.

Press ◀ to move one space to the left.

Press ▶ or # to move one space to the right.

Press * to delete any unwanted characters.

Long press # to change text entry method.

5 Press OK once message is composed.

Do one of the following:

- Press OK to send the message.
- Press ↩. Press ▲ or ▼ to choose among editing, deleting, or saving the message. Press OK to select.

Sending Text Messages

Follow the procedure to send text message on your radio.

It is assumed that you have a newly written text message or a saved text message.

Select the message recipient. Do one of the following:

- Press ▲ or ▼ to the required alias or ID. Press OK to select.
- Press ▲ or ▼ to `Manual Dial`. Press OK to select.Key in the subscriber ID. The first line of the display shows `Radio Number:`. The second line of the display shows a blinking cursor. Key in the subscriber alias or ID. Press OK.

The display shows transitional mini notice, confirming your message is being sent.

If successful:

- A tone sounds.
- The display shows positive mini notice.

If unsuccessful:

- A low tone sounds.
- The display shows negative mini notice.
- The message is moved to the Sent Items folder.
- The message is marked with a Send Failed icon.

Note:
For a newly written text message, the radio returns you to the `Resend` option screen.

Deleting Text Messages from the Inbox

Follow the procedure to delete text messages from the Inbox on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Messages`. Press OK to select.

3 Press ▲ or ▼ to `Inbox`. Press OK to select.

If the Inbox is empty:

- The display shows `List Empty`.
- A tone sounds.

4 Press ▲ or ▼ to the required message.

Press OK to select.

The display shows a subject line if the message is from an e-mail application.

5 Press OK to access the sub-menu.

6 Press ▲ or ▼ to `Delete`. Press OK to select.

7 Press ▲ or ▼ to `Yes`. Press OK to select. The display shows a positive mini notice. The screen returns to the Inbox.

Deleting All Text Messages from the Inbox

Follow the procedure to delete all text messages from the Inbox on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Messages`. Press OK to select.

3 Press ▲ or ▼ to `Inbox`. Press OK to select.

If the Inbox is empty:

- The display shows `List Empty`.
- A tone sounds.

4 Press ▲ or ▼ to `Delete All`. Press OK to select.

5 Press ▲ or ▼ to `Yes`. Press OK to select. The display shows a positive mini notice.

Sent Text Messages

Once a message is sent to another radio, it is saved in Sent Items folder. The most recent sent text message is always added to the top of the Sent Items folder. You can resend, forward, edit, or delete a Sent text message.

The Sent Items folder is capable of storing a maximum of 30 last sent messages. When the folder is full, the next sent text message automatically replaces the oldest text message in the folder.

If you exit the message sending screen while the message is being sent, the radio updates the status of the message in the Sent Items folder without providing any indication in the display or via sound.

If the radio changes mode or powers down before the status of the message in Sent Items folder is updated, the radio cannot complete any In-Progress messages and automatically marks it with a **Send Failed** icon.

The radio supports a maximum of five In-Progress messages at one time. During this period, the radio cannot send any new message and automatically marks it with a **Send Failed** icon.

If you long press ↩ at any time, the radio returns to the Home screen.

Note:
If the channel type, for example a conventional digital or Capacity Plus channel, is not a match, you can only edit, forward, or delete a Sent message.

Viewing Sent Text Messages

Follow the procedure to view sent text messages on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.

- Press OK to access the menu.

2 Press ▲ or ▼ to Messages. Press OK to select.

3 Press ▲ or ▼ to Sent Items. Press OK to select.

If the Sent Items folder is empty:

- The display shows List Empty.
- A low tone sounds, if the Keypad Tone is turned on.

4 Press ▲ or ▼ to the required message.

Press OK to select.
The icon at the top right corner of the screen indicates the status of the message. See *Sent Item Icons* on page 262.

Sending Sent Text Messages
Follow the procedure to send a sent text messages on your radio.

When you are viewing a Sent message:

1 Press OK .

2 You can either resend or forward the sent text message. Do one of the following:

- ▼ to Resend. Press OK to select.
- ▼ to Forward. Press OK to select.

The display shows a transitional mini notice, confirming your message is being sent.

3 Wait for acknowledgment.
If successful:

- A tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A tone sounds.
- The display shows a negative mini notice.
- The radio proceeds to the Resend option screen. See *Resending Text Messages* on page 102 for more information.

Deleting Sent Text Messages from the Sent Items Folder

Follow the procedure to delete sent text messages from the Sent Items folder on your radio.

When you are viewing a Sent message:

1 Press OK.

2 Press ▲ or ▼ to `Delete`. Press OK to select.

Deleting All Sent Text Messages from the Sent Items Folder

Follow the procedure to delete all sent text messages from the Sent Items folder on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Messages`. Press OK to select.

3 Press ▲ or ▼ to `Sent Items`. Press OK to select.

If Sent Items is empty:

- The display shows `List Empty`.
- A tone sounds.

4 Press ▲ or ▼ to `Delete All`. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to `Yes`. Press OK to select.

  The display shows a positive mini notice.
- Press ▲ or ▼ to `No`. Press OK to select.

  The radio returns to the previous screen.

Saved Text Messages

You can save a text message to send it at a later time.

If a PTT button press or a mode change causes the radio to exit the text message writing/editing screen while you are in the process of writing or editing a text message, your current text message is automatically saved to the Drafts folder.

The most recent saved text message is always added to the top of the Drafts list.

The Drafts folder stores a maximum of ten (10) last saved messages. When the folder is full, the next saved text message automatically replaces the oldest text message in the folder.

Viewing Saved Text Messages

Follow the procedure to view saved text message on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Messages`. Press OK to select.

3 Press ▲ or ▼ to `Drafts`. Press OK to select.

4 Press ▲ or ▼ to the required message.

Press OK to select.

Editing Saved Text Messages

Follow the procedure to edit saved text message on your radio.

1 Press OK while viewing the message.

2 Press ▲ or ▼ to `Edit`. Press OK to select.

A blinking cursor appears.

3 Use the keypad to type your message.

Press ◄ to move one space to the left.

Press ▶ or # to move one space to the right.

Press * to delete any unwanted characters.

Long press # to change text entry method.

4 Press OK once message is composed.
Do one of the following:

- Press ▲ or ▼ to Send. Press OK to send the message.
- Press ↩. Press ▲ or ▼ to choose between saving or deleting the message. Press OK to select.

Deleting Saved Text Messages from the Drafts Folder
Follow the procedure to delete saved text message from drafts on your radio.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step 3.
- Press OK to access the menu.

2 Press ▲ or ▼ to Messages. Press OK to select.

3 Press ▲ or ▼ to Drafts. Press OK to select.

4 Press ▲ or ▼ to the required message.
Press OK to select.

5 Press ▲ or ▼ to Delete. Press OK to delete the text message.

Quick Text Messages
Your radio supports a maximum of 50 Quick Text messages as programmed by your dealer.

While Quick Text messages are predefined, you can edit each message before sending it.

Sending Quick Text Messages

Follow the procedure to send predefined Quick Text messages on your radio to a predefined alias.

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to *3*.
- Press the programmed **One Touch Access** button. Proceed to Step *6*.

  The display shows a transitional mini notice, confirming your message is being sent.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Messages`. Press OK to select.

3 Press ▲ or ▼ to `Quick Text`. Press OK to select.

4 Press ▲ or ▼ to the required Quick Text message. Press OK to select.

5 Do the following to select the recipient and send the message.

  The display shows a transitional mini notice, confirming that your message is being sent.

6 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.
- The radio proceeds to the `Resend` option screen. See *Resending Text Messages* on page 102 for more information.

Text Entry Configuration

Your radio allows you to configure different text.

You can configure the following settings for entering text on your radio:

- Word Predict
- Word Correct
- Sentence Cap

- My Words

Your radio supports the following text entry methods:

- Numbers
- Symbols
- Predictive or Multi-Tap
- Language (If programmed)

Note:

Press ⟲ at any time to return to the previous screen or long press ⟲ to return to the Home Screen. The radio exits the current screen once the inactivity timer expires.

Enabling or Disabling Word Correct

The in-built dictionary cannot recognize the supplies alternative word choice when the word entered into the text editor.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Utilities`. Press OK to select.
3. Press ▲ or ▼ to `Radio Settings`. Press OK to select.
4. Press ▲ or ▼ to `Text Entry`. Press OK to select.
5. Press ▲ or ▼ to `Word Correct`. Press OK to select.
6. Do one of the following:
   - Press ▲ or ▼ to `Word Correct`. Press OK to select.
   - Press to enable Word Correct. If enabled ✓ appears besides `Enabled`.
   - Press to disable Word Correct. If disabled, ✓ disappears beside `Enabled`.

Enabling or Disabling Word Predict

Word Predict: Your radio can learn common word sequences that you often enter. It then predicts the next word you may want to use after you enter the

first word of a common word sequence into the text editor.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Text Entry. Press OK to select.

5 Press ▲ or ▼ to Word Predict. Press OK to select.

6 Do one of the following:

- Press OK to enable the Word Predict. If enabled ✓ appears besides Enabled.
- Press OK to disable Microphone Dynamic Distortion Control. If disabled, ✓ disappears beside Enabled.

Sentence Cap

This feature is used to automatically enable capitalization of the first letter in the first word for every new sentence.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Text Entry. Press OK to select.

5 Press ▲ or ▼ to Sentence Cap. Press OK to select.

6 Do one of the following:

- Press OK to enable Sentence Cap. If enabled ✓ appears besides Enabled.
- Press OK to disable Sentence Cap. If disabled, ✓ disappears beside Enabled.

Viewing Custom Words

You can add your own custom words into the in-built dictionary of your radio. Your radio maintains a list to contain these words.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Text Entry. Press OK to select.

5 Press ▲ or ▼ to My Words. Press OK to select.

6 Press ▲ or ▼ to List of Words. Press OK to select.
The display shows the list of custom words.

Editing Custom Words

You can edit custom words saved in your radio

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Text Entry. Press OK to select.

5 Press ▲ or ▼ to My Words. Press OK to select.

6 Press ▲ or ▼ to List of Words. Press OK to select.
Display shows the list of custom words.

7 Press ▲ or ▼ to the required word. Press OK to select.

8 Press ▲ or ▼ to Edit. Press OK to select.

9 Use the keypad to edit your custom word.

- Press ◀ to move one space to the left.
- Press ▶ key to move one space to the right.
- Press the * key to delete any unwanted characters.
- Long press # to change text entry method.

10 Press OK once your custom word is completed.

The display shows transitional mini notice, confirming your custom word is being saved.

- If the custom word is saved, a tone sounds and the display shows positive mini notice.
- If the custom word is not saved, a low tone sounds and the display show negative mini notice.

Adding Custom Words

You can add custom words into the in-built radio dictionary.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Text Entry. Press OK to select.

5 Press ▲ or ▼ to My Words. Press OK to select.

6 Press ▲ or ▼ to Add New Word. Press OK to select.
Display shows the list of custom words.

7 Use the keypad to edit your custom word.

- Press ◀ to move one space to the left.
- Press ▶ key to move one space to the right.
- Press the * key to delete any unwanted characters.
- Long press #⇧ to change text entry method.

8 Press OK once your custom word is completed.

The display shows transitional mini notice, confirming your custom word is being saved.

- If the custom word is saved, a tone sounds and the display show positive mini notice.
- If the custom word is not saved, a low tone sounds and the display show negative mini notice.

Deleting a Custom Word

Follow the procedure to delete the custom words saved in your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Text Entry. Press OK to select.

5 Press ▲ or ▼ to My Words. Press OK to select.

6 Press ▲ or ▼ to the required word. Press OK to select.

7 Press ▲ or ▼ to Delete. Press OK to select.

8 Choose one of the following.

- At Delete Entry?, press OK to select Yes. The display shows Entry Deleted.
- Press ▲ or ▼ to No. Press OK to return to the previous screen.

Deleting All Custom Words

Follow the procedure to delete all custom words from the in-built dictionary of your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Text Entry. Press OK to select.

5 Press ▲ or ▼ to My Words. Press OK to select.

6 Press ▲ or ▼ to Delete All. Press OK to select.

7 Do one of the following:

- At Delete Entry?, press OK to select Yes. The display shows All Entries Deleted.
- Press ▲ or ▼ to No to return to the previous screen. Press OK to select.

Job Tickets

This feature allows your radio to receive Job Tickets, which are messages from the dispatcher listing out tasks to perform.

You can respond to Job Tickets in order to sort them into Job Ticket Folders. By default, the folders are

“All", "New", "Started", and "Completed". Check with your dealer or system administrator for an additional 10 folders.

Your radio supports a maximum of 100 Job Tickets, all of which can be seen in the "All" folder. New Job Tickets and Job Tickets with recent change in state are listed first. Upon reaching the maximum number of Job Tickets, the next Job Ticket automatically replaces the last Job Ticket in your radio.

Job Tickets are retained even after radio is powered down and powered up again.

Your radio automatically detects and discards the duplicated Job Tickets with the same subject line.

Accessing the Job Ticket Folder

Follow the procedure to access the Job Ticket folder.

1 Do one of the following:

- Press the programmed **Job Ticket** button. Proceed to Step *3*.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Job Tickets`. Press OK to select.

3 Press ▲ or ▼ to the required folder. Press OK to select.

4 Press ▲ or ▼ to the required Job Ticket. Press OK to select.

Logging In or Out of the Remote Server

This feature allows you to log in and log out of the remote server by using your user ID via the menu.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Log In`. Press OK to select.

If you are already logged in, menu displays `Log Out`.

The display shows a transitional mini notice, confirming that you have been logged in successfully.

If you have failed to log in, the display shows a negative mini notice.

Creating Job Tickets

Your radio is able to create Job Tickets, which are based on a Job Ticket template and send out tasks that need to be performed.

CPS programming software is required to configure the Job Ticket template.

1 Press OK to access the menu.

2 ▲ or ▼ to `Job Tickets`. Press OK to select.

3 ▲ or ▼ to `Create Ticket`. Press OK to select.

4 Continue with either *Sending Job Tickets Using One Job Ticket Template* on page 346 or *Sending Job Tickets Using More Than One Job Ticket Template* on page 346.

Responding to Job Tickets

1 Press OK to access the menu.

2 ▲ or ▼ to `Job Tickets`. Press OK to select.

3 ▲ or ▼ to the required folder. Press OK to select.

4 ▲ or ▼ to the required job ticket. Press OK to select.

5 Press OK once more to access the sub-menu.

You can also press the corresponding number key (1–9) to **Quick Reply**.

6 ▲ or ▼ to the required job ticket. Press OK to select.

The display shows transitional mini notice, confirming your message being sent.

If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Sending Job Tickets Using One Job Ticket Template

If your radio is configured with one Job Ticket template, perform the following actions to send the Job Ticket.

1 Use the keypad to type the required room number.

Press OK to select.

2 ▲ or ▼ to `Room Status`. Press OK to select.

3 ▲ or ▼ to the required option. Press OK to select.

4 ▲ or ▼ to `Send`. Press OK to select.
The display shows transitional mini notice, confirming your message is sent.

If the message is not sent, the display shows negative mini notice.

Sending Job Tickets Using More Than One Job Ticket Template

If your radio is configured with more than one Job Ticket template, perform the following actions to send the Job Tickets.

1 ▲ or ▼ to the required option. Press OK to select.

2 ▲ or ▼ to `Send`. Press OK to select.
The display shows transitional mini notice, confirming your message is sent.

If the message is not sent, the display shows negative mini notice.

Deleting Job Tickets

Follow the procedure to delete job tickets on your radio.

1 Do one of the following:

- Press the programmed **Job Ticket** button. Proceed to Step *3*

- Press OK to access the menu.

2. ▲ or ▼ to Job Tickets. Press OK to select.
3. ▲ or ▼ to All. Press OK to select.
4. ▲ or ▼ to the required Job Ticket. Press OK to select.
5. Press OK again while viewing the Job Ticket.
6. ▲ or ▼ to Delete. Press OK to select.

Privacy

This feature helps to prevent eavesdropping by unauthorized users on a channel by the use of a software-based scrambling solution. The signaling and user identification portions of a transmission are not scrambled.

Your radio must have privacy enabled on the channel to send a privacy-enabled transmission, although this is not a necessary requirement for receiving a transmission. While on a privacy-enabled channel, the radio is still able to receive clear or unscrambled transmissions.

Your radio supports two types of privacy, but only **one** can be assigned to your radio. They are:

- Basic Privacy
- Enhanced Privacy

To unscramble a privacy-enabled call or data transmission, your radio must be programmed to have the same Privacy Key for Basic Privacy, or the same Key Value and Key ID for Enhanced Privacy as the transmitting radio.

If your radio receives a scrambled call that is of a different Privacy Key, or different Key Value and Key ID, you will either hear a garbled transmission for Basic Privacy or nothing at all for Enhanced Privacy.

Note:
This feature is not applicable in Citizens Band channels that are in the same frequency.

The green LED lights up when the radio is transmitting, and blinks rapidly when the radio is receiving an ongoing privacy-enabled transmission.

Note:
Some radio models may not offer this Privacy feature, or may have a different configuration. Check with your dealer or system administrator for more information.

Turning Privacy On or Off

Follow the procedure to turn privacy on or off on your radio.

1 Do one of the following:

- Press the programmed **Privacy** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Privacy`. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to `On`. Press OK to select. The display shows ✓ beside `On`.
- Press ▲ or ▼ to `Off`. Press OK to select. The display shows ✓ beside `Off`.

Multi-Site Controls

These features are applicable when your current radio channel is part of an IP Site Connect or Capacity Plus--Multi-Site configuration.

Starting Manual Site Search

Follow the procedure to start manual site search when the received signal strength is poor in order to attempt to find a site with better signal. .

If the radio finds a new site:

- A positive indicator tone sounds.

If the radio fails to find a new site:

- A negative indicator tone sounds.

Site Lock On/Off

When toggled on, the radio searches the current site only. When toggled off, the radio searches other sites in addition to the current site.

Press the programmed **Site Lock** button.

If the **Site Lock** function is toggled on:

- You hear a positive indicator tone, indicating the radio has locked to the current site.
- The display shows `Site Locked`.

If the **Site Lock** function is toggled off:

- You hear a negative indicator tone, indicating the radio is unlocked.
- The display shows `Site Unlocked`.

Accessing Neighbor Sites List

This feature allows the user to check the adjacent sites list of the current home site. Follow the procedure to access the Neighbor Sites List:

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`.Press OK to select.

3 Press ▲ or ▼ to `Radio Info`. Press OK to select.

4 Press ▲ or ▼ to `Neighbor Sites`. Press OK to select.

Security

This feature allows you to enable or disable any radio in the system. For example, you may want to disable a stolen radio to prevent unauthorized users from using it, and enable the radio when it is recovered.

You can enable or disable a radio by using one of these features:

- Programmable Button
- Contacts List
- Manual Dial (via Contacts)

You will not receive an acknowledgment if you press during Radio Enable or Radio Disable operation.

Note:
Check with your dealer or system administrator for more information.

Disabling Radios

Follow the procedure to disable your radio.

1 Press the programmed **Radio Disable** button.

2 Press or to the required alias or ID.

Press OK to select.
The display shows a transitional mini notice, indicating the request is in progress. The green LED blinks.

3 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Disabling Radios by Using the Contacts List

Follow the procedure to disable your radio by using the Contacts list.

1 Press OK to access the menu.

2 Press or to `Contacts`. Press OK to select.

3 Press or to the required alias or ID.

Press OK to select.

4 Press or to `Radio Disable`. Press OK to select.
The display shows a transitional mini notice, indicating the request is in progress. The green LED blinks.

5 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.

- The display shows a positive mini notice.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Disabling Radios by Using the Manual Dial

Follow the procedure to disable your radio by using the manual dial.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to `Manual Dial`. Press OK to select.

4 Press ▲ or ▼ to `Radio Number`. Press OK to select.
The first text line shows `Radio Number:`.

5 Enter the subscriber ID, and press OK to proceed.

6 Press ▲ or ▼ to `Radio Disable`. Press OK to select.
The display shows a transitional mini notice, indicating the request is in progress. The green LED blinks.

7 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Enabling Radios

Follow the procedure to enable your radio.

1 Press the programmed **Radio Enable** button.

2 Press ▲ or ▼ to the required alias or ID.

Press OK to select.
The display shows `Radio Enable` and the subscriber alias or ID. The green LED lights up.

3 Wait for acknowledgment.
If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.

Enabling Radios by Using the Contacts List
Follow the procedure to enable your radio by using the Contacts list.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID.

Press OK to select.

4 Press ▲ or ▼ to `Radio Enable`. Press OK to select.
The green LED blinks.

The display shows `Radio Enable` and the subscriber alias or ID. The green LED lights up.

5 Wait for acknowledgment.
If successful:

- A tone sounds.
- The display shows `Radio Enable Successful`.

If unsuccessful:

- A tone sounds.
- The display shows `Radio Enable Failed`.

Enabling Radios by Using the Manual Dial

Follow the procedure to enable your radio by using the manual dial.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Contacts`. Press OK to select.

3 Press ▲ or ▼ to `Manual Dial`. Press OK to select.

4 Press ▲ or ▼ to `Private Call`. Press OK to select.
The first text line shows `Radio Number:`.

5 Enter the subscriber ID, and press OK to proceed.

6 Press ▲ or ▼ to `Radio Enable`. Press OK to select.
The green LED blinks.

The display shows `Radio Enable` and the subscriber alias or ID. The green LED lights up.

7 Wait for acknowledgment.
If successful:

- A tone sounds.
- The display shows `Radio Enable Successful`.

If unsuccessful:

- A tone sounds.
- The display shows `Radio Enable Failed`.

Lone Worker

This feature prompts an emergency to be raised if there is no user activity, such as any radio button press or activation of the channel selector, for a predefined time.

Following no user activity for a programmed duration, the radio pre-warns the user via an audio indicator once the inactivity timer expires.

If there is still no acknowledgment by the user before the predefined reminder timer expires, the radio initiates an Emergency Alarm.

Only one of the following Emergency Alarms is assigned to this feature:

- Emergency Alarm
- Emergency Alarm with Call
- Emergency Alarm with Voice to Follow

The radio remains in the emergency state, allowing voice messages to proceed until action is taken. See *Emergency Operation* on page 317 for more information on ways to exit Emergency.

Note:
This feature is limited to radios with this function enabled. Check with your dealer or system administrator for more information.

Bluetooth

This feature allows you to use your radio with a Bluetooth-enabled device (accessory) via a Bluetooth connection. Your radio supports both Motorola and COTS (Commercially available Off-The-Shelf) Bluetooth-enabled devices.

Bluetooth operates within a range of 10 meters (32 feet) line of sight. This is an unobstructed path between your radio and your Bluetooth-enabled device. It is not recommended that you leave your radio behind and expect your Bluetooth-enabled device to work with a high degree of reliability when they are separated.

At the fringe areas of reception, both voice and tone quality will start to sound "garbled" or "broken". To correct this problem, simply position your radio and Bluetooth-enabled device closer to each other (within the 10-meter defined range) to re-establish clear audio reception. The Bluetooth function of your radio has a maximum power of 2.5 mW (4 dBm) at the 10-meter range.

Your radio can support up to three simultaneous Bluetooth connections with Bluetooth-enabled devices of unique types. For example, a headset, a scanner, and a PTT-Only Device (POD). Multiple connections with Bluetooth-enabled devices of the same type are not supported.

Refer to the user manual of your respective Bluetooth-enabled device for more details on the full capabilities of your Bluetooth-enabled device.

Note:
If disabled via the CPS, all Bluetooth-related features are disabled and the Bluetooth device database is erased.

Turning Bluetooth On and Off

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Bluetooth`. Press OK to select.

3 Press ▲ or ▼ to `My Status`. Press OK to select.
The display shows `On` and `Off`. The current status is indicated by a ✓.

4 Do one of the following:

- Press ▲ or ▼ to `On`. Press OK to select. The display shows ✓ beside `On`.
- Press ▲ or ▼ to `Off`. Press OK to select. The display shows ✓ beside `Off`.

Connecting to Bluetooth Devices

Turn on your Bluetooth-enabled device and place it in pairing mode.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Bluetooth`. Press OK to select.

3 Press ▲ or ▼ to `Devices`. Press OK to select.

4 Do one of the following:

- Press ▲ or ▼ to the required device. Press OK to select.
- Press ▲ or ▼ to `Find Devices` to locate available devices. Press ▲ or ▼ to the required device. Press OK to select.

5 Press ▲ or ▼ to `Connect`. Press OK to select.
Your Bluetooth-enabled device may require additional steps to complete the pairing. Refer to the user manual of your Bluetooth-enabled device.

The display shows `Connecting to <Device>`.

Wait for acknowledgment.

If successful:

- A positive indicator tone sounds.
- The display shows `<Device> Connected` and the **Bluetooth Connected** icon.
- The display shows ✓ beside the connected device.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows `Connecting Failed`.

Note:
If pin code is required, refer *Accessing Radios by Using Passwords* on page 120.

Connecting to Bluetooth Devices in Discoverable Mode

Turn on your Bluetooth-enabled device and place it in pairing mode.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Bluetooth`. Press OK to select.

3 Press ▲ or ▼ to `Find Me`. Press OK to select. The radio can now be found by other Bluetooth-enabled devices for a programmed duration. This is called Discoverable Mode.

Wait for acknowledgment.

If successful:

- A positive indicator tone sounds.
- The display shows `<Device> Connected` and the **Bluetooth Connected** icon.
- The display shows ✓ beside the connected device.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows `Connecting Failed`.

Disconnecting from Bluetooth Devices

1 Press OK to access the menu.

2 Press ▲ or ▼ to Bluetooth. Press OK to select.

3 Press ▲ or ▼ to Devices. Press OK to select.

4 Press ▲ or ▼ to the required device. Press OK to select.

5 Press ▲ or ▼ to Disconnect. Press OK to select.
The display shows Disconnecting from <Device>.

Note:
Your Bluetooth-enabled device may require additional steps to disconnect. Refer to respective user manuals of any Bluetooth-enabled devices.

Wait for acknowledgment.

- A tone sounds.
- The display shows <Device> Disconnected and the **Bluetooth Connected** icon disappears.
- The ✓ disappears beside the connected device.

Switching Audio Route between Internal Radio Speaker and Bluetooth Device

Follow the procedure to toggle audio routing between internal radio speaker and external Bluetooth device.

Press the programmed **Bluetooth Audio Switch** button.

The display shows one of the following results:

- A tone sounds. The display shows Route Audio to Radio.
- A tone sounds. The display shows Route Audio to Bluetooth.

Viewing Device Details

Follow the procedure to view the device details on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Bluetooth. Press OK to select.

3 Press ▲ or ▼ to Devices. Press OK to select.

4 Press ▲ or ▼ to the required device. Press OK to select.

5 Press ▲ or ▼ to View Details. Press OK to select.

Deleting Device Name

You can remove a disconnected device from the list of Bluetooth-enabled devices.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Bluetooth. Press OK to select.

3 Press ▲ or ▼ to Devices. Press OK to select.

4 Press ▲ or ▼ to the required device. Press OK to select.

5 Press ▲ or ▼ to Delete. Press OK to select. The display shows Device Deleted.

Bluetooth Mic Gain

This feature allows the user to control the microphone gain value of the connected Bluetooth-enabled device.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Bluetooth. Press OK to select.

3 Press ▲ or ▼ to BT Mic Gain. Press OK to select.

4 Press ▲ or ▼ to the BT Mic Gain type and the current values. Press OK to select. You can edit the values here.

5 Press ▲ or ▼ to increase or to decrease values. Press OK to select.

Indoor Location

Note:
Indoor Location feature is applicable for models with the latest software and hardware. Check with your dealer or system administrator for more information.

Indoor Location can be used to keep track of radio users location while indoors. When Indoor Location is activated, the radio is in a limited discoverable mode. Dedicated beacons are used to locate the radio and determine its position.

Turning Indoor Location On or Off

You can turn on or turn off Indoor Location by performing one of the following actions.

- Access this feature via the menu.
  a) Press OK to access the menu.
  a) Press ▲ or ▼ to `Bluetooth` and press OK to select.
  a) Press ▲ or ▼ to `Indoor Location` and press OK to select.
  b) Press OK to turn on Indoor Location. The display shows `Indoor Location On`. You hear a good key tone.

  One of the following scenarios occurs.

  - If successful, the Indoor Location Available icon appears on the Home screen display.
  - If unsuccessful, the display shows `Turning On Failed`. You hear a bad key tone.

  c) Press OK to turn off Indoor Location. The display shows `Indoor Location Off`. You hear a good key tone.

  One of the following scenarios occurs.

  - If successful, the Indoor Location Available icon disappears on the Home screen display.

- If unsuccessful, the display shows `Turning Off Failed`. You hear a bad key tone.

- Access this feature via the programmed button.
  a) Long press the programmed **Indoor Location** button to turn on Indoor Location.
  The display shows `Indoor Location On`. You hear a positive tone.

  One of the following scenarios occurs.

  - If successful, the Indoor Location Available icon appears on the Home screen display.
  - If unsuccessful, the display shows `Turning On Failed`. If unsuccessful, you hear a negative tone.

  b) Press the programmed **Indoor Location** button to turn off Indoor Location.
  The display shows `Indoor Location Off`.
  You hear a positive tone.

  One of the following scenarios occurs.

  - If successful, the Indoor Location Available icon disappears on the Home screen display.
  - If unsuccessful, the display shows `Turning Off Failed`. If unsuccessful, you hear a negative tone.

Accessing Indoor Location Beacons Information

Displays information on Indoor Location Beacons

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Bluetooth` and press OK to select.

3 Press ▲ or ▼ to `Indoor Location` and press OK to select.

4 Press ▲ or ▼ to `Beacons` and press OK to select.

The display shows the beacons information.

Notification List

Your radio has a Notification list that collects all your unread events on the channel, such as unread text messages, telegrams, missed calls and call alerts.

The display shows the **Notification** icon when the Notification list has one or more events.

For text messaging and missed call/call alert notification events, the maximum number are 30 text messages and 10 missed calls/call alerts. This maximum number depends on individual feature (job tickets or text messages or missed calls/ call alerts) list capability.

Accessing Notification List

Follow the procedure to access the Notification list on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Notification`. Press OK to select.

3 Press ▲ or ▼ to the required event. Press OK to select.

4 Long press ↩ to return to the Home screen.

Auto-Range Transponder System

The Auto-Range Transponder System (ARTS) is an analog-only feature designed to inform you when your radio is out-of-range of other ARTS-equipped radios.

ARTS-equipped radios transmit or receive signals periodically to confirm that they are within range of each other.

Your radio provides indications of states as follows:

First-Time Alert	A tone sounds. The display shows `In Range` after the channel alias.
ARTS-in-Range Alert	A tone sounds, if programmed. The display shows `In Range` after the channel alias.

ARTS-Out-of-Range Alert	A tone sounds. The red LED rapidly blinks. The display shows `Out of Range` alternating with the Home screen.

Note:
Check with your dealer or system administrator for more information.

Over-the-Air Programming

Your dealer can remotely update your radio via Over-the-Air Programming (OTAP) without physical connection. Additionally, some settings can also be configured via OTAP.

When your radio undergoes OTAP, the green LED blinks.

When your radio receives high volume data:

- The display shows the **High Volume Data** icon.
- The channel becomes busy.
- A negative tone sounds if you press the **PTT** button.

When OTAP completes, depending on the configuration:

- A tone sounds. The display shows `Updating Restarting`. Your radio restarts by powering off and on again.
- You can select `Restart Now` or `Postpone`. When you select `Postpone`, your radio returns to the previous screen. The display shows the **OTAP Delay Timer** icon until the automatic restart occurs.

When your radio powers up after automatic restart:

- If successful, the display shows `Sw Update Completed`.
- If unsuccessful, the display shows `Sw Update Failed`.

See *Checking Software Update Information* on page 146 for the updated software version.

Transmit Inhibit

Transmit inhibit feature allow users to block all transmission from the radio.

Note:
Bluetooth and Wi-Fi features are available in Transmit Inhibit mode.

Selecting Third-Party Peripherals Connection Modes

Follow the procedure to select one of the following third-party peripherals connection modes:

- Motorola
- PC and Audio
- Data Accessory
- Telemetry
- Generic

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`.Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`.Press OK to select.

4 Press ▲ or ▼ to `Cable Type`. Press OK to select.

5 Press ▲ or ▼ to the required connection mode. Press OK to select.

The display shows the selected connection mode. The screen returns to the previous menu.

Received Signal Strength Indicator

This feature allows you to view the Received Signal Strength Indicator (RSSI) values.

The display shows the RSSI icon at the top right corner. See *Display Icons* on page 256 for more information on the RSSI icon.

Viewing RSSI Values

Follow the procedure to view RSSI values on your radio.

When you are at the Home screen:

Long press ↩ to return to the Home screen.

Password Lock Features

This feature allows you to restrict access to the radio by asking for a password when the device is turned on

You can use a keypad microphone or **Scroll Up/ Down** buttons to enter the password.

Accessing Radios by Using Passwords

Follow the procedure to access your radio by using a password.

1 Enter the current four-digit password.

The use of **Emergency** footswitch cancels out password input to access the radio.

- Use a keypad microphone.
- Press ▲ or ▼ to edit the numeric value of each digit, and press OK to enter and move to the next digit.

2 Press OK to enter the password.
If successful, the radio powers up.

If unsuccessful:

- After the first and second attempt, the display shows `Wrong Password`. Repeat Step *1*.
- After the third attempt, the display shows `Wrong Password` and then, `Radio Locked`. A tone sounds. The yellow LED double blinks. Your radio enters into locked state for 15 minutes.

Note:
In locked state, your radio responds to inputs from **On/Off/Volume Control Knob** and programmed **Backlight** button only.

Unlocking Radios in Locked State

Your radio is unable to receive any call, including emergency calls, in locked state. Follow the procedure to unlock your radio in locked state.

1 Power up the radio.

Your radio restarts the 15-minutes timer for locked state.

2 Wait for 15 minutes.

Your radio responds only to **On/Off** button in locked state.

3 Repeat the steps in *Accessing Radios by Using Passwords* on page 120 to access the radio.

Turning Password Lock On or Off

Follow the procedure to turn password lock on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Passwd Lock. Press OK to select.

5 Enter the current four-digit password.

- Use a keypad microphone.
- Press ▲ or ▼ to edit the numeric value of each digit, and press OK to enter and move to the next digit.

  A positive indicator tone sounds for every digit pressed.

6 Press OK to enter the password.

If the password is incorrect, the display shows Wrong Password and automatically returns to the previous menu.

7 Do one of the following:

- Press ▲ or ▼ to Turn On. Press OK to select.

  The display shows ✓ beside Turn On.
- Press ▲ or ▼ to Turn Off. Press OK to select.

  The display shows ✓ beside Turn Off.

Changing Passwords

Follow the procedure to change passwords on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Passwd Lock. Press OK to select.

5 Enter the current four-digit password, and press OK to proceed.
If the password is incorrect, the display shows Wrong Password and automatically returns to the previous menu.

6 Press ▲ or ▼ to Change PWD. Press OK to select.

7 Enter a new four-digit password, and press OK to proceed.

8 Re-enter the new four-digit password, and press OK to proceed.
If successful, the display shows Password Changed.
If unsuccessful, the display shows Passwords Do Not Match.
The screen automatically returns to the previous menu.

Front Panel Configuration

You are able to customize certain feature parameters in Front Panel Configuration (FPC) to enhance the use of your radio.

Entering Front Panel Configuration Mode

Follow the procedure to enter front panel programming mode on your radio.

Long press ⌂ at any time to return to the Home screen.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Program Radio. Press OK to select.

Editing FPC Mode Parameters

Use the following buttons as required while navigating through the feature parameters.

- , – Scroll through options, increase/decrease values, or navigate vertically.
- OK – Select the option or enter a sub-menu.
- – Short-press to return to previous menu or to exit the selection screen. Long-press to return to Home screen.

Wi-Fi Operation

Wi-Fi® is a registered trademark of Wi-Fi Alliance®.

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

This feature allows you to setup and connect to a Wi-Fi® network. Wi-Fi supports updates for radio firmware, codeplug, and resources such as language packs and voice announcement.

Turning Wi-Fi On or Off

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

The programmed **Wi-Fi On or Off** button is assigned by your dealer or system administrator. Check with your dealer or system administrator to determine how your radio has been programmed.

You can turn on or turn off Wi-Fi® by performing one of the following actions.

- Press the programmed **Wi-Fi On or Off** button. Voice Announcement sounds Turning On Wi-Fi or Turning Off Wi-Fi.

- Access this feature via the menu.
  a) Press OK to access the menu.
  b) Press or to `WiFi` and press OK to select.
  c) Press or to `WiFi Status` and press OK to select.

Press OK to turn on Wi-Fi. The display shows ✓ beside Enabled.

Press OK to turn off Wi-Fi. The ✓ disappears from beside Enabled.

Connecting to a Network Access Point

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

When you turn on Wi-Fi®, the radio scans and connects to a network access point.

You can also connect to a network access point via the menu.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `WiFi` and press OK to select.

3 Press ▲ or ▼ to `Networks` and press OK to select.

4 Press ▲ or ▼ to a network access point and press OK to select.

5 Press ▲ or ▼ to `Connect` and press OK to select.

6 Enter the password and press OK.
When the connection is successful, the radio displays a notice and the network access point is saved into the profile list.

Refreshing the Network List

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

- Perform the following actions to refresh the network list.
  a) Press OK to access the menu.
  b) Press ▲ or ▼ to `WiFi` and press OK to select.

c) Press ▲ or ▼ to Networks and press OK to select.
When you enter the Networks menu, the radio automatically refreshes the network list.

- If you are already in the Networks menu, perform the following action to refresh the network list.

  a) Press ▲ or ▼ to Refresh and press OK to select.

  The radio refreshes and displays the latest network list.

Adding a Network

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

If a preferred network is not in the available network list, perform the following actions to add a network.

1 Press OK to access the menu.

2 Press ▲ or ▼ to WiFi and press OK to select.

3 Press ▲ or ▼ to Networks and press OK to select.

4 Press ▲ or ▼ to Add Network and press OK to select.

5 Enter the Service Set Identifier (SSID) and press OK.

6 Press ▲ or ▼ to Open and press OK to select.

7 Enter the password and press OK.

The radio displays ✓ to indicate that the network is successfully saved.

Viewing Details of Network Access Points

Note:
This feature is applicable to XPR 5550e/XPR 5580e only.

Perform the following actions to view details of network access points.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `WiFi` and press OK to select.
3. Press ▲ or ▼ to `Networks` and press OK to select.
4. Press ▲ or ▼ to a network access point and press OK to select.
5. Press ▲ or ▼ to `View Details` and press OK to select.

   For a connected network access point, the Service Set Identifier (SSID), Security Mode, Media Access Control (MAC) address, and Internet Protocol (IP) address are displayed.

   For a non-connected network access point, the Service Set Identifier (SSID) and Security Mode are displayed.

Removing Network Access Points

Note:
This feature is applicable to XPR 5550e/XPR 5580e only. Enterprise network access points that are added via CPS can only be removed via CPS.

Perform the following actions to remove network access points from the profile list.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `WiFi` and press OK to select.
3. Press ▲ or ▼ to `Networks` and press OK to select.

4 Press ▲ or ▼ to the selected network access point and press OK to select.

5 Press ▲ or ▼ to Remove and press OK to select.

6 Press ▲ or ▼ to Yes and press OK to select.

The radio displays to indicate that the selected network access point is successfully removed.

Utilities

This chapter explains the operations of the utility functions available in your radio.

Squelch Levels

You can adjust the squelch level to filter out unwanted calls with low signal strength or channels with a higher than normal background noise.

Normal This is the default setting.

Tight This setting filters out unwanted calls and/or background noise. Calls from remote locations may also be filtered out.

Note:
This feature is not applicable in Citizens Band channels that are in the same frequency.

Setting Squelch Levels

Follow the procedure to set the squelch levels on your radio.

1 Do one of the following:

- Press the programmed **Squelch** button. Skip the following steps.
- Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Squelch. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to Normal. Press OK to select.

  The display shows ✓ beside Normal.
- Press ▲ or ▼ to Tight. Press OK to select.

  The display shows ✓ beside Tight.

The screen automatically returns to the previous menu.

Power Levels

You can customize the power setting to high or low for each channel.

High This enables communication with radios located at a considerable distance from you.

Low This enables communication with radios in closer proximity.

Note:
This feature is not applicable in Citizens Band channels that are in the same frequency.

Setting Power Levels

Follow the procedure to set the power levels on your radio.

1 Do one of the following:

- Press the programmed **Power Level** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Power. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to High. Press OK to select.

  The display shows ✓ beside High.
- Press ▲ or ▼ to Low. Press OK to select.

  The display shows ✓ beside Low.

6 Long press ⌂ to return to the Home screen.

Turning Radio Tones/Alerts On or Off

You can enable and disable all radio tones and alerts, if needed, except for incoming Emergency alert tone. Follow the procedure to turn tones and alerts on or off on your radio.

1 Do one of the following:

- Press the programmed **Tones/Alerts** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alerts. Press OK to select.

5 Press ▲ or ▼ to All Tones. Press OK to select.

6 Press OK to enable or disable all tones and alerts.

If enabled ✓ appears besides Enabled.

If disabled, ✓ disappears beside Enabled.

Turning Keypad Tones On or Off

Follow the procedure to turn keypad tones on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alerts. Press OK to select.

5 Press ▲ or ▼ to Keypad Tones. Press OK to select.

6 Press OK to enable or disable keypad tones. The display shows one of the following results:

- If enabled ✓ appears besides Enabled.
- If disabled, ✓ disappears beside Enabled.

Setting Tones/Alerts Volume Offset Levels

This feature adjusts the volume of the tones or alerts, allowing it to be higher or lower than the voice volume. Follow the procedure to set the tones and alerts volume offset levels on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Tones/Alerts. Press OK to select.

5 Press ▲ or ▼ to Vol. Offset. Press OK to select.

6 Press ▲ or ▼ to the required volume offset level.
A feedback tone sounds with each corresponding volume offset level.

7 Do one of the following:

- Press OK to select. The required volume offset level is saved.

- Press ⮌ to exit. The changes are discarded.

Turning Talk Permit Tone On or Off

Follow the procedure to turn Talk Permit Tone on or off on your radio.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Utilities`. Press OK to select.
3. Press ▲ or ▼ to `Radio Settings`. Press OK to select.
4. Press ▲ or ▼ to `Tones/Alerts`. Press OK to select.
5. Press ▲ or ▼ to `Talk Permit`. Press OK to select.
6. Press OK to enable or disable the Talk Permit Tone.

   The display shows one of the following results:

   - If enabled ✓ appears besides `Enabled`.
   - If disabled, ✓ disappears beside `Enabled`.

Turning Power Up Tone On or Off

Follow the procedure to turn Power Up Tone on or off on your radio.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Utilities`. Press OK to select.
3. Press ▲ or ▼ to `Radio Settings`. Press OK to select.
4. Press ▲ or ▼ to `Tones/Alerts`. Press OK to select.

5 Press ▲ or ▼ to Power Up. Press OK to select.

6 Press OK to enable or disable the Power Up Tone.
If enabled ✓ appears besides Enabled.

If disabled, ✓ disappears beside Enabled.

Setting Text Message Alert Tones

You can customize the text message alert tone to Momentary or Repetitive for each entry in the Contacts list. Follow the procedure to set the text message alert tones on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Contacts. Press OK to select.

3 Press ▲ or ▼ to the required alias or ID.

Press OK to select.

4 Press ▲ or ▼ to Message Alert. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to Momentary. Press OK to select.

  The display shows ✓ beside Momentary.
- Press ▲ or ▼ to Repetitive. Press OK to select.

  The display shows ✓ beside Repetitive.

Changing Display Modes

You can change the display mode of the radio between Day or Night, as needed. This feature affects the color palette of the display. Follow the procedure to change the display mode of your radio.

1 Do one of the following:

- Press the programmed **Display Mode** button. Skip the following steps.

- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`.Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Display`. Press OK to select.
The display shows `Day Mode` and `Night Mode`.

5 Press ▲ or ▼ to the required setting. Press OK to select.
The display shows ✓ beside the selected setting.

Adjusting Display Brightness

Follow the procedure to adjust the display brightness on your radio. Display brightness cannot be adjusted when Auto Brightness is enabled.

1 Do one of the following:

- Press the programmed **Brightness** button. Proceed to Step *5*.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Brightness`. Press OK to select.
The display shows the progress bar.

5 Press ▲ or ▼ to decrease or increase the display brightness. Press OK to select.
The setting value is varied from 1 to 8.

Turning Horns/Lights On or Off

Your radio is able to notify you of an incoming call via the horns and lights feature. When activated, an incoming call sounds the horn and turns on the lights of your vehicle. This feature needs to be installed

through your radio rear accessory connector by your dealer. Follow the procedure to turn all horns and lights on or off on your radio.

1 Do one of the following:

- Press the programmed **Horns/Lights** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Horns/Lights`. Press OK to select.

5 Press OK to enable or disable Horns/Lights. The display shows one of the following results:

- If enabled ✓ appears besides `Enabled`.
- If disabled, ✓ disappears beside `Enabled`.

Turning LED Indicators On or Off

Follow the procedure to turn the LED indicators on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `LED Indicator`. Press OK to select.

5 Press OK to enable or disable the LED indicator. The display shows one of the following results:

- If enabled ✓ appears besides `Enabled`.
- If disabled, ✓ disappears beside `Enabled`.

Turning Public Address System On or Off

Follow the procedure to enable or disable the internal public address (PA) system of your radio.

1 Do one of the following:

- Press the programmed **Public Address** button. Skip the following steps.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Public Address`. Press OK to select.

5 Press OK to enable or disable Public Address.

- If enabled ✓ appears besides `Enabled`.
- If disabled, ✓ disappears beside `Enabled`.

Turning External Public Address System On or Off

Follow the procedure to enable or disable the external public address (PA) system of your radio.

1 Do one of the following:

- Press the programmed **Ext Public Address** button. Skip the following steps.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `External Public Address`. Press OK to select.

5 Press OK to enable or disable external public address.

- If enabled ✓ appears besides `Enabled`.

- If disabled, ✓ disappears beside Enabled.

Turning Introduction Screen On or Off

You can enable and disable the Introduction Screen by following the procedure.

1. Press OK to access the menu.
2. Press ▲ or ▼ to Utilities. Press OK to select.
3. Press ▲ or ▼ to Radio Settings. Press OK to select.
4. ▲ or ▼ to Display. Press OK to select.
5. ▲ or ▼ to Intro Screen. Press OK to select.
6. Press OK to enable or disable the Introduction Screen.
   The display shows one of the following results:
   - If enabled ✓ appears besides Enabled.
   - If disabled, ✓ disappears beside Enabled.

Setting Languages

Follow the procedure to set the languages on your radio.

1. Press OK to access the menu.
2. Press ▲ or ▼ to Utilities. Press OK to select.
3. Press ▲ or ▼ to Radio Settings. Press OK to select.
4. Press ▲ or ▼ to Languages. Press OK to select.
5. Press ▲ or ▼ to the required language.
   Press OK to select.
   The display shows ✓ beside the selected language.

Identifying Cable Type

Do the following steps to select the type of cable your radio uses.

1. Press OK to access the menu.
2. Press ▲ or ▼ to `Utilities`. Press OK to select.
3. Press ▲ or ▼ to `Radio Settings`. Press OK to select.
4. Press ▲ or ▼ to `Cable Type`. Press OK to select.
5. The current cable type is indicated by a ✓.

Voice Operating Transmission

The Voice Operating Transmission (VOX) allows you to initiate a hands-free voice-activated call on a programmed channel. The radio automatically transmits, for a programmed period, whenever the microphone on the VOX-capable accessory detects voice.

Note:
This feature is not applicable in Citizens Band channels that are in the same frequency.

You can enable or disable VOX by doing one of the following:

- Press the **PTT** button during radio operation to disable VOX.
- Turn the radio off and then power it on again to enable VOX.
- Change the channel via the **Scroll Up/Down** buttons to enable VOX.
- Change the channel via the **Volume/Channel Knob**to enable VOX.
- Turn VOX on or off via the programmed **VOX** button or menu to enable or disable VOX.

If the Talk Permit Tone is enabled, use a trigger word to initiate the call. Wait for the Talk Permit Tone to finish before speaking clearly into the microphone. See for more information.

Note:
Turning this feature on or off is limited to radios with this function enabled. Check with your dealer or system administrator for more information.

Turning Voice Operating Transmission On or Off
Follow the procedure to turn Voice Operating Transmission (VOX) on or off on your radio.

1 Do one of the following:

- Press the programmed **VOX** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to VOX. Press OK to select.

5 Press OK to enable or disable **VOX**.

Turning Voice Announcement On or Off
This feature enables the radio to audibly indicate the current zone or channel the user has just assigned, or the programmable button the user has just pressed.

This is typically useful when the user has difficulty reading the content shown on the display. This audio indicator can be customized according to customer requirements.

Turning Option Board On or Off
Option board capabilities within each channel can be assigned to programmable buttons. A channel can support up to 6 option board features. Follow the procedure to turn option board on or off on your radio.

Press the programmed **Option Board** button.

Text-to-Speech
The Text-to-Speech feature can only be enabled by your dealer or system administrator. If Text-to-Speech is enabled, the Voice Announcement feature is automatically disabled. If Voice Announcement is enabled, then the Text-to-Speech feature is automatically disabled.

This feature enables the radio to audibly indicate the following features:

- Current Channel
- Current Zone
- Programmed button feature on or off
- Content of received text messages

- Content of received Job Tickets

This audio indicator can be customized per customer requirements. This feature is typically useful when the user is in a difficult condition to read the content shown on the display.

Setting Text-to-Speech
Follow the procedure to set the Text-to-Speech feature.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Voice Announcement`. Press OK to select.

5 Press ▲ or ▼ to any of the following features. Press OK to select.
The available features are as follows:

- `All`
- `Messages`
- `Job Tickets`
- `Channel`
- `Zone`
- `Program Button`

✓ appears beside the selected setting.

Turning Automatic Call Forwarding On or Off
You can enable your radio to automatically forward voice calls to another radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to Call Forward. Press OK to select.

4 Do one of the following:

- Press ▲ or ▼ to enable Call Forwarding. If enabled, ✓ appears beside Enabled.
- Press ▲ or ▼ to disable Call Forwarding. If disabled, ✓ disappears beside Enabled.

Setting Menu Timer

You can set the time your radio stays in the menu before it automatically switches to the Home screen. Follow the procedure to set the menu timer.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Display. Press OK to select.

5 Press ▲ or ▼ to Menu Timer. Press OK to select.

6 Press ▲ or ▼ to the required setting. Press OK to select.

Turning Analog Microphone AGC On or Off

The Analog Microphone Automatic Gain Control (AGC) controls the microphone gain of the radio automatically while transmitting on an analog system. This feature suppresses loud audio or boosts soft audio to a preset value in order to provide a consistent level of audio. Follow the procedure to turn Analog Microphone AGC on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Mic AGC-A. Press OK to select.

5 Press OK to enable or disable Analog Microphone AGC.
The display shows one of the following results:

- If enabled ✓ appears besides Enabled.
- If disabled, ✓ disappears beside Enabled.

Turning Digital Microphone AGC On or Off

The Digital Microphone Automatic Gain Control (AGC) controls the microphone gain of the radio automatically while transmitting on a digital system. This feature suppresses loud audio or boosts soft audio to a preset value in order to provide a consistent level of audio. Follow the procedure to turn Digital Microphone AGC on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Mic AGC-D. Press OK to select.

5 Press OK to enable or disable Digital Microphone AGC.
The display shows one of the following results:

- If enabled ✓ appears besides Enabled.
- If disabled, ✓ disappears beside Enabled.

Turning Intelligent Audio On or Off

Your radio automatically adjusts the audio volume to overcome current background noise in the environment, inclusive of both stationary and non-stationary noise sources. This is a receive-only feature and does not affect transmission audio.

Follow the procedure to turn Intelligent Audio on or off on your radio.

Note:
This feature is not applicable during a Bluetooth session.

1 Do one of the following:

- Press the programmed **Intelligent Audio** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Intelligent Audio`. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to `On`. Press OK to select. The display shows ✓ beside `On`.
- Press ▲ or ▼ to `Off`. Press OK to select. The display shows ✓ beside `Off`.

Turning the Acoustic Feedback Suppressor Feature On or Off

This feature allows you to minimize Acoustic Feedback Suppressor in received calls. Follow the procedure to turn the Acoustic Feedback Suppressor on or off on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select..

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `AF Suppressor`. Press OK to select.

5 Do one of the following:

- Press to enable Acoustic Feedback Suppressor. If enabled ✓ appears besides `Enabled`.
- Press to disable Acoustic Feedback Suppressor. If disabled, ✓ disappears beside `Enabled`.

Turning Trill Enhancement On or Off

You can enable this feature when you are speaking in a language that contains many words with alveolar trill (rolling “R”) pronunciations. Follow the procedure to turn Trill Enhancement on or off on your radio.

1 Do one of the following:

- Press the programmed **Trill Enhancement** button. Skip the steps below.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Settings`. Press OK to select.

4 Press ▲ or ▼ to `Trill Enhance`. Press OK to select.

5 Do one of the following:

- Press ▲ or ▼ to `On`. Press OK to select. The display shows ✓ beside `On`.
- Press ▲ or ▼ to `Off`. Press OK to select. The display shows ✓ beside `Off`.

Audio Ambience

You can customize the audio ambience for your radio according to your environment.

Default	This is the default setting.
Loud	This setting enables Noise Suppressor and increases speaker loudness for use in noisy surroundings.

Work Group	This setting enables AF Suppressor and disables AGC for use when a group of radios are near to each other.

Setting Audio Ambience

Follow the procedure to set the audio ambience on your radio according to your environment.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Audio Ambience. Press OK to select.

5 Press ▲ or ▼ to the required setting. Press OK to select.

The settings are as follows.

- Choose Default for the default factory settings.
- Choose Loud to increase speaker loudness when using in noisy surroundings.
- Choose Work Group to reduce acoustic feedback when using with a group of radios that are near to each other.

The display shows ✓ beside the selected setting.

Audio Profiles

You can customize the audio profiles for your radio according to your preference.

Default	This is the default setting.
Level 1, Level 2, and Level 3	These settings are intended to compensate for noise-induced hearing loss that is typical for adults in their 40’s, 50’s, and 60’s or over.
Treble Boost, Mid Boost, and Bass Boost	These settings are intended for a tinnier sound, a more nasal sound, and a deeper sound.

Setting Audio Profiles

Follow the procedure to set audio profiles on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Settings. Press OK to select.

4 Press ▲ or ▼ to Audio Profiles. Press OK to select.

5 Press ▲ or ▼ to the required setting. Press OK to select.

The settings are as follows.

- Choose Default to disable the previously selected audio profile and return to the default factory settings.
- Choose Level 1, Level 2, or Level 3 for audio profiles intended to compensate for noise-induced hearing loss that is typical for adults over 40 years of age.
- Choose Treble Boost, Mid Boost, or Bass Boost for audio profiles that align with your preference for tinnier, more nasal, or deeper sounds.

- Default
- Level 1, Level 2, or Level 3
- Treble Boost, Mid Boost, or Bass Boost

The display shows ✓ beside the selected setting.

Turning the Global Positioning System (GPS) On or Off

Global Positioning System (GPS) is a satellite navigation system that determines the radio's precise location. Follow the procedure to turn GPS on or off on your radio.

Press the programmed **GPS** button to toggle the feature on or off.

Flexible Receive List

Flexible Receive List is a feature that allows you to create and assign members on the receive talkgroup list. Your radio can support a maximum of 16 members in the list. This feature is supported in Capacity Plus.

Turning Flexible Receive List On or Off

Follow the procedure to turn Flexible Receive List on or off.

1 Do one of the following:

- Press the programmed **Flexible Receive List** button. Skip the following steps.
- Press OK to access the menu.

2 Press ▲ or ▼ to `Flexible Rx List`.

Press OK to select.

3 Do one of the following:

- Press ▲ or ▼ to `Turn On`. Press OK to select.

  A positive indicator tone sounds.

  The display shows a positive mini notice.

- Press ▲ or ▼ to `Turn Off`. Press OK to select.

  A negative indicator tone sounds.

  The display shows a negative mini notice.

General Radio Information

Your radio contains information on various general parameters.

The general information of your radio are as follows.

- Radio alias and ID.
- Firmware and Codeplug versions.
- Software update.
- GPS information.
- Site information.

Note:
You return to the previous screen when you press ↩, and to the Home screen when you long press ↩, at any time. The radio exits the current screen once the inactivity timer expires.

Checking Radio Alias and ID

Follow the procedure to check the radio alias and ID on your radio.

1 Do one of the following:

- Press the programmed **Radio Alias and ID** button. Skip the steps below.

  A positive indicator tone sounds.

- Press OK to access the menu.

You can press the programmed **Radio Alias and ID** button to return to the previous screen.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Info`. Press OK to select.

4 Press ▲ or ▼ to `My ID`. Press OK to select.
The first text line shows the radio alias. The second text line shows the radio ID.

Checking Firmware and Codeplug Versions

Follow the procedure to check the firmware and codeplug versions on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to `Utilities`. Press OK to select.

3 Press ▲ or ▼ to `Radio Info`. Press OK to select.

4 Press ▲ or ▼ to `Versions`. Press OK to select.
The display shows the current firmware and codeplug versions.

Checking Software Update Information

This feature shows the date and time of the latest software update carried out via OTAP or Wi-Fi. Follow the procedure to check the software update information on your radio.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Info. Press OK to select.

4 Press ▲ or ▼ to SW Update. Press OK to select.
The display shows the date and time of the latest software update.

Software Update menu is only available after at least one successful OTAP or Wi-Fi session. See *Over-the-Air Programming* on page 362 for more information.

Checking GPS/GNSS Information

Displays the GPS/GNSS information on your radio, such as values of:

- Latitude
- Longitude
- Altitude
- Direction
- Velocity
- Horizontal Dilution of Precision (HDOP)
- Satellites
- Version

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 ▲ or ▼ to Radio Info. Press OK to select.

4 ▲ or ▼ to GPS Info. Press OK to select.

5 ▲ or ▼ to the required item. Press OK to select. The display shows the requested GPS/GNSS information.

Displaying Site Information

Follow the procedure to display the current Linked Capacity Plus site name your radio is on.

1 Press OK to access the menu.

2 Press ▲ or ▼ to Utilities. Press OK to select.

3 Press ▲ or ▼ to Radio Info. Press OK to select.

4 Press ▲ or ▼ to Site Info. Press OK to select.

The display shows the current site name of Capacity Plus-Multi-Site.

Authorized Accessories List

Authorized Accessories List

Antennas

- VHF, 136 – 144 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAD4006_)
- VHF, 146 – 150.8 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAD4007_)
- VHF, 150.8 – 162 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAD4008_)
- VHF, 162 – 174 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAD4009_)
- UHF, 403 – 430 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAE4002_)
- UHF, 450 – 470 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAE4003_)
- UHF, 470 – 527 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAE4004_)
- UHF, 406 – 420 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (HAE4010_)
- UHF, 450 – 470 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (HAE4011_)
- UHF, 470 – 494 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (HAE4012_)
- UHF, 494 – 512 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (HAE4013_)
- Fixed Mount GPS Active Antenna (PMAN4000_)
- Window Mount GPS Active Antenna (PMAN4001_)
- Magnetic Mount GPS Active Antenna (PMAN4002_)
- Combination GPS+RF, Base Only, Through-hole Mount, Mini-U (PMAN4004_)
- UHF, 403 – 527 MHz, 2.0 dB Gain, Through-Hole Mount, Mini-U (HAE6022_)
- Combination GPS+RF, 806 – 941 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAF4029_)
- Combination GPS+RF, 806 – 941 MHz, 3.0 dB Gain, Through-Hole Mount, Mini-U (HAF4030_)
- Combination GPS+RF, 806 – 941 MHz, 5.0 dB Gain, Through-Hole Mount, Mini-U (HAF4032_)
- Combination GPS+RF, 806 – 941 MHz, 5.0 dB Gain, Through-Hole Mount, Mini-U (HAF4033_)
- UHF, 445 – 470 MHz, 5.0 dB Gain, Through-Hole Moun, Mini-U (with base) (RAE4004_RB)
- UHF, 445 – 470 MHz, 5.0 dB Gain, Through-Hole Mount, Mini-U (without base) (RAE4004_)
- Combination GPS/VHF, 136 – 144 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (RAD4214_)

- Combination GPS/VHF, 146 – 150.8 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (RAD4215_)
- Combination GPS/VHF, 150.8 – 162 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (RAD4216_)
- Combination GPS/VHF, 162 – 174 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (RAD4217_)
- Combination GPS/VHF, 146 – 172 MHz, 3.0 dB Gain, Through-Hole Mount, Mini-U (RAD4218_)
- Combination GPS/UHF, 403 – 527 MHz, 2.0 dB Gain, Through-Hole Mount, Mini-U (HAE6019_)
- Combination GPS/UHF, 470 – 527 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAE6020_)
- Combination GPS/UHF, 470 – 494 MHz, 3.0 dB Gain, Through-Hole Mount, Mini-U (HAE6024_)
- Combination GPS/UHF, 494 – 512 MHz, 3.0 dB Gain, Through-Hole Mount, Mini-U (HAE6026_)
- Combination GPS/UHF, 403 – 430 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (PMAE4030_)
- Combination GPS/UHF, 450 – 470 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (PMAE4031_)
- Combination GPS/UHF, 406 – 420 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (PMAE4032_)
- Combination GPS/UHF, 450 – 470 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (PMAE4033_)
- Combination GPS/UHF, 450 – 470 MHz, 5.0 dB Gain, Through-Hole Mount, Mini-U (PMAE4034_)
- 800/900, 806 – 941 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAF4025_)
- 800/900, 806 – 941 MHz, 3.0dB Gain, Through-Hole Mount, Mini-U (HAF4026_)
- 800/900, 806 – 941 MHz, Stubby Antenna, Through-Hole Mount, Mini-U (HAF4013_)
- 800/900, 806 – 941 MHz, 5.0dB Gain, Through-Hole Mount, Mini-U (HAF4027_)

For use with base PMAN4004_ only:

- UHF, 403 – 430 MHz, 1/4 Wave (PMAE4039_)
- UHF, 450 – 470 MHz, 1/4 Wave (PMAE4041_)
- UHF, 406 – 420 MHz, 3.5 dB Gain (PMAE4040_)
- UHF, 450 – 470 MHz, 3.5 dB Gain (PMAE4042_)
- UHF, 450 – 470 MHz, 5.0 dB Gain (PMAE4043_)
- VHF, 162 – 174 MHz, 1/4 Wave (RAD4223_)
- VHF, 150.8 – 162 MHz, 1/4 Wave (RAD4224_)
- VHF, 146 – 150.8 MHz, 1/4 Wave (RAD4225_)
- VHF, 136 – 144 MHz, 1/4 Wave (RAD4226_)
- VHF, 146 – 172 MHz, 3.0 dB Gain (RAD4227_)
- UHF, 470 – 527 MHz, 1/4 Wave, Through-Hole Mount (HAE6030_)

- UHF, 403 – 527 MHz, 2.0 dB Gain, Through-Hole Mount (HAE6029_)
- UHF, 470 – 494 MHz, 3.0 dB Gain, Through-Hole Mount (HAE6028_)
- UHF, 494 – 512 MHz, 3.0 dB Gain, Through-Hole Mount (HAE6027_)

Audio

- Telephone Style Handset (HMN4098_)
- Desktop Microphone (RMN5050_)
- Compact Microphone (RMN5052_)
- IMPRES 4-Way Navigation Keypad Microphone (RMN5127_)
- Heavy Duty Microphone with Enhanced Audio (RMN5053_)
- Visor Microphone with Enhanced Audio (RMN5054_)
- Operations Critical Wireless Earpiece, 12” Cable (NNTN8125_)
- Operations Critical Wireless Push-to-Talk POD (NNTN8127_)
- Non-Secure Wireless Headset & Push-to-Talk Device with Push-to-Talk Audio, 12-Inch Cable (NNTN8189_)
- Bluetooth Accessory Kit, SP, 9.5” Cable (NNTN8190_)
- Operations Critical Wireless Earpiece, 9.5” Cable (NNTN8126_)
- Wireless Covert Kit, includes two sets of 2-Wire Earbuds (1 Black and 1 White), 1-Wire Earbud (Black), and a 3.5 mm Adapter to plug into any off-the-shelf headphones (NNTN8296_) [11]
- Wireless Neckloop Y-adapter and retention hook for Completely Discreet Kit (NNTN8385_) [11]
- HK200 Bluetooth Headset (89409N)
- Compact Microphone Replacement Cable (3075336B07)
- Heavy Duty/Keypad Microphone Replacement Cable (3075336B10)
- Completely Discreet Earpiece Kit (RLN4922_) [11]
- XBT Behind-the-Neck, Non-Secure Wireless Heavy Duty Headset (RLN6490_)
- XBT Overhead, Non-Secure Wireless Heavy Duty Headset (RLN6491_)
- MOTOTRBO Bluetooth Accessory Kit with NA Power Supply (RLN6500_)
- Swivel Earpiece with In-Line Microphone for Bluetooth Accessory Kit Pod, Pack of 3 (RLN6550_) [11]

- Flexible Fit Swivel Earpiece with Boom Mic (PMLN7181_) [11]
- Flexible Fit Swivel Earpiece with Boom Mic, Multipack (PMLN7203_) [11]

Cables

- Power Cable to Battery, 10-foot (3-metre) Cable, 15 amp (1 – 25 Watt) (HKN4137_)
- Power Cable to Battery, 10-foot (3-metre) Cable, 20 amp (1 – 45 Watt) (HKN4191_)
- Power Cable to Battery, 20-foot (6-metre) Cable, 20 amp (1 – 45 Watt) (HKN4192_)
- Mobile and Repeater Rear Accessory Connector Universal Cable (PMKN4018_)
- Ignition Sense Cable (RKN4136_)
- Mobile Mic Extension Cable, 10 feet (PMKN4033_)
- Mobile Mic Extension Cable, 20 feet (PMKN4034_)
- Mobile Front (MMP) Programming Cable (HKN6184_)
- MAP Programming Cable (PMKN4010_)
- MAP Programming and Test Cable (PMKN4016_)
- Remote Mount (3-metre) Cable (PMKN4143_)
- Remote Mount (5-metre) Cable (PMKN4144_)

Desktop Accessories

- Radio Power Cable for GPN6145 (GKN6266_)
- Desktop Tray without Speaker (GLN7318_)
- Desktop Tray with Speaker (RSN4005_)
- Switchmode Power Supply (1 – 25 Watt Models) (CE marked) (GPN6145_)
- Power Supply and Cable (HPN4007_)
- Hardware Kit for Rear Accessory Connector (PMLN5072_)
- US Line Cord (3060665A04)

Mounting Kits

- In Dash (DIN) Mounting Kit (RLN6465_)
- Low Profile Trunnion Kit (RLN6466_)
- High Profile Trunnion Kit (RLN6467_)
- Key Lock Trunnion Kit (RLN6468_)

11 Your radio is compatible with the accessories listed here. Contact your dealer for details.

- Low Profile Trunnion – Bag (RLN6469_)
- Remote Mount Transceiver Interface (PMLN6402_)
- Remote Mount Control Head Interface (PMLN6403_)

Speakers

- 13-Watt External Speaker (RSN4002_)
- 7.5-Watt External Speaker (RSN4003_)
- 5-Watt External Speaker (RSN4004_)

Miscellaneous Accessories

- PL259/Mini-U Antenna Adapter, 8-foot (2.4-metre) Cable (HKN9557_)
- Microphone Hang Up Clip (All Microphones) (HLN9073_)
- Universal Microphone Hang Up Clip (All Microphones) (HLN9414_)
- Push Button PTT (RLN5926_)
- Emergency Footswitch (RLN5929_)
- IMPRES Mobile MMP Non-PC Adapter (PMKN4072_)
- IMPRES Mobile MAP Non-PC Adapter (PMKN4070_)
- Surge Protector, Tower Mount Kit (DQT1)
- Surge Protector, Coax Protector Bulkhead (DSISB50LNC2MA)
- Generic Option Board (PMLN5718_S)
- Operations Critical Wireless 1-Wire Surveillance Kit with translucent tube (PMLN7052_) [12]

[12] Your radio is compatible with the accessories listed here. Contact your dealer for details.

Maritime Radio Use in the VHF Frequency Range

Special Channel Assignments

Operating Frequency Requirements

A radio designated for shipboard use must comply with Federal Communications Commission Rule Part 80 as follows:

- on ships subject to Part II of Title III of the Communications Act, the radio must be capable of operating on the 156.800 MHz frequency.
- on ships subject to the Safety Convention, the radio must be capable of operating:
  - in the simplex mode on the ship station transmitting frequencies specified in the 156.025 – 157.425 MHz frequency band, and
  - in the semiduplex mode on the two frequency channels specified in the table below.

Note:

Simplex channels 3, 21, 23, 61, 64, 81, 82, and 83 cannot be lawfully used by the general public in US waters.

Additional information about operating requirements in the Maritime Services can be obtained from the full text of FCC Rule Part 80 and from the US Coast Guard.

Table 1: VHF Marine Channel List

Channel Number	Frequency (MHz)	
	Transmit	Receive
1	156.050	160.650
2	156.100	160.700
*	156.150	160.750
4	156.200	160.800
5	156.250	160.850
6	156.300	–
7	156.350	160.950
8	156.400	–
9	156.450	156.450
10	156.500	156.500
11	156.550	156.550

12	156.600	156.600
13**	156.650	156.650
14	156.700	156.700
15**	156.750	156.750
16	156.800	156.800
17**	156.850	156.850
18	156.900	161.500
19	156.950	161.550
20	157.000	161.600
*	157.050	161.650
22	157.100	161.700
*	157.150	161.750
24	157.200	161.800
25	157.250	161.850
26	157.300	161.900
27	157.350	161.950
28	157.400	162.000

60	156.025	160.625
*	156.075	160.675
62	156.125	160.725
63	156.175	160.775
*	156.225	160.825
65	156.275	160.875
66	156.325	160.925
67**	156.375	156.375
68	156.425	156.425
69	156.475	156.475
71	156.575	156.575
72	156.625	–
73	156.675	156.675
74	156.725	156.725
75	***	***
76	***	***
77**	156.875	–

78	156.925	161.525
79	156.975	161.575
80	157.025	161.625
*	157.075	161.675
*	157.125	161.725
*	157.175	161.775
84	157.225	161.825
85	157.275	161.875
86	157.325	161.925
87	157.375	161.975
88	157.425	162.025

Note:

** Simplex channels 3, 21, 23, 61, 64, 81, 82, and 83 cannot be **lawfully used** by the general public in US waters.*

*** Low power (1 W) only.*

**** Guard band.*

Note:
A – in the Receive column indicates that the channel is transmit only.

Declaration of Compliance for the Use of Distress and Safety Frequencies

The radio equipment does not employ a modulation other than the internationally adopted modulation for maritime use when it operates on the distress and safety frequencies specified in RSS-182 Section 7.3.

Technical Parameters for Interfacing External Data Sources

	RS232	USB	SB9600
Input Voltage (Volts Peak-to-peak)	18V	3.6V	5V
Max Data Rate	28 kb/s	12 Mb/s	9.6 kb/s
Impedance	5000 ohm	90 ohm	120 ohm

Limited Warranty

MOTOROLA COMMUNICATION PRODUCTS

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

MOTOROLA SOLUTIONS, INC. (“MOTOROLA”) warrants the MOTOROLA manufactured Communication Products listed below (“Product”) against defects in material and workmanship under normal use and service for a period of time from the date of purchase as scheduled below:

Digital Mobile Radios	24 Months
Product Accessories	12 Months

MOTOROLA, at its option, will at no charge either repair the Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the Product during the warranty period provided it is returned in accordance with the terms of this warranty. Replaced parts or boards are warranted for the balance of the original applicable warranty period. All replaced parts of Product shall become the property of MOTOROLA.

This express limited warranty is extended by MOTOROLA to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of MOTOROLA.

Unless made in a separate agreement between MOTOROLA and the original end user purchaser, MOTOROLA does not warrant the installation, maintenance or service of the Product.

MOTOROLA cannot be responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system which may use the Product is unique, MOTOROLA disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

II. GENERAL PROVISIONS

This warranty sets forth the full extent of MOTOROLA'S responsibilities regarding the Product. Repair, replacement or refund of the purchase price, at MOTOROLA's option, is the exclusive remedy. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW.

III. STATE LAW RIGHTS:

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSIONS MAY NOT APPLY.

This warranty gives specific legal rights, and there may be other rights which may vary from state to state.

IV. HOW TO GET WARRANTY SERVICE

You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and, also, deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location. Warranty service will be provided by MOTOROLA through one of its authorized warranty service locations. If you first contact the company which sold you the Product (e.g., dealer or communication service provider), it can facilitate your obtaining warranty service. You can also call MOTOROLA at 1-800-927-2744 US/Canada.

V. WHAT THIS WARRANTY DOES NOT COVER

1. Defects or damage resulting from use of the Product in other than its normal and customary manner.
2. Defects or damage from misuse, accident, water, or neglect.
3. Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.
4. Breakage or damage to antennas unless caused directly by defects in material workmanship.
5. A Product subjected to unauthorized Product modifications, disassembles or repairs (including, without limitation, the addition to the Product of non-MOTOROLA supplied equipment) which adversely affect performance of the Product or interfere with MOTOROLA's normal warranty inspection and testing of the Product to verify any warranty claim.
6. Product which has had the serial number removed or made illegible.
7. Rechargeable batteries if:
   - any of the seals on the battery enclosure of cells are broken or show evidence of tampering.
   - the damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.
8. Freight costs to the repair depot.
9. A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA’s published specifications or the FCC certification labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.
10. Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.
11. Normal and customary wear and tear.

VI. PATENT AND SOFTWARE PROVISIONS

MOTOROLA will defend, at its own expense, any suit brought against the end user purchaser to the extent that it is based on a claim that the Product or parts infringe a United States patent, and MOTOROLA will pay those costs and damages finally awarded against

the end user purchaser in any such suit which are attributable to any such claim, but such defense and payments are conditioned on the following:

1. MOTOROLA will be notified promptly in writing by such purchaser of any notice of such claim,
2. MOTOROLA will have sole control of the defense of such suit and all negotiations for its settlement or compromise, and
3. Should the Product or parts become, or in MOTOROLA's opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit MOTOROLA, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes non-infringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by MOTOROLA.

MOTOROLA will have no liability with respect to any claim of patent infringement which is based upon the combination of the Product or parts furnished hereunder with software, apparatus or devices not furnished by MOTOROLA, nor will MOTOROLA have any liability for the use of ancillary equipment or software not furnished by MOTOROLA which is attached to or used in connection with the Product. The foregoing states the entire liability of MOTOROLA with respect to infringement of patents by the Product or any parts thereof.

Laws in the United States and other countries preserve for MOTOROLA certain exclusive rights for copyrighted MOTOROLA software such as the exclusive rights to reproduce in copies and distribute copies of such MOTOROLA software. MOTOROLA software may be used in only the Product in which the software was originally embodied and such software in such Product may not be replaced, copied, distributed, modified in any way, or used to produce any derivative thereof. No other use including, without limitation, alteration, modification, reproduction, distribution, or reverse engineering of such MOTOROLA software or exercise of rights in such MOTOROLA software is permitted. No license is granted by implication, estoppel or otherwise under MOTOROLA patent rights or copyrights.

VII. GOVERNING LAW

This Warranty is governed by the laws of the State of Illinois, U.S.A.

Motorola Solutions, Inc.
1303 East Algonquin Road
Schaumburg, Illinois 60196 U.S.A.

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2011–2016 Motorola Solutions, Inc. All rights reserved.
Wi-Fi® is a registered trademark of Wi-Fi Alliance®.
May 2016
www.motorolasolutions.com/mototrbo

68009504001-GD