MOTOROLA SOLUTIONS

PROFESSIONAL DIGITAL TWO-WAY RADIO

MOTOTRBO™

DP4801 Ex
FULL KEYPAD PORTABLE RADIO

USER GUIDE

en-US

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Contents

Important Safety Information

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

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

Software Version

All the features described in the following sections are supported by the software version **R02.21.01.0000** or later.

See Checking Firmware and Codeplug Versions on page 193 to determine the software version of your radio.

Contact your dealer or administrator for more information.

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As defined by the WEEE directive, this cross-out trash bin label means that customers and end-users in EU countries should not dispose of electronic and electrical equipment or accessories in household waste.

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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.

Radio Care

This section describes the basic handling precaution of the radio.

Table 1: IP Specification

IP Specification	Description
IP67	Allows your radio to withstand adverse field conditions such as being submersed in water.

⚠️ **CAUTION:**
Do not disassemble your radio. This could damage radio seals and result in leak paths into the radio. Radio maintenance should only be done in service depot that is equipped to test and replace the seal on the radio.

- If your radio has been submersed in water, shake your radio well to remove any water that may be trapped inside the speaker grille and microphone port. Trapped water could cause decreased audio performance.

- If your radio's battery contact area has been exposed to water, clean and dry battery contacts on both your radio and the battery before attaching the battery to radio. The residual water could short-circuit the radio.

- If your radio has been submersed in a corrosive substance (for example, saltwater), rinse radio and battery in fresh water then dry radio and battery.

- To clean the exterior surfaces of your radio, use a diluted solution of mild dishwashing detergent and fresh water (for example, one teaspoon of detergent to one gallon of water).

- Never poke the vent (hole) located on the radio chassis below the battery contact. This vent allows for pressure equalization in the radio. Doing so may create a leak path into radio and your radio's submersibility may be lost.

- Never obstruct or cover the vent, even with a label.

- Ensure that no oily substances come in contact with the vent.

- Your radio with antenna attached properly is designed to be submersible to a maximum depth of 1 m (3.28 ft) and a maximum submersion time of 30 minutes. Exceeding either maximum limit or use without antenna may result in damage to your radio.

- When cleaning your radio, do not use a high pressure jet spray on radio as this will exceed the 1 m depth pressure and may cause water to leak into your radio.

Introduction

This user guide covers the operation of your radios.

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

You can consult your dealer or system administrator about the following:

- Is your radio programmed with any preset conventional channels?
- Which buttons have been programmed to access other features?
- What optional accessories may suit your needs?
- What are the best radio usage practices for effective communication?
- What maintenance procedures that helps promote longer radio life?

1.1

Icon Information

Throughout this publication, the icons described are used to indicate features supported in either the conventional analog or conventional digital mode.

Indicates a conventional **Analog Mode-Only** feature.

Indicates a conventional **Digital Mode-Only** feature.

For features that are available in **both** conventional analog and digital modes, both icons are **not** shown.

1.2

Conventional Analog and Digital Modes

Each channel in your radio can be configured as a conventional analog or conventional digital channel.

1 : Channel Selector Knob

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.

NOTICE:
Your radio also switches between digital and analog modes during a dual mode scan. See Scan on page 267 for more information.

1.3
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.

NOTICE:
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.

NOTICE:
You cannot manually add or delete an entry in the roam list. Contact your dealer for more information.

1.4
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 by using 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.

1.5
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 with an 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 repeater of the new site 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 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.

NOTICE:
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 by using a programmable button press.

Getting Started

Getting Started provides instructions to prepare your radio for use.

2.1
Charging the Battery

For best performance, your radio is powered by a Motorola Solutions-approved Lithium-Ion (Li-Ion) battery.

- Charge your battery only in non-hazardous areas. After battery is charged, allow your radio to rest for at least 3 minutes.

- To avoid damage and comply with warranty terms, charge the battery using a Motorola Solutios charger exactly as described in the charger user guide.

- Charge your battery only in non-hazardous areas. After battery is charged, allow your radio to rest for at least 3 minutes.

- If battery is attached to your radio, ensure that your radio remains powered off while charging.

- Charge a new battery 14 to 16 hours before initial use for best performance.

- Always charge your IMPRES battery with an IMPRES charger for optimized battery life and valuable battery data.

  IMPRES batteries charged exclusively with IMPRES chargers receive a 6-month capacity warranty extension over the standard Motorola Solutions Premium battery warranty duration.
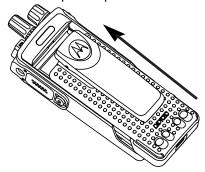
2.2
Attaching the Battery

Follow the procedure to attach the battery to your radio.

When the radio is attached with non-Motorola Solutions battery, an alert tone sounds, display shows `Unknown Battery`, and battery icon is disabled.

1 Align the battery with the rails on the back of the radio.

2 Press the battery firmly, and slide upward until the latch snaps into place.

3 Slide battery latch into lock position.

2.3
Attaching the Antenna

Turn off your radio.

Set the antenna in the receptacle and turn clockwise.

📝 **NOTICE:**
To protect best against water and dust, ensure that antenna is tightly fitted.

📝 **NOTICE:**
To remove the antenna, turn the antenna counterclockwise.
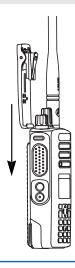
⚠️ **CAUTION:**
To prevent damages, replace the faulty antenna with only MOTOTRBO antennas.

2.4
Attaching the Belt Clip

1 To attach the belt clip, align the grooves on the clip with those on the battery and press downward until you hear a click.
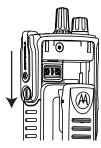
2 To remove the belt clip, press the belt clip tab away from the battery using a key. Then slide the clip upward and away from the radio.

2.5

Attaching the Universal Connector Cover

The universal connector is located on the antenna side of the radio. It is used to connect MOTOTRBO accessories to the radio.

Replace the universal connector cover or dust cover when the universal connector is not in use.

1 Insert the slanted end of the cover into the slots above the universal connector.

2 Press downwards on the cover to seat the dust cover properly on the universal connector.

3 Secure the connector cover to the radio by turning the thumbscrew clockwise.

2.6
Turning the Radio On

Rotate the **On/Off/Volume Control** knob clockwise until it clicks.

If successful, your radio shows the following indications:

• A tone sounds.

> **NOTICE:**
> If the Tones/Alerts function is disabled, there is no tone upon powering up.

• The green LED lights up.

• The display shows `MOTOTRBO (TM)`, followed by a welcome message or image.

• The Home screen lights up.

If the LED indicator is disabled, the Home screen does not light up during a power-up.

> **NOTICE:**
> During the initial power-up after a software version update to **R02.07.00.0000** or later, a GNSS firmware upgrade takes place for 20 seconds. After the upgrade, the radio resets and turns on. This firmware upgrade is only applicable for portable models with the latest software and hardware.

If your radio does not power up, check your battery. Make sure that the battery is charged and properly attached. Contact your dealer if your radio still does not power up.

2.7
Adjusting the Volume

To adjust the volume of your radio, perform one of the following actions:

• To increase the volume, turn the **On/Off/Volume Control** knob clockwise.

- To decrease the volume, turn the **On/Off/Volume Control** knob counterclockwise.
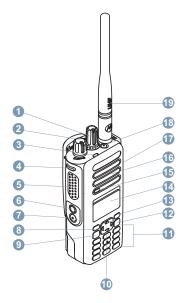
  NOTICE:
  Your radio can be programmed to have a minimum volume offset where the volume level cannot be lowered past the programmed minimum volume.

Radio Controls

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

1 Channel Selector Knob

2 On/Off/Volume Control Knob

3 LED Indicator

4 Side Button 1[1]

5 Push-to-Talk (PTT) Button

6 Side Button 2[1]

7 Side Button 3[1]

8 Front Button P1[1]

9 Menu/OK Button

10 4-Way Navigation Button

11 Keypad

12 Back/Home Button

13 Front Button P2[1]

14 Display

15 Microphone

16 Speaker

17 Universal Connector for Accessories

18 Emergency Button[1]

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[1] These buttons are programmable.

19 Antenna

3.1
Using the 4–Way Navigation Button

You can use the 4–way navigation button, ⊕, to scroll through options, increase/decrease values, and navigate vertically.

Category	Direction	
	▲ or ▼	◀ or ▶
Menu	Vertical Navigation	-
Lists	Vertical Navigation	-
View Details	Vertical Navigation	Previous/Next Item

You can use the 4–way navigation button, ⊕, as a number, alias, or free form text editor.

Editor Category	Direction	
	▲ or ▼	◀ or ▶
Number	-	Left : Delete last digit Right : -
Alias	-	Move cursor one character left/right-
Free Form Text	Move cursor up/down	Move cursor one character right/left
Numeric Values	Increase/Decrease	Move cursor one character right/left

3.2
Using the Keypad

You can use the 3 x 4 alphanumeric keypad to access your radio features. Many characters require that you press a key multiple times. The following 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	.	,	?	!	@	&	'	%	—	:	*	#
2 ABC	A	B	C	2									
2 ABC													
3 DEF	D	E	F	3									
3 DEF													

Key	Number of Times Key is Pressed												
	1	2	3	4	5	6	7	8	9	10	11	12	13
4 GHI 4 GHI	G	H	I	4									
5 JKL 5 JKL	J	K	L	5									
6 MNO 6 MNO	M	N	O	6									
7 PQRS 7 PQRS	P	Q	R	S	7								

Key	Number of Times Key is Pressed												
	1	2	3	4	5	6	7	8	9	10	11	12	13
8 TUV	T	U	V	8									
8 TUV													
9 WXYZ	W	X	Y	Z	9								
9 WXYZ													
0	0		**NOTICE:** Press to enter "0" and long press to activate the CAPS lock. Another long press to turn off the CAPS lock.										
0													
*	* or del		**NOTICE:** Press during text entry to delete the character. Press during numeric entry to enter a "*".										
#	# or space		**NOTICE:** Press during text entry to insert a space. Press during numeric entry to enter a "#". Long press to change text entry method.										

Capacity Max

Capacity Max is MOTOTRBO control channel based trunked radio system.

MOTOTRBO digital radio products are marketed by Motorola Solutions primarily to business and industrial users. MOTOTRBO uses the European Telecommunications Standards Institute (ETSI) Digital Mobile Radio (DMR) standard, that is, two-slot Time Division Multiple Access (TDMA), to pack simultaneous voice or data in a 12.5 kHz channel (6.25 kHz equivalent).

4.1
Push-To-Talk Button

The Push-to-Talk **(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.

Long press the **PTT** button to talk. Release the **PTT** button to listen.

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

4.2
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.

> **NOTICE:**
> See Emergency Operation on page 288 for more information on the programmed duration of the **Emergency** button.

4.3
Assignable Radio Functions

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

Audio Profiles

Allows the user to select the preferred audio profile.

Audio Routing

Toggles audio routing between internal and external speakers.

Audio Toggle

Toggles audio routing between the internal radio speaker and the speaker of a wired 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.

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.

Radio Alias and ID

Provides radio alias and ID.

Remote Monitor

Turns on the microphone of a target radio without it giving any indicators.

Reset Home Channel
Sets a new home channel.

Silence Home Channel Reminder
Mutes the Home Channel Reminder.

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.

Status
Selects the status list menu.

Telemetry Control
Controls the Output Pin on a local or remote radio.

Text Message
Selects the text message menu.

Toggle Call Priority Level
Enables your radio to enter Call Priority Level High/ Normal.

Trill Enhancement
Toggles trill enhancement on or off.

Voice Announcement On/Off
Toggles voice announcement on or off.

Zone Selection
Allows selection from a list of zones.

4.4
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.

Backlight Brightness
Adjusts the brightness level.

Display Mode
Toggles the day/night display mode on or off.

Keypad Lock
Toggles keypad between locked and unlocked.

Power Level

Toggles transmit power level between high and low.

4.5
Accessing Programmed Functions

Follow the procedure to access programmed functions in your radio.

1 Do one of the following:

- Press the programmed button. Proceed to step 3.

- Press ⌨ to access the menu.

2 Press ▲ or ▼ to the menu function, and press ⌨ 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.

4.6
Status Indicators

This chapter explains the status indicators and audio tones used in the radio.

4.6.1
Icons

The 132 x 90 pixels, 256 colors, 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.

Table 2: 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. The icon blinks when the battery is low.
	DGNA Radio is in DGNA Talkgroup.
	Emergency Radio is in Emergency mode.
	GNSS Available GNSS feature is enabled. The icon stays lit when a position fix is available.
	GNSS Not Available GNSS feature is enabled but is not receiving data from the satellite.
	High Volume Data Radio is receiving high volume data and channel is busy.
	Mute Mode Mute Mode is enabled and speaker is muted.
	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.

L or **H**	**Power Level** Radio is set at Low power or Radio is set at High power.			**Shared Frequency** Indicates radio is locking to shared control channel.
	Priority 1 Indicates Priority Talkgroup 1.			**Silent Ring** Silent ring mode is enabled.
	Priority 2 Indicates Priority Talkgroup 2.			**Site Roaming** The site roaming feature is enabled.
	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.			**Status** Indicates a new status message.
				Tones Disable Tones are turned off.
	Response Inhibit Response Inhibit is enabled.			
	Ring Only Ringing mode is enabled.			
	Secure The Privacy feature is enabled.			

	Unsecure The Privacy feature is disabled.

Table 3: 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 that the option is selected.
	Checkbox (Empty) Indicates that the option is not selected.
	Solid Black Box Indicates that the option selected for the menu item with a sub-menu.
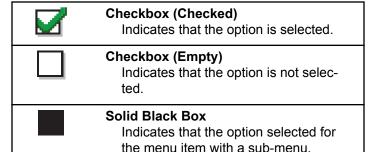
Table 4: Call Icons

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

	Call Priority High Indicating Call Priority Level High is enabled.
	DGNA Call Indicates a DGNA Call is in progress.
	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).

49

Private Call
Indicates a Private Call in progress. In the Contacts list, it indicates a subscriber alias (name) or ID (number).

Table 5: Job Tickets Icons

The following icons appear momentarily on the display in the Job Ticket folder.

All Jobs
Indicates all jobs listed.

New Jobs
Indicates new jobs.

In Progress
Jobs are transmitting. This is seen before indication for Job Tickets Send Failed or Sent Succesfully.

Send Failed
Jobs cannot be sent.

Sent Successfully
Jobs have been successfully sent.

Priority 1
Indicates Priority Level 1 for jobs.

Priority 2
Indicates Priority Level 2 for jobs.

Priority 3
Indicates Priority Level 3 for jobs.

Table 6: 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 Transmission (Positive)
Successful action taken.

	Transmission in Progress (Transitional) Transmitting. This is seen before indication for Successful Transmission or Failed Transmission.

Table 7: Sent Items 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 acknowledgment. The text message to a group alias or ID is pending transmission.
or	**Individual or Group Message Read** The text message has been read.

	Individual or Group Message Unread The text message has not been read.
or	**Send Failed** The text message cannot be sent.
or	**Sent Successfully** The text message has been successfully sent.

4.6.2
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 an emergency transmission.

Radio is transmitting in low battery state.

51

Radio has moved out of range if Auto-Range Transponder System is configured.

Mute Mode is enabled.

Solid Green

Radio is powering up.

Radio is transmitting.

Radio is sending a Call Alert or an emergency transmission.

Blinking Green

Radio is receiving a call or data.

Radio is retrieving Over-the-Air Programming transmissions over the air.

Radio is detecting activity over the air.

> **NOTICE:**
> 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.

Blinking Yellow

Radio has yet to respond to 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.

4.6.3
Tones

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

☐

High Pitched Tone

■

Low Pitched Tone

4.6.3.1
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 once for a short duration set by the radio.

4.6.3.2
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

4.7
Registration

There are a number of registration-related messages that you 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, Register Denied is displayed on the radio and the yellow LED double flashes to indicate a site search.

4.8
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.Each Capacity Max zone contains a maximum of 16 assignable positions.

4.8.1
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.

4.8.2
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.
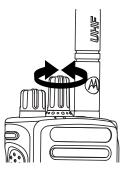
The display shows `<Zone> Selected` momentarily and returns to the selected zone screen.

4.8.3
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.

4.8.4
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.

The Capacity Max system can support up to 250 sites.

4.8.5
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.

    NOTICE:
    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>`.

4.8.6

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`.

4.8.7
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 Register Denied and the yellow LED double flashes to indicate a site search.

4.8.8
Site Trunking

Site Trunking is only available with Capacity Max system. 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.

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

4.9
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 (by using 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.

> **NOTICE:**
>
> 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 271 for more information.

Programmed One Touch Access Button

This method is used for Group, Private, and Phone Calls only.

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.

4.9.1
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.

4.9.1.1
Making Group Calls

To make a call to a group of users, your radio must be configured as part of that group.

1 Do one of the following:

- Select a channel with the active group alias or ID. See Selecting a Call Type on page 56.

- 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.

4.9.1.2

Making Group Calls by 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 to select.

4 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.

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.

6 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.

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.

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

4.9.1.3
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 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.The second text line
displays the call status for `Group 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.

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

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

---

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 271 for more information.

4.9.1.4
Making Group Calls by Using the Alias Search

You can also use alias or alphanumeric search to retrieve the required subscriber alias. This feature is only applicable

while in Contacts. If the target radio is not available, you hear a short tone and see Party Not Available on the display; the radio returns to the menu prior to initiating the radio presence check.

> **NOTICE:**
>
> Press ⬛ button or ⬛ to exit alias search.

1

Press ⬛ to access the menu.

2

Press ▲ or ▼ to Contacts. Press ⬛ to select.

The display shows the entries in alphabetical order.

---

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

The green LED lights up. The display shows the destination ID, call type, and **Call** icon.

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

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

The green LED blinks when the target radio responds.

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. A tone sounds. The display shows Call Ended.

The call initiator can press 🔄 to end the Group Call.

4.9.1.5
Responding to Group Calls

When you receive a Group Call:

• The green LED blinks.

• 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.

4.9.2
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.

64

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.

4.9.2.1
Making Broadcast Calls

1 Do one of the following:

• Select a channel with the active group alias or ID. See .

• 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 **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.

4.9.2.2
Making Broadcast Calls Using the Contact 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 🔘 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.

4.9.2.3
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.

65

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.

4.9.2.4
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 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.

> 📝 **NOTICE:**
> Recipient users are not allowed to Talkback during a Broadcast Call. The display shows `Talkback Prohibit`. The Talkback Prohibit Tone plays momentarily if the **PTT** button is pressed during a Broadcast Call.

4.9.3
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 acknowledgment 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.

If the target radio is not available prior to setting up the Private Call, the following occur:

- A tone sounds.
- The display shows a negative mini notice.
- The radio returns to the menu prior to initiating the radio presence check.

NOTICE:
Both the call initiator and recipient are able to

terminate an on-going Private Call by pressing 🔙.

4.9.3.1
Making Private Calls

Your radio must be programmed for you to initiate a Private Call. If this feature is not enabled, you hear a negative indicator tone when you initiate the call. If the target radio is not available, a short tone sounds and the display show Party Not Available.

1 Do one of the following:
- Select a channel with the active subscriber alias or ID. See .
- 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 lights up when the target radio responds.

5 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 ⟨🔚⟩.

4.9.3.2
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, subscriber ID or 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 blinks when the target radio responds. The display shows the destination alias.

5 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 271 for more information.

4.9.3.3
Making Private Calls by Using the Alias Search

You can also use alias or alphanumeric search to retrieve the required subscriber alias. This feature is only applicable while in Contacts.

NOTICE:

Press button or to exit alias search.

1
Press to access the menu.

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

The display shows the entries in alphabetical order.

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

The green LED lights up. The display shows the destination ID, call type, and **Private Call** icon.

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

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

The green LED blinks when the target radio responds.

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

69

Both the call initiator and recipient are able to

terminate an on-going Private Call by pressing 🔙 .

4.9.3.4
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 Press the **PTT** button to make the call.

The LED lights up solid green.

The display shows the Private Call alias or ID.

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

4 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 🔙 .

4.9.3.5
Making Private Calls by Using the Manual Dial

1
Press 🔳 to access the menu.

2
Press ▲ or ▼ to Contacts. Press 🔳 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 🔙.

4.9.3.6
Receiving Private Calls

When you receive Private Calls configured as Off Air Call Set-Up (OACSU):

• The green LED blinks.

- The **Private Call** icon appears in the top right corner.

- The first text line shows the caller alias.

- Your radio unmutes and the incoming call sounds through the speaker.

NOTICE:
Depending on how your radio is configured, either OACSU or Full Off Air Call Set-Up (FOACSU), responding to Private Calls may or may not require user acknowledgment.

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

4.9.3.7
Accepting Private Calls

When you receive Private Calls configured as Full Off Air Call Set-Up (FOACSU):

- The green LED blinks.

- The **Private Call** icon appears in the top right corner.

- The first text line shows the caller alias.

    1 To accept a Private Call configured as FOACSU, do one of the following:

- Press or to Accept and press to answer a Private Call.

- Press the **PTT** button on any entry.

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.

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

4.9.3.8
Declining Private Calls

When you receive Private Calls configured as Full Off Air Call Set-Up (FOACSU):

- The green LED blinks.

- The **Private Call** icon appears in the top right corner.

- The first text line shows the caller alias.

  To decline a Private Call configured as FOACSU, do one of the following:

  - Press ▲ or ▼ to `Reject` and press ⌨️ to decline a Private Call.

  - Press 🔙 to decline a Private Call.

4.9.4
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.

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

4.9.4.1
Receiving All Calls

When you receive an All Call, the following occur:

- 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.

NOTICE:
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.

4.9.4.2
Making All Calls

Your radio must be programmed for you to make an All Call.

1 Select a channel with the active All Call group alias or ID. See Selecting a Call Type on page 56.

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.

4.9.4.3
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. 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.

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

See for more information.

4.9.4.4

Making All Calls by Using the Alias Search

You can use alias or alphanumeric search to retrieve the required subscriber alias. This feature is only applicable while in Contacts. Follow the procedure to make All Calls on your radio by using the alias search.

NOTICE:

Press 🔲 button or 🔙 to exit alias search.

1
Press 🔲 to access the menu.

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

The display shows the entries in alphabetical order.

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

The green LED lights up. The display shows the destination ID, call type, and **Group Call** icon.

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

NOTICE:

The call initiator can press [🔙] to end the All Call.

4.9.5

Phone Calls

A Phone Call is a call in between an individual radio or a group of radios and a telephone.

Depending on how the radio is configured, the following features may or may not be made available:

- Access code
- Dual Tone Multi Frequency (DTMF) tone
- De-access code
- Displaying of caller alias or ID on receiving a phone call
- Ability to reject or accept a phone call

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.

4.9.5.1
Making Phone Calls

Follow the procedure to make Phone Calls on your radio.

1 Do one of the following:

- Press the programmed **Phone** button to enter into the Phone Entry list.

- Press the programmed **One Touch Access** button. Proceed to step 2.

---

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

OK to select.

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

- A negative indicator tone sounds.

- The display shows `Press OK to Place Phone Call`.

The display shows `Access Code:` if the access code was not preconfigured.

3

Enter the access code, and press OK to proceed.

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

---

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

The green LED lights up. The display shows **Phone Call** icon, subscriber alias, and call status.

If the call is successful:

- The DTMF Tone sounds.

- You hear the call waiting tone of the telephone user.

- The display shows the subscriber alias and the **Phone Call** icon.

If the call is unsuccessful:

- A tone sounds.

- The display shows `Phone Call Failed` and then, `Access Code:`.

- If the access code has been preconfigured in the Contacts list, your radio returns to the screen you were on before initiating the call.

---

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

---

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

77

7 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.

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 the last two steps or wait for the telephone user to end the call.

4.9.5.2
Making Phone Calls with the Programmable Button

Follow the procedure to make Phone Calls with the programmable button.

1 Press the programmed **Phone** button to enter into the Phone Entry list.

2 Press ▲ or ▼ to the required alias or ID. Press 〔OK〕 to select.

If the access code was not preconfigured in the Contacts list, the display shows Access Code:.

Enter the access code and press the ⬜ button to proceed.

The green LED lights up. The display shows **Phone Call** icon, subscriber alias or ID, and call status.

If the call-setup is successful:

- The DTMF tone sounds.

- You hear the call waiting tone of the telephone user.

- The display shows **Phone Call** icon, subscriber alias or ID, Phone Call, and call status.

If call-setup is unsuccessful:

- A tone sounds.

- 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.

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

4 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 display shows Extra Digits: and a blinking cursor. Enter the extra digits and press the ⬜ 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.

5
Press 🔙 to end the call.

If deaccess code was not preconfigured in the Contacts list, the display shows De-Access Code:.

Enter the deaccess code and press the ⬜ button to proceed.

The DTMF tone sounds and the display shows Ending Phone Call.

79

If the end-call-setup is successful, a tone sounds and the display shows `Call Ended`.

If the end-call-setup is unsuccessful, your radio returns to the Phone Call screen. Repeat step 3 and step 5 or wait for the telephone user to end the call.

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

NOTICE:

During 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.

4.9.5.3
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 🔲 to access the menu.

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

The display shows the entries in alphabetical order.

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

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

• A negative indicator tone sounds.

• The display shows `Press OK to Place Call`.

If the selected entry is empty:

• A negative indicator tone sounds.

- The display shows `Phone Call Invalid #`.

4

Press ▲ or ▼ to `Call Phone`. Press 🔲 to select.

The display shows `Access Code:` if the access code was not preconfigured.

5

Enter the access code, and press 🔲 to proceed.

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

The display shows `Calling`, subscriber alias or ID, and the **Phone Call** icon.
If the call is successful:

- The DTMF Tone sounds.

- You hear the call waiting tone of the telephone user.

- The display shows the subscriber alias or ID, the **Phone Call** icon, and `Phone Call`.

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 🔲 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.

81

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

4.9.5.4
Making Phone Calls by Using the Alias Search

You can also use alias or alphanumeric search to retrieve
the required subscriber alias. This feature is only applicable
while in Contacts. Follow the procedure to make Phone
Calls on your radio by using the alias search.

NOTICE:
Press ⌂ button or 🔙 to exit alias search.

1
Press ⌂ to access the menu.

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

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

To make a call to the required alias, press ⌷⌷ .

6

Press ▲ or ▼ to `Call Phone`. Press ⌷⌷ to select.

The green LED lights up. The display shows the destination ID, call type, and **Phone Call** icon.

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 blinks when the target radio responds.

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`.

4.9.5.5
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 ⌷⌷ to access the menu.

2

Press ▲ or ▼ to `Contacts`. Press ⌷⌷ to select.

3

Press ▲ or ▼ to `Manual Dial`. Press ⌷⌷ to select.

4

Press ▲ or ▼ to `Phone Number`. Press 🔳 to select.

The display shows `Number:` and a blinking cursor.

5

Enter the telephone number, and press 🔳 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 🔳 to proceed. The access or deaccess code cannot be more than 10 characters.

The green LED lights up. The display shows the **Phone Call** icon, subscriber alias, and call status.

If the call is successful:

- The DTMF Tone sounds.

- You hear the call waiting tone of the telephone user.

- The display shows subscriber alias 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 before initiating the call if the access code has been preconfigured in the Contacts list.

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

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

9 Enter extra digits with the keypad if requested by the call, and press 🔳 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.

10

Press ⟨🔚⟩ to end the call.

11 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 10, or wait for the telephone user to end the call.

4.9.5.6

Dual Tone Multi Frequency

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

Disabling all radio tones and alert will automatically turn off the DTMF tone.

4.9.5.6.1
Initiating DTMF Tone

Follow the procedure to initiate a DTMF tone on your radio.

1 Press and hold the **PTT** button.

2 Do one of the following:

- Enter the desired number to initiate a DTMF tone.

- Press ⟨＊⟩ to initiate a DTMF tone.

- Press ⟨＃⟩ to initiate a DTMF tone.

4.9.5.7
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.

4.9.5.8
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 and `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.

  NOTICE:
  Your 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 talk back during 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 step 3 or wait for the telephone user to end the call.

4.9.5.9
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 and 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.

NOTICE:
Your 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 talk back during 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 step 3 or wait for the telephone user to end the call.

4.9.6
Initiating Transmit Interrupt

An ongoing call is interrupted, when you perform the following actions:

- Press the **Voice PTT** button.
- Press the **Emergency** button.

The receiving radio displays Call Interrupted.

4.9.7
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.

4.9.8
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.

4.9.8.1
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 To interrupt the transmission during an on-going call, press the **PTT** button.

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 acknowledgment.

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.

4.10

Advanced Features

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

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

4.10.1

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 and radio screen displays `Call In Queue` 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.

4.10.2
Priority Call

Priority Call allows the system to preempt one of the ongoing non-priority calls and initiate the requested high priority call when all channels are busy.

With all channels occupied with high priority calls, the system does not preempt any calls, and places the requesting high-priority call into call queue. If the system fails to place the requesting high-priority call into call queue, it declares failure.

The default settings for Priority Call are preconfigured. Press the programmable button to toggle between normal and high priority level. When you use the following features, the call priority level reverts automatically to the preconfigured setting.

- All voice calls
- DMR Ⅲ Text Message/Text Message
- Job Ticket
- Remote monitor

The following are the types of Priority Call:

High Priority

The radio displays Next Call: High Priority.

Call Priority High icon appears at the top of your radio display.

Voice Announcement sounds Next Call: High Priority.

Normal Priority

The radio displays Next Call: Normal Priority.

Call Priority High icon disappears.

Voice Announcement sounds Next Call: Normal Priority.

4.10.3
Talkgroup Scan

This feature allows your radio to monitor and join calls for groups defined by a Receive Group List.

When scan is enabled, your radio unmutes to any member in its Receive Group List.

When scan is disabled, your radio does not receive transmission from any members of the Receive Group List, except for All Call, Permanent Talkgroup, and the selected Talkgroup.

4.10.3.1
Turning Talkgroup Scan On or Off

Follow the procedure to turn Talkgroup Scan on or off on your radio.

1
Press ⌨ to access the menu.

2
Press ▲ or ▼ to Scan. Press ⌨ to select.

3 Do one of the following:

- Press ▲ or ▼ to Turn On. Press ⌨ to select.

- Press ▲ or ▼ to Turn Off. Press ⌨ to select.

If scan is enabled:
- The display shows Scan On and **Scan** icon.
- The yellow LED blinks.
- A positive indicator tone sounds.

If scan is disabled:

- The display shows Scan Off.
- The **Scan** icon disappears.
- The LED turns off.
- A negative indicator tone sounds.

4.10.4
Receive Group List

Receive Group List is a feature that allows you to create and assign members on the talkgroup scan list.

This list is created when your radio is programmed and it determines which groups can be scanned. Your radio can support a maximum of 16 members in this list.

If your radio has been programmed to edit the scan list, you can:

- Add/remove talkgroups.
- Add, remove, and/or edit priority for talkgroups. Refer to Editing Priority for a Talkgroup on page 93.
- Add, remove, and/or edit affiliation talkgroups. Refer to Adding Talkgroup Affiliation on page 94 and Removing Talkgroup Affiliation on page 95.

• Replace the existing scan list with a new scan list.

If a talkgroup is programmed as Permanent Talkgroup, you are unable to edit the talkgroup from the scan list.

> **IMPORTANT:**
> To add member into the list, the talkgroup must first be configured in the radio.

> **NOTICE:**
> Receive Group List is programmed by the system administrator. Check with your dealer or system administrator for more information.

4.10.5
Priority Monitor

The Priority Monitor feature allows the radio to automatically receive transmission from talkgroups with higher priority even when radio is in a talkgroup call.

Radio leaves lower priority talkgroup call for higher priority talkgroup call.

> **NOTICE:**
> This feature can only be accessed when Talkgroup Scan feature is enabled.

Priority Monitor feature applies only to members in the Receive Group List. There are two Priority Talkgroups:

Priority 1 (P1) and Priority 2 (P2). P1 has higher priority than P2. In Capacity Max system, the radio receives transmission according to the priority order below:

1 Emergency Call for P1 Talkgroup

2 Emergency Call for P2 Talkgroup

3 Emergency Call for Non-priority Talkgroups in the Receive Group List

4 All Call

5 P1 Talkgroup Call

6 P2 Talkgroup Call

7 Non-priority Talkgroups in the Receive Group List

See for more information on how to add, remove, and/or edit the priority of the talkgroups in the scan list.

> **NOTICE:**
> This feature is programmed by the system administrator. Check with your dealer or system administrator for more information.

4.10.5.1
Editing Priority for a Talkgroup

In the Talkgroup Scan Menu, you can view or edit the priority of a talkgroup.

1
Press ⬛ to access the menu.

2
Press ▲ or ▼ to Scan. Press ⬛ to select.

3
Press ▲ or ▼ to View/Edit List. Press ⬛ to select.

4
Press ▲ or ▼ to the required talkgroup. Press ⬛ to select.

The current priority is indicated by a **Priority 1** or **Priority 2** icon beside the talkgroup.

5
Press ▲ or ▼ to Edit Priority. Press ⬛ to select.

6
Press ▲ or ▼ to the required priority level. Press ⬛ to select.

If another talkgroup has been assigned to Priority 1 or Priority 2, you can choose to overwrite the current priority. When the display shows Overwrite Existing?, press ▲ or ▼ to the following options:

• No to return to the previous step.

• Yes to overwrite.

The display shows positive mini notice before returning to the previous screen. The priority icon appears beside the talkgroup.

4.10.6
Multi-Talkgroup Affiliation

Your radio can be configured for up to seven talkgroups at a site.

Of the 16 talkgroups in the Receive Group List, up to seven talkgroups can be assigned as affiliation talkgroups. The selected talkgroup and the priority talkgroups are automatically affiliated.

93

4.10.6.1
Adding Talkgroup Affiliation

Follow the procedure to add a talkgroup affiliation.

1
Press 🔲 to access the menu.

2
Press ▲ or ▼ to Scan. Press 🔲 to select.

3
Press ▲ or ▼ to View/Edit List. Press 🔲 to select.

4 Press ▲ or ▼ to the required talkgroup ID or

alias. Press 🔲 to select.

The affiliation status is displayed at the View/Edit List. The display shows ● beside the selected talkgroup ID or alias.

5
Press ▲ or ▼ to Edit Affiliation. Press 🔲 to select.

6 Do one of the following:

- Press ▲ or ▼ to On. Press 🔲 to select.

- Press ▲ or ▼ to Off. Press 🔲 to select.

When On is selected, ● appears beside the talkgroup ID or alias.

If affiliation is successful, the display shows ✔ beside the selected talkgroup ID or alias.

If affiliation is unsuccessful, ● remains beside the talkgroup ID or alias.

NOTICE:
The radio displays List Full when a maximum of seven talkgroups are selected for affiliation in the scan list. To select a new talkgroup for affiliation, remove an existing affiliated talkgroup to make way for the new addition. See for more information.

4.10.6.2
Removing Talkgroup Affiliation

When the affiliation list is full and you want to select a new talkgroup for affiliation, remove an existing affiliated talkgroup to make way for the new addition. Follow the procedure to remove a talkgroup affiliation.

1
Press 🔲 to access the menu.

2
Press ▲ or ▼ to Scan. Press 🔲 to select.

3
Press ▲ or ▼ to View/Edit List. Press 🔲 to select.

4 Press ▲ or ▼ to the required talkgroup ID or

alias. Press 🔲 to select.

The affiliation status is displayed at the View/Edit List. The display shows ✔ beside the selected talkgroup ID or alias.

5
Press ▲ or ▼ to Edit Affiliation. Press 🔲 to select.

6
Press ▲ or ▼ to Off. Press 🔲 to select.

When Off is selected, ✔ disappears from beside the talkgroup ID or alias.

4.10.7
Talkback

The Talkback feature allows you to respond to a transmission while scanning.

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 Talkback was enabled or disabled during radio programming. Check with your dealer or system administrator for more information.

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

95

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.

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.

NOTICE:
If you scan into a call for a group that is not assigned to a channel position in the currently selected zone and the call ends, switch to the proper zone and then select the channel position of the group to talk back to that group.

4.10.8
Job Tickets

This feature allows your radio to receive messages from the dispatcher listing out tasks to perform.

NOTICE:
This feature can be customized through the Customer Programming Software (CPS) according to user requirements. Check with your dealer or system administrator for more information.

There are two folders that contain different Job Tickets:

My Tasks folder

Personalized Job Tickets assigned to your signed in user ID.

Shared Tasks folder

Shared Job Tickets assigned to a group of individuals.

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**.

Job Tickets are retained even after the radio is turned off and turned on again.

All Job Tickets are located in the **All** folder. Depending on how your radio is programmed, Job Tickets are sort by their priority level followed by time received. New Job Tickets, Job Tickets with recent changes in state, and Job Tickets with the highest priority are listed first.

Upon reaching the maximum number of Job Tickets, the next Job Ticket automatically replaces the last Job Ticket in your radio. Your radio supports a maximum of 100 or 500 Job Tickets, depending on your radio model. Check with your dealer or system administrator for more information. Your radio automatically detects and discards duplicated Job Tickets with the same Job Ticket ID.

Depending on the importance of the Job Tickets, the dispatcher adds a Priority Level to them. There are three priority levels: Priority 1, Priority 2, and Priority 3. Priority 1 has the highest priority and Priority 3 has the lowest priority. There are also Job Tickets with no priority.

Your radio updates accordingly when dispatcher makes the following changes:

- Modify content of Job Tickets.

- Add or edit Priority Level of Job Tickets.

- Move Job Tickets from folder to folder.

- Canceling of Job Tickets.

4.10.8.1
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 􀃰 to access the menu.

2
Press ▲ or ▼ to `Job Tickets`. Press 􀃰 to select.

3
Press ▲ or ▼ to the required folder. Press 􀃰 to select.

4 Press ▲ or ▼ to the required Job Ticket. Press 􀃰 to select.

4.10.8.2
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.

1
Press 􀃰 to access the menu.

2
Press ▲ or ▼ to `Log In`. Press 􀃰 to select.

If you are already logged in, menu displays `Log Out`.

The display shows a transitional mini notice, indicating the request is in progress.

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.

4.10.8.3
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 󰀓 to access the menu.

2
Press ▲ or ▼ to `Job Tickets`. Press 󰀓 to select.

3
Press ▲ or ▼ to `Create Ticket`. Press 󰀓 to select.

4.10.8.4
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 󰀓 to select.

2
Press ▲ or ▼ to `Room Status`. Press 󰀓 to select.

3

Press ▲ or ▼ to the required option. Press 🔲 to select.

4

Press ▲ or ▼ to `Send`. Press 🔲 to select.

The display shows a transitional mini notice, indicating the request is in progress.

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.

4.10.8.5

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

Press ▲ or ▼ to the required option. Press 🔲 to select.

2

Press ▲ or ▼ to `Send`. Press 🔲 to select.

The display shows a transitional mini notice, indicating the request is in progress.

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.

99

• The display shows a negative mini notice.

4.10.8.6
Responding to Job Tickets

Follow the procedure to respond to job tickets on your radio.

1
Press ⬛ᴏᴋ to access the menu.

2
Press ▲ or ▼ to Job Tickets. Press ⬛ᴏᴋ to select.

3
Press ▲ or ▼ to the required folder. Press ⬛ᴏᴋ to select.

4 Press ▲ or ▼ to the required job ticket. Press ⬛ᴏᴋ to select.

5
Press ⬛ᴏᴋ once more to access the sub-menu.

You can also press the corresponding number key (1–9) to **Quick Reply**.

6 Press ▲ or ▼ to the required job ticket. Press ⬛ᴏᴋ to select.

The display shows a transitional mini notice, indicating the request is in progress.

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.

4.10.8.7
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 4

- 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 All folder. Press ⬛OK to select.

5 Press ▲ or ▼ to the required Job Ticket. Press ⬛OK to select.

6 Press ⬛OK again while viewing the Job Ticket.

7 Press ▲ or ▼ to Delete. Press ⬛OK to select.

The display shows a transitional mini notice, indicating the request is in progress.

8 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.

4.10.8.8
Deleting All Job Tickets

Follow the procedure to delete all job tickets on your radio.

1 Do one of the following:

- Press the programmed **Job Ticket** button. Proceed to step 3.

101

• Press $\boxed{\overset{\text{BB}}{\text{OK}}}$ to access the menu.

2

Press ▲ or ▼ to Job Tickets. Press $\boxed{\overset{\text{BB}}{\text{OK}}}$ to select.

3

Press ▲ or ▼ to the required folder. Press $\boxed{\overset{\text{BB}}{\text{OK}}}$ to select.

4

Press ▲ or ▼ to All folder. Press $\boxed{\overset{\text{BB}}{\text{OK}}}$ to select.

5

Press ▲ or ▼ to Delete All. Press $\boxed{\overset{\text{BB}}{\text{OK}}}$ to select.

6 Do one of the following:

• Press ▲ or ▼ to Yes. Press $\boxed{\overset{\text{BB}}{\text{OK}}}$ to select. The display shows a positive mini notice.

• Press ▲ or ▼ to No. Press $\boxed{\overset{\text{BB}}{\text{OK}}}$ to select. The radio returns to the previous screen.

4.10.9
Multi-Site Controls

These features are applicable when your current radio channel is configured to a Capacity Max system.

4.10.9.1
Enabling Manual Site Search

1 Perform one of the following actions:

• Press the programmed **Manual Site Roam** button. Skip the following steps.

• Press $\boxed{\overset{\text{BB}}{\text{OK}}}$ to access the menu.

2

Press ▲ or ▼ to Utilities. Press $\boxed{\overset{\text{BB}}{\text{OK}}}$ to select.

3

Press ▲ or ▼ to Radio Settings. Press $\boxed{\overset{\text{BB}}{\text{OK}}}$ to select.

4

Press ▲ or ▼ to Site Roaming. Press $\boxed{\overset{\text{BB}}{\text{OK}}}$ to select.

5

Press ▲ or ▼ to `Active Search`. Press ⌨️ to select.

A tone sounds. The green LED blinks. The display shows `Finding Site`.

If the radio finds a new site, your radio shows the following indications:

• A positive tone sounds.

• The LED extinguishes.

• The display shows `Site <Alias> Found`.

If the radio fails to find a new site, your radio shows the following indications:

• A negative tone sounds.

• The LED extinguishes.

• The display shows `Out of Range`.

If a new site is within range, but the radio is unable to connect to it, your radio shows the following indications:

• A negative tone sounds.

• The LED turns off.

• The display shows `Channel Busy`.

4.10.9.2
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.
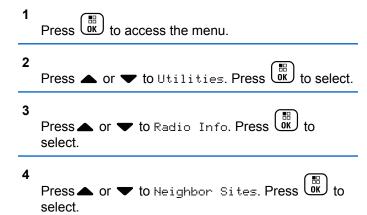
• The display shows `Site Unlocked`.

4.10.9.3
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:

103

1

Press ⌧ to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press ⌧ to select.

3

Press ▲ or ▼ to `Radio Info`. Press ⌧ to select.

4

Press ▲ or ▼ to `Neighbor Sites`. Press ⌧ to select.

4.10.10
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 display shows `Non Home Channel`.

4.10.10.1
Muting the Home Channel Reminder

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

Press the programmed **Silence Home Channel Reminder** button.

The display shows `HCR Silenced`.

4.10.10.2
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 🔳 to access the menu.

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

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

4
Press ▲ or ▼ to Home Channel. Press 🔳 to select.

5 Press ▲ or ▼ to the desired new home channel alias. Press 🔳 to select.

The display shows ✔ beside the selected home channel alias.

4.10.11
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.

4.10.11.1
Initiating Remote Monitor

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 🔳 to select.

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

105

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.

4.10.11.2
Initiating Remote Monitor by Using the Contacts List

Follow the procedure to initiate Remote Monitor on your radio by 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 to select.

4
Press or to Remote Mon.. Press 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.

4.10.11.3
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.

107

If unsuccessful:

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

4.10.12
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.

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.

> **NOTICE:**
> 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

> **NOTICE:**
> 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 are able to decrypt the transmission.

4.10.12.1
Assigning Entries to Programmable Number Keys

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

1

Press ⬛ᴏᴋ to access the menu.

2

Press ▲ or ▼ to Contacts. Press ⬛ᴏᴋ to select.

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

⬛ᴏᴋ to select.

4

Press ▲ or ▼ to Program Key. Press ⬛ᴏᴋ 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 ⬛ᴏᴋ 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 ⬛ᴏᴋ 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.

4.10.12.2
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 ⬛ᴏᴋ to access the menu.

2

Press ▲ or ▼ to Contacts. Press ⬛ᴏᴋ to select.

109

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

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

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

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

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

  📝 NOTICE:
  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.

4.10.12.3
Adding New Contacts

Follow the procedure to add new contacts on your radio.

1
Press ⒪ to access the menu.

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

3
Press ▲ or ▼ to `New Contact`. Press ⒪ to select.

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

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

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

7 Press ▲ or ▼ to the required ringer type. Press ⬛ to select.

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

4.10.13
Call Indicator Settings

This feature allows you to configure call or text message ringing tones.

4.10.13.1
Activating or Deactivating Call Ringers for Private Calls

1
Press ⬛ to access the menu.

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

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

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

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

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

7 Do one of the following:

- Press ▲ or ▼ to the required tone. Press ⬛ to select.
  The display shows ✔ and the selected tone.

- Press ▲ or ▼ to Off. Press ⬛ to select.
  If the ringing tones were earlier enabled, the display shows ✔ beside Off.

111

If the ringing tones were earlier disabled, the display does not show ✔ beside Off.

4.10.13.2
Activating or Deactivating Call Ringers for Text Messages

1

Press 🔳 to access the menu.

2

Press 🔺 or 🔻 to Utilities. Press 🔳 to select.

3

Press 🔺 or 🔻 to Radio Settings. Press 🔳 to select.

4

Press 🔺 or 🔻 to Tones/Alerts. Press 🔳 to select.

5

Press 🔺 or 🔻 to Call Ringers. Press 🔳 to select.

6

Press 🔺 or 🔻 to Text Message. Press 🔳 to select.

The display shows ✔ and the current tone.

7

Press 🔺 or 🔻 to Messages. Press 🔳 to select.

The display shows ✔ and the current tone.

8 Do one of the following:

- Press 🔺 or 🔻 to the required tone. Press 🔳 to select.
  The display shows ✔ and the selected tone.

- Press 🔺 or 🔻 to Off. Press 🔳 to select.
  If the ringing tones were earlier enabled, the display shows ✔ beside Off.

  If the ringing tones were earlier disabled, the display does not show ✔ beside Off.

4.10.13.3
Activating or Deactivating Call Ringers for Call Alerts

1
Press 🔳 to access the menu.

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

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

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

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

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

7 Do one of the following:

• Press ▲ or ▼ to the required tone. Press 🔳 to select.
The display shows ✔ and the selected tone.

• Press ▲ or ▼ to Off. Press 🔳 to select.
If the ringing tones were earlier enabled, the display shows ✔ beside Off.

If the ringing tones were earlier disabled, the display does not show ✔ beside Off.

4.10.13.4
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 🔳 to access the menu.

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

113

3

Press ⏶ or ⏷ to `Radio Settings`. Press ⏹ to select.

4

Press ⏶ or ⏷ to `Tones/Alert`. Press ⏹ to select.

5

Press ⏶ or ⏷ to `Call Ringers`. Press ⏹ to select.

6

Press ⏶ or ⏷ to `Telemetry`. Press ⏹ to select.

The current tone is indicated by a ✔ .

7

Press ⏶ or ⏷ to the required tone. Press ⏹ to select. A ✔ appears beside the selected tone.

4.10.13.5
Assigning Ring Styles

The radio can be programmed to sound one of eleven predefined ringing tones when receiving a Private Call, a

Call Alert, or a Text Message from a particular contact.The radio sounds out each ring style as you navigate through the list.

1

Press ⏹ to access the menu.

2

Press ⏶ or ⏷ to `Contacts`. Press ⏹ to select. The entries are alphabetically sorted.

3 Press ⏶ or ⏷ to the required alias or ID. Press ⏹ to select.

4

Press ⏶ or ⏷ to `View/Edit`. Press ⏹ to select.

5

Press ⏹ until display shows `Ringer` menu

A ✔ indicates the current selected tone.

114

6

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

The display shows a positive mini notice.

4.10.13.6
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. Follow the procedure to escalate alarm tone volume 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 `Escalert`.

6

Press ⬛OK to enable OR disable Escalert. If enabled, ✔ appears beside `Enabled`. If disabled, ✔ disappears beside `Enabled`.

4.10.14
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

• View Details

115

4.10.14.1
Viewing Recent Calls

1
Press ⬛ to access the menu.

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

3 Press ▲ or ▼ to the preferred list. The options are Missed, Answered, and Outgoing lists.

Press ⬛ to select.

The display shows the most recent entry.

4 Press ▲ or ▼ to view the list.

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

4.10.14.2
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 ⬛ to access the menu.

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

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

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

5
Press ▲ or ▼ to Store. Press ⬛ to select.

The display shows a blinking cursor.

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

Press ⬛ to select.

You can store an ID without an alias.

The display shows a positive mini notice.

4.10.14.3
Deleting Calls from the Call List

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

1
Press to access the menu.

2
Press or to Call Log. Press to select.

3
Press or to the required list. Press 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

 to select.

5
Press or to Delete Entry?. Press to select.

6 Do one of the following:

- Press to select Yes to delete the entry. The display shows Entry Deleted.

- Press or to No. Press to select. The radio returns to the previous screen.

4.10.14.4
Viewing Details from the Call List

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

1
Press to access the menu.

2
Press or to Call Log. Press to select.

117

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.

4.10.15
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 by using 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 you to press the **PTT** button to respond directly to the call initiator by making a Private Call.

* The radio is configured to allow you 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 a Full Off Air Call Set-Up (FOACSU) private call requires user acknowledgment for the call. OACSU type calls are therefore, recommended being used for the Call Alert feature. See Private Call on page 66.

4.10.15.1
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.

4.10.15.2
Making Call Alerts by Using the Contacts List

1
Press 󰀹 to access the menu.

2
Press 󰁁 or 󰁂 to `Contacts`. Press 󰀹 to select.

3 Do one of the following:

- Select the subscriber alias or ID directly

Press 󰁁 or 󰁂 to the required alias or ID.

Press 󰀹 to select.

- Use the `Manual Dial` menu

Press 󰁁 or 󰁂 to `Manual Dial`. Press 󰀹 to select.
Press 󰁁 or 󰁂 to `Radio Number`. Press
󰀹 to select.
The display shows `Radio Number:` and a blinking cursor. Enter the subscriber ID you

want to page. Press 󰀹 to select.

4
Press 󰁁 or 󰁂 to `Call Alert`. Press 󰀹 to select.

The display shows `Call Alert` and the subscriber alias or ID. The green LED lights up.

5 Wait for acknowledgment.

- If the acknowledgment is received, the display shows a positive mini notice.

119

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

4.10.15.3
Responding to Call Alerts

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 and for more information.

4.10.16
Dynamic Caller Alias

This feature allows you to dynamically edit a Caller Alias from your radio front panel.

When in a call, the receiving radio displays the Caller Alias of the transmitting radio.

The Caller Aliases list can store up to 500 Caller Aliases of transmitting radio. You can view or make Private Calls from the Caller Aliases list. When you turn off your radio, the history of receiving Caller Aliases is removed from the Caller Aliases list.

4.10.16.1
Editing Your Caller Alias After Turning On the Radio

1 Turn on your radio.

2

Enter your new Caller Alias. Press 🔲 to proceed.

The display shows a positive mini notice.

NOTICE:
When in a call, the receiving radio displays your new Caller Alias.

4.10.16.2
Editing Your Caller Alias from the Main Menu

1

Press 🔲 to access the menu.

2

Press ▲ or ▼ to Utilities. Press 🔲 to select.

3

Press ▲ or ▼ to Radio Info.. Press 🔲 to select.

4

Press ▲ or ▼ to My ID. Press 🔲 to select.

5

Press 🔲 to proceed.

6

Press ▲ or ▼ to Edit. Press 🔲 to select.

7

Enter your new Caller Alias. Press 🔲 to select.

The display shows a positive mini notice.

NOTICE:
When in a call, the receiving radio displays your new Caller Alias.

4.10.16.3
Viewing the Caller Aliases List

You can access the Caller Aliases list to view the transmitting Caller Alias details.

1

Press 🔲 to access the menu.

121

2

Press ▲ or ▼ to `Caller Aliases`. Press ⊡ to select.

3

Press ▲ or ▼ to the preferred list. Press ⊡ to select.

4

Press ▲ or ▼ to `View Details`. Press ⊡ to select.

4.10.16.4
Initiating Private Call From the Caller Aliases List

You can access the Caller Aliases list to initiate Private Call.

1

Press ⊡ to access the menu.

2

Press ▲ or ▼ to `Caller Aliases`. Press ⊡ to select.

3

Press ▲ or ▼ to the *<required Caller Alias>*.

4 To call, press and hold the **PTT** button.

4.10.17
Mute Mode

Mute Mode provides an option to silence all audio indicators on your radio.

When Mute Mode is initiated, all audio indicators are muted except higher priority features such as emergency operations.

When Mute Mode is exited, your radio resumes playing ongoing tones and audio transmissions.

⚠ **IMPORTANT:**
You can only enable either Face Down or Man Down one at a time. Both features cannot be enabled together.

This feature is applicable to DP4800e/DP4801e, DP4600e/ DP4601e, DP4400e/DP4401e only.

4.10.17.1
Turning On Mute Mode

Follow the procedure to turn on Mute Mode.

Do one of the following:

- Access this feature by using the programmed **Mute Mode** button.

- Access this feature by placing the radio in a face-down position momentarily.

Depending on radio model, the Face Down feature can be enabled either through the radio menu or by your system administrator. Check with your dealer or system administrator for more information.

> ⚠ **IMPORTANT:**
> User can only enable either Man Down or Face Down at a time. Both features cannot be enabled together.

The following occurs when Mute mode is enabled:

- Positive Indicator Tone sounds.

- Display shows `Mute Mode On`.

- The red LED light starts blinking and remains blinking until Mute Mode is exited.

- Display shows **Mute Mode** icon on home screen.

- Radio is muted.

- Mute Mode Timer begins counting down the duration that is configured.

4.10.17.2
Setting Mute Mode Timer

Mute Mode feature can be enabled for a pre-configured amount of time by setting the Mute Mode Timer. The timer duration is configured in the radio menu and can range between 0.5–6 hours. Mute Mode is exited once the timer expires.

If the timer is left at 0, the radio remains in Mute mode for an indefinite period until the radio is moved to a face-up position or the programmed **Mute Mode** button is pressed.

1
Press 🔲 to access the menu.

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

123

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

4
Press ▲ or ▼ to `Mute Timer`. Press 🔲 to select.

5 Press ▲ or ▼ to edit the numeric value of each digit, and press 🔲.

4.10.17.3
Exiting Mute Mode

This feature can be exited automatically once the Mute Mode Timer expires.

Do one of the following to exit Mute mode manually:

- Press the programmed **Mute Mode** button.
- Press the **PTT** button on any entry.
- Place the radio in a face-up position momentarily.

The following occurs when Mute mode is disabled:

- Negative Indicator Tone sounds.
- Display shows `Mute Mode Off`.
- The blinking red LED turns off.
- **Mute Mode** icon disappears from home screen.
- Your radio unmutes and speaker state is restored.
- If the timer has not expired, Mute mode timer is stopped.

NOTICE:
Mute Mode is also exited if the user transmits voice or switches to an unprogrammed channel.

4.10.18
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.

NOTICE:
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. If *hot mic* is enabled, the incoming calls sound through the speaker after the programmed *hot mic* transmission period is over. The indicators only appear once you press the **PTT** button.

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

4.10.18.1
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.

NOTICE:
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.

NOTICE:

When configured for Emergency Alarm only, the emergency process consists only of the Emergency Alarm delivery. The emergency ends when an acknowledgment 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.

4.10.18.2
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 acknowledgment by the infrastructure within the group, a group of radios can communicate over a programmed Emergency channel.

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.

The display shows `Tx Alarm` and the destination alias. The **Emergency** icon appears. The green LED lights up.

NOTICE:

If your radio is 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 successfully 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.

127

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

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.

6 Press the **Emergency Off** button to exit the Emergency mode.

The radio returns to the Home screen.

NOTICE:

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.

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.

4.10.18.3
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*.

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.

NOTICE:
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.

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.

129

3 Press the **Emergency Off** button to exit the Emergency mode.

The radio returns to the Home screen.

4.10.18.4
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 to view the alarm.

2
Press 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 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.

4.10.18.5
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.

NOTICE:
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.

4.10.18.6
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.

  NOTICE:
  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.

4.10.18.7
Exiting Emergency Mode

Press the programmed **Emergency Off** button.

Your radio shows the following indications:

- The tone ceased.

- The red LED extinguished.

- When acknowlegment is received, the display of the transmitting radio shows Cancel Emer Success. If no

acknowledgement is received, the display shows `Cancel Emer Failed`.

NOTICE:
If the Cancel Emergency configuration is enabled on the transmitting radio, the emergency alarm in your receiving radio will cease and the status is added to the Alarm List of the receiving radio.

4.10.19
Status Message

This feature allows the user to send status messages to other radios.

The Quick Status list is configured by using CPS-RM and comprises up to a maximum of 99 statuses.

The maximum length for each status message is 16 characters.

NOTICE:
Every status has a corresponding digital value ranging from 0–99. An alias can be specified to each status for ease of reference.

4.10.19.1

Sending Status Messages

Follow the procedure below to send a status message.

1 Do one of the following:

- Press the programmed **One Touch Access** button. Skip the following steps.

- Press $\boxed{\text{OK}}$ to access the menu.

2
Press ▲ or ▼ to `Status`. Press $\boxed{\text{OK}}$ to select.

3
Press ▲ or ▼ to `Quick Status`. Press $\boxed{\text{OK}}$ to select.

4 Press ▲ or ▼ to the required status message. Press $\boxed{\text{OK}}$ to select.

5 Press ▲ or ▼ to the required subscriber alias or ID, or group alias or ID. Press $\boxed{\text{OK}}$ to select.

If successful:

- A positive indicator tone sounds.
- The LED turns off.
- The display shows a positive mini notice momentarily before returning to the Quick Status screen.
- The display shows ✔ beside the sent status message.

If unsuccessful:

- A negative indicator tone sounds.
- The LED turns off.
- The display shows the failure notice momentarily before returning to the Quick Status screen.

4.10.19.2
Sending Status Message by Using Programmable Button

Follow the procedure to send a status message by using the programmable button.

1 Press the programmed **Status Message** button.

2 Press ▲ or ▼ to the required status message. Press 🔳 to select. The contact list is displayed.

3 Press ▲ or ▼ to the required subscriber alias or ID, or group alias or ID. Press 🔳 to select.

If successful:

- A positive indicator tone sounds.
- The LED turns off.
- The display shows a positive mini notice momentarily before returning to the Quick Status screen.
- The display shows ✔ beside the sent status message.

If unsuccessful:

- A negative indicator tone sounds.
- The LED turns off.
- The display shows the failure notice momentarily before returning to the Quick Status screen.

4.10.19.3
Sending a Status Message by Using the Contacts List

Follow the procedure to send a status message by using the contacts list.

1
Press ⬚ to access the menu.

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

3 Press ▲ or ▼ to the required subscriber alias or

ID, or group alias or ID. Press ⬚ to select.

4
Press ▲ or ▼ to Send Status. Press ⬚ to select.

5 Press ▲ or ▼ to the required status message.

Press ⬚ to select.

If successful:

• A positive indicator tone sounds.

• The LED turns off.

• The display shows a positive mini notice momentarily before returning to the Quick Status screen.

• The display shows ✔ beside the sent status message.

If unsuccessful:

• A negative indicator tone sounds.

• The LED turns off.

• The display shows the failure notice momentarily before returning to the Quick Status screen.

4.10.19.4
Sending Status Message by Using Manual Dial

Follow the procedure to send a status message by using the manual dial.

1
Press ⬚ to access the menu.

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

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

135

4

Press ▲ or ▼ to `Radio Number`. Press 🔲 to select.

5 Enter the required subscriber alias or ID, or group

alias or ID, and press 🔲 to proceed.

6

Press ▲ or ▼ to `Send Status`. Press 🔲 to select.

7 Press ▲ or ▼ to the required status message.

Press 🔲 to select.

If successful:

- A positive indicator tone sounds.
- The LED turns off.
- The display shows a positive mini notice momentarily before returning to the `Quick Status` screen.
- The display shows ✔ beside the sent status message.

If unsuccessful:

- A negative indicator tone sounds.

136

- The LED turns off.
- The display shows the failure notice momentarily before returning to the `Quick Status` screen.

4.10.19.5
Viewing Status Messages

Follow the procedure to view status messages.

1
Press 🔲 to access the menu.

2
Press ▲ or ▼ to `Status`. Press 🔲 to select.

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

4 Press ▲ or ▼ to the required status message.

Press 🔲 to select.

The content of the status message is displayed to the radio user.

Received status messages can also be viewed by accessing the Notification List. See Notification List on page 167 for more information.

4.10.19.6
Responding to Status Messages

Follow the procedure to reply status messages.

1
Press 　　 to access the menu.

2
Press ▲ or ▼ to Status. Press 　　 to select.

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

4 Press ▲ or ▼ to the required status message.
Press 　　 to select.

5
The content of the status is displayed. Press 　　 to select.

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

7 Press ▲ or ▼ to the required status message.
Press 　　 to select.

If successful:

• A positive indicator tone sounds.

• The LED turns off.

• The display shows a positive mini notice before returning to the Inbox screen.

• The display shows ✔ beside the sent status message.

If unsuccessful:

• A negative indicator tone sounds.

• The LED turns off.

• The display shows the failure notice momentarily before returning to the Inbox screen.

137

4.10.19.7
Deleting a Status Message

Follow the procedure to delete a status message from your radio.

1

Press ⌞OK⌟ to access the menu.

2

Press ▲ or ▼ to Status. Press ⌞OK⌟ to select.

3

Press ▲ or ▼ to Inbox. Press ⌞OK⌟ to select.

4 Press ▲ or ▼ to the required status message.

Press ⌞OK⌟ to select.

5

The content of the status is displayed. Press ⌞OK⌟ to select.

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 before returning to the Inbox screen.

4.10.19.8
Deleting All Status Messages

Follow the procedure to delete all status messages from your radio.

1

Press ⌞OK⌟ to access the menu.

2

Press ▲ or ▼ to Status. Press ⌞OK⌟ to select.

3

Press ▲ or ▼ to Inbox. Press ⌞OK⌟ to select.

4

Press ▲ or ▼ to Delete All. Press ⌞OK⌟ to select.

5

Press ▲ or ▼ to Yes. Press ⌷⌷ to select.

• The display shows List Empty.

4.10.20
Text Messaging

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

There are two types of text messages, Digital Mobile Radio (DMR) Short Text Message and text message. The maximum length of a DMR Short Text Message is 23 characters. The maximum length of a text message is 280 characters, including the subject line. The subject line only appears when you receive messages from e-mail applications.

✎ **NOTICE:**
The maximum character length is only applicable for models with the latest software and hardware. For radio models with older software and hardware, the maximum length of a text message is 140 characters. Contact your dealer for more information.

4.10.20.1
Text Messages

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

The radio exits the current screen once the inactivity timer expires. Long press ⌷ at any time to return to the Home screen.

4.10.20.1.1
Viewing Text Messages

1

Press ⌷⌷ to access the menu.

2

Press ▲ or ▼ to Messages. Press ⌷⌷ to select.

3

Press ▲ or ▼ to Inbox. Press ⌷⌷ to select.

If the Inbox is empty:

• The display shows List Empty.

• A tone sounds, if the Keypad Tone is turned on.

139

4 Press or to the required message. Press

 to select.

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

4.10.20.1.2
Viewing Telemetry Status Text Messages

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

1
Press to access the menu.

2
Press or to Messages. Press to select.

3
Press or to Inbox. Press to select.

4 Press or to the required message. Press

 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.

4.10.20.1.3
Viewing Saved Text Messages

1 Do one of the following:

• Press the programmed **Text Message** button. Proceed to step 3.

• Press to access the menu.

2
Press or to Messages. Press to select.

3
Press or to Drafts. Press to select.

4 Press ▲ or ▼ to the required message. Press

OK to select.

4.10.20.1.4
Responding to Text Messages

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.

    NOTICE:
    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 Press to return to the Inbox.

4.10.20.1.5
Responding to Text Messages with Quick Text

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.

141

3

Press ▲ or ▼ to `Inbox`. Press 🔳 to select.

4 Press ▲ or ▼ to the required message. Press

🔳 to select.

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

5

Press 🔳 to access the sub-menu.

6 Do one of the following:

• Press ▲ or ▼ to `Reply`. Press 🔳 to select.

• Press ▲ or ▼ to `Quick Reply`. Press 🔳 to select.

A blinking cursor appears. You can write or edit your message, if required.

7

Press 🔳 once message is composed.

The display shows a transitional mini notice, confirming the message is being sent.

8 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.

4.10.20.1.6
Forwarding Text Messages

When you are at the Resend option screen:

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

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

4.10.20.1.7
Forwarding Text Messages by Using the Manual Dial

1
Press ▲ or ▼ to Forward. Press 🔳 to select.

2
Press 🔳 to send the same message to another subscriber or group alias or ID.

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

The display shows Radio Number:.

4
Enter the subscriber ID, and press 🔳 to proceed.

The display shows a transitional mini notice, confirming your message is being sent.

143

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.

4.10.20.1.8
Editing Text Messages

Select Edit to edit the message.

NOTICE:
If a subject line is present (for messages received from an e-mail application), you cannot edit it.

1

Press ▲ or ▼ to Edit. Press 🔲 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 🔲 once message is composed.

4 Do one of the following:

- Press ▲ or ▼ to Send and press 🔲 to send the message.

- Press ▲ or ▼ to Save and press 🔲 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.

144

4.10.20.1.9
Sending Text Messages

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. 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.

> 📝 **NOTICE:**
> For a newly written text message, the radio returns you to the `Resend` option screen.

4.10.20.1.10
Editing Saved Text Messages

1
Press 🔲 while viewing the message.

2
Press ▲ or ▼ to `Edit`. Press 🔲 to select.

A blinking cursor appears.

3 Use the keypad to type your message.

Press ◀ to move one space to the left.

145

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.

4.10.20.1.11

Resending Text Messages

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 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 Resend option screen.

4.10.20.1.12
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.

4.10.20.1.13
Deleting All Text Messages from the Inbox

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:

147

- • The display shows List Empty.

- • A tone sounds.

4
Press ▲ or ▼ to Delete All. Press 🖳 to select.

5
Press ▲ or ▼ to Yes. Press 🖳 to select.

The display shows a positive mini notice.

4.10.20.1.14
Deleting Saved Text Messages from the Drafts Folder

1 Do one of the following:

- • Press the programmed **Text Message** button. Proceed to step 3.

- • Press 🖳 to access the menu.

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

3
Press ▲ or ▼ to Drafts. Press 🖳 to select.

4
Press ▲ or ▼ to the required message. Press

🖳 to select.

5
Press 🖳 again while viewing the message.

6
Press ▲ or ▼ to Delete. Press 🖳 to delete the text message.

4.10.20.2
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.

<div style="border:1px solid">

NOTICE:
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.

</div>

4.10.20.2.1
Viewing Sent Text Messages

1 Do one of the following:

• Press the programmed **Text Message** button. Proceed to step 3.

• Press ⬛ to access the menu.

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

3
Press ▲ or ▼ to Sent Items. Press ⬛ 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 ⬛ to select.

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

4.10.20.2.2
Sending Sent Text Messages

When you are viewing a Sent message:

1
Press ⬚ .

2
Press ▲ or ▼ to Resend. Press ⬚ 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 for more information.

4.10.20.2.3
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 ⬚ .

2
Press ▲ or ▼ to Delete. Press ⬚ to select.

4.10.20.3
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.

4.10.20.3.1
Sending Quick Text Messages

Follow the procedure to send predefined Quick Text messages on your radio to a predefined alias.

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

The display shows a transitional mini notice, confirming the message is being sent.

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.

- The radio proceeds to the `Resend` option screen. See for more information.

4.10.21
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)

  NOTICE:

  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.

4.10.21.1
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 🔳 to access the menu.

2

Press ▲ or ▼ to `Utilities` and press 🔳 to
select.

3 Press ▲ or ▼ to `Radio Settings` and press

🔳 to select.

4

Press ▲ or ▼ to `Text Entry` and press 🔳 to
select.

5

Press ▲ or ▼ to `Word Predict` and press 🔳
to select.

You can also use ◀ or ▶ to change the selected
option.

6 Do one of the following:

- Press 🔳 to enable Word Predict. The display
  shows ✔ beside Enabled.

- Press 🔳 to disable Word Predict. The ✔
  disappears from beside Enabled.

4.10.21.2
Sentence Cap

This feature is used to automatically enable capitalization of the first letter in the first word for every new sentence.

1
Press ⬚ to access the menu.

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

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

4
Press ▲ or ▼ to `Text Entry`. Press ⬚ to select.

5
Press ▲ or ▼ to `Sentence Cap`. Press ⬚ to select.

6 Do one of the following:

• Press ⬚ to enable Sentence Cap. If enabled, ✔ appears beside `Enabled`.

• Press ⬚ to disable Sentence Cap. If disabled, ✔ disappears beside `Enabled`.

4.10.21.3
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 ⬚ to access the menu.

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

3
Press ▲ or ▼ to `Radio Settings`. Press ⬚ 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.

4.10.21.4
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.

4.10.21.5
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.

155

- Press ▶ key to move one space to the right.

- Press the (∗◁) key to delete any unwanted characters.

- Long press (# ᵇ) 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.

4.10.21.6
Deleting a Custom Word

You can 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 🔲 to return to the previous screen.

4.10.21.7
Deleting All Custom Words

You can delete all custom words from the in-built dictionary of your radio.

1

Press 🔲 to access the menu.

2

Press ▲ or ▼ to Utilities. Press 🔲 to select.

3

Press ▲ or ▼ to Radio Settings. Press 🔲 to select.

4

Press ▲ or ▼ to Text Entry. Press 🔲 to select.

5

Press ▲ or ▼ to My Words. Press 🔲 to select.

6

Press ▲ or ▼ to Delete All. Press 🔲 to select.

7 Do one of the following:

• At Delete Entry?, press 🔲 to select Yes. The display shows Entry Deleted.

• Press ▲ or ▼ to No to return to the previous screen. Press 🔲 to select.

4.10.22
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.

157

Your radio 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 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 for Enhanced Privacy.

On a privacy-enabled channel, your radio is able to receive clear or unscrambled calls, depending on how your radio is programmed. In addition, your radio may play a warning tone or not, depending on how it is programmed.

If the radio has privacy assigned, the **Secure** or **Unsecure** icon appears on the status bar, except when the radio is sending or receiving an Emergency call or alarm.

The green LED lights up when the radio is transmitting, and double blinks when the radio is receiving an ongoing privacy-enabled transmission.

✎ **NOTICE:**
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.

4.10.22.1

158

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 ⌷ to access the menu.

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

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

4
Press ▲ or ▼ to Privacy. Press ⌷ to select.

5 Do one of the following:

- Press ▲ or ▼ to On. Press ⌷ to select. The display shows ✔ beside On.

• Press ▲ or ▼ to `Off`. Press 🔲 to select. The display shows ✔ beside `Off`.

4.10.23
Response Inhibit

This feature helps prevent your radio from responding to any incoming transmissions.

NOTICE:
Contact your dealer to determine how your radio has been programmed.

If enabled, your radio does not generate any outgoing transmissions in respond to incoming transmissions, such as Radio Check, Call Alert, Radio Disable, Remote Monitor, Automatic Registration Service (ARS), Responding to Private Messages, and Sending GNSS location reports.

Your radio cannot receive Confirmed Private Calls when this feature is enabled. However, your radio is able to manually send transmission.

4.10.23.1

Turning Response Inhibit On or Off

Follow the procedure to enable or disable Response Inhibit on your radio.

Press the programmed **Response Inhibit** button.

If successful:

• A positive indicator tone sounds.

• The display shows a momentary positive mini notice.

If unsuccessful:

• A negative indicator tone sounds.

• The display shows a momentary negative mini notice.

4.10.24
Stun/Revive

☑ Capacity Max   This feature allows you to enable or disable any radio in the system. For example, the dealer or system administrator may want to disable a stolen radio to

159

prevent unauthorized users from using it, and enable the radio when it is recovered.

A radio can be disabled (stunned) or enabled (revived) either through the console or through a command initiated by another radio.

Once a radio is disabled, the radio sounds a negative indicator tone and the home screen shows `Channel Denied`.

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 GNSS location reports and can be monitored remotely when it was stunned.

NOTICE:
The dealer or system administrator may permanently disable a radio. See Radio Kill on page 164 for more information.

4.10.24.1
Stunning a Radio

Follow the procedure to disable a radio.

1 Press the programmed **Radio Disable** button.

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

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.

4.10.24.2
Stunning a Radio by Using the Contacts List

Follow the procedure to disable a 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.

If ⟲ is pressed during the Radio Disable operation, the radio does not receive an acknowledgment message.

The display shows `Radio Disable: <Subscriber Alias or ID>`. 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.

4.10.24.3
Stunning a Radio by Using the Manual Dial

Follow the procedure to disable a 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.

161

4

Press ▲ or ▼ to `Radio Contact`. Press 🔲 to select.

The first text line shows `Radio Number:`.

5

Enter the subscriber ID, and press 🔲 to proceed.

6

Press ▲ or ▼ to `Radio Disable`. Press 🔲 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.

4.10.24.4
Reviving a Radio

Follow the procedure to enable a radio.

1 Press the programmed **Radio Enable** button.

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

The display shows `Radio Enable: <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.

4.10.24.5
Reviving a Radio by Using the Contacts List

Follow the procedure to enable a radio by 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 ⌷ to select.

4
Press ▲ or ▼ to Radio Enable. Press ⌷ to select.

The display shows Radio Enable: <Subscriber Alias or ID>. The green LED lights up.

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.

4.10.24.6
Reviving a Radio by Using the Manual Dial

Follow the procedure to enable a radio by using the Manual Dial.

163

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 display shows `Radio Enable: <Subscriber Alias or ID>`. The green LED lights up.

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.

4.10.25
Radio Kill

This feature is an enhanced security measure to restrict unauthorized access to a radio.

Radio Kill causes a radio to be rendered inoperable. For example, the dealer may want to kill a stolen or misplaced radio to prevent unauthorized usage.

When powered on, a killed radio displays `Radio Killed` on the screen momentarily to indicate the killed state.

NOTICE:
A killed radio can only be revived at a Motorola Solutions service depot. Contact your dealer for more information.

4.10.26
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 you using an audio indicator once the inactivity timer expires.

If there is still no acknowledgment by you before the predefined reminder timer expires, the radio initiates an emergency condition as programmed by the dealer.

4.10.27

Password Lock

You can set a password to restrict access to your radio. Each time you turn on your radio, you are asked to enter the password.

Your radio supports a 4-digit password input.

Your radio is unable to receive calls in locked state.

4.10.27.1
Accessing the Radio by Using Password

Turn on your radio.

1 Enter the four-digit password.

    a To edit the numeric value of each digit, press ▲ or ▼. To enter and move to the next digit, press 🔲 .

2
Press 🔲 to confirm the password.

If you enter the password correctly, the radio powers up.

165

If you enter the wrong password after the first and second attempt, your radio shows the following indications:

- A continuous tone sounds.

- The display shows `Wrong Password`.

Repeat step 1.

If you enter the wrong password after the third attempt, your radio shows the following indications:

- A tone sounds.

- The yellow LED double blinks.

- The display shows `Wrong Password` and then, `Radio Locked`.

- Your radio enters into locked state for 15 minutes.

	NOTICE:
🖉	In locked state, your radio responds to inputs from the **On/Off/Volume Control Knob** and programmed **Backlight** button only.

Wait for the 15-minute locked state timer to end and then repeat step 1.

	NOTICE:
🖉	If you turn off and turn your radio on again, the 15-minute timer restarts.

4.10.27.2
Unlocking Radios in Locked State

Your radio is unable to receive calls in locked state. Follow the procedure to unlock your radio in locked state.

Do one of the following:

- If the radio is powered on, wait for 15 minutes and then repeat the steps in Accessing the Radio by Using Password on page 165 to access the radio.

- If the radio is powered off, power up the radio. Your radio restarts the 15-minute timer for locked state. A tone sounds. The yellow LED double blinks. The display shows `Radio Locked`.

  Wait for 15 minutes and then repeat the steps in Accessing the Radio by Using Password on page 165 to access the radio.

4.10.27.3
Changing Passwords

Follow the procedure to change passwords on your radio.

1
Press 🔲 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔲 to select.

3

Press ▲ or ▼ to `Radio Settings`. Press 🔲 to select.

4

Press ▲ or ▼ to `Passwd Lock`. Press 🔲 to select.

5

Enter the current four-digit password, and press 🔲 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 🔲 to select.

7

Enter a new four-digit password, and press 🔲 to proceed.

8

Re-enter the new four-digit password, and press 🔲 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.

4.10.28
Notification List

Your radio has a Notification list that collects all your unread events on the channel, such as unread text messages, telemetry messages, missed calls, and call alerts.

The display shows the **Notification** icon when the Notification list has one or more events.

The list supports a maximum of 40 unread events. When the list is full, the next event automatically replaces the oldest event. After the events are read, they are removed from the Notification list.

For text messages, missed calls, and call alert events, the maximum number of notifications are 30 text messages and 10 missed calls or call alerts. This maximum number depends on individual feature (job tickets or text messages or missed calls or call alerts) list capability.

4.10.28.1
Accessing Notification List

Follow the procedure to access the Notification list on your radio.

1 Do one of the following:

- Press the programmed **Notification** button. Skip the steps below.

- Press ⬛ to access the menu.

2
Press ⬛ to access the menu.

3
Press ▲ or ▼ to Notification. Press ⬛ to select.

4
Press ▲ or ▼ to the required event. Press ⬛ to select.

Long press 🔙 to return to the Home screen.

4.10.29
Over-the-Air Programming

Your dealer can remotely update your radio by using Over-the-Air Programming (OTAP) without physical connection. Additionally, some settings can also be configured by using 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 the program update is unsuccessful, a tone sounds, the red LED blinks once, and the display shows `Sw Update Failed`.

  NOTICE:
  If the programming update is unsuccessful, the software update failure indications appear every time you turn on your radio. Contact your dealer to reprogram your radio with the latest software to eliminate the software update failure indications.

See Checking Software Update Information on page 195 for the updated software version.

4.10.30
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 for more information on the **RSSI** icon.

4.10.30.1
Viewing RSSI Values

At the home screen, press ◀ three times and immediately press ▶, all in 5 seconds.

The display shows the current RSSI values.

To return to the home screen, press and hold 🔙.

4.10.31
Front Panel Programming

You are able to customize certain feature parameters in Front Panel Programming (FPP) to enhance the use of your radio.

The following buttons are used as required while navigating through the feature parameters.
Up/Down/Left/Right Navigation Button
Press to navigate through options horizontally or vertically, or increase or decrease values.

169

Menu/OK Button

Press to select the option or enter a sub-menu.

Return/Home Button

Short press to return to the previous menu or exit the selection screen.

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

4.10.31.1

Entering Front Panel Programming Mode

1
Press ⌷ to access the menu.

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

3
Press ▲ or ▼ to `Program Radio`. Press ⌷ to select.

4.10.31.2

Editing Mode Parameters

Use the following buttons as required while navigating through the feature parameters.

• ▲ , ▼ – Scroll through options, increase/decrease values, or navigate vertically.

• ⌷ – 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.

4.10.32

Dynamic Group Number Assignment (DGNA)

Dynamic Group Number Assignment (DGNA) is a feature which allows the console to assign and remove a new talkgroup from your radio over the air.

When the console assigns DGNA to your radio, your radio is in DGNA mode:

• A tone sounds.

- The display shows `<DGNA Talkgroup Alias> Assigned` momentarily before returning to the home screen.
- The DGNA icon appears in the status bar.
- The home screen displays DGNA talkgroup alias.

When the console removes DGNA from your radio, your radio returns to the previous talkgroup:

- A tone sounds.
- The display shows `<DGNA Talkgroup Alias> Removed` momentarily before returning to the home screen.
- The DGNA icon disappears from the status bar.
- The home screen displays the previous talkgroup alias.

Depending on how your radio is programmed, you can view, edit, and listen to the original scan lists channels and the non-DGNA talkgroups.

When your radio is in DGNA mode, pressing the PTT button allows you to communicate only with the current DGNA talkgroup. To communicate with the previous non-DGNA talkgroup, program the **One Touch Access** button. See .

NOTICE:
Check with your dealer or system administrator to determine how your radio has been programmed.

4.10.32.1
Making DGNA Calls

When your radio is in DGNA mode, press the **PTT** button to make the call.

- A DGNA tone sounds.
- The display shows the DGNA icon and the DGNA talkgroup alias.

NOTICE:
If your radio is not in DGNA mode and you press the **One Touch Access** button, your radio sounds a tone, indicating error. The display remains unchanged.

4.10.32.2
Making Non-DGNA Calls

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

- A positive tone sounds.

- Voice Announcement sounds One Touch Replaced Call.

- The display shows `<Talkgroup Alias>` and `Press PTT` momentarily.

    📝 **NOTICE:**
    If your radio is not in DGNA mode and you press the **One Touch Access** button, your radio sounds a negative tone, indicating error. The display remains unchanged.

2 Press **PTT** button before a negative tone sounds and your radio returns to the home screen.

    📝 **NOTICE:**
    When your radio is in the home screen, a PTT press makes call to the DGNA talkgroup.

4.10.32.3

Receiving and Responding to DGNA Calls

When you receive a DGNA call:

- A DGNA tone sounds.

- The display shows the DGNA icon, DGNA talkgroup alias, and radio alias.

- 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.

4.11

Utilities

This chapter explains the operations of the utility functions available in your radio.

4.11.1

Keypad Lock Options

With this feature, you can avoid accidentally pressing buttons or changing channels when your radio is not in use. You can choose to either lock your keypad, channel selector knob, or both; depending on your requirements.

Your dealer can use CPS/RM to configure one of the following options:

- Lock Keypad
- Lock Channel Selector Knob
- Lock Keypad and Channel Selector Knob
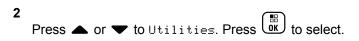
Contact your dealer to determine how your radio has been programmed.

4.11.1.1
Enabling the Keypad Lock Option

The following steps are applicable for either Lock Keypad, Lock Channel Selector Knob, or Lock Keypad and Channel Selector Knob option depending on how your radio has been configured.

1 Do one of the following:

- Press the programmed **Keypad Lock** button. Skip the following steps.

- Press 􀀀 to access the menu.

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

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

4 Press ▲ or ▼ to `Keypad Lock`. Press 􀀀 to select.

The display shows `Locked`.

4.11.1.2
Disabling the Keypad Lock Option

The following steps are applicable for either Lock Keypad, Lock Channel Selector Knob, or Lock Keypad and Channel Selector Knob option depending on how your radio has been configured.

Do one of the following:

- Press the programmed **Keypad Lock** button.
- When the display shows `Menu then * To Unlock`, press 􀀀 followed by 􀀀.

The display shows `Unlocked`.

4.11.2
Turning Acoustic Feedback Suppressor On or Off

The feature allows you to minimize acoustic feedback in received calls. Follow the procedure to turn Acoustic Feedback Suppressor on or off on your radio.

1 Do one of the following:

- Press the programmed **AF Suppressor** button. Skip the following steps.

- Press 🔲 to access the menu.

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

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

4 Press ▲ or ▼ to `AF Suppressor`. Press 🔲 to select.

5 Do one of the following:

- Press 🔲 to enable Acoustic Feedback Suppressor.

- Press 🔲 to disable Acoustic Feedback Suppressor.
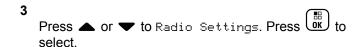
If enabled, ✔ appears beside `Enabled`. If disabled, ✔ disappears beside `Enabled`.

4.11.3
Identifying Cable Type

Do the following steps to select the type of cable your radio uses.

1 Press 🔲 to access the menu.

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

3

Press ▲ or ▼ to `Radio Settings`. Press ⊞ to select.

4

Press ▲ or ▼ to `Cable Type`. Press ⊞ to select.

5 Press ▲ or ▼ to change the selected option.

The current cable type is indicated by a ✔ .

4.11.4
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 ⊞ to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press ⊞ to select.

3

Press ▲ or ▼ to `Radio Settings`. Press ⊞ to select.

4

Press ▲ or ▼ to `Display`. Press ⊞ to select.

5

Press ▲ or ▼ to `Menu Timer`. Press ⊞ to select.

6

Press ▲ or ▼ to the required setting. Press ⊞ to select.

4.11.5
Text-to-Speech

The Text-to-Speech feature can only be enabled by your dealer. 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:

175

- 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.

4.11.5.1
Setting Text-to-Speech

Follow the procedure to set the Text-to-Speech feature.

1
Press 🔳 to access the menu.

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

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

4
Press ▲ or ▼ to Voice Announcement. Press 🔳 to select.

5
Press ▲ or ▼ to any of the following features. Press 🔳 to select.

The available features are as follows:

- All

- Messages

- Job Tickets

- Channel

- Zone

- Program Button

✔ appears beside the selected setting.

4.11.6
Turning Global Navigation Satellite System On or Off

Global Navigation Satellite System (GNSS) is a satellite navigation system that determines the radio precise location. GNSS includes Global Positioning System (GPS), Global Navigation Satellite System (GLONASS), and BeiDou Navigation Satellite System (BDS).

> **NOTICE:**
> Selected radio models may offer GPS, GLONASS, and BDS. GNSS constellation is configured by using CPS. Check with your dealer or system administrator to determine how your radio has been programmed.

1

2 Do one of the following steps to toggle GNSS on or off on your radio.

- Press the programmed **GNSS** button.

- Press ⌷ to access the menu. Proceed to the next step.

3
Press ▲ or ▼ to `Utilities`. Press ⌷ to select.

4
Press ▲ or ▼ to `Radio Settings`. Press ⌷ to select.

5
Press ▲ or ▼ to `GNSS`. Press ⌷ to select.

6
Press ⌷ to enable or disable GNSS.

If enabled, ✔ appears beside `Enabled`.
If disabled, ✔ disappears beside `Enabled`.

4.11.7
Turning Introduction Screen On or Off

You can enable and disable the Introduction Screen by following the procedure.

1
Press ⌷ to access the menu.

177

2

Press ▲ or ▼ to `Utilities`. Press 🔳 to select.

3

Press ▲ or ▼ to `Radio Settings`. Press 🔳 to select.

4

Press ▲ or ▼ to `Display`. Press 🔳 to select.

5

Press ▲ or ▼ to `Intro Screen`. Press 🔳 to select.

6

Press 🔳 to enable or disable the Introduction Screen.

The display shows one of the following results:

- If enabled, ✔ appears beside `Enabled`.
- If disabled, ✔ disappears beside `Enabled`.

4.11.8

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 following steps.

- Press 🔳 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔳 to select.

3

Press ▲ or ▼ to `Radio Settings`. Press 🔳 to select.

4

Press ▲ or ▼ to `Tones/Alerts`. Press 🔳 to select.

5

Press ▲ or ▼ to `All Tones`. Press 🔳 to select.

6

Press 🔳 to enable or disable all tones and alerts. The display shows one of the following results:

- If enabled, ✔ appears beside `Enabled`.

- If disabled, ✔ disappears beside `Enabled`.

4.11.9
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 🔳 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔳 to select.

3

Press ▲ or ▼ to `Radio Settings`. Press 🔳 to select.

4

Press ▲ or ▼ to `Tones/Alerts`. Press 🔳 to select.

5

Press ▲ or ▼ to `Vol. Offset`. Press 🔳 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 🔳 to select. The required volume offset level is saved.

- Press ⤺ to exit. The changes are discarded.

179

4.11.10
Turning Talk Permit Tone On or Off

Follow the procedure to turn Talk Permit Tone on or off on your radio.

1
    Press ⬛️ to access the menu.

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

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

4
    Press ▲ or ▼ to `Tones/Alerts`. Press ⬛️ to select.

5
    Press ▲ or ▼ to `Talk Permit`. Press ⬛️ to select.

6
    Press ⬛️ to enable or disable the Talk Permit Tone.

The display shows one of the following results:

- If enabled, ✔ appears beside `Enabled`.
- If disabled, ✔ disappears beside `Enabled`.

4.11.11
Turning Power Up Tone On or Off

Follow the procedure to turn Power Up Tone on or off on your radio.

1
    Press ⬛️ to access the menu.

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

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

4
Press ▲ or ▼ to `Tones/Alerts`. Press 🔲 to select.

5
Press ▲ or ▼ to `Power Up`. Press 🔲 to select.

6
Press 🔲 to enable or disable the Power Up Tone. The display shows one of the following results:

- If enabled, ✓ appears beside `Enabled`.

- If disabled, ✓ disappears beside `Enabled`.

4.11.12
Setting Text Message Alert Tones

You can customize the text message alert tone for each entry in the Contacts list. Follow the procedure to set the text message alert tones on your radio.

1
Press 🔲 to access the menu.

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

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

4
Press ▲ or ▼ to `Message Alert`. Press 🔲 to select.

5
Do one of the following:

- Press ▲ or ▼ to `Momentary`. Press 🔲 to select.
  The display shows ✓ beside `Momentary`.

- Press ▲ or ▼ to `Repetitive`. Press 🔲 to select.
  The display shows ✓ beside `Repetitive`.

181

4.11.13
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.

	NOTICE:
	This feature is not applicable in Citizens Band channels that are in the same frequency.

4.11.13.1
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 􀀃 to access the menu.

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

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

4 Press ▲ or ▼ to Power. Press 􀀃 to select.

5 Do one of the following:

- Press ▲ or ▼ to High. Press 􀀃 to select. The display shows ✔ beside High.

- Press ▲ or ▼ to Low. Press 􀀃 to select. The display shows ✔ beside Low.

6 Long press 􀀃 to return to the Home screen.

4.11.14
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.

4.11.15
Adjusting Display Brightness

Follow the procedure to adjust the display brightness on your radio.

1. Do one of the following:

   - Press the programmed **Brightness** 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 `Brightness`. Press 🔳 to select.

The display shows the progress bar.

5 Press ▲ or ▼ to decrease or increase the display brightness. Press 🔳 to select.

4.11.16
Setting Display Backlight Timer
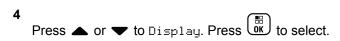
You can set the display backlight timer of the radio as needed. The setting also affects the Menu Navigation Buttons and keypad backlighting accordingly. Follow the procedure to set the backlight timer on your radio.

1 Do one of the following:

- Press the programmed **Backlight** button. Skip the following steps.

- Press 🔳 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔳 to select.

3

Press ▲ or ▼ to `Radio Settings`. Press 🔳 to select.

4

Press ▲ or ▼ to `Display`. Press 🔳 to select.

5

Press ▲ or ▼ to `Backlight Timer`. Press 🔳 to select.

The display backlight and keypad backlighting are automatically turned off as the LED indicator is disabled. See Turning LED Indicators On or Off on page 185 for more information.

4.11.17
Turning Backlight Auto On or Off

You can enable and disable the backlight of the radio to turn on automatically as needed. If enabled, the backlight is turned on when the radio receives a call, Notification List event, or Emergency Alarm.

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 `Backlight Auto.`

5

Press ⊞OK to enable or disable Backlight Auto.

The display shows one of the following results:

- If enabled, ✔ appears beside `Enabled.`

- If disabled, ✔ disappears beside `Enabled.`

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 beside `Enabled.`

- If disabled, ✔ disappears beside `Enabled.`

4.11.18
Turning LED Indicators On or Off

Follow the procedure to turn the LED indicators on or off on your radio.

4.11.19
Setting Languages

Follow the procedure to set the languages on your radio.

1

Press $\boxed{\overset{\boxdot}{\text{OK}}}$ to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press $\boxed{\overset{\boxdot}{\text{OK}}}$ to select.

3

Press ▲ or ▼ to `Radio Settings`. Press $\boxed{\overset{\boxdot}{\text{OK}}}$ to select.

4

Press ▲ or ▼ to `Languages`. Press $\boxed{\overset{\boxdot}{\text{OK}}}$ to select.

5 Press ▲ or ▼ to the required language. Press $\boxed{\overset{\boxdot}{\text{OK}}}$ to select.

The display shows ✔ beside the selected language.

4.11.20
Turning Option Board On or Off

Option board capabilities within each channel can be assigned to programmable buttons. Follow the procedure to turn option board on or off on your radio.

Press the programmed **Option Board** button.

4.11.21
Turning Voice Announcement On or Off

This feature enables the radio to audibly indicates 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. Follow the procedure to turn Voice Announcement on or off on your radio.

1 Do one of the following:

- Press the programmed **Voice Announcement** button. Skip the following steps.

- Press $\boxed{\overset{\boxdot}{\text{OK}}}$ to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press $\boxed{\overset{\boxdot}{\text{OK}}}$ to select.

3

Press ▲ or ▼ to Radio Settings. Press 🔲 to select.

4

Press ▲ or ▼ to Voice Announcement. Press 🔲 to select.

5

Press 🔲 to enable or disable Voice Announcement.

- If enabled, ✔ appears beside Enabled.

- If disabled, ✔ disappears beside Enabled.

4.11.22
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 🔲 to access the menu.

2

Press ▲ or ▼ to Utilities. Press 🔲 to select.

3

Press ▲ or ▼ to Radio Settings. Press 🔲 to select.

4

Press ▲ or ▼ to Mic AGC-D. Press 🔲 to select.

5

Press 🔲 to enable or disable Digital Microphone AGC.

The display shows one of the following results:

- If enabled, ✔ appears beside Enabled.

- If disabled, ✔ disappears beside Enabled.

187

4.11.23
Switching Audio Route between Internal Radio Speaker and Wired Accessory

Follow the procedure to toggle audio routing between internal radio speaker and wired accessory.

You can toggle audio routing between the internal radio speaker and the speaker of a wired accessory with the condition that:

• The wired accessory with speaker is attached.

Press the programmed **Audio Toggle** button.

A tone sounds when the audio route has switched.

Powering down the radio or detaching the accessory resets the audio routing to the internal radio speaker.

4.11.24
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.

> **NOTICE:**
> 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 to access the menu.

2 Press or to Utilities. Press to select.

3 Press or to Radio Settings. Press to select.

4 Press or to Intelligent Audio. Press to select.

5 Do one of the following:

- Press ▲ or ▼ to `On`. Press 🔲 to select. The display shows ✔ beside `On`.

- Press ▲ or ▼ to `Off`. Press 🔲 to select. The display shows ✔ beside `Off`.

4.11.25
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 🔲 to access the menu.

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

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

4 Press ▲ or ▼ to `Trill Enhance`. Press 🔲 to select.

5 Do one of the following:

- Press ▲ or ▼ to `On`. Press 🔲 to select. The display shows ✔ beside `On`.

- Press ▲ or ▼ to `Off`. Press 🔲 to select. The display shows ✔ beside `Off`.

4.11.26
Turning the Microphone Dynamic Distortion Control Feature On or Off

This feature allows you to enable the radio to automatically monitor the microphone input and adjust the microphone gain value to avoid audio clipping.

189

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 Distortion`. Press ⬛ᴼᴷ to select.

5 Do one of the following:

- Press ⬛ᴼᴷ to enable Microphone Dynamic Distortion Control. If enabled, ✔ appears beside `Enabled`.

- Press ⬛ᴼᴷ to disable Microphone Dynamic Distortion Control. If disabled, ✔ disappears beside `Enabled`.

4.11.27

190

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.

4.11.28
Setting Audio Profiles

Follow the procedure to set audio profiles on your radio.

1

Press 📟 to access the menu.

2

Press ▲ or ▼ to Utilities. Press 📟 to select.

3

Press ▲ or ▼ to Radio Settings. Press 📟 to select.

4

Press ▲ or ▼ to Audio Profiles. Press 📟 to select.

5

Press ▲ or ▼ to the required setting. Press 📟 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.

The display shows ✔ beside the selected setting.

191

4.11.29
General Radio Information

Your radio contains information on various general parameters.

The general information of your radio is as follows:

- Battery information.
- Radio alias and ID.
- Firmware and Codeplug versions.
- Software update.
- GNSS information.
- Site information.
- Received Signal Strength Indicator.

> **NOTICE:**
>
> Press $\boxed{\overset{\circlearrowright}{\unicode{x2302}}}$ to return to the previous screen. Long
>
> press $\boxed{\overset{\circlearrowright}{\unicode{x2302}}}$ to return to the Home screen. The radio exits the current screen once the inactivity timer expires.

4.11.29.1

Accessing Battery Information

Displays information of your radio battery.

1
  Press $\boxed{\overset{\boxminus}{\text{OK}}}$ to access the menu.

2
  Press ▲ or ▼ to Utilities. Press $\boxed{\overset{\boxminus}{\text{OK}}}$ to select.

3
  Press ▲ or ▼ to Radio Info. Press $\boxed{\overset{\boxminus}{\text{OK}}}$ to select.

4

Press ▲ or ▼ to `Battery Info.` Press 🔲 to select.

> 📝 **NOTICE:**
> For **IMPRES** batteries only: The display reads `Recondition Battery` when the battery requires reconditioning in an IMPRES charger. After the reconditioning process, the display then shows the battery information.

The display shows the battery information.

> 📝 **NOTICE:**
> For non-supported battery, the display shows `Unknown Battery.`

4.11.29.2
Checking Radio Alias and ID

1 Do one of the following:

- Press the programmed **Radio Alias and ID** button. Skip the following steps.
  A positive indicator tone sounds.

You can press the programmed **Radio Alias and ID** button to return to the previous screen.

- Press 🔲 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔲 to select.

3

Press ▲ or ▼ to `Radio Info`. Press 🔲 to select.

4

Press ▲ or ▼ to `My Number`. Press 🔲 to select.

The first text line shows the radio alias. The second text line shows the radio ID.

4.11.29.3
Checking Firmware and Codeplug Versions

1

Press 🔲 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔲 to select.

3

Press ▲ or ▼ to `Radio Info`. Press 🔲 to select.

4

Press ▲ or ▼ to `Versions`. Press 🔲 to select.

The display shows the current firmware and codeplug versions.

4.11.29.4
Checking GNSS Information

Displays the GNSS information on your radio, such as values of:

• Latitude

• Longitude

• Altitude

• Direction

• Velocity

• Horizontal Dilution of Precision (HDOP)

• Satellites

• Version

1

Press 🔲 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔲 to select.

3

Press ▲ or ▼ to `Radio Info`. Press 🔲 to select.

4

Press ▲ or ▼ to `GNSS Info`. Press 🔲 to select.

5

Press ▲ or ▼ to the required item. Press 🔲 to select. The display shows the requested GNSS information.

4.11.29.5
Checking Software Update Information

This feature shows the date and time of the latest software update carried out through OTAP or Wi-Fi. Follow the procedure to check the software update information on your radio.

1
Press to access the menu.

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

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

4
Press ▲ or ▼ to SW Update. Press 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 324 for more information.

4.11.29.6
Displaying Site Information

Follow the procedure to display the current site name your radio is on.

1
Press to access the menu.

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

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

4
Press ▲ or ▼ to Site Info. Press to select.

The display shows the current site name.

195

Other Systems

Features that are available to the radio users under this system are available in this chapter.

5.1

Push-To-Talk Button

The Push-to-Talk **(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.

Long press the **PTT** button to talk. Release the **PTT** button to listen.

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

5.2

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.

> **NOTICE:**
> See Emergency Operation on page 288 for more information on the programmed duration of the **Emergency** button.

5.3

Assignable Radio Functions

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

Audio Profiles
Allows the user to select the preferred audio profile.

Audio Toggle

Toggles audio routing between the internal radio speaker and the speaker of a wired 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.
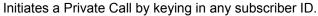
Emergency

Depending on the programming, initiates or cancels an emergency.

Intelligent Audio

Toggles intelligent audio on or off.

Manual Dial ⬤

Initiates a Private Call by keying in any subscriber ID.

Manual Site Roam [2] ⬤

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[2]

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, a Quick Text message, or Home Revert.

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[2] Not applicable in Capacity Plus.

Option Board Feature
Toggles option board feature(s) on or off for option board-enabled channels.

Permanent Monitor[2]
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.

Radio Alias and ID
Provides radio alias and ID.

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.

Repeater/Talkaround[2]
Toggles between using a repeater and communicating directly with another radio.

Scan [3]
Toggles scan on or off.

Silence Home Channel Reminder
Mutes the Home Channel Reminder.

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[2] 🔵
When toggled on, the radio searches the current site only. When toggled off, the radio searches other sites in addition to the current site.

Status
Selects the status list menu.

Telemetry Control
Controls the Output Pin on a local or remote radio.

---

[3] Not applicable in Capacity Plus–Single-Site.

Text Message 🔵
Selects the text message menu.

Voice Interrupt 🔵
Interrupts the audio from a transmitting radio to free the channel.

Trill Enhancement
Toggles trill enhancement on or off.

Voice Announcement On/Off
Toggles voice announcement on or off.

Voice Operating Transmission (VOX)
Toggles VOX on or off.

Zone Selection
Allows selection from a list of zones.

5.4
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.

Backlight Brightness
Adjusts the brightness level.

Display Mode
Toggles the day/night display mode on or off.

Keypad Lock
Toggles keypad between locked and unlocked.

Power Level
Toggles transmit power level between high and low.

5.5
Accessing Programmed Functions

Follow the procedure to access programmed functions in your radio.

1 Do one of the following:

• Press the programmed button. Proceed to step 3.

• Press 🔲 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.

5.6
Status Indicators

This chapter explains the status indicators and audio tones used in the radio.

5.6.1
Icons

The 132 x 90 pixels, 256 colors, 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.

Table 8: 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. The icon blinks when the battery is low.
	Call Log Radio call log.
	Contact Radio contact is available.
	Emergency Radio is in Emergency mode.

	GNSS Available GNSS feature is enabled. The icon stays lit when a position fix is available.			**Option Board** The Option Board is enabled. (Option board enabled models only)
	GNSS Not Available GNSS feature is enabled but is not receiving data from the satellite.			**Option Board Non-Function** The Option Board is disabled.
	High Volume Data Radio is receiving high volume data and channel is busy.			**Over-the-Air Programming Delay Timer** Indicates time left before automatic restart of radio.
	Message Incoming message.			**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.
	Monitor Selected channel is being monitored.			**Response Inhibit** Response Inhibit is enabled.
	Mute Mode Mute Mode is enabled and speaker is muted.			**Ring Only** Ringing mode is enabled.
	Notification Notification List has one or more missed events.			**Scan**[4] Scan feature is enabled.

201

	Scan-Priority 1[4] Radio detects activity on channel/group designated as Priority 1.
	Scan-Priority 2[4] 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[5] The site roaming feature is enabled.

	Talkaround[4] 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.
	Vote Scan Vote scan feature is enabled.

Table 9: 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 that the option is selected.

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[4] Not applicable in Capacity Plus.

[5] Not applicable in Capacity Plus–Single-Site

	Checkbox (Empty)
	Indicates that the option is not selected.

	Solid Black Box
	Indicates that the option selected for the menu item with a sub-menu.
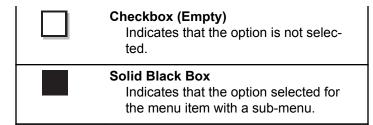
Table 10: Call Icons

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

	Private Call
	Indicates a Private Call in progress. In the Contacts list, it indicates a subscriber alias (name) or ID (number).

	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).

Table 11: Job Tickets Icons

The following icons appear momentarily on the display in the Job Ticket folder.

	All Jobs
	Indicates all jobs listed.

	New Jobs
	Indicates new jobs.

203

	In Progress Jobs are transmitting. This is seen before indication for Job Tickets Send Failed or Sent Succesfully.
	Send Failed Jobs cannot be sent.
	Sent Successfully Jobs have been successfully sent.
	Priority 1 Indicates Priority Level 1 for jobs.
	Priority 2 Indicates Priority Level 2 for jobs.
	Priority 3 Indicates Priority Level 3 for jobs.

Table 12: 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 Transmission (Positive) Successful action taken.
	Transmission in Progress (Transitional) Transmitting. This is seen before indication for Successful Transmission or Failed Transmission.

Table 13: Sent Items Icons

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

or	**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.
or	
	Individual or Group Message Unread The text message has not been read.
or	
	Send Failed The text message cannot be sent.
or	
	Sent Successfully The text message has been success- fully sent.
or	

Blinking Red

Radio is indicating a battery mismatch.

Radio has failed the self-test upon powering up.

Radio is receiving an emergency transmission.

Radio is transmitting in low battery state.

Radio has moved out of range if Auto-Range Transponder System is configured.

Mute Mode is enabled.

Solid Green

Radio is powering up.

Radio is transmitting.

Radio is sending a Call Alert or an emergency transmission.

Blinking Green

Radio is receiving a call or data.

Radio is retrieving Over-the-Air Programming transmissions.

5.6.2
LED Indicators

LED indicators show the operational status of your radio.

Radio is detecting activity over the air.

 NOTICE:
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 has yet to respond to 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.

5.6.3
Tones

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

☐

High Pitched Tone

■

Low Pitched Tone

5.6.3.1
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

5.6.3.2
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 once for a short duration set by the radio.

5.7

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 1000 channels and 250 zones, with a maximum of 160 channels per zone.

Each channel can be programmed with different features and/or support different groups of users.

5.7.1
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.

207

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.

5.7.2
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.

5.7.3
Selecting Channels

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

Turn the **Channel Selector** Knob to select the channel, subscriber ID, or group ID.

NOTICE:
If **Virtual Channel Stop** is enabled, your radio stops proceeding beyond the first or the last channel, and a tone is heard.

5.8
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 (by using 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.

NOTICE:
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 271 for more information.

Programmed One Touch Access Button
This method is used for Group, Private, and Phone Calls only.

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.

5.8.1
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.

5.8.1.1
Responding to Group Calls

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

When you receive a Group Call:

- The green LED blinks.
- 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.

If the radio receives a Group Call while not on the Home screen, it remains on its current screen prior to answering the call.

Long press 🔙 to return to the Home screen to view the caller alias before replying.

5.8.1.2
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 display shows the **Group Call** icon and the group call 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, the group 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 radio returns to the screen you were on prior to initiating the call.

5.8.1.3
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 🔲 to access the menu.

211

2

Press ▲ or ▼ to Contacts. Press 🔳 to select.

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

🔳 to select.

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

The green LED lights up.

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.

6 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.

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.

5.8.1.4
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 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 subscriber alias. The second text line displays either the call status for a Private Call or `All Call` for 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.

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

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

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 for more information.

5.8.1.5
Making Group Calls by Using the Channel Selector Knob

Follow the procedure to make Group Calls by using the Channel Selector Knob.

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 display 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 blinks when the target radio responds. The display shows the **Group Call** icon, and alias or ID, and the transmitting radio alias or ID. The radio returns to the screen you were on prior to initiating the call.

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.

5.8.2

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.

If your radio is programmed to perform a radio presence check prior to setting up the Private Call and the target radio is not available:

• A tone sounds.

• The display shows a negative mini notice.

• The radio returns to the menu prior to initiating the radio presence check.

See Privacy on page 314 for more information.

5.8.2.1
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.

- The **Private Call** icon appears in the top right corner.

- The first text line shows the caller 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 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`.

5.8.2.2
Making Private Calls ⬤

Your radio must be programmed to initiate a Private Call. If this feature is not enabled, a negative indicator tone sounds when you initiate the call. 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.

        - 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.

215

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`.

5.8.2.3
Making Private Calls by 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 ⌨ to select.

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

If you release the **PTT** button while the radio is setting up the call, it exits without any indication and returns to the previous screen.

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.

5.8.2.4
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 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 blinks when the target radio responds. The display shows the destination alias.

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 radio

returns to the screen you were on before initiating the call.

See Assigning Entries to Programmable Number Keys on page 271 for more information.

5.8.2.5
Making Private Calls by Using the Programmable Manual Dial Button

Follow the procedure to make Private Calls by using the programmable **Manual Dial** button.

1 To enter the Manual Dial screen, press the programmed **Manual Dial** button.

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

The display shows Number:.

3 Enter a subscriber alias.

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

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.

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.

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.

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

5.8.3
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.

5.8.3.1
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.

📝 **NOTICE:**
   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 end of an All Call.

5.8.3.2
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.

219

• 🔴 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.

5.8.3.3
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. The first text line shows the subscriber alias. The second text line shows the 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. The display shows the destination alias.

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 prior to initiating the call.

See for more information.

5.8.4
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.

5.8.4.1
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`.

5.8.4.2
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:

221

- 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.

5.8.4.3

Making Selective Calls by Using the Channel Selector Knob

Just like a Private Call, while you can receive and/or respond to a Selective Call initiated by an authorized individual radio, your radio must be programmed for you to initiate a Selective Call.

1 Select the channel with the active subscriber alias or ID.

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

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 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 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.

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

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

5.8.5
Phone Calls 🌐

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

If Phone Call capability is not enabled in your radio:

• The display shows `Unavailable`.

• Your radio mutes the call.

• Your radio returns to the previous screen when the call ends.

During the Phone Call, your radio attempts to end the call when:

• You press the **One Touch Access** button with the deaccess code preconfigured.

• You enter the deaccess code as the input for extra digits.

During channel access, access or deaccess code, or extra digits transmission, your radio responds to the **On/Off** , **Volume Control**, and **Channel Selector** buttons or knobs only. A tone sounds for every invalid input.

During channel access, press 🔘 to dismiss the call attempt. A tone sounds.

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

Check with your dealer or system administrator for more information.

223

5.8.5.1
Dual Tone Multi Frequency

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

Disabling all radio tones and alert will automatically turn off the DTMF tone.

5.8.5.1.1
Initiating DTMF Tone

Follow the procedure to initiate a DTMF tone on your radio.

1 Press and hold the **PTT** button.

2 Do one of the following:

- Enter the desired number to initiate a DTMF tone.

- Press ⬚ to initiate a DTMF tone.

- Press ⬚ to initiate a DTMF tone.

5.8.5.2

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

2 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.

5.8.5.3
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.

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

2
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.

5.8.5.4
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`.

225

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.

5.8.5.5

Making Phone Calls ☎

Follow the procedure to make Phone Calls on your radio.

1 Do one of the following:

- Press the programmed **Phone** button to enter into the Phone Entry list.

- Press the programmed **One Touch Access** button. Proceed to Step 3.

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

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

- A negative indicator tone sounds.

- The display shows `Press OK to Place Phone Call`.

The display shows `Access Code:` if the access code was not preconfigured.

3
Enter the access code, and press 🔳 to proceed.

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

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

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:`.

- If the access code has been preconfigured in the Contacts list, your radio returns to the screen you were on before initiating the call.

5 Press the **PTT** button to respond to the call. Release the **PTT** button to listen.

6 Enter extra digits with the keypad if requested by the call, and press 🔳 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 Dual Tone Multi Frequency (DTMF) Tone sounds. Your radio returns to the previous screen.

7 Press 🔙 to end the call.

8 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 🔳 to proceed. The radio returns to the previous screen.

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

227

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.

5.8.5.6
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:

- A negative indicator tone sounds.

- The display shows `Press OK to Place Phone Call`.

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`.

229

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.

5.8.5.7
Making Phone Calls with the Programmable Phone Button

Follow the procedure to make a phone call with the programmable phone button.

1 Press the programmed **Phone** button to enter into the Phone Entry list.

2 Press ▲ or ▼ to the required alias or ID. Press
🔲 to select. If the access code was not preconfigured in the Contacts list, the display shows Access Code:. Enter the access code and press the
🔲 button to proceed.

- The green LED lights up. The **Phone Call** icon appears in the top right corner. The first text line shows the subscriber alias. The second text line displays the call status.

- If the call-setup is successful, the Dual Tone Multi Frequency (DTMF) tone sounds. You hear the dialing tone of the telephone user. The first text line shows the subscriber alias. The **Phone Call** icon remains in the top right corner. The second text line displays the call status.

- If call-setup is 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.

---

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

---

4 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 ⌨ button to proceed. The Dual Tone Multi Frequency (DTMF) tone sounds and the radio returns to the previous screen.

- Press **One Touch Access** button. The Dual Tone Multi Frequency (DTMF) tone sounds. If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.

5
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 the ⌨ button to proceed.

- The Dual Tone Multi Frequency (DTMF) tone sounds and the display shows `Ending Phone Call`.

- If the end-call-setup is successful, a tone sounds and the display shows `Call Ended`.

- If the end-call-setup is unsuccessful, your radio returns to the Phone Call screen. Repeat step 3 and step 5 or wait for the telephone user to end the call.

- 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 `Phone Call Ended`.

- If the call ends while you are entering the extra digits requested by the Phone Call, your radio

231

returns to the screen you were on prior to initiating the call.

> NOTICE:
>
> ✏️
>
> During 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.

5.8.5.8
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 🔘 to access the menu.

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

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

4
Press ▲ or ▼ to Phone Number. Press 🔘 to select.

The display shows Number: and a blinking cursor.

5
Enter the telephone number, and press 🔘 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 🔘 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 the **PTT** button to respond to the call.

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

10 Enter extra digits with the keypad if requested by the call, and press 🔲 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.

11
Press 🔙 to end the call.

12 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 🔲 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`.

233

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

5.8.6
Initiating Transmit Interrupt ●

An ongoing call is interrupted, when you perform the following actions:

- Press the **Voice PTT** button.
- Press the **Emergency** button.
- Perform data transmission.
- Press the programmed **TX Interrupt Remote Dekey** button.

The recipient radio displays Call Interrupted.

5.8.7
Broadcast Voice Calls

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

The Broadcast Voice Call feature allows only the call initiating user to transmit to the talkgroup, while the recipients of the call cannot respond (no Call Hang Time).

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

5.8.7.1
Making Broadcast Voice Calls

Program your radio to make Broadcast Voice Calls.

1 Select a channel with the active group alias or ID.

2 Do one of the following:
- Select a channel with the active group alias or ID.
- Press the programmed **One Touch Access** button.

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

The green LED lights up. The display shows Broadcast Call, the **Group Call** icon and alias.The display shows the **Group Call** icon and alias.

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.

  ✎ NOTICE:
     Users on the channel cannot respond to Broadcast Voice Calls.

The radio returns to the previous menu after the call ends.

5.8.7.2
Making Broadcast Voice Calls by Using the Programmable Number Key

Follow the procedure to make Broadcast Voice Call on your radio by using the programmable number key.

1 On the **Home** screen, long press the programmed number key assigned to the predefined alias or ID.

If the 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.

If the number key is not associated to an entry, a negative indicator tone sounds

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

The green LED lights up. The first text line shows the subscriber alias. The second text line shows the call status.

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

Users on the channel cannot respond to a Broadcast Voice Call.

The radio returns to the previous menu after the call ends.

See Assigning Entries to Programmable Number Keys on page 271 for more information.

5.8.7.3
Making Broadcast Voice Calls by Using the Alias Search ◉

You can use alias or alphanumeric search to retrieve the required subscriber alias. You can retrieve subscriber aliases this way only from Contacts. If you release the PTT

235

button while this call is being set up, the call exits without any indication and returns to the previous screen. If the target radio is not available, you hear a short tone and see Party Not Available on the display; the radio returns to the menu before initiating the radio presence check.

NOTICE:

Press ⊞OK button or 🔙 to exit alias search. If you release the **PTT** button while the radio is setting up the call, it exits without any indication and returns to the previous screen.

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

The green LED lights up. The display shows the destination ID, call type, and **Call** icon.

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

User on the channel cannot respond to a Broadcast Voice Call.

The radio returns to the previous menu after the call ends.

5.8.7.4
Receiving Broadcast Voice Calls

When you receive a Broadcast Voice 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 `Broadcast Call.`

- Your radio unmutes and the incoming call sounds through the speaker.

When the call ends, the radio returns to the previous screen.

A Broadcast Voice Call does not wait for a predetermined period before ending.

You cannot respond to a Broadcast Voice Call.

NOTICE:
The radio stops receiving the Broadcast Voice Call if you switch to a different channel while receiving the call. You cannot continue with any menu navigation or editing until the end of the Broadcast Voice Call.

5.8.8
Unaddressed Calls

An Unaddressed Call is a group call to one of the 16 predefined group IDs.

This feature is configured using CPS-RM. A contact for one of the predefined IDs is required to initiate and/or receive an Unaddressed Call. Check with your dealer or system administrator for more information.

5.8.8.1
Making Unaddressed Calls

1 Select a channel with the active group alias or ID.

2 Do one of the following:

- Select a channel with the active group alias or ID.

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

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

The green LED lights up.The text line shows `Unaddress Call`, the **Group Call** icon and alias.

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 green LED lights up when the target radio responds. A momentary tone sounds. The display shows Unaddress Call, 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 that 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 $\boxed{\overset{\supset}{\mathbb{A}}}$ to end a Group Call.

5.8.8.2
Responding to Unaddressed Calls

When you receive an Unaddressed Call:

• The green LED blinks.

• A momentary tone sounds.

• The text line shows Unaddress Call, the caller alias, and 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.

5.8.9
Open Voice Channel Mode (OVCM)

An Open Voice Channel Mode (OVCM) allows a radio that is not preconfigured to work in a particular system to both receive and transmit during a group or individual call.

The OVCM group call also supports broadcast calls. Program your radio to use this feature. Check with your dealer or system administrator for more information.

5.8.9.1
Making OVCM Calls

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

1 Select a channel with the active group alias or ID.

2 Do one of the following:

- Select a channel with the active group alias or ID.

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

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

The green LED lights up.
The text line shows the call type icon, OVCM and alias. indicating that the radio has entered OVCM State.

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.

5.8.9.2
Responding to OVCM Calls

When you receive an OVCM Call:

- The green LED blinks.

- The text line shows the call type icon, OVCM, and alias.

- Your radio unmutes and the incoming call sounds through the speaker.

NOTICE:
Recipient users are not allowed to Talkback during a Broadcast Call. The display shows `Talkback Prohibit`. If the **PTT** button is pressed during a Broadcast Call, the Talkback Prohibit Tone sounds momentarily.

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.

5.9
Advanced Features

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

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

5.9.1
Job Tickets

This feature allows your radio to receive messages from the dispatcher listing out tasks to perform.

NOTICE:
This feature can be customized through the Customer Programming Software (CPS) according to user requirements. Check with your dealer or system administrator for more information.

There are two folders that contain different Job Tickets:

My Tasks folder
Personalized Job Tickets assigned to your signed in user ID.

Shared Tasks folder
Shared Job Tickets assigned to a group of individuals.

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**.

Job Tickets are retained even after the radio is turned off and turned on again.

All Job Tickets are located in the **All** folder. Depending on how your radio is programmed, Job Tickets are sort by their priority level followed by time received. New Job Tickets, Job Tickets with recent changes in state, and Job Tickets with the highest priority are listed first.

Upon reaching the maximum number of Job Tickets, the next Job Ticket automatically replaces the last Job Ticket in your radio. Your radio supports a maximum of 100 or 500 Job Tickets, depending on your radio model. Check with your dealer or system administrator for more information. Your radio automatically detects and discards duplicated Job Tickets with the same Job Ticket ID.

Depending on the importance of the Job Tickets, the dispatcher adds a Priority Level to them. There are three priority levels: Priority 1, Priority 2, and Priority 3. Priority 1 has the highest priority and Priority 3 has the lowest priority. There are also Job Tickets with no priority.

Your radio updates accordingly when dispatcher makes the following changes:

• Modify content of Job Tickets.

• Add or edit Priority Level of Job Tickets.

• Move Job Tickets from folder to folder.

• Canceling of Job Tickets.

241

5.9.1.1
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 ⬚ to access the menu.

2
Press ▲ or ▼ to Job Tickets. Press ⬚ to select.

3
Press ▲ or ▼ to the required folder. Press ⬚ to select.

4 Press ▲ or ▼ to the required Job Ticket. Press ⬚ to select.

5.9.1.2

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.

1
Press ⬚ to access the menu.

2
Press ▲ or ▼ to Log In. Press ⬚ to select.

If you are already logged in, menu displays Log Out.

The display shows a transitional mini notice, indicating the request is in progress.

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.

5.9.1.3
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 ⬛ to access the menu.

2
Press ▲ or ▼ to Job Tickets. Press ⬛ to select.

3
Press ▲ or ▼ to Create Ticket. Press ⬛ to select.

5.9.1.4

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 ⬛ to select.

2
Press ▲ or ▼ to Room Status. Press ⬛ to select.

3
Press ▲ or ▼ to the required option. Press ⬛ to select.

4
Press ▲ or ▼ to Send. Press ⬛ to select.

The display shows a transitional mini notice, indicating the request is in progress.

5 Wait for acknowledgment.

If successful:

243

- 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.

5.9.1.5
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
Press ▲ or ▼ to the required option. Press 　▣ᴏᴋ　 to select.

2
Press ▲ or ▼ to Send. Press 　▣ᴏᴋ　 to select.

The display shows a transitional mini notice, indicating the request is in progress.

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.

5.9.1.6
Responding to Job Tickets

Follow the procedure to respond to job tickets on your radio.

1
Press 　▣ᴏᴋ　 to access the menu.

2
Press ▲ or ▼ to Job Tickets. Press 　▣ᴏᴋ　 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.

5

Press 〔 OK 〕 once more to access the sub-menu.

You can also press the corresponding number key (1–9) to **Quick Reply**.

6 Press ▲ or ▼ to the required job ticket. Press

〔 OK 〕 to select.

The display shows a transitional mini notice, indicating the request is in progress.

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.

5.9.1.7

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 4

- 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 `All` folder. Press 　OK　 to select.

5 Press ▲ or ▼ to the required Job Ticket. Press

　OK　 to select.

6

Press 　OK　 again while viewing the Job Ticket.

7

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

The display shows a transitional mini notice, indicating the request is in progress.

8 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.

246

5.9.1.8
Deleting All Job Tickets

Follow the procedure to delete all 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

Press ▲ or ▼ to `Job Tickets`. Press 　OK　 to select.

3

Press ▲ or ▼ to the required folder. Press 　OK　 to select.

4

Press ▲ or ▼ to `All` folder. Press 　OK　 to select.

5

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

6 Do one of the following:

- Press ▲ or ▼ to `Yes`. Press ⬛ to select. The display shows a positive mini notice.

- Press ▲ or ▼ to `No`. Press ⬛ to select. The radio returns to the previous screen.

5.9.2

Multi-Site Control 〰️

Your radio is able to search for sites and switch between sites when signal is weak or your radio is unable to detect any signal from the current site.

When the signal is strong, the radio remains on the current site.

This setting is applicable when your current radio channel is part of an IP Site Connect or Capacity Plus–Multi-Site configuration.

Your radio can perform either one of the following site searches:

- Automatic Site Search

- Manual Site Search

If the current channel is a multi-site channel with an attached roam list and is out of range, and the site is unlocked, your radio also performs automatic site search.

5.9.2.1

Starting Automatic Site Search

1 Do one of the following:

- Press the programmed **Site Lock On/Off** button. Skip the following steps.

- Press ⬛ to access the menu.

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

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

4 Press ▲ or ▼ to `Site Roaming`. Press ⬛ to select.

247

5

Press ▲ or ▼ to `Unlock Site`. Press ⊡ to select.

- A tone sounds.

- The display shows `Site Unlocked`.

- The LED blinks yellow rapidly when the radio is actively searching for a new site.

- The yellow LED turns off once the radio locks on to a site.

5.9.2.2
Stopping Automatic Site Search

Follow the procedure to stop automatic site search when your radio is actively searching for a new site.

1 Do one of the following:

- Press the programmed **Site Lock On/Off** button. Skip the following steps.

- Press ⊡ to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press ⊡ to select.

3

Press ▲ or ▼ to `Radio Settings`. Press ⊡ to select.

4

Press ▲ or ▼ to `Site Roaming`. Press ⊡ to select.

5

Press ▲ or ▼ to `Lock Site`. Press ⊡ to select.

- A tone sounds.

- The ✔ disappears from beside `Enabled`.

- The LED turns off.

- The display shows the current channel alias.

5.9.2.3
Enabling Manual Site Search

1 Perform one of the following actions:

- Press the programmed **Manual Site Roam** 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 `Site Roaming`. Press 🔲ₒₖ to select.

5

Press ▲ or ▼ to `Active Search`. Press 🔲ₒₖ to select.

A tone sounds. The green LED blinks. The display shows `Finding Site`.

If the radio finds a new site, your radio shows the following indications:

- A positive tone sounds.

- The LED extinguishes.

- The display shows `Site <Alias> Found`.

If the radio fails to find a new site, your radio shows the following indications:

- A negative tone sounds.

- The LED extinguishes.

- The display shows `Out of Range`.

If a new site is within range, but the radio is unable to connect to it, your radio shows the following indications:

- A negative tone sounds.

- The LED turns off.

- The display shows `Channel Busy`.

5.9.3
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

249

- Sentence Cap
- My Words

Your radio supports the following text entry methods:

- Numbers
- Symbols
- Predictive or Multi-Tap
- Language (If programmed)

NOTICE:

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.

5.9.3.1
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 ▲ or ▼ to `Text Entry`. Press [OK] to select.

- Press [OK] to enable the Word Predict. If enabled, ✔ appears beside `Enabled`.

• Press 🔲 to disable Microphone Dynamic Distortion Control. If disabled, ✔ disappears beside `Enabled`.

5.9.3.2
Sentence Cap

This feature is used to automatically enable capitalization of the first letter in the first word for every new sentence.

1
Press 🔲 to access the menu.

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

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

4
Press ▲ or ▼ to `Text Entry`. Press 🔲 to select.

5
Press ▲ or ▼ to `Sentence Cap`. Press 🔲 to select.

6 Do one of the following:

• Press 🔲 to enable Sentence Cap. If enabled, ✔ appears beside `Enabled`.

• Press 🔲 to disable Sentence Cap. If disabled, ✔ disappears beside `Enabled`.

5.9.3.3
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 🔲 to access the menu.

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

251

3

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

4

Press ▲ or ▼ to `Text Entry`. Press to select.

5

Press ▲ or ▼ to `My Words`. Press to select.

6

Press ▲ or ▼ to `List of Words`. Press to select.

The display shows the list of custom words.

5.9.3.4
Editing Custom Words

You can edit custom words saved in your radio.

1

Press to access the menu.

2

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

3

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

4

Press ▲ or ▼ to `Text Entry`. Press to select.

5

Press ▲ or ▼ to `My Words`. Press to select.

6

Press ▲ or ▼ to `List of Words`. Press to select.

Display shows the list of custom words.

7

Press ▲ or ▼ to the required word. Press to select.

8

Press ▲ or ▼ to `Edit`. Press 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.

5.9.3.5
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 ⬚ 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.

5.9.3.6
Deleting a Custom Word

You can delete the custom words saved in your radio.

1
Press ⬚ to access the menu.

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

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

4
Press ▲ or ▼ to `Text Entry`. Press ⬚ to select.

5
Press ▲ or ▼ to `My Words`. Press ⬚ to select.

6
Press ▲ or ▼ to the required word. Press ⬚ to select.

7
Press ▲ or ▼ to `Delete`. Press ⬚ to select.

8 Choose one of the following.

- At `Delete Entry?`, press ⬚ to select `Yes`. The display shows `Entry Deleted`.

• Press ▲ or ▼ to No. Press OK to return to the previous screen.

5.9.3.7
Deleting All Custom Words

You can 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 Entry Deleted.

• Press ▲ or ▼ to No to return to the previous screen. Press OK to select.

5.9.4
Talkaround

This feature allows you to continue communicating when your repeater is non-operational, or when your radio is out of range from the repeater but within the talk range of other radios.

255

The talkaround setting is retained even after powering down.

> **NOTICE:**
> This feature is not applicable in Capacity Plus–Single-Site, Capacity Plus–Multi-Site, and Citizens Band channels that are in the same frequency.

5.9.4.1
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 🔲 to access the menu.

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

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

4
Press ▲ or ▼ to `Talkaround`. Press 🔲 to select.

If enabled, ✔ appears beside `Enabled`.

If disabled, ✔ disappears beside `Enabled`.

The screen automatically returns to the previous screen.

5.9.5
Monitor Feature

The feature allows you to ensure that a channel is free before transmitting.

> **NOTICE:**
> This feature is not applicable in Capacity Plus–Single-Site and Capacity Plus–Multi-Site.

5.9.5.1
Monitoring Channels

Follow the procedure to monitor channels.

1 Long press the programmed **Monitor** button.

The **Monitor** icon appears on the display and the LED lights up solid yellow.
If the channel is in use:

- The display shows the **Monitor** icon.

- You hear radio activity or total silence.

- The yellow LED lights up.

If the monitored channel is free, you hear a "white noise".

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

5.9.5.2
Permanent Monitor

The Permanent Monitor feature is used to continuously monitor a selected channel for activity.

5.9.5.2.1
Turning Permanent Monitor On or Off

Follow the procedure to turn Permanent Monitor on or off on your radio.

Press the programmed **Permanent Monitor** button.

When the radio enters the mode:

- An alert tone sounds.

- The yellow LED lights up.

- The display shows `Permanent Monitor On` and the **Monitor** icon.

When the radio exits the mode:

- An alert tone sounds.

- The yellow LED turns off.

- The display shows `Permanent Monitor Off`.

5.9.6
Radio Check

This feature allows you to determine if another radio is active in a system without disturbing the radio user. No

257

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.

5.9.6.1
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 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.

5.9.6.2
Sending Radio Checks by Using the Contacts List

Follow the procedure to send radio checks 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 `Radio Check`. 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 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.

5.9.7
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.

There are two types of Remote Monitor:

- Remote Monitor without Authentication

- Remote Monitor with Authentication.

Authenticated Remote Monitor is a purchasable feature. In Authenticated Remote Monitor, verification is required when your radio turns on the microphone of a target radio.

When your radio initiates this feature on a target radio with User Authentication, a passphrase is required. The passphrase is preprogrammed into the target radio through CPS.

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

This feature stops after a programmed duration or when there is any user operation on the target radio.

259

5.9.7.1
Initiating Remote Monitor

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.

3
  Press 🔲 to select. One of the following scenarios occurs:

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

  • A passphrase screen appears.

    Enter the passphrase. Press 🔲 to proceed.

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

  • If the passphrase is incorrect, the display shows a negative mini notice, and returns to the previous screen.

4 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.

5.9.7.2
Initiating Remote Monitor by Using the Contacts List

Follow the procedure to initiate Remote Monitor on your radio by 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

🔲 to select.

4 Press ▲ or ▼ to `Remote Mon.`.

5

Press 🔲 to select. One of the following scenarios occurs:

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

- A passphrase screen appears.

  Enter the passphrase. Press 🔲 to proceed.

  - If the passphrase is correct, the display shows a transitional mini notice, indicating the

request is in progress. The green LED lights up.

- If the passphrase is incorrect, the display shows a negative mini notice, and returns to the previous screen.

6 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.

261

5.9.7.3
Initiating Remote Monitor 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..

7
Press ⌗OK to select. One of the following scenarios occurs:

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

- A passphrase screen appears.

  Enter the passphrase. Press ⌗OK to proceed.

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

  - If the passphrase is incorrect, the display shows a negative mini notice, and returns to the previous screen.

8 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.

5.9.8
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 by using Front Panel Programming. See Front Panel Programming on page 169 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**.

NOTICE:
This feature is not applicable in Capacity Plus.
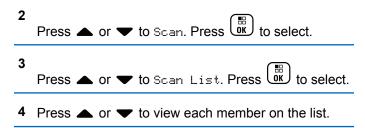
5.9.8.1
Viewing Entries in the Scan List

Follow the procedure to view the entries in the Scan list on your radio.

1 Press ⌞⠿⠅⌝ 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.

5.9.8.2
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.
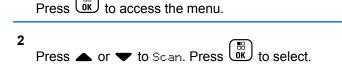
4 Enter the first character of the required alias.

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.

5.9.8.3
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.

5.9.8.4
Deleting Entries from the Scan List

Follow the procedure to delete entries 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 🔲 to select.
  The display shows a positive mini notice.

- Press ▲ or ▼ to `No` to return to the previous screen. Press 🔲 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.

5.9.8.5
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 🔲 to access the menu.

2
Press ▲ or ▼ to `Scan`. Press 🔲 to select.

3
Press ▲ or ▼ to `Scan List`. Press 🔲 to select.

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

5
Press ▲ or ▼ to `Edit Priority`. Press 🔲 to select.

6 Press ▲ or ▼ to the required priority level. Press 🔲 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.

5.9.9
Scan

Your radio cycles through the programmed scan list for the current channel looking for voice activity when you start a scan.

NOTICE:
This feature is not applicable in Capacity Plus.

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. This 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.

NOTICE:
When you configure **Receive Group Message In Scan**, your radio is able to receive group messages from non-home channels. Your radio is able to reply the group messages on home channel but is not able to reply on non-home channels. Check with your dealer or system administrator for more information.

5.9.9.1
Turning Scan On or Off

Follow the procedure to turn scan on or off on your radio.

NOTICE:
While scanning, the radio only accepts data (for example: text message, location, or PC data) if received on its Selected Channel.

1 Turn the **Channel Selector Knob** to select a channel programmed with a scan list.

2 Press 🔲 to access the menu.

3 Press ▲ or ▼ to Scan. Press 🔲 to select.

267

4 Press ▲ or ▼ to `Scan State`. Press 🔲OK to select.

5 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.

5.9.9.2
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.

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 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 radio returns to scanning other channels or groups if you do not respond within the hang time.

5.9.9.3
Deleting Nuisance Channels

If a channel continually generates unwanted calls or noise, (termed a "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.

2 Release the programmed **Nuisance Channel Delete** button.

The nuisance channel is deleted.

5.9.9.4
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 using the programmed **Scan** button or menu.

- Change the channel using the **Channel Selector Knob**.

5.9.10

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 receives transmissions from that base station.

During a vote scan, the yellow LED blinks and the display shows the **Vote Scan** icon.

To respond to a transmission during a vote scan, see .

269

5.9.11
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.

> **NOTICE:**
> 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

> **NOTICE:**
> 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.

5.9.11.1
Adding New Contacts

Follow the procedure to add new contacts on your radio.

1
Press ⊞ to access the menu.

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

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

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

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

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

7 Press ▲ or ▼ to the required ringer type. Press ⬜ to select.

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

5.9.11.2
Setting Default Contact ●

Follow the procedure to set the default contact on your radio.

1 Press ⬜ to access the menu.

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

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

4 Press ▲ or ▼ to `Set as Default`. Press ⬜ to select.

A positive indicator tone sounds. The display shows a positive mini notice. The display shows ✔ beside the selected default alias or ID.

5.9.11.3
Assigning Entries to Programmable Number Keys ●

1 Press ⬜ to access the menu.

271

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.

5.9.11.4
Removing Associations Between Entries and Programmable Number Keys 🔘

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.

📝 **NOTICE:**
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.

5.9.12

Call Indicator Settings

This feature allows you to configure call or text message ringing tones.

5.9.12.1
Activating or Deactivating Call Ringers for Call Alerts

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.

273

5

Press ▲ or ▼ to `Call Ringers`. Press 🔲 to select.

6

Press ▲ or ▼ to `Call Alert`. Press 🔲 to select.

7 Do one of the following:

• Press ▲ or ▼ to the required tone. Press 🔲 to select.
The display shows ✔ and the selected tone.

• Press ▲ or ▼ to `Off`. Press 🔲 to select.
If the ringing tones were earlier enabled, the display shows ✔ beside `Off`.

If the ringing tones were earlier disabled, the display does not show ✔ beside `Off`.

5.9.12.2

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 🔲 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔲 to select.

3

Press ▲ or ▼ to `Radio Settings`. Press 🔲 to select.

4

Press ▲ or ▼ to `Tones/Alerts`. Press 🔲 to select.

5

Press ▲ or ▼ to `Call Ringers`. Press 🔲 to select.

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

The display shows ✔ beside `On` if Private Call ringing tones are enabled.

The display shows ✔ beside `Off` if Private Call ringing tones are disabled.

7 Do one of the following:

- Press ▲ or ▼ to the required tone. Press 🔲OK to select.
  The display shows ✔ and the selected tone.

- Press ▲ or ▼ to `Off`. Press 🔲OK to select.
  If the ringing tones were earlier enabled, the display shows ✔ beside `Off`.

  If the ringing tones were earlier disabled, the display does not show ✔ beside `Off`.

5.9.12.3

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 Do one of the following:

- Press ▲ or ▼ to the required tone. Press 🔲OK🔲 to select.
  The display shows ✔ and the selected tone.

- Press ▲ or ▼ to `Off`. Press 🔲OK🔲 to select.
  If the ringing tones were earlier enabled, the display shows ✔ beside `Off`.

  If the ringing tones were earlier disabled, the display does not show ✔ beside `Off`.

5.9.12.4

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 `Messages`. Press 🔲 to select.

The display shows ✔ at the current tone.

8 Do one of the following:

- Press ▲ or ▼ to the required tone. Press 🔲 to select.
  The display shows ✔ and the selected tone.

- Press ▲ or ▼ to `Off`. Press 🔲 to select.
  If the ringing tones were earlier enabled, the display shows ✔ beside `Off`.

  If the ringing tones were earlier disabled, the display does not show ✔ beside `Off`.

5.9.12.5
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 🔲 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔲 to select.

3

Press ▲ or ▼ to `Radio Settings`. Press 🔲 to select.

4

Press ▲ or ▼ to `Tones/Alert`. Press 🔲 to select.

5

Press ▲ or ▼ to `Call Ringers`. Press 🔲 to select.

6

Press ▲ or ▼ to `Telemetry`. Press 🔲 to select.

The current tone is indicated by a ✔ .

7

Press ▲ or ▼ to the required tone. Press 🔲 to select. A ✔ appears beside the selected tone.

277

5.9.12.6
Assigning Ring Styles

The radio can be programmed to sound one of eleven predefined ringing tones when receiving a Private Call, a Call Alert, or a Text Message from a particular contact.The radio sounds out each ring style as you navigate through the list.

1
Press 🔲 to access the menu.

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

The entries are alphabetically sorted.

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

4
Press ▲ or ▼ to `View/Edit`. Press 🔲 to select.

5
Press 🔲 until display shows `Ringer` menu

A ✔ indicates the current selected tone.

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

The display shows a positive mini notice.

5.9.12.7
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. Follow the procedure to escalate alarm tone volume on your radio.

1
Press 🔲 to access the menu.

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

278

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

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

5 Press ▲ or ▼ to `Escalert`.

6
Press 🔲 to enable OR disable Escalert. If enabled, ✔ appears beside `Enabled`. If disabled, ✔ disappears beside `Enabled`.

5.9.13
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

• View Details

5.9.13.1
Viewing Recent Calls

1
Press 🔲 to access the menu.

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

3 Press ▲ or ▼ to the preferred list. The options are `Missed`, `Answered`, and `Outgoing` lists.

Press 🔲 to select.

The display shows the most recent entry.

4 Press ▲ or ▼ to view the list.

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

279

5.9.13.2
Viewing Call List Details ◉

Follow the procedure to view call details on your radio.

1
Press $\boxed{\text{OK}}$ to access the menu.

2
Press ▲ or ▼ to Call Log. Press $\boxed{\text{OK}}$ to select.

3
Press ▲ or ▼ to the required list. Press $\boxed{\text{OK}}$ to select.

4 Press ▲ or ▼ to the required alias or ID. Press $\boxed{\text{OK}}$ to select.

5
Press ▲ or ▼ to View Details. Press $\boxed{\text{OK}}$ to select.

The display shows the call details.

5.9.13.3

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 $\boxed{\text{OK}}$ to access the menu.

2
Press ▲ or ▼ to Call Log. Press $\boxed{\text{OK}}$ to select.

3
Press ▲ or ▼ to the required list. Press $\boxed{\text{OK}}$ to select.

4 Press ▲ or ▼ to the required alias or ID. Press $\boxed{\text{OK}}$ to select.

5
Press ▲ or ▼ to Store. Press $\boxed{\text{OK}}$ to select.

The display shows a blinking cursor.

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

Press 🔘 to select.

You can store an ID without an alias.

The display shows a positive mini notice.

5.9.13.4
Deleting Calls from the Call List

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

1
Press 🔘 to access the menu.

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

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

5
Press ▲ or ▼ to Delete. Press 🔘 to select.

6 Do one of the following:

• Press 🔘 to select Yes to delete the entry. The display shows a positive mini notice.

• Press ▲ or ▼ to No. Press 🔘 to select. The radio returns to the previous screen.

5.9.14
Call Alert Operation

Call Alert paging enables you to alert a specific radio user to call you back.

281

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

5.9.14.1
Responding to Call Alerts

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 and for more information.

5.9.14.2
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.

5.9.14.3
Making Call Alerts by Using the Contacts List

1
Press 🔳 to access the menu.

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

3 Do one of the following:

- Select the subscriber alias or ID directly

  Press ▲ or ▼ to the required alias or ID.

  Press 🔳 to select.

- Use the `Manual Dial` menu

  Press ▲ or ▼ to `Manual Dial`. Press 🔳 to select.

  Press ▲ or ▼ to `Radio Number`. Press 🔳 to select.

The display shows `Radio Number:` and a blinking cursor. Enter the subscriber ID you want to page. Press 🔳 to select.

4
Press ▲ or ▼ to `Call Alert`. Press 🔳 to select.

The display shows `Call Alert` and the subscriber alias or ID. The green LED lights up.

5 Wait for acknowledgment.

- If the acknowledgment is received, the display shows a positive mini notice.

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

283

5.9.15
Dynamic Caller Alias

This feature allows you to dynamically edit a Caller Alias from your radio front panel.

When in a call, the receiving radio displays the Caller Alias of the transmitting radio.

The Caller Aliases list can store up to 500 Caller Aliases of transmitting radio. You can view or make Private Calls from the Caller Aliases list. When you turn off your radio, the history of receiving Caller Aliases is removed from the Caller Aliases list.

5.9.15.1
Editing Your Caller Alias After Turning On the Radio

1 Turn on your radio.

2
Enter your new Caller Alias. Press to proceed.

The display shows a positive mini notice.

📝 **NOTICE:**
When in a call, the receiving radio displays your new Caller Alias.

5.9.15.2
Editing Your Caller Alias from the Main Menu

1
Press to access the menu.

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

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

4
Press ▲ or ▼ to My ID. Press to select.

5
Press to proceed.

6
Press ▲ or ▼ to Edit. Press 🔲 OK to select.

7
Enter your new Caller Alias. Press 🔲 OK to select.

The display shows a positive mini notice.

📝 **NOTICE:**
When in a call, the receiving radio displays your new Caller Alias.

5.9.15.3
Viewing the Caller Aliases List

You can access the Caller Aliases list to view the transmitting Caller Alias details.

1
Press 🔲 OK to access the menu.

2
Press ▲ or ▼ to Caller Aliases. Press 🔲 OK to select.

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

4
Press ▲ or ▼ to View Details. Press 🔲 OK to select.

5.9.15.4
Initiating Private Call From the Caller Aliases List

You can access the Caller Aliases list to initiate Private Call.

1
Press 🔲 OK to access the menu.

2
Press ▲ or ▼ to Caller Aliases. Press 🔲 OK to select.

3 Press ▲ or ▼ to the *<required Caller Alias>*.

285

4 To call, press and hold the **PTT** button.

5.9.16
Mute Mode

Mute Mode provides an option to silence all audio indicators on your radio.

When Mute Mode is initiated, all audio indicators are muted except higher priority features such as emergency operations.

When Mute Mode is exited, your radio resumes playing ongoing tones and audio transmissions.

> **IMPORTANT:**
> You can only enable either Face Down or Man Down one at a time. Both features cannot be enabled together.

This feature is applicable to DP4800e/DP4801e, DP4600e/ DP4601e, DP4400e/DP4401e only.

5.9.16.1
Turning On Mute Mode

Follow the procedure to turn on Mute Mode.

Do one of the following:

• Access this feature by using the programmed **Mute Mode** button.

• Access this feature by placing the radio in a face-down position momentarily.

Depending on radio model, the Face Down feature can be enabled either through the radio menu or by your system administrator. Check with your dealer or system administrator for more information.

> **IMPORTANT:**
> User can only enable either Man Down or Face Down at a time. Both features cannot be enabled together.

The following occurs when Mute mode is enabled:

• Positive Indicator Tone sounds.

• Display shows `Mute Mode On`.

• The red LED light starts blinking and remains blinking until Mute Mode is exited.

• Display shows **Mute Mode** icon on home screen.

• Radio is muted.

- Mute Mode Timer begins counting down the duration that is configured.

5.9.16.2
Setting Mute Mode Timer

Mute Mode feature can be enabled for a pre-configured amount of time by setting the Mute Mode Timer. The timer duration is configured in the radio menu and can range between 0.5–6 hours. Mute Mode is exited once the timer expires.

If the timer is left at 0, the radio remains in Mute mode for an indefinite period until the radio is moved to a face-up position or the programmed **Mute Mode** button is pressed.

1
Press ⬛ to access the menu.

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

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

4
Press ▲ or ▼ to Mute Timer. Press ⬛ to select.

5
Press ▲ or ▼ to edit the numeric value of each digit, and press ⬛.

5.9.16.3
Exiting Mute Mode

This feature can be exited automatically once the Mute Mode Timer expires.

Do one of the following to exit Mute mode manually:
- Press the programmed **Mute Mode** button.
- Press the **PTT** button on any entry.
- Place the radio in a face-up position momentarily.

The following occurs when Mute mode is disabled:
- Negative Indicator Tone sounds.
- Display shows Mute Mode Off.
- The blinking red LED turns off.

- **Mute Mode** icon disappears from home screen.

- Your radio unmutes and speaker state is restored.

- If the timer has not expired, Mute mode timer is stopped.

> 🖉 **NOTICE:**
> Mute Mode is also exited if the user transmits voice or switches to an unprogrammed channel.

5.9.17
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.

> 🖉 **NOTICE:**
> If a short press to the **Emergency** button initiates Emergency mode, then a long press to the same enables the radio to exit Emergency mode.
>
> If a long press to the **Emergency** button initiates Emergency mode, then a short press to the same enables the radio to exit Emergency mode.

Your radio supports three Emergency Alarms:

- Emergency Alarm

- Emergency Alarm with Call

- Emergency Alarm with Voice to Follow ⬤

> 🖉 **NOTICE:**
> Only one of the Emergency Alarms above can be assigned to the programmed **Emergency** button.

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. If *hot mic* is enabled, the incoming calls sound through the speaker after the programmed *hot mic* transmission period is over. The indicators only appear once you press the **PTT** button.

5.9.17.1
Receiving Emergency Alarms

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 ⬜ to view more details.

- If more than one alarm, press ▲ or ▼ to the required alias, and press ⬜ to view more details.

2 Press ⬜ to view the action options.

3 Press ⬜ and select `Yes` to exit the Alarm list.

4 Press ⬜ to access the menu.

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

6 To return to home screen, perform the following actions:

a Press ⬜.

b Press ▲ or ▼ to `Yes`.

289

c Press [OK] to select.

The radio returns to the home screen and the display shows the Emergency icon.

5.9.17.2
Responding to Emergency Alarms

1 Make sure the display shows the Alarm List. Press ▲ or ▼ to the required alias or ID.

2 Press the **PTT** button to transmit non-emergency voice to the same group the Emergency Alarm targeted.

🌐 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.

📝 **NOTICE:**

Emergency voice can only be transmitted by the emergency initiating radio. All other radios, including the emergency receiving radio, transmit non-emergency voice.

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.

5.9.17.3
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. Your radio does not display any audio or visual indicators during Emergency mode when it is set to Silent.

Follow the procedure to send Emergency Alarms on your radio.

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.

NOTICE:
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 through CPS.

2   Wait for acknowledgment.

    If successful:

    • The Emergency tone sounds.

    • The red 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.

291

5.9.17.4
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. If your radio is set to Silent, it does not display any audio or visual indicators during Emergency mode, or allow any received calls to sound through the radio's speaker, until you press the PTT button to initiate the call.

If your radio is set to Silent with Voice, it does not display any audio or visual indicators during Emergency mode, but allow incoming calls to sound through the radio's speaker. The indicators only appear once you press the PTT button to initiate, or respond to, the call.

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

1 Press the programmed **Emergency On** button.

You see the following:

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

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

> **NOTICE:**
> 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 red 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 To exit the Emergency mode once the call ends, press the **Emergency Off** button.

The radio returns to the Home screen.

5.9.17.5
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*.

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.

293

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

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

5.9.17.6
Sending Emergency Alarms with Voice to Follow ●

1 Press the programmed **Emergency On** button.

You see one of these results:

- The display shows Tx Alarm 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.

5.9.17.7
Reinitiating Emergency Mode

Perform one of the following actions:

- Change the channel while the radio is in Emergency mode.

NOTICE:
You can reinitiate emergency mode only if you enable emergency alarm on the new channel.

• Press the programmed **Emergency On** button during an emergency initiation or transmission state.

The radio exits the Emergency mode, and reinitiates Emergency.

5.9.18
Man Down

This feature prompts an emergency to be raised if there is a change in the motion of the radio, such as the tilt of the radio, motion and/or the lack of motion for a predefined time.

Following a change in the motion of the radio for a programmed duration, the radio pre-warns the user with an audio indicator indicating that a change in motion is detected.

If there is still no acknowledgment by the user before the predefined reminder timer expires, the radio initiates an Emergency Alarm or an Emergency Call. You can program the reminder timer by using CPS.

5.9.18.1

Turning the Man Down Feature On or Off

NOTICE:
The programmed **Man Down** button and Man Down settings are configured using CPS. Check with your dealer or system administrator to determine how your radio has been programmed.

If you disable the Man Down feature, the programmed alert tone sounds repeatedly until the Man Down feature is enabled. A device failure tone sounds when the Man Down feature fails while powering up. The device failure tone continues until the radio resumes normal operation.

You can enable or disable this feature by performing one of the following actions.

• Press the programmed **Man Down** button to toggle the feature on or off.

• Access this feature using the menu.

a. Press ⌷ to access the menu.

b. Press ▲ or ▼ to Utilities. Press ⌷ to select.

295

c. Press ▲ or ▼ to `Radio Settings`. Press 🔲 to select.

d. Press ▲ or ▼ to `Man Down`. Press 🔲 to select.

You can also use ◀ or ▶ to change the selected option.

e. Press 🔲 to enable or disable Man Down.

If enabled, ✔ appears beside `Enabled`.

If disabled, ✔ disappears beside `Enabled`.

5.9.19
Text Messaging

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

There are two types of text messages, Digital Mobile Radio (DMR) Short Text Message and text message. The maximum length of a DMR Short Text Message is 23 characters. The maximum length of a text message is 280 characters, including the subject line. The subject line only appears when you receive messages from e-mail applications.

NOTICE:
The maximum character length is only applicable for models with the latest software and hardware. For radio models with older software and hardware, the maximum length of a text message is 140 characters. Contact your dealer for more information.

5.9.19.1
Text Messages ●

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

5.9.19.1.1
Viewing Text Messages

1
Press 🔲 to access the menu.

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

3

Press ▲ or ▼ to Inbox. Press 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

 to select.

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

5.9.19.1.2
Viewing Telemetry Status Text Messages

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

1

Press to access the menu.

2

Press ▲ or ▼ to Messages. Press to select.

3

Press ▲ or ▼ to Inbox. Press to select.

4 Press ▲ or ▼ to the required message. Press

 to select.

You cannot reply to a Telemetry Status text message.

The display shows Telemetry: <Status Text Message>.

5
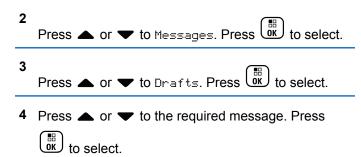
Long press to return to the Home screen.

5.9.19.1.3
Viewing Saved Text Messages

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to step 3.

- Press to access the menu.

297

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

3
Press ▲ or ▼ to `Drafts`. Press 🔲 to select.

4 Press ▲ or ▼ to the required message. Press
🔲 to select.

5.9.19.1.4
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.

📝 **NOTICE:**
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 🔲 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 🔲 to select.
The radio returns to the screen you were on prior to receiving the text message.

• Press ▲ or ▼ to `Delete`. Press 🔲 to select.

2
Press 🔙 to return to the Inbox.

5.9.19.1.5
Replying to Text Messages

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

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to Step step 3.

- Press 🔲 to access the menu.

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

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

4 Press ▲ or ▼ to the required message. Press 🔲 to select.

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

5
Press 🔲 to access the sub-menu.

6 Do one of the following:

- Press ▲ or ▼ to Reply. Press 🔲 to select.

- Press ▲ or ▼ to Quick Reply. Press 🔲 to select.

A blinking cursor appears. You can write or edit your message, if required.

7
Press 🔲 once message is composed.

The display shows a transitional mini notice, confirming the message is being sent.

8 Wait for acknowledgment.

If successful:

- A tone sounds.

- The display shows a positive mini notice.

If unsuccessful:

299

- A tone sounds.

- The display shows a negative mini notice.

- The radio returns to the `Resend` option screen.

5.9.19.1.6
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 to send the same message to another subscriber or group alias or ID.

2 Press or to the required alias or ID. Press to select.

The display shows a transitional mini notice, confirming your message is being sent.

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.

5.9.19.1.7
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 to select.

2
Press to send the same message to another subscriber or group alias or ID.

3

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

The display shows `Radio Number:`.

4

Enter the subscriber ID, and press 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.

5.9.19.1.8

Editing Text Messages

Select `Edit` to edit the message.

> **NOTICE:**
> If a subject line is present (for messages received from an e-mail application), you cannot edit it.

1

Press ▲ or ▼ to `Edit`. Press 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 once message is composed.

4 Do one of the following:

301

- 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.

5.9.19.1.9
Sending Text Messages

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. 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.

  NOTICE:
  For a newly written text message, the radio returns you to the `Resend` option screen.

5.9.19.1.10
Editing Saved Text Messages

1

Press 🔲 while viewing the message.

2

Press ▲ or ▼ to Edit. Press 🔲 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 🔲 once message is composed.

Do one of the following:

• Press ▲ or ▼ to Send. Press 🔲 to send the message.

• Press (⤺). Press ▲ or ▼ to choose between saving or deleting the message. Press 🔲 to select.

5.9.19.1.11
Resending Text Messages

When you are at the Resend option screen:

Press 🔲 to resend the same message to the same subscriber or group alias or ID.

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.

303

- The radio returns to the `Resend` option screen.

5.9.19.1.12
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 🖳 to access the menu.

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

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

If the Inbox is empty:

- The display shows `List Empty`.

- A tone sounds.

4 Press ▲ or ▼ to the required message. Press

🖳 to select.

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

5
Press 🖳 to access the sub-menu.

6
Press ▲ or ▼ to `Delete`. Press 🖳 to select.

7
Press ▲ or ▼ to `Yes`. Press 🖳 to select.

The display shows a positive mini notice. The screen returns to the Inbox.

5.9.19.1.13
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 ⬛ to access the menu.

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

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

If the Inbox is empty:

- The display shows List Empty.

- A tone sounds.

4
Press ▲ or ▼ to Delete All. Press ⬛ to select.

5
Press ▲ or ▼ to Yes. Press ⬛ to select.

The display shows a positive mini notice.

5.9.19.1.14
Deleting Saved Text Messages from the Drafts Folder

1 Do one of the following:

- Press the programmed **Text Message** button. Proceed to step 3.

- Press ⬛ to access the menu.

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

3
Press ▲ or ▼ to Drafts. Press ⬛ to select.

4 Press ▲ or ▼ to the required message. Press ⬛ to select.

5
Press ⬛ again while viewing the message.

305

6
Press ▲ or ▼ to Delete. Press 🔳 to delete the text message.

5.9.19.2
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.

NOTICE:
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.

5.9.19.2.1
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 🔳 to access the menu.

2

Press ▲ or ▼ to `Messages`. Press 🔲 to select.

3

Press ▲ or ▼ to `Sent Items`. Press 🔲 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 🔲 to select.

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

5.9.19.2.2
Sending Sent Text Messages ●

Follow the procedure to send a sent text message on your radio.

When you are viewing a Sent message:

1

Press 🔲 while viewing the message.

2

Press ▲ or ▼ to `Resend`. Press 🔲 to select.

The display shows a transitional mini notice, confirming your message is being sent.

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.
- The radio proceeds to the `Resend` option screen. See Resending Text Messages on page 146 for more information.

5.9.19.2.3
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 ⌨ to access the menu.

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

3 Press ▲ or ▼ to Sent Items. Press ⌨ to select.

If the Sent Items folder is empty:

- The display shows List Empty.

- A tone sounds.

4 Press ▲ or ▼ to Delete All. Press ⌨ to select.

5 Do one of the following:

- Press ▲ or ▼ to Yes. Press ⌨ to select. The display shows a positive mini notice.

- Press ▲ or ▼ to No. Press ⌨ to select. The radio returns to the previous screen.

5.9.19.3
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.

5.9.19.3.1
Sending Quick Text Messages

Follow the procedure to send Quick Text messages on your radio.

1 Do one of the following:

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

- Press 🔲 to access the menu.

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

3 Press ▲ or ▼ to `Quick Text`. Press 🔲 to select.

4 Press ▲ or ▼ to the required Quick Text message. Press 🔲 to select.

If required, use the keypad to edit the message.

5 Press 🔲 once the message is composed.

6 Do the following to select the recipient and send the message.

a Press ▲ or ▼ to the required alias or ID. Press 🔲 to select.

b Press ▲ or ▼ to `Manual Dial`. Press 🔲 to select.

The first line of the display shows `Radio Number:` and the second line shows a blinking cursor.

c Key in the subscriber alias or ID and press 🔲 .

The display shows a transitional mini notice, confirming that your message is being sent.

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.

309

• The radio proceeds to the `Resend` option screen.
See Resending Text Messages on page 146 for
more information.

5.9.20
Analog Message Encode

Your radio can send preprogrammed messages from the
Message list to a radio alias or the dispatcher.

5.9.20.1
Sending MDC Encode Messages to Dispatchers

Follow the procedure to send MDC Encode messages to
dispatchers on your radio.

1
Press to access the menu.

2
Press or to `Message`. Press to select.

3
Press or to `Quick Text`. Press to
select.

4 Press or to the required message. Press
 to select.

The display shows a transitional mini notice,
confirming the message is being sent.

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.

5.9.20.2
Sending 5-Tone Encode Messages to Contacts ▓

Follow the procedure to send 5-Tone Encode messages to contacts on your radio.

1
Press ▓ to access the menu.

2
Press ▲ or ▼ to `Message`. Press ▓ to select.

3
Press ▲ or ▼ to `Quick Text`. Press ▓ to select.

4 Press ▲ or ▼ to the required message. Press ▓ to select.

5
Press ▲ or ▼ to the required contact. Press ▓ to select.

The display shows a transitional mini notice, confirming the 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.

NOTICE:
Check with your dealer or system administrator for more information.

311

5.9.21
Analog Status Update ●

Your radio is able to send preprogrammed messages from the Status list indicating your current activity to a radio contact (for 5-Tone systems) or the dispatcher (for Motorola Data Communication systems).

The last acknowledged message is kept at the top of the Status list. The other messages are arranged in alphanumeric order.

5.9.21.1
Sending Status Updates to Predefined Contacts ●

Follow the procedure to send status updates to predefined contacts on your radio.

1
Press ▲ or ▼ to `Status`. Press 🔲 to select.

2
Press ▲ or ▼ to the required status. Press 🔲 to select.

When you press the **PTT** button while in the Status list for 5-Tone systems, the radio sends the selected status update, and returns to the Home screen to initiate a voice call.

3
Press ▲ or ▼ to `Set as Default`. Press 🔲 to select.

The display shows a transitional mini notice, confirming the status update is being sent.

4 Wait for acknowledgment.

If successful:

- A positive indicator tone sounds.
- The display shows a positive mini notice.
- The display shows ✔ beside the acknowledged status.

If unsuccessful:

- A negative indicator tone sounds.
- The display shows a negative mini notice.
- The display shows ✔ beside the previous status.

See for more information on setting the default contact for 5-Tone systems.

5.9.21.2
Viewing 5-Tone Status Details

Follow the procedure to view 5-tone status details on your radio.

It is assumed that you have purchased the Software License Key.

1
Press ▲ or ▼ to Status. Press 🔲 to select.

2
Press ▲ or ▼ to the required status. Press 🔲 to select.

3
Press ▲ or ▼ to View Details. Press 🔲 to select.

The display shows details of the selected status.

5.9.21.3
Editing 5-Tone Status Details

Follow the procedure to edit 5–Tone status details on your radio.

1
Press ▲ or ▼ to Status. Press 🔲 to select.

2
Press ▲ or ▼ to required status. Press 🔲 to select.

3
Press ▲ or ▼ to Edit. Press 🔲 to select.

4
After a blinking cursor appears, press ◀ to move one space to the left or press ▶ to move one space to the right. Press ✱ to delete any unwanted

313

characters. Long press ⬛ to change the text

entry method. Press 🔳 once editing is complete.

The display shows Status Saved and radio returns to Status List.

5.9.22
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.

Some radio models may not offer Privacy feature, or may have a different configuration. Check with your dealer or system administrator for more information.

Your radio supports the following 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 either hear a garbled transmission for Basic Privacy or nothing at all for Enhanced Privacy.

On a privacy-enabled channel, your radio is able to receive clear or unscrambled calls, depending on how your radio is programmed. In addition, your radio may play a warning tone or not, depending on how it is programmed.

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 call or alarm.

The green LED lights up when the radio is transmitting, and double blinks when the radio is receiving an ongoing privacy-enabled transmission.

5.9.22.1
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 proceeding steps.

- Press 🔲 to access the menu.

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

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

4 Press ▲ or ▼ to *<required privacy>*. Press 🔲 to select.

- If privacy is on, display shows ✓ beside `Enabled`.

- If privacy is off, display shows empty box beside `Enabled`.

5.9.23
Response Inhibit

This feature helps prevent your radio from responding to any incoming transmissions.

📝 **NOTICE:**
Contact your dealer to determine how your radio has been programmed.

If enabled, your radio does not generate any outgoing transmissions in respond to incoming transmissions, such as Radio Check, Call Alert, Radio Disable, Remote Monitor, Automatic Registration Service (ARS), Responding to Private Messages, and Sending GNSS location reports.

Your radio cannot receive Confirmed Private Calls when this feature is enabled. However, your radio is able to manually send transmission.

315

5.9.23.1
Turning Response Inhibit On or Off

Follow the procedure to enable or disable Response Inhibit on your radio.

Press the programmed **Response Inhibit** button.

If successful:

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

If unsuccessful:

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

5.9.24
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.

There are two ways to enable or disable a radio, with authentication and without authentication.

Authenticated Radio Disable is a purchasable feature. In Authenticated Radio Disable, verification is required when you enable or disable a radio. When your radio initiates this feature on a target radio with User Authentication, a passphrase is required. The passphrase is preprogrammed in the target radio through CPS.

You will not receive an acknowledgment if you press $\boxed{\begin{smallmatrix}5\\\hat{\mathbb{a}}\end{smallmatrix}}$ during Radio Enable or Radio Disable operation.

> **NOTICE:**
> Check with your dealer or system administrator for more information.

5.9.24.1
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.

3

Press 　 to select. One of the following scenarios occurs:

- The green LED blinks.

- A passphrase screen appears.

  Enter the passphrase. Press 　 to proceed.

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

  - If the passphrase is incorrect, the display shows a negative mini notice, and returns to the previous screen.

4 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.

5.9.24.2
Disabling Radios by Using the Contacts List ⬤

Follow the procedure to disable your radio by 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 　 to select.

4 Press ▲ or ▼ to Radio Disable.

5

Press 　 to select. One of the following scenarios occurs:

- The green LED blinks.

- A passphrase screen appears.

   Enter the passphrase. Press ⊞OK to proceed.

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

  - If the passphrase is incorrect, the display shows a negative mini notice, and returns to the previous screen.

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.

5.9.24.3

318

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 Contact`. 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`.

7

Press 🔲 to select. One of the following scenarios occurs:

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

- A passphrase screen appears.

  Enter the passphrase. Press 🔲 to proceed.

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

  - If the passphrase is incorrect, the display shows a negative mini notice, and returns to the previous screen.

8 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.

5.9.24.4
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.

3

Press 🔲 to select. One of the following scenarios occurs:

- The display shows Radio Enable: <Subscriber Alias or ID>. The green LED lights up.

- A passphrase screen appears.

  Enter the passphrase. Press 🔲 to proceed.

  - If the passphrase is correct, the display shows a transitional mini notice, indicating the

319

request is in progress. The green LED lights up.

- If the passphrase is incorrect, the display shows a negative mini notice, and returns to the previous screen.

4 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.

5.9.24.5
Enabling Radios by Using the Contacts List

Follow the procedure to enable your radio by 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 🔲 to select.

4 Press ▲ or ▼ to Radio Enable.

5
Press 🔲 to select. One of the following scenarios occurs:

- The display shows Radio Enable: <Subscriber Alias or ID>. The green LED lights up.
- A passphrase screen appears.

  Enter the passphrase. Press 🔲 to proceed.

  - If the passphrase is correct, the display shows a transitional mini notice, indicating the

320

request is in progress. The green LED lights up.

- If the passphrase is incorrect, the display shows a negative mini notice, and returns to the previous screen.

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.

5.9.24.6
Enabling Radios by Using the Manual Dial

Follow the procedure to enable your radio by using the manual dial.

1

Press to access the menu.

2

Press or to `Contacts`. Press to select.

3

Press or to `Manual Dial`. Press to select.

4

Press or to `Private Call`. Press to select.

The first text line shows `Radio Number:`.

5

Enter the subscriber ID, and press to proceed.

6 Press or to `Radio Enable`.

7

Press to select. One of the following scenarios occurs:

321

- The display shows `Radio Enable:`
  `<Subscriber Alias or ID>`. The green LED
  lights up.

- A passphrase screen appears.

  Enter the passphrase. Press 🔲 to proceed.

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

  - If the passphrase is incorrect, the display
    shows a negative mini notice, and returns to
    the previous screen.

8 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.

5.9.25
Lone Worker

This feature prompts an emergency to be raised if there is
no user activity, such as any radio button press or channel
selection, for a predefined time.

Following no user activity for a programmed duration, the
radio pre-warns you using an audio indicator once the
inactivity timer expires.

If there is still no acknowledgment by you 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

for more information on ways to exit Emergency.

	NOTICE:
	Check with your dealer or system administrator for more information.

5.9.26
Notification List

Your radio has a Notification list that collects all your unread events on the channel, such as unread text messages, telemetry messages, missed calls, and call alerts.

The display shows the **Notification** icon when the Notification list has one or more events.

The list supports a maximum of 40 unread events. When the list is full, the next event automatically replaces the oldest event. After the events are read, they are removed from the Notification list.

For text messages, missed calls, and call alert events, the maximum number of notifications are 30 text messages and 10 missed calls or call alerts. This maximum number depends on individual feature (job tickets or text messages or missed calls or call alerts) list capability.

5.9.26.1
Accessing Notification List

Follow the procedure to access the Notification list on your radio.

1 Do one of the following:

- Press the programmed **Notification** button. Skip the steps below.

- Press to access the menu.

2
Press to access the menu.

3
Press or to Notification. Press to select.

4
Press or to the required event. Press to select.

Long press to return to the Home screen.

323

5.9.27
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 channel alias and In Range.

ARTS-in-Range Alert
A tone sounds, if programmed.

The display shows channel alias and In Range.

ARTS-Out-of-Range Alert
A tone sounds. The red LED rapidly blinks.

The display shows Out of Range alternating with the Home screen.

NOTICE:
Check with your dealer or system administrator for more information.

5.9.28
Over-the-Air Programming

Your dealer can remotely update your radio through Over-the-Air Programming (OTAP) without any physical connection. Additionally, some settings can also be configured by using 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 the program update is unsuccessful, a tone sounds, the red LED blinks once, and the display shows `Sw Update Failed`.

> **NOTICE:**
> If the programming update is unsuccessful, the software update failure indications appear every time you turn on your radio. Contact your dealer to reprogram your radio with the latest software to eliminate the software update failure indications.

See Checking Software Update Information on page 195 for the updated software version.

5.9.29
Password Lock

You can set a password to restrict access to your radio. Each time you turn on your radio, you are asked to enter the password.

Your radio supports a 4-digit password input.

Your radio is unable to receive calls in locked state.

5.9.29.1
Accessing the Radio by Using Password

Turn on your radio.

1 Enter the four-digit password.

   a To edit the numeric value of each digit, press ▲ or ▼. To enter and move to the next digit, press ⌷.

2 Press ⌷ to confirm the password.

If you enter the password correctly, the radio powers up.

If you enter the wrong password after the first and second attempt, your radio shows the following indications:

- A continuous tone sounds.

- The display shows `Wrong Password`.

Repeat step 1.

If you enter the wrong password after the third attempt, your radio shows the following indications:

- A tone sounds.

- The yellow LED double blinks.

- The display shows `Wrong Password` and then, `Radio Locked`.

- Your radio enters into locked state for 15 minutes.

    NOTICE:
    In locked state, your radio responds to inputs from the **On/Off/Volume Control Knob** and programmed **Backlight** button only.

Wait for the 15-minute locked state timer to end and then repeat step 1.

    NOTICE:
    If you turn off and turn your radio on again, the 15-minute timer restarts.

5.9.29.2
Unlocking Radios in Locked State

Your radio is unable to receive calls in locked state. Follow the procedure to unlock your radio in locked state.

Do one of the following:

- If the radio is powered on, wait for 15 minutes and then repeat the steps in Accessing the Radio by Using Password on page 165 to access the radio.

- If the radio is powered off, power up the radio. Your radio restarts the 15-minute timer for locked state. A tone sounds. The yellow LED double blinks. The display shows `Radio Locked`.

    Wait for 15 minutes and then repeat the steps in Accessing the Radio by Using Password on page 165 to access the radio.

5.9.29.3
Changing Passwords

Follow the procedure to change passwords on your radio.

1
   Press ⬚ to access the menu.

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

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

4

Press ▲ or ▼ to `Passwd Lock`. Press 🔳 to select.

5

Enter the current four-digit password, and press 🔳 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 🔳 to select.

7

Enter a new four-digit password, and press 🔳 to proceed.

8 Re-enter the new four-digit password, and press

🔳 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.

5.9.30
Front Panel Programming

You are able to customize certain feature parameters in Front Panel Programming (FPP) to enhance the use of your radio.

The following buttons are used as required while navigating through the feature parameters.
Up/Down/Left/Right Navigation Button
Press to navigate through options horizontally or vertically, or increase or decrease values.

Menu/OK Button
Press to select the option or enter a sub-menu.

Return/Home Button
Short press to return to the previous menu or exit the selection screen.

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

327

5.9.30.1
Entering Front Panel Programming Mode

1
Press ⬛ to access the menu.

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

3
Press ▲ or ▼ to `Program Radio`. Press ⬛ to select.

5.9.30.2
Editing Mode Parameters

Use the following buttons as required while navigating through the feature parameters.

• ▲ , ▼ – Scroll through options, increase/decrease values, or navigate vertically.

• ⬛ – 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.

5.10
Utilities

This chapter explains the operations of the utility functions available in your radio.

5.10.1
Keypad Lock Options

With this feature, you can avoid accidentally pressing buttons or changing channels when your radio is not in use. You can choose to either lock your keypad, channel selector knob, or both; depending on your requirements.

Your dealer can use CPS/RM to configure one of the following options:

• Lock Keypad

• Lock Channel Selector Knob

• Lock Keypad and Channel Selector Knob

Contact your dealer to determine how your radio has been programmed.

5.10.1.1
Enabling the Keypad Lock Option

The following steps are applicable for either Lock Keypad, Lock Channel Selector Knob, or Lock Keypad and Channel Selector Knob option depending on how your radio has been configured.

1. Do one of the following:
   - Press the programmed **Keypad Lock** button. Skip the following steps.
   - Press 🔳 to access the menu.

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

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

4. Press ▲ or ▼ to `Keypad Lock`. Press 🔳 to select.

The display shows `Locked`.

5.10.1.2
Disabling the Keypad Lock Option

The following steps are applicable for either Lock Keypad, Lock Channel Selector Knob, or Lock Keypad and Channel Selector Knob option depending on how your radio has been configured.

Do one of the following:
- Press the programmed **Keypad Lock** button.
- When the display shows `Menu then * To Unlock`, press 🔳 followed by ✱.

The display shows `Unlocked`.

329

5.10.2
Turning Automatic Call Forwarding On or Off

You can enable your radio to automatically forward voice calls to another radio.

1
Press 🔲 to access the menu.

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

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

4
Press ▲ or ▼ to `Call Forward`. Press 🔲 to select.

5 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`.

5.10.3
Identifying Cable Type

Do the following steps to select the type of cable your radio uses.

1
Press 🔲 to access the menu.

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

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

4
Press ▲ or ▼ to `Cable Type`. Press 🔲 to select.

5 Press ▲ or ▼ to change the selected option.

The current cable type is indicated by a ✔ .

5.10.4
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.

5.10.5
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.

331

5 Press ▲ or ▼ to any of the following features.

Press ⬚ᴏᴋ to select.

The available features are as follows:

- All
- Messages
- Job Tickets
- Channel
- Zone
- Program Button

✔ appears beside the selected setting.

5.10.6
Turning Acoustic Feedback Suppressor On or Off 🌐

The feature allows you to minimize acoustic feedback in received calls. Follow the procedure to turn Acoustic Feedback Suppressor on or off on your radio.

1 Do one of the following:

- Press the programmed **AF Suppressor** button. Skip the following steps.

- Press ⬚ᴏᴋ to access the menu.

2 Press ▲ or ▼ to Utilities. Press ⬚ᴏᴋ to select.

3 Press ▲ or ▼ to Radio Settings. Press ⬚ᴏᴋ to select.

4 Press ▲ or ▼ to AF Suppressor. Press ⬚ᴏᴋ to select.

5 Do one of the following:

- Press ⬚ᴏᴋ to enable Acoustic Feedback Suppressor.

- Press 🔳 to disable Acoustic Feedback
  Suppressor.

  If enabled, ✔ appears beside `Enabled`. If disabled, ✔
  disappears beside `Enabled`.

5.10.7
Turning Global Navigation Satellite System On or Off

Global Navigation Satellite System (GNSS) is a satellite navigation system that determines the radio precise location. GNSS includes Global Positioning System (GPS), Global Navigation Satellite System (GLONASS), and BeiDou Navigation Satellite System (BDS).

NOTICE:
Selected radio models may offer GPS, GLONASS, and BDS. GNSS constellation is configured by using CPS. Check with your dealer or system administrator to determine how your radio has been programmed.

1

2 Do one of the following steps to toggle GNSS on or off on your radio.

- Press the programmed **GNSS** button.

- Press 🔳 to access the menu. Proceed to the next step.

3
Press ▲ or ▼ to `Utilities`. Press 🔳 to select.

4
Press ▲ or ▼ to `Radio Settings`. Press 🔳 to select.

5
Press ▲ or ▼ to `GNSS`. Press 🔳 to select.

6
Press 🔳 to enable or disable GNSS.

If enabled, ✔ appears beside `Enabled`.
If disabled, ✔ disappears beside `Enabled`.

5.10.8
Turning Introduction Screen On or Off

You can enable and disable the Introduction Screen by following the procedure.

1
Press 🔲 to access the menu.

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

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

4
Press ▲ or ▼ to `Display`. Press 🔲 to select.

5
Press ▲ or ▼ to `Intro Screen`. Press 🔲 to select.

6
Press 🔲 to enable or disable the Introduction Screen.

The display shows one of the following results:

- If enabled, ✔ appears beside `Enabled`.

- If disabled, ✔ disappears beside `Enabled`.

5.10.9
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 following steps.

- Press 🔲 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. The display shows one of the following results:

- If enabled, ✔ appears beside `Enabled`.
- If disabled, ✔ disappears beside `Enabled`.

5.10.10

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.

335

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 ⬛ᴏᴋ to select. The required volume offset level is saved.

- Press ⬅🏠 to exit. The changes are discarded.

5.10.11
Turning Talk Permit Tone On or Off

Follow the procedure to turn Talk Permit Tone on or off on your radio.

1
Press ⬛ᴏᴋ to access the menu.

2
Press ▲ or ▼ to Utilities. Press ⬛ᴏᴋ to select.

3
Press ▲ or ▼ to Radio Settings. Press ⬛ᴏᴋ to select.

4
Press ▲ or ▼ to Tones/Alerts. Press ⬛ᴏᴋ to select.

5
Press ▲ or ▼ to Talk Permit. Press ⬛ᴏᴋ to select.

6
Press ⬛ᴏᴋ to enable or disable the Talk Permit Tone.

The display shows one of the following results:

- If enabled, ✔ appears beside Enabled.
- If disabled, ✔ disappears beside Enabled.

5.10.12
Turning Power Up Tone On or Off

Follow the procedure to turn Power Up Tone on or off on your radio.

1
Press 📠 to access the menu.

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

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

4
Press ▲ or ▼ to `Tones/Alerts`. Press 📠 to select.

5
Press ▲ or ▼ to `Power Up`. Press 📠 to select.

6
Press 📠 to enable or disable the Power Up Tone. The display shows one of the following results:

- If enabled, ✔ appears beside `Enabled`.

- If disabled, ✔ disappears beside `Enabled`.

5.10.13

Setting Text Message Alert Tones

You can customize the text message alert tone for each entry in the Contacts list. Follow the procedure to set the text message alert tones on your radio.

1
Press 📠 to access the menu.

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

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

4
Press ▲ or ▼ to `Message Alert`. Press 📠 to select.

5 Do one of the following:

- Press ▲ or ▼ to `Momentary`. Press 📠 to select.
  The display shows ✔ beside `Momentary`.

- Press ▲ or ▼ to `Repetitive`. Press 🔲 to select.
  The display shows ✔ beside `Repetitive`.

5.10.14
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 🔲 to access the menu.

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

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

4
Press ▲ or ▼ to `Display`. Press 🔲 to select.

The display shows `Day Mode` and `Night Mode`.

5
Press ▲ or ▼ to the required setting. Press 🔲 to select.

The display shows ✔ beside the selected setting.

5.10.15
Adjusting Display Brightness

Follow the procedure to adjust the display brightness on your radio.

1 Do one of the following:

- Press the programmed **Brightness** button. Skip the following steps.

- Press 🔲 to access the menu.

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

3

Press ▲ or ▼ to `Radio Settings`. Press ⌷ to select.

4

Press ▲ or ▼ to `Brightness`. Press ⌷ to select.

The display shows the progress bar.

5 Press ▲ or ▼ to decrease or increase the display brightness. Press ⌷ to select.

5.10.16
Setting Display Backlight Timer

You can set the display backlight timer of the radio as needed. The setting also affects the Menu Navigation Buttons and keypad backlighting accordingly. Follow the procedure to set the backlight timer on your radio.

1 Do one of the following:

- Press the programmed **Backlight** button. Skip the following steps.

- Press ⌷ to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press ⌷ to select.

3

Press ▲ or ▼ to `Radio Settings`. Press ⌷ to select.

4

Press ▲ or ▼ to `Display`. Press ⌷ to select.

5

Press ▲ or ▼ to `Backlight Timer`. Press ⌷ to select.

The display backlight and keypad backlighting are automatically turned off as the LED indicator is disabled. See Turning LED Indicators On or Off on page 185 for more information.

339

5.10.17
Turning Backlight Auto On or Off

You can enable and disable the backlight of the radio to turn on automatically as needed. If enabled, the backlight is turned on when the radio receives a call, Notification List event, or Emergency Alarm.

1

Press 📻 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 📻 to select.

3

Press ▲ or ▼ to `Radio Settings`. Press 📻 to select.

4 Press ▲ or ▼ to `Backlight Auto`.

5

Press 📻 to enable or disable Backlight Auto.

The display shows one of the following results:

• If enabled, ✔ appears beside `Enabled`.

• If disabled, ✔ disappears beside `Enabled`.

5.10.18
Squelch Levels

You can adjust the squelch level to filter out unwanted calls with low signal strength or channels with noise higher than normal background.

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.

📝 **NOTICE:**
This feature is not applicable in Citizens Band channels that are in the same frequency.

5.10.18.1
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 🔲 to access the menu.

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

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

4
Press ▲ or ▼ to `Squelch`. Press 🔲 to select.

5 Do one of the following:

- Press ▲ or ▼ to `Normal`. Press 🔲 to select. The display shows ✔ beside `Normal`.

- Press ▲ or ▼ to `Tight`. Press 🔲 to select.

The display shows ✔ beside `Tight`.

The screen automatically returns to the previous menu.

5.10.19
Turning LED Indicators On or Off

Follow the procedure to turn the LED indicators on or off on your radio.

1
Press 🔲 to access the menu.

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

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

4
Press ▲ or ▼ to `LED Indicator`. Press 🔲 to select.

341

5

Press 　OK 　 to enable or disable the LED indicator.

The display shows one of the following results:

- If enabled, ✔ appears beside Enabled.

- If disabled, ✔ disappears beside Enabled.

5.10.20
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.

5.10.21
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.

You can enable or disable VOX by doing one of the following:

- Turn the radio off and then power it on again to enable VOX.

- Change the channel by using the **Channel Selector** knob to enable VOX.

- Turn VOX on or off by using the programmed **VOX** button or menu to enable or disable VOX.

• Press the **PTT** button during radio operation to disable VOX.

<div style="border:1px solid"></div>

NOTICE:

Turning this feature on or off is limited to radios with this function enabled. Check with your dealer or system administrator for more information.

5.10.21.1
Turning Voice Operating Transmission On or Off

Follow the procedure to turn VOX on or off on your radio.

1 Do one of the following:

- Press the programmed **VOX** button. Skip the steps below.

- Press to access the menu.

2
Press or to Utilities. Press to select.

3
Press or to Radio Settings. Press to select.

4
Press or to VOX. Press to select.

5 Do one of the following:

- Press or to On. Press to select. The display shows ✓ beside On.

- Press or to Off. Press to select. The display shows ✓ beside Off.

NOTICE:

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 Turning Talk Permit Tone On or Off on page 180 for more information.

343

5.10.22
Turning Option Board On or Off

Option board capabilities within each channel can be assigned to programmable buttons. Follow the procedure to turn option board on or off on your radio.

> Press the programmed **Option Board** button.

5.10.23
Turning Voice Announcement On or Off

This feature enables the radio to audibly indicates 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. Follow the procedure to turn Voice Announcement on or off on your radio.

1 Do one of the following:

- Press the programmed **Voice Announcement** button. Skip the following steps.

- Press 🔲 to access the menu.

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

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

4 Press ▲ or ▼ to Voice Announcement. Press 🔲 to select.

5
Press 🔲 to enable or disable Voice Announcement.

- If enabled, ✔ appears beside Enabled.
- If disabled, ✔ disappears beside Enabled.

5.10.24
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 🔲 to access the menu.

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

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

4
Press ▲ or ▼ to `Mic AGC-A`. Press 🔲 to select.

5
Press 🔲 to enable or disable Analog Microphone AGC.

The display shows one of the following results:

- If enabled, ✔ appears beside `Enabled`.
- If disabled, ✔ disappears beside `Enabled`.

5.10.25
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 🔲 to access the menu.

345

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 beside `Enabled`.

- If disabled, ✔ disappears beside `Enabled`.

5.10.26

Switching Audio Route between Internal Radio Speaker and Wired Accessory

Follow the procedure to toggle audio routing between internal radio speaker and wired accessory.

You can toggle audio routing between the internal radio speaker and the speaker of a wired accessory with the condition that:

- The wired accessory with speaker is attached.

  Press the programmed **Audio Toggle** button.

A tone sounds when the audio route has switched.

Powering down the radio or detaching the accessory resets the audio routing to the internal radio speaker.

5.10.27

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.

> 🖊 **NOTICE:**
> 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 🔲 to access the menu.

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

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

4 Press ▲ or ▼ to Intelligent Audio. Press 🔲 to select.

5 Do one of the following:

- Press ▲ or ▼ to On. Press 🔲 to select. The display shows ✔ beside On.

- Press ▲ or ▼ to Off. Press 🔲 to select. The display shows ✔ beside Off.

5.10.28
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 🔲 to access the menu.

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

347

3

Press ▲ or ▼ to `Radio Settings`. Press 🔲 to select.

4

Press ▲ or ▼ to `Trill Enhance`. Press 🔲 to select.

5 Do one of the following:

- Press ▲ or ▼ to `On`. Press 🔲 to select. The display shows ✔ beside `On`.

- Press ▲ or ▼ to `Off`. Press 🔲 to select. The display shows ✔ beside `Off`.

5.10.29

Turning the Microphone Dynamic Distortion Control Feature On or Off

This feature allows you to enable the radio to automatically monitor the microphone input and adjust the microphone gain value to avoid audio clipping.

1

Press 🔲 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔲 to select.

3

Press ▲ or ▼ to `Radio Settings`. Press 🔲 to select.

4

Press ▲ or ▼ to `Mic Distortion`. Press 🔲 to select.

5 Do one of the following:

- Press 🔲 to enable Microphone Dynamic Distortion Control. If enabled, ✔ appears beside `Enabled`.

- Press 🔲 to disable Microphone Dynamic Distortion Control. If disabled, ✔ disappears beside `Enabled`.

5.10.30
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.

5.10.30.1
Setting Audio Ambience

Follow the procedure to set the audio ambience on your radio according to your environment.

1
Press 🔲 to access the menu.

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

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

4
Press ▲ or ▼ to Audio Ambience. Press 🔲 to select.

5
Press ▲ or ▼ to the required setting. Press 🔲 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.

349

5.10.31
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.

5.10.31.1
Setting Audio Profiles

Follow the procedure to set audio profiles on your radio.

1
Press $\boxed{\text{OK}}$ to access the menu.

2
Press ▲ or ▼ to Utilities. Press $\boxed{\text{OK}}$ to select.

3
Press ▲ or ▼ to Radio Settings. Press $\boxed{\text{OK}}$ to select.

4
Press ▲ or ▼ to Audio Profiles. Press $\boxed{\text{OK}}$ to select.

5
Press ▲ or ▼ to the required setting. Press $\boxed{\text{OK}}$ 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.

The display shows ✔ beside the selected setting.

5.10.32
General Radio Information

Your radio contains information on various general parameters.

The general information of your radio is as follows:

- Battery information.

- Radio alias and ID.

- Firmware and Codeplug versions.

- Software update.

- GNSS information.

- Site information.

- Received Signal Strength Indicator.

NOTICE:

Press 🔙 to return to the previous screen. Long press 🔙 to return to the Home screen. The radio exits the current screen once the inactivity timer expires.

5.10.32.1
Accessing Battery Information

Displays information of your radio battery.

1
Press 🔘 to access the menu.

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

3
Press ▲ or ▼ to Radio Info. Press 🔘 to select.

351

4

Press ▲ or ▼ to `Battery Info.` Press 🔲ⱺ to select.

> 🖊 **NOTICE:**
> For **IMPRES** batteries only: The display reads `Recondition Battery` when the battery requires reconditioning in an IMPRES charger. After the reconditioning process, the display then shows the battery information.

The display shows the battery information.

> 🖊 **NOTICE:**
> For non-supported battery, the display shows `Unknown Battery`.

5.10.32.2
Checking Radio Alias and ID

1 Do one of the following:

- Press the programmed **Radio Alias and ID** button. Skip the following steps.
  A positive indicator tone sounds.

You can press the programmed **Radio Alias and ID** button to return to the previous screen.

- Press 🔲ⱺ to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔲ⱺ to select.

3

Press ▲ or ▼ to `Radio Info`. Press 🔲ⱺ to select.

4

Press ▲ or ▼ to `My Number`. Press 🔲ⱺ to select.

The first text line shows the radio alias. The second text line shows the radio ID.

5.10.32.3
Checking Firmware and Codeplug Versions

1

Press 🔲ⱺ to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔲 to select.

3

Press ▲ or ▼ to `Radio Info`. Press 🔲 to select.

4

Press ▲ or ▼ to `Versions`. Press 🔲 to select.

The display shows the current firmware and codeplug versions.

5.10.32.4
Checking GNSS Information

Displays the GNSS information on your radio, such as values of:

• Latitude

• Longitude

• Altitude

• Direction

• Velocity

• Horizontal Dilution of Precision (HDOP)

• Satellites

• Version

1

Press 🔲 to access the menu.

2

Press ▲ or ▼ to `Utilities`. Press 🔲 to select.

3

Press ▲ or ▼ to `Radio Info`. Press 🔲 to select.

4

Press ▲ or ▼ to `GNSS Info`. Press 🔲 to select.

5

Press ▲ or ▼ to the required item. Press 🔲 to select. The display shows the requested GNSS information.

353

5.10.32.5
Checking Software Update Information

This feature shows the date and time of the latest software update carried out through OTAP or Wi-Fi. Follow the procedure to check the software update information on your radio.

1
Press ⬛ to access the menu.

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

3
Press ▲ or ▼ to Radio Info. Press ⬛ to select.

4
Press ▲ or ▼ to SW Update. Press ⬛ 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 324 for more information.

5.10.32.6
Displaying Site Information

Follow the procedure to display the current site name your radio is on.

1
Press ⬛ to access the menu.

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

3
Press ▲ or ▼ to Radio Info. Press ⬛ to select.

4
Press ▲ or ▼ to Site Info. Press ⬛ to select.

The display shows the current site name.

5.10.33
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 for more information on the **RSSI** icon.

5.10.33.1
Viewing RSSI Values

At the home screen, press ◀ three times and

immediately press ▶, all in 5 seconds.

The display shows the current RSSI values.

To return to the home screen, press and hold ⎯.

355

Limited Warranty

MOTOROLA SOLUTIONS COMMUNICATION PRODUCTS

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

Motorola Solutions, Inc. ("Motorola Solutions") warrants the Motorola Solutions 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:

Portable Radios	Two (2) Years
Product Accessories (Including Batteries and Chargers)	One (1) Year

Motorola Solutions, 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 Solutions.

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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 Solutions through one of its authorized warranty service locations. If you first contact the company which sold you the Product (for example, dealer or communication service provider), it can facilitate your obtaining warranty service. You can also call Motorola Solutions at 1-800-927-2744.

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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 Solutions supplied equipment) which adversely affect performance of the Product or interfere with Motorola Solutions 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 Solutions published specifications or the FCC certification labeling in effect for the Product at the time the Product was initially distributed from Motorola Solutions.

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.

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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 Solutions will be notified promptly in writing by such purchaser of any notice of such claim,

2 Motorola Solutions 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 Solutions opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit Motorola Solutions, 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 Solutions.

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This Warranty is governed by the laws of the State of Illinois, U.S.A.

VIII. For Australia Only

This warranty is given by Motorola Solutions Australia Pty Limited (ABN 16 004 742 312) of Tally Ho Business Park, 10 Wesley Court. Burwood East, Victoria.

Our goods come with guarantees that cannot be excluded under the Australia Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Motorola Solutions Australia's limited warranty above is in addition to any rights and remedies you may have under the Australian Consumer Law. If you have any queries, please call Motorola Solutions Australia at 1800 457 439. You may also visit our website: http://www.motorolasolutions.com/XA-EN/Pages/Contact_Us for the most updated warranty terms.

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