MOTOROLA SOLUTIONS

MOTOTRBO™

PROFESSIONAL DIGITAL TWO-WAY RADIO

SL2600 Portable Radio User Guide

MN008364A01-AC

Contents

Legal and Support

Intellectual Property and Regulatory Notices

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Important Safety Information

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

⚠ **CAUTION:**
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Chapter 1

Read Me First

This user guide covers the basic operations of the radio models offered in your region.

Notations Used in This Manual

Throughout the text in this publication, you notice the use of **Warning**, **Caution**, and **Notice**. These notations are used to emphasize that safety hazards exist, and the care that must be taken or observed.

> **WARNING:** An operational procedure, practice, or condition, and so on, which may result in injury or death if not carefully observed.

> **CAUTION:** An operational procedure, practice, or condition, and so on, which may result in damage to the equipment if not carefully observed.

> **NOTE:** An operational procedure, practice, or condition, and so on, which is essential to emphasize.

Special Notations

The following special notations are used throughout the text to highlight certain information or items:

Table 1: Special Notations

Example	Description
Menu key or **PTT** button	Bold words indicate a name of a key, button, or soft menu item.
Your radio shows `Bluetooth On`.	Typewriter words indicate the MMI strings or messages displayed on your radio.
`<required ID>`	The courier, bold, italic, and angle brackets indicate user input.
Setup → Tone → All Tones	Bold words with the arrow in between indicate the navigation structure in the menu items.

Feature and Service Availability

Your dealer or administrator may have customized your radio for your specific needs.

> **NOTE:**
> ● Not all features in the manual are available in your radio. Contact your dealer or administrator for more information.

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

● What are the functions of each button?

● Which optional accessories may suit your needs?

● What are the best radio usage practices for effective communication?

● What maintenance procedures promote longer radio life?

1.1
Software Version

All the features described in the following sections are supported by the software version:

R02.24.01.1000 or later.

Contact your dealer or administrator for more information.

Chapter 2

Introduction

This user guide is written as per the highest tier model offered to the region.

The following table describes ways to access features for the radio model.

Table 2: The Feature Access and Indications of the Radio Model

	Radio Model
Radio Model	**Figure 1: SL2600** ![SL2600 radio]
Feature Access	● Menu ● Programmable Button
Feature Indication	● Tone ● LED indicator ● Display ● Voice Announcement or Text-to-Speech

NOTE: To understand which feature is available with the **Programmable Button**, you can refer to the Programmable Buttons on page 20 topic.

Chapter 3

Radio Care

This section describes the basic handling precaution of the radio.

Table 3: IP Specification

IP Specification	Description
IP54	Allows your radio to withstand adverse field conditions such as being exposed to water splashed from all directions or dust protected for 2–8 hours.

⚠ **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.

- Keep your radio clean and exposure to water should be avoided to help ensure proper functionality and performance.

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

- These surfaces should be cleaned whenever a periodic visual inspection reveals the presence of smudges, grease, and/or grime.

  ⚠ **CAUTION:** The effects of certain chemicals and their vapors can have harmful results on certain plastics. Avoid using aerosol sprays, tuner cleaners, and other chemicals.

- When cleaning your radio, do not use a high-pressure jet spray on radio as this may cause water to leak into your radio.

Chapter 4

Getting Started

This chapter provides instructions on how to prepare your radio for use.

4.1
Charging the Battery

Your radio is powered by a Lithium-Ion (Li-Ion) battery.

Prerequisites: Turn off your radio when charging.

Procedure:

- Charge your battery only in non-hazardous areas. After battery is charged, allow your radio to rest for at least 3 minutes.
- To comply with warranty terms and avoid damage, charge the battery using a Motorola Solutions authorized charger.
- Charge a new battery 14 to 16 hours before initial use for best performance.

   Batteries charge best at room temperature.

   NOTE:
   PC USB charging is not supported on flat battery.

   You may charge your battery by connecting the USB charger to a nearby and easily accessible wall power outlet.

4.2
Attaching the Battery

Procedure:

1. Fit the battery into the battery slot of the radio.
2. Place the back cover into position and press until it snaps into place.
3. Slide the battery latch into lock position.

Postrequisites:

> **NOTE:**
> If the radio is attached with the wrong battery, your radio shows the following indications:

- A low pitched warning tone sounds.
- The red LED blinks.
- The display shows `Wrong Battery`
- The Voice Announcement or Text-to-Speech sounds if loaded using CPS.

If the radio is attached with an unsupported battery, your radio shows the following indications:

- An alert tone sounds.
- The display shows `Unknown Battery`.
- Battery icon is disabled.

The certification of the radio is voided if you attach a UL battery to an FM approved radio or vice versa.

If your radio is attached with an unsupported or wrong battery, immediately swap with the correct battery.

4.3
Removing the Battery

Prerequisites: Ensure that your radio is turned off.

Procedure:

1. Move the battery latch into unlock position.
2. Remove the back cover.
3. Take the battery out from the battery slot.

4.4
Attaching the Antenna

Procedure:

1. Set the antenna in the receptacle.
2. Turn the antenna clockwise.

   > **NOTE:** Fastening the antenna blocks water and dust from entering the radio.

   > ⚠ **CAUTION:** To prevent damages, replace the faulty antenna with only MOTOTRBO antennas.

4.5
Removing the Antenna

Procedure:

1. Turn the antenna counterclockwise.
2. Remove the antenna from the receptacle.

4.6
Attaching the Earpiece or Audio Accessory

The audio accessory connector is located on the right side of the radio. Follow the procedure to attach accessories to your radio.

Procedure:

1. Lift the flap of the audio jack cover.

2. Align the indicators on both the connector and housing, then push until it fits in properly.

4.7
Turning Radio On or Off

Procedure:

Press and hold the **Power/Information** button.

Result:
If turning radio on successful, your radio shows the following indications:

● A tone sounds.

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

● The green LED illuminates.

● The display shows power-on animation.

● The Home screen lights up.

If turning radio off successfully, your radio shows the following indications:

● A tone sounds.

● The Home screen turns off.

Postrequisites: 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.

4.8
Locking and Unlocking the Radio Display

Procedure:

Short press the **On/Off** button.

Result:
If locking radio is successful, your radio shows the following indications:

● The radio display turns off.

● The touch screen keypad is hidden and inactive.

If unlocking radio is successful, your radio shows the following indications:

● The radio display lights up.

● The touch screen keypad is visible and active.

4.9
Adjusting the Volume

Procedure:

Perform one of the following actions:

- To increase the volume, press the **Volume Up** button.

- To decrease the volume, press the **Volume Down** button.

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

Chapter 5

Radio Overview

Radio overview explains the buttons, icons, and LED indications of your radio

Radio Overview

Table 4: Callout Legend

Label	Item	Description
1	Channel Rocker	To select channel.
2	Power/Information button	To turn your radio on or off.
		When the radio is turned on, you can perform the following actions:
		● To check the battery strength.
		● To check the Received Signal Strength Indicator (RSSI).
		● To check radio name by pressing the button twice.
3	LED Indicator	The red, green, and amber light-emitting diodes indicate operating status.

Label	Item	Description
4	Push-To-Talk (PTT) button	To execute voice operations (for example, Group Call and Private Call).
5	Volume button	To adjust volume.
6	Side button	This button is field programmable using the Customer Programming Software (CPS).
7	P1/Left Navigation Button[1]	This button is field programmable using the Customer Programming Software (CPS).
8	Menu/OK Button[1]	This button is field programmable using the Customer Programming Software (CPS).
9	Back/Home Button[1]	This button is field programmable using the Customer Programming Software (CPS).
10	P2/Right Navigation Button[1]	This button is field programmable using the Customer Programming Software (CPS).
11	Display (LCD)	To provide visual information about many radio features.
12	Microphone	Allows the voice to be sent when PTT or voice operations are activated.
13	Micro-USB Connector	To charge radio.
14	Accessory Connector	Interface point for all accessories to be used with the radio. It has twelve points to which specific accessories will connect and be activated.
15	Speaker	Outputs all tones and audio that are generated by the radio (for example, features like keypad tones and voice audio).
16	Antenna	Provides the needed RF amplification when transmitting or receiving.

5.1
Programmable Buttons

You can program the programmable buttons as shortcuts to the following radio functions through programming software.

NOTE: Contact your dealer for more information.

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[1] These buttons become visible when the radio is unlocked.

Table 5: Assignable Radio Functions

Function	Description
All Alert Tones	Allows you to toggle all tones and alerts to on or off.
Analog Scrambling	Allows you to toggle the Analog Scrambling feature to on or off.
Analog Scrambling Code	Allows you to toggle the Analog Scrambling Code feature to on or off.
Audio Profiles	Allows you to select the preferred audio profiles.
Audio Toggle	Allows you to toggle the audio routing between the internal radio speaker and the wired accessory speaker.
Backlight	Allows you to toggle the display backlight to on or off.
Backlight Brightness	Allows you to adjust the brightness level.
Battery Indicator	Allows you to check the current status of the battery level.
Bluetooth® Audio Switch	Allows you to toggle the audio routing between an internal radio speaker and an external Bluetooth-enabled accessory.
Bluetooth Connect	Allows you to initiate a Bluetooth find-and-connect operation.
Bluetooth Disconnect	Allows you to terminate all existing Bluetooth connections between your radio and any Bluetooth-enabled devices.
Bluetooth Discoverable	Allows you to enable your radio to enter Bluetooth Discoverable Mode.
Call Alert.	Allows you to direct access to the contacts list and select the required contact to send a call alert.
Call Forwarding	Allows you to toggle the Call Forwarding to on or off.
Call Log	Allows you to select the call log list.
Channel Announcement	Allows you to play zone and channel announcement voice messages in the current channel.
Confirm	Allow you to confirm a feature.
Contacts	Provides direct access to the contacts list.
Emergency Off	Allows you to terminate an outgoing emergency call.
Emergency On	Allows you to set up an emergency call.
Indoor Location	Allows you to toggle the Indoor Location to on or off.
Intelligent Audio	Allows you to toggle intelligent audio to on or off.
Manual Site Roam	Allows you to start the manual site search.
Mic AGC	Allows you to toggle the internal microphone automatic gain control (AGC) to on or off.
Monitor	Allows you to monitor a channel.
Mute Mode	Allows you to turn Mute Mode on or off.
Notifications	Allows you to direct access to the notification list.
Nuisance Delete	Allows you to temporarily remove an unwanted channel from the scan list, except the Selected Channel. The nuisance deleted channel will be restored into the scan list, for instance, when radio is powered off and back on again (not applicable in Capacity Plus).

Function	Description
One Touch Access	Allows you to direct access to the predefined call features.
Permanent Monitor	Allows you to monitor a selected channel for all radio traffic until function is disabled (not applicable in Capacity Plus).
Phone	Allows you to direct access to the phone contact list.
Power Level	Allows you to toggle the transmit power to high or low.
Privacy	Allows you to toggle the privacy to on or off.
Radio Alias and ID	Provide radio alias and ID.
Radio Check	Allows you to check if the radio is active in the system.
Radio Enable or Disable	Allows a target radio to be remotely enabled or disabled.
Remote Monitor	Allows you to turn on the microphone of a target radio without giving any indications.
Repeater or Talkaround	Allows you to toggle between using a repeater and directly communicating with another radio.
Reset Home Channel	Allows you to select a new home channel.
Ring Alert Type	Allows you to direct access the Ring Alert Type setting.
Scan	Allows you to toggle the scan to on or off.
Silence Home Channel Reminder	Allows you to mute the Home Channel Reminder.
Site Lock	Allows you to enable the site lock to search only in current site or disable the site lock to search in other sites as well.
Text Message	Allows you to select the text message menu.
TX Interrupt Remote Dekey	Allows you to stop an on-going voice call by dekeying the transmitting radio or terminate the repeater call hang time in order to free up the channel. This button can also be used to end a Remote Monitor session.
Trill Enhancement	Allows you to toggle the trill enhancement to on or off.
Voice Announcement	Allows you to toggle the Voice Announcement to on or off.
Voice Operating Transmission (VOX)	Allows you to toggle the VOX to on or off.
Wi-Fi	Allows you to toggle the Wi-Fi to on or off.
Zone Selection	Allows you to select from a list of zones.

5.2
Icons

Icons are only available for radio with display.

Your radio display shows the radio status, text entries, and menu entries.

5.2.1
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.

Table 6: Display Icons

Icon	Description
▯▮▯▮▮	Battery
	Bluetooth Connected
	Bluetooth Not Connected
	Emergency
	High Volume Data
	Monitor
	Mute Mode
★	Notification
	Over-the-Air Programming Delay Timer
H	Power High
L	Power Low
	Received Signal Strength Indicator (RSSI)
	Response Inhibit
	Ring Only
	Scan[2]
or	Scan Priority 1 or Priority 2[2]
	Secure

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[2] Not available in Capacity Plus.

Icon	Description
	Site Roaming[3]
	Talkaround[2]
	Tones Disable
	Unsecure
	Vote Scan
	Wi-Fi

5.2.2
Advanced Menu Icons

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

Table 7: Advanced Menu Icons

Icon	Description
	Checkbox (Checked)
	Checkbox (Empty)
	Solid Black Box

5.2.3
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.

Table 8: Call Icons

Icons	Description
	Private Call

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[3] Not available in Capacity Plus-Single Site.

Icons	Description
	Group Call/All Call
	Phone Call as Group or All Call
	Phone Call as Private Call

5.2.4
Mini Notice Icons

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

Table 9: Mini Notice Icons
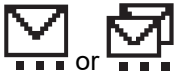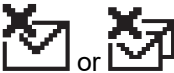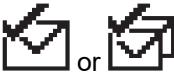
Icon	Description
	Failed Transmission (Negative)
	Successful Transmission (Positive)
	Transmission in Progress (Transitional)

5.2.5
Sent Items Icons

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

Table 10: Sent Items Icons

Icon	Description
or	In Progress
or	Send Failed
or	Sent Successfully

5.3
LED Indications

The LED Indicator shows the operational status of your radio.

A qualified technician can permanently disable the LED indication by preprogramming it.

Table 11: LED Indications

Indication	Status
Solid Red	The radio is charging.
Blinking Red	- The radio has failed the self-test upon powering up. - The radio is receiving an emergency transmission. - The radio is transmitting in low battery state. - The radio has moved out of range if Auto-Range Transponder System is configured. - Mute Mode is enabled. - The radio encounters charging errors.
Solid Yellow	The radio is monitoring a conventional channel.
Blinking Yellow	- The radio has yet to respond to a Call Alert. - The radio is scanning for activity. - The radio has Flexible Receive List enabled. - All Capacity-Plus–Multi-Site channels are busy.
Double Blinking Yellow	- The radio has Auto Roaming enabled. - The radio is actively searching for a new site. - The radio has yet to respond to a Group Call Alert. - The radio is locked. - The radio is not connected to the repeater while in Capacity Plus. - All Capacity-Plus channels are busy.
Solid Green	- The radio is powering up. - The radio is transmitting. - The radio is sending a Call Alert or an emergency transmission.
Blinking Green	- The radio is receiving a call or data. - The radio is retrieving the Over-the-Air Programming transmissions. - The radio is detecting activity over the air. - The radio is turned on and in idle mode. **NOTE:** The activity may or may not affect the programmed channel of the radio due to the nature of the digital protocol.
Double Blinking Green	The radio is receiving a privacy-enabled call or data.

Chapter 6

System Overview

System overview explains what type of systems and modes available in the radio.

6.1
Conventional Analog and Digital Modes

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

Certain features are unavailable when switching from digital to analog mode and analog to digital mode, whereas some are available in both.

There are minor differences on how each feature works but they do not affect the performance of your radio.

6.2
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.

When the radio moves out of range from one site and into the range of another, the radio connects to the repeater of the new site to send or receive calls or data transmissions. This is done either automatically or manually depending on your settings.

In an automatic site search, the radio scans through all available sites when the signal from the current site is weak or when the radio is unable to detect any signal from the current site. The radio then locks on to the repeater with the strongest Received Signal Strength Indicator (RSSI) value.

In a manual site search, the radio searches for the next site in the roam list that is currently in range but which may not have the strongest signal and locks on to the repeater.

NOTE: Each channel can only have either Scan or Roam enabled, not both at the same time.

Channels with this feature enabled can be added to a particular roam list. The radio searches the channels in the roam list during the automatic roam operation to locate the best site. A roam list supports a maximum of 16 channels, including the selected channel.

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

6.3
Capacity Plus

Capacity Plus is a cost effective and entry-level digital trunked system. It expands the capacity and extends the coverage for single and multi-sites. The single and multi-sites dynamic trunking offers better capacity and coverage.

NOTE: If you try to access a feature not applicable to Capacity Plus–Single-Site or Capacity Plus–Multi-Site by using a programmable button, you hear a negative indicator tone.

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 configuration allows your radio to efficiently utilize the number of available programmed channels while in Repeater Mode.

Your radio also has features that are available in conventional digital mode, IP Site Connect, and Capacity Plus.

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. It is also known as Linked Capacity Plus.

It 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 number of available programmed channels supported by each of the available sites.

When your radio moves out of range of one site and into the range of another, it connects to the repeater of the new site to send or receive calls or data transmissions. Depending on your settings, this is done automatically or manually.

Automatically
Your radio scans through all available sites when the signal from the current site is weak or unable to detect any signal and locks on to the repeater with the strongest RSSI value.

Manually
Your radio searches for the next site in the roam list that is currently in range 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 roam list. Your radio searches these channels during the automatic roam operation to locate the best site.

NOTE: You cannot manually add or delete an entry in the roam list.

Chapter 7

Zone and Channel Selections

A zone is a group of channels. You can program each channel with different features that support different groups of users.

Table 12: Number of Supported Zones and Channels

Zones	Channels	Channels per Zone
50	128	16

7.1
Selecting Zones

Procedure:

From the menu, select **Zone** → *`<required Zone>`*.

Result: The display shows *`<Zone>`* `Selected`.

7.2
Selecting a Channel

Procedure:

Push the **Channel Rocker**.

NOTE: If **Virtual Channel Stop** is enabled, your radio stops proceeding beyond the first or the last channel, and a tone is heard.

Result: The radio displays the current channel and sounds the Voice Announcement.

Types of Radio Calls

There are several ways that you can make a call with your radio depending on the types of calls and system available on your radio.

Table 13: Types of Radio Calls

Call Type	Description
Group Call	A Group Call is a point-to-multipoint call operation. Your radio must be configured as a member of the group for you to communicate with each other.
Broadcast Voice Call	A Broadcast Voice 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.
Private Call	A Private Call is a call from an individual radio to another individual radio. You can set up a Private Call after performing a radio presence check or call immediately.
Selective Call	A Selective Call is a call from an individual radio to another individual radio. This feature is only supported in Analog system.
All Call	An All Call is a call from an individual radio to every radio on the site or every radio at a group of sites. This feature is used to make an important announcement.
Unaddressed Call	An Unaddressed Call is a group call to one of the 16 predefined group IDs.
Open Voice Channel Mode (OVCM)	An OVCM is a call from a radio that is not preconfigured to work in a particular system during a group or individual call. The OVCM group call supports broadcast calls.

When a call is interrupted, you hear a continuous Talk Prohibit Tone. Releasing the **PTT** button allows you to receive the call.

Channel Free Indication feature can be programmed on your radio by your dealer. If the Channel Free Indication feature is enabled, you hear a short alert tone when the recipient releases the **PTT** button, indicating the channel is free for you to respond.

8.1
Making Calls on the Radio

Procedure:

Perform one of the following actions based on the type of calls:

Option	Actions
Making group calls, private calls, unaddressed calls, or selective calls	**a.** Select a channel with an active ID or alias. **b.** To call, press and hold the **PTT** button. **c.** Wait for the Talk Permit Tone to end, and speak into the microphone. **d.** To listen, release the **PTT** button.
Making broadcast calls, all calls, or OVCM calls	**a.** Select a channel with an active group ID or alias. **b.** To call, press and hold the **PTT** button. **c.** Wait for the Talk Permit Tone or PTT Sidetone to end, and speak into the microphone.

If your radio does not detect voice activity for a predetermined period, the call ends.

8.2
Receiving and Responding to Calls on the Radio

When you receive calls, your radio shows the following indications:

- The green LED blinks.

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

- The display shows the ID and alias and call status.

  NOTE: You cannot respond to a Broadcast Call or All Call.

Procedure:

1. To respond, press and hold the **PTT** button.

2. Wait for the Talk Permit Tone to end, and speak into the microphone.

   NOTE: For Group Call, wait for the **PTT** Sidetone to end, and speak into the microphone if enabled.

3. To listen, release the **PTT** button.

Chapter 9

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

9.1
Making Phone Calls

Procedure:

1. From the menu, select **Phone** → **<required ID>** → **<Access Code>**.
2. To call, press and hold the **PTT** button.
3. To listen, release the **PTT** button.
4. While you are in the Phone call, you can perform any of the following actions if required:
   - Enter extra digits by using the **Keypad**.
   - To end the call, select the **Back/Home** button.
   - To deaccess a code, enter the deaccess code by using the **Keypad** when the display shows `De-Access Code:`.

Result: If the call ends successfully, your radio shows the following indications:

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

9.2
Receiving and Responding to Phone Calls

When you receive a phone call, your radio shows the following indications:

- The green LED blinks.
- Your radio unmutes and the incoming call sounds through the speaker.
- The display shows the Phone Call icon and the call status.

Procedure:

1. To respond to the phone call, press and hold the **PTT** button.
2. Wait for the Talk Permit Tone to end, and speak into the microphone.

3. To listen, release the **PTT** button.

4. To end the call, select the **Back/Home** button.

> **NOTE:** 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.

Result: If the call ends successfully, your radio shows the following indications:

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

Chapter 10

Initiating Transmit Interrupt

Procedure:

To interrupt an ongoing call, perform one of the following actions:

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

Chapter 11

Advanced Features

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

11.1
Analog Message Encode

Your radio can send preprogrammed messages from the Message list to a radio alias or the dispatcher.

11.1.1
Sending MDC Encode Messages to Dispatchers

Procedure:

From the menu, select **Message** → **Quick Text** → *<required message>*.

Result:
If the request is successful, your radio shows the following indications:

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

If the request is unsuccessful, your radio shows the following indications:

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

11.1.2
Sending 5-Tone Encode Messages to Contacts

Procedure:

From the menu, select **Message** → **Quick Text** → *<required message>* → *<required contact>*.

Result:
If the request is successful, your radio shows the following indications:

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

If the request is unsuccessful, your radio shows the following indications:

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

11.2

Analog Status Update

Your radio can 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).

For Motorola Data Communication (MDC) systems, the last acknowledged message is kept at the top of the Status list. The other messages are arranged in alphanumeric order.

11.2.1

Sending Status Updates to Predefined Contacts

Procedure:

Perform one of the following actions:

- For Motorola Data Communication (MDC) systems, from the menu, select **Status** → *<required status>* → **Set as Default** → **Menu/OK**.

- For 5-Tone systems, from the menu, select **Status** → *<required status>* → **Set as Default**.

Result:
For MDC systems, if the request is successful, your radio shows the following indications:

- A positive indicator tone sounds.

- The display shows a positive mini notice.

For MDC systems, if the request is unsuccessful, your radio shows the following indications:

- A negative indicator tone sounds.

- The display shows a negative mini notice.

For 5-Tone systems, if the request is successful, your radio display shows a ✔ beside the acknowledged status.

For 5-Tone systems, if the request is unsuccessful, your radio display shows a ✔ beside the previous status.

11.2.2

Viewing 5-Tone Status Details

Prerequisites: Purchase the Software License Key.

Procedure:

From the menu, select **Status** → *<required status>* → **View Details**.

Result: The display shows details of the selected status.

11.3

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 as follows:

Table 14: Auto-Range Transponder System Indications

Indication	Description
First-Time Alert	- A tone sounds. - The display shows `In Range` after the channel alias.
ARTS-in-Range Alert	- A tone sounds, if programmed. - The display shows `In Range` after the channel alias.
ARTS-Out-of-Range Alert	- A tone sounds. - The red LED rapidly blinks. - The display shows `Out of Range` alternating with the Home screen.

11.4
Bluetooth®

This feature allows your radio to connect to any Bluetooth enabled device through Bluetooth connection.

Your radio supports both Motorola Solutions and Commercially available Off-The-Shelf (COTS) Bluetooth enabled devices. For example, headset, scanner, sensor device, and PTT-Only Device (POD).

The Bluetooth operates within a range of 10 meter (32 feet) line of sight. The Bluetooth function of your radio has a maximum power of 2.5 mW (4 dBm) at the 10 m range.

This is an unobstructed path between your radio and your Bluetooth enabled device. For high degree of reliability, Motorola Solutions recommends to not separate the radio and the Bluetooth enabled device.

If the voice and tone quality gets distorted or unclear, place your radio and the Bluetooth enabled device close to each other to re-establish clear audio reception.

Your radio can support up to three simultaneous Bluetooth connections with Bluetooth-enabled devices of unique types. Your radio connects to the Bluetooth-enabled device within range with either the strongest signal strength or last connected device.

NOTE:
- Use the latest Bluetooth accessories (v5.0 and above) for enhanced connection security.
- Always adopt Bluetooth security best practices when using Bluetooth devices.

11.4.1
Turning the Bluetooth On

Procedure:

From the menu, select **Bluetooth** → **My Status** → **On**.

Result: If Bluetooth is turned on, the display shows a ✔ beside `On`.

11.4.2
Turning the Bluetooth Off

Procedure:

From the menu, select **Bluetooth** → **My Status** → **Off**.

Result: If Bluetooth is turned off, the display shows a ✔ beside `Off`.

11.4.3
Connecting to Bluetooth Devices

Procedure:

1. From the menu, select **Bluetooth**.

2. Perform one of the following actions:

   - To connect to an existing device, select **Devices** → *<required device>* → **Connect**.

   - To connect to a new device, select **Devices** → **Find Devices** → *<required device>* → **Connect**.

   - To connect to a device in discoverable mode, select **Find Me**.

Result:
If the Bluetooth device is successfully connected to the radio, your radio shows the following indications:

- A positive tone sounds.

- The display shows *<Device>* `Connected` and the **Bluetooth Connected** icon.

If the Bluetooth device is unsuccessfully connected to the radio, your radio shows the following indications:

- A negative tone sounds.

- The display shows `Connecting Failed`.

> 📝 **NOTE:** The Bluetooth connection tone is enabled by default. You can disable the Bluetooth connection tone through the radio programming software.

11.4.4
Disconnecting from Bluetooth Devices

Procedure:

From the menu, select **Bluetooth** → **Devices** → *<required device>* → **Disconnect**.

Result:
If the Bluetooth device is successfully disconnected from the radio, your radio shows the following indications:

- A tone sounds.

- The display shows *<Device>* `Disconnected`.

> 📝 **NOTE:** The Bluetooth connection tone is enabled by default. You can disable the Bluetooth connection tone through the radio programming software.

11.4.5

Switching Audio Route between Internal Radio Speaker and Bluetooth Device

Procedure:

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

Result:

When the audio is routed to the Internal Radio Speaker, the display shows `Route Audio to Radio`.

When the audio is routed to the Bluetooth device, the display shows `Route Audio to Bluetooth`.

11.4.6

Viewing Device Details

Procedure:

From the menu, select **Bluetooth** → **Devices** → *`<required device>`* → **View Details**.

11.4.7

Deleting Device Names

Procedure:

From the menu, select **Bluetooth** → **Devices** → *`<required device>`* → **Delete**.

Result: The display shows `Device Deleted`.

11.4.8

Adjusting Bluetooth Mic Gain Values

Procedure:

1. From the menu, select **Bluetooth** → **BT Mic Gain**.

2. To increase or decrease the values, use the **Channel Up or Down** → **Menu/OK** button.

11.4.9

Permanent Bluetooth Discoverable Mode

The Permanent Bluetooth Discoverable Mode must be enabled by your dealer.

> **NOTE:** If the Permanent Bluetooth Discoverable Mode is enabled, you are unable to find the **Bluetooth** setting in the menu and you cannot use any Bluetooth programmable button features.

Other Bluetooth-enabled devices can locate your radio, but the devices cannot connect to the radio. The Permanent Bluetooth Discoverable Mode enables dedicated devices to use your radio position in the process of Bluetooth-based location.

11.5

Call Alert Operation

Call Alert paging enables you to alert the recipient to call you back when they can. This feature is applicable for subscriber aliases or IDs only.

11.5.1

Making Call Alerts

Procedure:

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

Result:
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.

11.5.2

Responding to Call Alerts

When you receive a Call Alert, your radio shows the following indications:

- A repetitive tone sounds.
- The yellow LED blinks.
- The display shows a notification list of the Call Alert and the ID of the caller.

Procedure:

Depending on the configuration by your dealer, perform one of the following actions:

- Respond to the caller with a Private Call by pressing the **PTT** button.
- Continue with Talkgroup communication by pressing the **PTT** button. To respond to the Call Alert, navigate to the Missed Call log in the Call Log menu.

11.6

Call Indicator Settings

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

11.6.1

Activating or Deactivating Call Ringers

You can activate or deactivate call ringers for Private Calls, Text Messages, Call Alerts, and Selective Calls.

Activating Call Ringers

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Tones/Alerts** → **Call Ringers**.
2. Select one of the following options:
    - **Call Alert**

- **Private Call**

- **Selective Call**

- **Messages**

3. Select the required tone.

Result:
If you activate call ringers, your radio display shows a ✔ and the selected tone.

Deactivating Call Ringers

Procedure:

1. From the menu, select **Utilities → Radio Settings → Tones/Alerts → Call Ringers**.

2. Select one of the following options:

   - **Call Alert**

   - **Private Call**

   - **Selective Call**

   - **Messages**

3. Select **Off**.

Result:
If you deactivate call ringers, your radio display shows a ✔ beside `Off`.

11.6.2
Assigning Ring Styles

You can program your radio to play one of the 11 predefined ring tones when receiving Private Calls, Call Alerts, or Text Messages.

Procedure:

From the menu, select **Contacts →** *`<required ID or alias>`* **→ View/Edit → Ringer →** *`<required tone>`*.

Result:
The display shows `Contact Saved`.

11.6.3
Selecting Ring Alert Types

Procedure:

1. From the menu, select **Utilities → Radio Settings → Tones/Alerts → Ring Alert Type**.

2. Select one of the following options:

   - **Silent**

   - **Ring**

11.6.4
Alarm Tone Volume Escalation

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

11.7
Call Log Features

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

Missed Call Alerts can be included in call logs depending on the system configuration on your radio. You can perform the following tasks in each call list:

- View Details
- Delete Calls

11.7.1
Viewing Recent Calls

Procedure:

1. From the menu, select **Call Log**.

2. Select one of the following lists:
   - **Missed**
   - **Answered**
   - **Outgoing**

3. View calls by scrolling through the list.

Result: The display shows the most recent entry.

11.7.2
Deleting Calls from the Call List

Procedure:

From the menu, select → **Call Log** → *<required list>* → *<required ID or alias>* → **Delete Entry?** → **Yes**.

> 📝 **NOTE:** If you select **No**, your radio returns to the previous screen. If the list is empty, a tone sounds and the display shows `List Empty`.

Result: The display shows `Entry Deleted`.

11.7.3
Viewing Details from the Call List

Procedure:

From the menu, select → **Call Log** → *<required list>* → *<required ID or alias>* → **View Details**.

11.8

Contacts Settings

The Contacts menu provides an address book function on your radio. Each entry corresponds to an ID for making calls. The entries are alphabetically sorted.

Each entry supports different call types depending on your settings. The contact entries display Call Type, Call Alias, and Call ID information.

You can assign entries to programmable number keys as quick dial. You see a check mark before each number key that is assigned to an entry. If the check mark is before the `Empty` interface, a number key is not assigned to the entry.

Personal Computer (PC) Calls and Dispatch Calls are data-related. These calls are only available with an application.

Your radio supports Analog and Digital contacts, with a maximum of 500 members for each Contacts Lists.

For Analog contacts list, you view or edit the subscriber IDs, and initiate a Call Alert. Only your dealer can add or delete the subscriber IDs.

For Digital contacts list, you can add or edit the subscriber IDs. Only your dealer can delete the subscriber IDs.

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.

11.8.1

Making Group Calls or Private Calls with Contact List

Procedure:

1. From the menu, select **Contacts** → *<required ID or alias>*.

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

3. Wait for the Talk Permit Tone to end, and speak into the microphone.

4. To listen, release the **PTT** button.

11.8.2

Setting Default Contacts

Procedure:

From the menu, select → **Contacts** → *<required ID or alias>* → **Set as Default**.

Result:
If the setting is successful, your radio shows the following indications:

- A positive indicator tone sounds.

- The display shows a positive mini notice.

- The display shows a ✔ beside the selected contact.

11.9

Covert Mode

Your radio is capable of Covert Mode. During covert mode, all keypad and programmed button access are blocked. When enabled, all visual indications (display, LEDs, and backlight) are disabled.

This feature allows audio or tone only by using a wired accessory or a Bluetooth accessory.

11.9.1

Entering or Exiting Covert Mode

Procedure:

Press **Volume Up** and **Volume Down** button alternately 6 times, in five seconds.

11.10

Emergency Operation

Emergency Alarms are used to indicate critical situations. You can initiate an Emergency Alarm at any time even when there is activity on the current channel.

You can only assign one type of Emergency Mode to the Emergency button for each channel. Your radio supports the following Emergency Modes:

Table 15: Emergency Modes

Emergency Mode	Description
Emergency Alarm	An Emergency Alarm is not a voice call. This alarm is an emergency notification sent to radios that are programmed to receive them.
Emergency Alarm with Call	Your radio transmits an Emergency Alarm. When the Emergency Alarm is acknowledged, the group of radios can communicate over the assigned emergency channel. Press and hold the **PTT** button to talk.
Emergency Alarm with Voice to Follow	Your radio transmits an Emergency Alarm. When the Emergency Alarm is acknowledged, your radio microphone is automatically activated which is known as Hot Mic. Hot Mic allows you to communicate with the group of radios without pressing the **PTT** button. **NOTE:** ● If the Emergency Cycle Mode is enabled, repetitions of Hot Mic and receiving period are made for a programmed duration. ● If you press and hold the **PTT** button during the programmed Hot Mic receiving period, your radio proceeds to make a call and stops Hot Mic receiving period timer. Your radio remains in emergency mode. Once **PTT** button is released, Hot Mic receiving period timer restarts. ● If the Emergency Alarm request fails, the radio does not retry to send the request, and enters the Hot Mic directly.
Silent Emergency Alarm	Your radio transmits an emergency notification without any audio or visual indicators.

Emergency Mode	Description
Silent Emergency Alarm with Call	Your radio transmits an emergency notification without any audio or visual indicators. Your radio suppresses all audio and visual indicators of the emergency until you press and hold the **PTT** button to talk.
Silent Emergency Alarm with Voice to Follow	Your radio transmits an emergency notification without any audio or visual indicators. When the Emergency Alarm is acknowledged, the Hot Mic is activated. You can communicate with the group of radios without pressing the **PTT** button. **NOTE:** The indicators only appear when you press the **PTT** button.

Your dealer can set the Emergency On or Off function and button-press duration of the Emergency button. Contact your dealer for more information.

Your dealer can program the Emergency Search tone. When the tone is programmed, the Emergency Search tone sounds. The tone mutes when your radio transmits or receives voice, and stops when your radio exits Emergency mode.

11.10.1
Sending Emergency Alarms

Procedure:

Press the programmed **Emergency On** button.

Result:
If the alarm is successfully sent, your radio shows the following indications:

● The Emergency tone sounds.

● The green LED blinks.

● The display shows `Alarm Sent.`

If the alarm is unsuccessful after all retries, your radio shows the following indications:

● A negative tone sounds.

● The display shows `Alarm Failed.`

11.10.2
Sending Emergency Alarms with Call

Procedure:

1. Press the programmed **Emergency On** button.

   If the alarm is successfully sent, your radio shows the following indications:

   ● The Emergency tone sounds.

   ● The green LED blinks.

   ● The display shows `Alarm Sent.`

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

3. Wait for the Talk Permit Tone to end, and speak into the microphone.

4. To listen, release the **PTT** button.

If your radio does not detect voice activity for a predetermined period, the call ends.

11.10.3
Sending Emergency Alarms with Voice to Follow

Procedure:

1. Press the programmed **Emergency On** button.

   If the alarm is successfully sent, your radio shows the following indications:

   - The green LED blinks.

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

   - The Emergency icon appears.

2. Speak into the microphone without pressing the **PTT** button.

   Your 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.

11.10.4
Receiving Emergency Alarms

When you receive an Emergency Alarm, your radio shows the following indications:

- 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.

Procedure:

1. When the Emergency Alarm List appears, perform one of the following actions:
   - Select **OK** button.
   - Select the *`<required ID>`*.
2. Select **OK** button to view the action options.

11.10.5
Reinitiating the Emergency Mode

Procedure:

Perform one of the following actions:

- Change the channel while the radio is in Emergency mode.

  NOTE: 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.

Result: The radio exits the Emergency mode, and reinitiates Emergency.

11.10.6
Exiting the Emergency Mode

Your radio automatically exits emergency mode when you are having the following scenarios:

● An acknowledgment is received from the system (for emergency alarms only).

● All retries to send the alarm are exhausted.

● Turning off your radio. When you turn on your radio, the emergency will not reinitiate automatically.

● Change your current channel to a channel with no Emergency.

Procedure:

Press the programmed **Emergency Off** button.

Result:
If you exited the Emergency successfully, your radio shows the following indications:

● The tone ceases.

● The red LED extinguishes.

11.11
Entering the Front Panel Programming

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

Procedure:

1. From the menu, select **Utilities** → **Program Radio**.

2. Enter your current eight-digit password.

3. Select the required setting.

11.12
Home Channel Reminder

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

When this feature is enabled and your radio is not set to the home channel for some time, the following indications occur periodically:

● A tone and the Home Channel Reminder announcement sounds.

● The display shows `Non Home Channel`.

11.12.1
Muting the Home Channel Reminder

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

Procedure:

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

Result:
The display shows `HCR Silenced`.

11.12.2
Setting New Home Channels

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

Procedure:

From the menu, select **Utilities → Radio Settings → Home Channel → <required channel>**.

Result:
The display shows a ✔ beside the selected home channel alias.

11.13
Indoor Location

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

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

11.13.1
Turning the Indoor Location On

Procedure:

From the menu, select **Bluetooth → Indoor Location → InLoc Status**.

Result:
If Indoor Location successfully turns on, your radio shows the following indications:

- A positive tone sounds.
- The display shows `Indoor Location On`.
- The Indoor Location Available icon appears on the home screen.

If Indoor Location does not turn on, your radio shows the following indications:

- A negative tone sounds.
- The display shows `Turning On Failed`.

11.13.2
Turning the Indoor Location Off

Procedure:

From the menu, select **Bluetooth → Indoor Location → InLoc Status**.

Result:
If Indoor Location successfully turns off, your radio shows the following indications:

- A positive tone sounds.

- The display shows `Indoor Location Off.`

- The Indoor Location Available icon disappears from the home screen.

If Indoor Location does not turn off, your radio shows the following indications:

- A negative tone sounds.

- The display shows `Turning Off Failed.`

11.13.3
Accessing Indoor Location Beacons Information

Procedure:

From the menu, select **Bluetooth** → **Indoor Location** → **Beacons**.

Result:
The display shows information of the beacons.

11.14
Lone Worker

This feature prompts an emergency if there is no user activity (button press or channel selector activation) for a predefined time.

When there is no user activity for a predefined time, the radio prewarns you using an audio indicator once the inactivity timer expires.

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

11.15
Monitor Feature

The feature allows you to remotely activate the microphone of a target radio. You can use this feature to monitor any audible activity surrounding the target radio.

11.15.1
Monitoring Channels

Procedure:

1. Press and hold the programmed **Monitor** button.

   Your radio shows the following indications:

   - You hear the radio activity.

   - The yellow LED illuminates.

   - The display shows the **Monitor** icon.

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

3. To listen, release the **PTT** button.

11.15.2

Permanent Monitor

The Permanent Monitor feature is used to continuously monitor a selected channel for activity.

11.15.2.1

Setting the Permanent Monitor

Procedure:

Press the programmed **Permanent Monitor** button.

Result:

When your radio enters the mode, your radio shows the following indications:

- An alert tone sounds.
- The yellow LED illuminates.
- The display shows `Permanent Monitor On` and the Monitor icon.

When your radio exits the mode, your radio shows the following indications:

- An alert tone sounds.
- The yellow LED extinguishes.
- The display shows `Permanent Monitor Off`.

11.16

Remote Monitor

This feature is used to turn on the microphone of a target radio with a subscriber 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.

The Remote Monitor microphone selection of the target radio follows the programmed Hot Mic setting. There are two Hot Mic sources:

Hot Mic Source	Microphone Selection
Radio Microphone	The Bluetooth microphone is used for Remote Monitor.
	If there is no Bluetooth microphone connected, the radio microphone is used.
Wired Accessory Microphone	The wired accessory microphone is used for Remote Monitor.
	If there is no wired accessory microphone connected, the Bluetooth microphone is used.
	If there is no Bluetooth microphone connected, the radio microphone is used.

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

Remote Monitor comprises of two types:

- Remote Monitor without Authentication
- Remote Monitor with Authentication

When your radio turns on the microphone of a target radio with user authentication, a passphrase is required. The passphrase is programmed into the target radio through the radio programming softwares.

11.16.1
Initiating the Remote Monitor

Procedure:

1. Perform one of the following actions:

Option	Actions
Initiating Remote Monitor with Contact List	From the menu, select **Contacts** → *<required ID or alias>* → **Remote Mon.**.
Initiating Remote Monitor with Manual Dial	a. From the menu, select **Contacts** → **Manual Dial** → **Radio Number**. b. Either enter the ID or alias, or edit the previous dialed ID. c. Select **Remote Mon.**.

2. Enter the passphrase if required.

Result:
If the request is successful, your radio shows the following indications:

- A positive 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`. When the timer expires, an alert tone sounds and the LED turns off.

If the request is unsuccessful, your radio shows the following indications:

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

11.17
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.

Mute Mode can be enabled for a predefined duration by setting the Mute Mode Timer. The duration of the timer is configured through 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 programmed **Mute Mode** button is pressed.

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

11.17.1
Turning the Mute Mode On

Procedure:

Press the programmed **Mute Mode** button.

Result:
If Mute Mode is enabled, your radio shows the following indications:

● A positive tone sounds.

● The red LED blinks and continues blinking until Mute Mode is exited.

● The display shows `Mute Mode On`.

● The home screen shows the Mute Mode icon.

● Your radio mutes.

● If the Mute Mode Timer has been set, the timer begins counting down the duration that it is configured.

11.17.2
Setting the Mute Mode Timer

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Mute Timer**.

2. Edit the numeric value of each digit.

11.17.3
Exiting the Mute Mode

When the Mute Mode Timer expires, your radio automatically exits Mute Mode. You can also exit Mute mode manually.

Procedure:

Exit Mute Mode manually by performing one of the following actions:

● Press the programmed **Mute Mode** button.

● Press and hold the **PTT** button and speak into the microphone.

● Switch to any unprogrammed channel.

Result:
If Mute Mode is disabled, your radio shows the following indications:

● A negative tone sounds.

● The blinking red LED extinguishes.

● The display shows `Mute Mode Off`.

● The Mute Mode icon disappears from the home screen.

● Your radio unmutes and restores the speaker state.

● The Mute Mode Timer stops even if the timer has not expired.

11.18
Notification List

Your radio has a Notification list that collects all unread events on the channel, such as 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.

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, text messages, missed calls, or call alerts) list capability.

> **NOTE:** Your radio suspends Scan when the Notification list is displayed. Scanning resumes when your radio exits the Notification list. Select **Back/Home** button or wait for the menu timer to expire to exit the Notification list.

11.18.1
Accessing the Notification List

Procedure:

From the menu, select **Notification**.

Result: The display shows all the available events.

11.19
Over-the-Air Programming

Your dealer can remotely update your radio through Over-the-Air Programming (OTAP) without any physical connection. 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, your radio shows the following indications:

- If you press the **PTT** button, a negative tone sounds.

- The display shows the High Volume Data icon.

- The channel becomes busy.

When OTAP completes, your radio shows one of the following responses depending on the configuration:

- A tone sounds. The display shows `Updating Restarting`. Your radio restarts.

- Your radio displays the **Restart Now** or **Postpone** options. If 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 turns on after automatic restart, your radio shows the following indications:

- If the program update is 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`.

> **NOTE:**
> If the programming update is unsuccessful, the 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 update failure indications.

11.20

Scan

Depending on the supported system available on your radio, your radio may have different behavior on Scan.

Channel Scan

When you start a scan, your radio scans through the programmed scan list for the current channel looking for voice activity. If you are on a digital channel, and your radio locks onto an analog channel, your radio automatically switches from digital mode to analog mode during the call and the same behavior occurs if you are on analog channel.

Table 16: Scan Methods

Method	Description
Main Channel Scan (Manual)	Your radio scans all the channels or groups in your scan list. When scanning, 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.

When you miss a call from a talkgroup or a channel that is in your scan list, you might be having the following situations:

- Scan feature is not on.
- Scan list member has been disabled through the menu.
- You are already participating in another call.

> **NOTE:** If your radio joins a call for a Zone Scan List member from a different Zone and Call Hang Timer expires before you are able to respond, you must navigate to the Zone and Channel of the Scan List Member and start a new call to respond.

11.20.1

Turning the Scan On

Procedure:

From the menu, select **Scan → Scan State → Turn On**.

Result:
If scan is turned on, your radio shows the following indications:

- The yellow LED blinks.
- The display shows `Scan On` and the scan icon.

11.20.2

Turning the Scan Off

Procedure:

From the menu, select **Scan → Scan State → Turn Off**.

Result:

If scan is turned off, your radio shows the following indications:

- The LED extinguishes.

- The display shows `Scan Off` and the scan icon disappears.

11.20.3
Nuisance Channels

Nuisance Channel is a channel that generates unwanted call continually.

You can temporarily remove the unwanted channel from the scan list and restore it back later on. This capability does not apply to the channel designated as the Selected Channel.

11.20.3.1
Deleting Nuisance Channels

Prerequisites: Your radio is scanned into the Nuisance Channel.

Procedure:

1. Press the programmed **Nuisance Delete** button until you hear a tone.

2. Release the programmed **Nuisance Delete** button.

11.20.3.2
Restoring Nuisance Channels

Procedure:

Perform one of the following actions:

- Restart your radio.

- Turn off and then turn on the scan.

- Change the channel using the **Channel Rocker**.

11.20.4
Vote Scan

Vote Scan provides wide coverage in areas with 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.

During a vote scan, your radio shows the following indications:

- The yellow LED blinks.

- The display shows the Vote Scan icon.

11.20.5

Scan Lists

You can create and assign individual channels or groups in Scan Lists. 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. Scan List also known as Receive Group List.

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 analog and digital entries.

The Priority icon on the left of member ID indicates whether the member is on Priority 1 or Priority 2 channel list. You cannot have multiple Priority 1 and Priority 2 channels in a scan list. There is no icon if the priority is set to **None**.

11.20.5.1

Viewing the Scan List

Procedure:

> From the menu, select **Scan** → **Scan List**.

11.20.5.2

Adding New Entries to the Scan List

Procedure:

1. From the menu, select **Scan** → **Scan List** → **Add Member** → *<required alias>*.

2. Perform one of the following actions:

    - To add another, select **Yes**.

    - To save the current list, select **No**.

11.20.5.3

Deleting Entries from the Scan List

Procedure:

1. From the menu, select **Scan** → **Scan List** → *<required alias>* → **Delete**.

2. Perform one of the following actions:

    - To delete the alias, select **Yes**.

    - To return to previous screen, select **No**.

11.20.5.4

Editing Priority for a Scan List

Procedure:

> From the menu, select **Scan** → **Scan List** → *<required alias>* → **Edit Priority**.

Result:
If successful, your radio shows the following indications:

- A positive tone sounds.

- **Priority** icon appears on the left of the member alias.

11.21

Radio Check

If enabled, this feature allows you to determine if another radio is active in a system without disturbing the user of that radio. No audible or visual notification is shown on the target radio.

This feature is only applicable for subscriber IDs.

11.21.1

Sending Radio Checks

Procedure:

> From the menu, select **Contacts** → **<required ID or alias>** → **Radio Check**.

Result:
If the target radio is active in the system, your radio shows the following indications:

- A tone sounds.

- The display shows `Target Radio Available`.

If the target radio is inactive in the system, your radio shows the following indications:

- A tone sounds.

- The display shows `Target Radio Not Available`.

11.22

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.

11.22.1

Viewing RSSI Values

Procedure:

> From the home screen, press **Volume Down** button five times, then immediately press **Volume Up** button five times.

11.23

Response Inhibit

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

> 📝 **NOTE:** Contact your dealer for more information.

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), and responding to Private Messages.

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

11.23.1
Setting the Response Inhibit

Procedure:

Press the programmed **Response Inhibit** button.

Result:
If the Response Inhibit is successfully turned off, your radio shows the following indications:

● A positive tone sounds.

● The display shows a momentary positive mini notice.

If the Response Inhibit fails to turn off, your radio shows the following indications:

● A negative tone sounds.

● The display shows a momentary negative mini notice.

11.24
Rental Timer

The Rental Timer feature allows the radio rental dealer to set the permitted rental period of your radio and automatically disable the radio beyond the duration specified on the timer.

The radio can be programmed with a maximum rental period of 999 hours and a maximum rental period extension of 99 hours.

The timer calculates the radio usage time and disables the radio when the usage time reaches the predetermined rental period.

After the rental period expires, the radio ceases to function until the dealer resets the rental timer.

11.24.1
Accessing Rental Timer Information

Procedure:

From the menu, select **Utilities** → **Rental Timer** → **Information**.

Result: The display shows the hours.

11.24.2
Rental Expiry Reminder

The Rental Expiry Reminder feature provides a reminder when the rental period is expiring.

The radio provides a display and an audio reminder of the timer expiry.

For the audio reminder frequency, the voice announcement sounds as the followings:

● Every 1 hour after the first reminder, until the last 2 hours before the rental period expires.

● Twice for the last 2 hours before the rental period expires.

● Twice during the last 3 minutes, 2 minutes and 1 minute before the rental period expires.

For the display reminder, your radio display shows a momentary notice reminder referring to the number of hours before before the rental period expires.

For the last 3 minutes before expiry, your radio display shows a momentary notice reminder referring to the number of minutes before the rental period expires.

11.24.3
Extending the Rental Period

The radio can be programmed with a maximum of 99 hours rental period extension.

Procedure:

Perform one of the following actions:

Options	Actions
Extending the rental period through the menu	a. From the menu, select **Utilities** → **Rental Timer** → **Extension**. b. Press the **Menu/OK** button. NOTE: You can only extend the rental period once. The extension check box is greyed out after you enable the feature.
Extending the rental period through the buttons	Press the **Side Button 2** and **Volume Down** three times continuously. NOTE: You can only extend the rental period once. A negative indicator tone sounds if you press the buttons again.

11.25
Security

This feature allows you to stun or revive any radio in the system.

For example, you may disable stolen radio to prevent unauthorized users from using and revive or enable the radio when it is recovered.

When a radio is stunned, the radio cannot request nor receive any user initiated services on the system that performed the stun procedure. However, the radio can switch to another system. The radio continues to send GNSS location reports and can be monitored remotely when it was stunned or disabled.

You can stun or revive a radio with or without authentication.

Authenticated Radio Disable is a selling feature and requires verification when you enable or disable a radio. When your radio disables a target radio with user authentication, a passphrase is required. The passphrase is preprogrammed in the target radio through the Customer Programming Software (CPS).

NOTE: Contact your dealer to enable this feature.

11.25.1
Disabling Radios

Procedure:

1. Perform one of the following actions:

Option	Actions
Disabling the Radio with Contact List	From the menu, select **Contacts** → `<required ID or alias>` → **Radio Disable**.

Option	Actions
Disabling the Radio with Manual Dial	a. From the menu, select **Contacts → Manual Dial**. b. Enter the ID. c. Select **Radio Disable**.

2. Enter the passphrase if required.

Result:

If the request is successful, your radio shows the following indications:

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

If the request is unsuccessful, your radio shows the following indications:

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

11.25.2

Enabling Radios

Procedure:

1. Perform one of the following actions:

Option	Actions
Enabling the Radio with Contact List	From the menu, select **Contacts → *<required ID or alias>* → Radio Enable**.
Enabling the Radio with Manual Dial	a. From the menu, select **Contacts → Manual Dial**. b. Enter the ID. c. Select **Radio Enable**.

2. Enter the passphrase if required.

Result:

If the request is successful, your radio shows the following indications:

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

If the request is unsuccessful, your radio shows the following indications:

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

11.26

Text Messaging

Your radio is able to receive data 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.

> **NOTE:**
> 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.

11.26.1
Viewing Text Messages

Procedure:

1. From the menu, select **Messages**.

2. Perform one of the following actions:

   - Select **Inbox → `<required messages>`**.
   - For Sent Text Messages, select **Sent Items → `<required messages>`**.

Result:
If the Inbox or Sent Items folder is empty:

- If the Keypad Tone is enabled, a tone sounds.
- The display shows `List Empty`.

The display shows a subject line if the message is from an email application.

11.26.2
Composing Text Messages

Procedure:

1. From the menu, select **Messages → Compose**.

2. Compose your message.

3. Perform one of the following actions:

   - To save a text message, select **Back/Home → Save**.
   - To discard a text message, select **Back/Home → Discard**.

     > **NOTE:** If you accidentally select the **Back/Home** button, you can select `Edit` to continue composing your text message.

   If your text message is saved, you can view and edit your text message in the Draft folder.

   If your text message is discarded, your text message is deleted.

11.26.3
Sending Text Messages

Prerequisites: Compose your message.

Procedure:

Perform one of the following actions:

Option	Actions
Sending Sent Text Messages	From your sent message, select **Menu/OK** → **Resend**.
Sending Quick Text Messages	1. From the menu, select **Messages** → **Quick Text**. 2. Perform one of the following actions: ○ Select the *<required ID or alias>*.
Resending Text Messages	Select **Resend**.

Result:

If your text message is successfully sent, your radio shows the following indications:

- A tone sounds.

- The display shows positive mini notice.

If your text message fails to send, the display shows the following options:

- `Resend`

- `Forward`

- `Edit`

11.26.4
Responding to Text Messages

When you receive a text message, your radio displays the following items:

- The Notification List with the ID or alias of the sender.

- The Message icon.

  NOTE: If you press the **PTT** button, your radio exits the Text Message alert screen and makes a Private or Group Call to the sender.

Procedure:

Perform one of the following actions:

Option	Actions

Responding to Text Messages from the Notification List	Perform one of the following actions:
	
	- To read the text message, select **Read**.
	
	- To read the text message later, select **Read Later**.
	
	- To delete the text message, select **Delete**.
	
	- To reply, perform the following actions:
	
	  a. Press **Menu/OK** button twice.
	
	  b. Select the *<required message>*.

Option	Actions
Responding to Text Messages	From the menu, select **Messages** → **Inbox** → *<required message>* → **Reply**.
Responding to Text Messages with Quick Text	From the menu, select **Messages** → **Inbox** → *<required message>* → **Reply** → **Quick Reply**.

11.26.5
Forwarding Text Messages

Procedure:

1. From the **Resend** option screen, select **Messages**.

2. To forward a Text Message from the Inbox or Sent Item folder, select *<required message>* → **Forward**.

Result:
If your text message is successfully forwarded, your radio shows the following indications:

- A positive tone sounds.

- The display shows positive mini notice.

If your text message fails to forward, the display shows the following indications:

- A negative tone sounds.

- The display shows negative mini notice.

11.26.6
Deleting Text Messages

Procedure:

1. From the menu, select **Messages**.

2. Perform one of the following actions:

   - To delete text messages, select **Inbox** → *<required text message>* → **Menu/OK** → **Delete**.

   - To delete all text messages, select **Inbox** → **Delete All**.

   - To delete sent text messages, select **Sent Items** → *<required text message>* → **Menu/OK** → **Delete**.

   - To delete all sent text messages, select **Sent Items** → **Delete All**.

11.27
Wi-Fi Operation

Wi-Fi® is a registered trademark of Wi-Fi Alliance®. You can set up and connect Wi-Fi network to update your radio firmware, codeplug, language pack, and Voice Announcement.

Your radio supports the following Wi-Fi networks.

WEP/WPA/WPA2 Personal Wi-Fi network
Uses pre-shared key/password based authentication. Pre-shared key/password can be entered by using the menu or MDM.

WPA/WPA Enterprise Wi-Fi network

Designed for enterprise networks and requires a RADIUS authentication server. Your radio must be pre-configured with a certificate if certificate-based authentication is deployed and client certificate verification is required.

> **NOTE:** Configure your Wi-Fi system according to the latest industry security recommendations or use Enterprise Wi-Fi.

11.27.1
Turning Wi-Fi On or Off

Procedure:

From the menu, select **WiFi → Turn On**.

Result: If Wi-Fi is turned on, the display shows `Turning On WiFi`.

If Wi-Fi is enabled and a low capacity battery is used, your radio display an alert screen the following notice:

- `Low Capacity Battery!`

- `Tx power restricted to 2 W and Wi-Fi disabled.`

- `Use a compatible battery to lift restriction.`

If Wi-Fi is disabled and a low capacity battery is used, the transmit power is restricted to 2 W.

Postrequisites:

To lift the restriction and to enable 3 W operation and Wi-Fi, power off the radio and change to a compatible battery such as Lithium-Ion 2300 mAh Battery Pack (PMNN4468_).

11.27.2
Turning Wi-Fi On or Off Using a Designated Radio (Individual Control)

Procedure:

1. From the menu, select **Contacts → WiFi Control**.

2. Perform one of the following actions:

   - To turn on Wi-Fi, select **On**.

   - To turn off Wi-Fi, select **Off**.

11.27.3
Connecting to a Network Access Point

When you turn on Wi-Fi, your radio scans and connects to a network access point.

Procedure:

1. From the menu, select **WiFi → Networks → *<required Network Access Point>* → Connect**.

   > **NOTE:** For WPA-Enterprise Wi-Fi, if a network access point is not preconfigured, the **Connect** option is not available.

2. Perform one of the following actions:

   - For WPA-Personal Wi-Fi, enter the password.

- For WPA-Enterprise Wi-Fi, the WPA is configured using the radio programming softwares.

    If the password is correct, your radio automatically connects to the selected network access point.

    If the password is incorrect, the display shows `Authentication Failure`, and automatically returns to the previous menu.

Result:
If the connection is successful, your radio displays a positive notice and the network access point is automatically saved into your profile list.

If the connection is unsuccessful, your radio displays a negative notice screen and returns to the previous menu.

11.27.4
Checking Wi-Fi Connection Status

Procedure:

Press the programmed **Wi-Fi Status** button.

Result:
If Wi-Fi connection is turned on and connected to a network, your radio shows the following indications:

- A voice prompt indicates that Wi-Fi is turned on.
- The display shows `WiFi On, Connected`.

If Wi-Fi connection is turned on but not connected to any network, your radio shows the following indications:

- A voice prompt indicating that Wi-Fi is turned on.
- The display shows `WiFi On, Disconnected`.

If Wi-Fi connection is turned off, your radio shows the following indications:

- A voice prompt indicating that Wi-Fi is turned off.
- The display shows `WiFi Off`.

11.27.5
Viewing Details of Network Access Points

Procedure:

From the menu, select **WiFi** → **Networks** → *<required Network Access Points>* → **View Details**.

Result:
For WPA-Personal Wi-Fi networks, your radio shows the following details:

- For a connected network access point, your radio displays information on:
    - Service Set Identifier (SSID)
    - Security Mode
    - Media Access Control (MAC) address
    - Internet Protocol (IP) address
- For a non-connected network access point, your radio displays information on
    - SSID
    - Security Mode

For WPA-Enterprise Wi-Fi networks, your radio shows the following details:

- For a connected network access point, your radio displays information on
  - SSID
  - Security Mode
  - Identity
  - Extended Authentication Protocol (EAP) Method
  - Phase 2 Authentication
  - Cert Name
  - MAC address
  - IP address
  - Gateway
  - DNS1
  - DNS2
- For a non-connected network access point, your radio displays information on
  - SSID
  - Security Mode
  - Identity
  - EAP Method
  - Phase 2 Authentication
  - Certificate Name

Chapter 12

Utilities

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

12.1
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.

The talkaround setting is retained even after powering down.

> 📝 **NOTE:** This feature is not applicable in Capacity Plus–Single-Site, Capacity Plus–Multi-Site, and Citizens Band channels that are in the same frequency.

12.1.1
Toggling Between Repeater and Talkaround Mode

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Talkaround**.

2. Select the **Menu/OK** button to toggle between Talkaround or Repeater mode.

Result:
When Talkaround mode is enabled, a ✔ appears beside `Enabled`.

When Talkaround mode is disabled, the ✔ disappears beside `Enabled`.

12.2
Setting Radio Tones and Alerts

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Tones/Alerts**.

2. Select one of the following options:

   ● **All Tones**

   ● **Talk Permit**

   ● **Keypad Tone**

   ● **Power Up Tone**

   ● **Vol.Offset** → `<required volume>`.

Result: A ✔ appears beside the setting.

12.3
Setting 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.

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Squelch**.

2. Perform one of the following actions:

   - For a normal squelch level, select **Normal Squelch**.

   - To filter out unwanted calls or background noise, select **Tight Squelch**.

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

12.4
Setting Power Levels

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Power**.

2. Perform one of the following actions:

   - To enable communication with radios located at a considerable distance from you, select **High**.

   - To enable communication with radios in closer proximity, select **Low**.

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

12.5
Adjusting Display Settings

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Display**.

2. Select one of the following options:

   - **Brightness**
   - **Backlight Timer**
   - **Menu Timer**
   - **Intro Screen**

12.6
Setting Languages

Procedure:

From the menu, select **Utilities** → **Radio Settings** → **Languages** → **<required language>**.

Result: A ✔ appears beside the selected language.

12.7

Setting LED Indicators

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **LED Indicator**.

2. Perform one of the following actions:

   - To enable LED Indicator, select **Menu/OK** button.

   - To disable LED Indicator, select **Menu/OK** button.

Result:
If the LED Indicator is enabled, a ✔ appears beside `Enabled`.

If the LED Indicator is disabled, your radio shows the following indications:

- The ✔ disappears beside `Enabled`.

- The display backlight and keypad backlight are automatically turned off.

12.8

Password Lock

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

Your radio supports a four-digit password input.

Your radio is unable to receive calls in locked state.

12.8.1

Accessing Radios with Password

Prerequisites: Turn on your radio.

Procedure:

1. Enter your four-digit password.

2. Select the **Menu/OK** button.

Result:
If you enter the password correctly, your radio turns on.

If you enter the password incorrectly, a tone sounds, the yellow LED illuminates, and the display shows `Wrong Password`.

> 📝 **NOTE:**
> You may repeat the steps to enter the password. You are given three attempts before your radio enters into a locked state for 15 minutes. The display shows `Radio Locked`.
>
> During locked state, your radio responds to inputs from the **On/Off/Volume knob** and the programmed **Backlight** button only.
>
> If you restart your radio during the locked state, the timer restarts.

12.8.2
Unlocking Radios in Locked State

Procedure:

To unlock your radio in locked state, perform one of the following actions:

Option	Actions
Unlocking Radios in Locked State if your radio is turned on	**a.** Wait for 15 minutes. **b.** Access the radio by following the steps in Accessing Radios with Password.
Unlocking Radios in Locked State if your radio is turned off	**a.** Turn on your radio. 📝 **NOTE:** Your radio restarts the 15 minutes timer for locked state. **b.** Wait for 15 minutes. **c.** Access the radio by following the steps in Accessing Radios with Password.

12.8.3
Setting the Password Lock

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Passwd Lock** → *<required password>*.

   📝 **NOTE:** When using this feature for the first time, the display shows `New Password Setup` to set a new password. You must set a new password before setting the Password Lock feature.

2. Perform one of the following actions:
   - To enable Password Lock, select **Turn On**.
   - To disable Password Lock, select **Turn Off**.

12.8.4
Changing Passwords

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Passwd Lock** → *<required password>* → **Change PWD**.

2. Enter a new four-digit password.

3. To confirm the new password, re-enter the same four-digit password.

Result:

If the password is successfully changed, the display shows `Password Changed`.

If the password change is unsuccessful, the display shows `Password Do Not Match` and returns to the previous menu.

12.9

Voice Announcement

This feature enables the radio to audibly indicate the current Zone or Channel assigned. This audio indicator can be customized per customer requirements.

> **NOTE:** The Voice Announcement feature can only be enabled through CPS. If enabled, the Text-to-Speech feature is automatically disabled.

12.9.1

Setting the Voice Announcement

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Voice Announcement**.

2. Perform one of the following actions:

   - To enable Voice Announcement, select the **Menu/OK** button.

   - To disable Voice Announcement, select the **Menu/OK** button.

Result:
If the Voice Announcement is enabled, a ✔ appears beside `Enabled`.

If the Voice Announcement is disabled, the ✔ disappears beside `Enabled`.

12.10

Setting the Intelligent Audio

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Intelligent Audio**.

2. Perform one of the following actions:

   - To enable Intelligent Audio, select **On**.

   - To disable Intelligent Audio, select **Off**.

   > **NOTE:**
   > Your radio automatically adjusts the audio volume to overcome current background noise in the environment.
   >
   > Intelligent audio feature is a receive-only feature.
   >
   > This feature is not applicable during a Bluetooth session.

12.11

Setting the Automatic Call Forwarding

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Call Forward**.

2. Perform one of the following actions:

   - To enable Call Forwarding, select the **Menu/OK** button.

- To disable Call Forwarding, select the **Menu/OK** button.

Result:
If the Call Forwarding is enabled, a ✔ appears beside `On`.

12.12
Setting the Microphone Automatic Gain Control

Procedure:

1. From the menu, select **Utilities** → **Radio Settings**

2. Perform one of the following actions:

   - For Analog Microphone Automatic Gain Control, select **Mic AGC-A**.

   - For Digital Microphone Automatic Gain Control, select **Mic AGC-D**.

3. Perform one of the following actions:

   - To enable Mic AGC, select the **Menu/OK** button.

   - To disable Mic AGC, select the **Menu/OK** button.

Result:
If the Mic AGC is enabled, a ✔ appears beside `Enabled`.

If the Mic AGC is disabled, the ✔ disappears beside `Enabled`.

12.13
Setting the Trill Enhancement

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **Trill Enhance**.

2. Perform one of the following actions:

   - To enable Trill Enhancement, select **On**.

   - To disable Trill Enhancement, select the **Off**.

12.14
Setting the Acoustic Feedback Suppressor

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **AF Suppressor**.

2. Perform one of the following actions:

   - To enable AF Suppressor, select the **Menu/OK** button.

   - To disable AF Suppressor, select the **Menu/OK** button.

12.15

Privacy

This feature prevents 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 clear.

Your radio must have privacy enabled on the channel to send a privacy-enabled transmission, although this is not a requirement for receiving a transmission.

Some radio models may not offer Privacy feature, or may have different configuration. Contact your dealer for more information.

NOTE:
Only one type of privacy can be assigned at a time.

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

The following table describes the type of privacy and the settings that appear on your radio.

Table 17: Privacy Types and Settings

Type	Setting
Basic Privacy	Privacy
Enhanced Privacy	Enhanced Privacy

12.15.1

Setting Privacy

Procedure:

1. From the menu, select **Utilities** → **Radio Settings**.

2. Depending on the configured type of privacy, select your privacy setting.

3. Perform one of the following actions:

    ● To enable Privacy, select the **Menu/OK** button.

    ● To disable Privacy, select the **Menu/OK** button.

Result:
If Privacy is enabled, a ✔ appears beside `Enabled`.

If Privacy is disabled, the ✔ disappears beside `Enabled`.

12.16

Voice Operating Transmission

Voice Operating Transmission (VOX) allows you to initiate hands-free voice-activated calls on a programmed channel. When your VOX-capable accessory detects voice, your radio automatically transmits for a programmed period.

NOTE:
This feature is not applicable in Citizen Band channels that are in the same frequency.

Contact your dealer or administrator for more information.

12.16.1
Setting the Voice Operating Transmission

Procedure:

1. From the menu, select **Utilities** → **Radio Settings** → **VOX**

2. Perform one of the following actions:

   - To enable VOX, select **On**.
   - To disable VOX, select **Off**.

Result: If VOX is turned on, the display shows a ✔ beside `On`.

12.17
Accessing the Radio Information

Procedure:

1. From the menu, select **Utilities** → **Radio Info**.

2. To access the radio information, perform one of the following actions:

   - To check on battery information, select **Battery Info**.
   - To check on your radio ID and alias, select **My ID**.
   - To check on the firmware and Codeplug versions, select **Versions**.
   - To check on the latest software update information, select **SW Update**.

12.18
Viewing Enterprise Wi-Fi Certificate Details

Procedure:

From the menu, select **Utilities** → **Certificate Menu** → **<required certificate>**.

Chapter 13

Authorized Accessories List

Motorola Solutions provides a list of accessories to improve the productivity of your radio.

Table 18: Antenna

Part Number	Description
PMAD4144_	VHF, 136–144 MHz, 5.0 cm, Stubby Antenna
PMAD4145_	VHF, 144–156 MHz, 5.0 cm, Stubby Antenna
PMAD4146_	VHF, 156–174 MHz, 5.0 cm, Stubby Antenna
PMAD4154_	VHF, 136–144 MHz, 9.0 cm, Whip Antenna
PMAD4155_	VHF, 144–156 MHz, 9.0 cm, Whip Antenna
PMAD4156_	VHF, 156–174 MHz, 9.0 cm, Whip Antenna
PMAE4093_	UHF, 403–425 MHz, 4.5 cm, Stubby Antenna
PMAE4094_	UHF, 420–445 MHz, 4.5 cm, Stubby Antenna
PMAE4095_	UHF, 435–470 MHz, 4.5 cm, Stubby Antenna
PMAE4099_	UHF, 445–480 MHz, 4.5 cm, Stubby Antenna

Table 19: Battery

Part Number	Description
PMNN4468_	BT100x Lithium-Ion 2300 mAh Battery Pack

Table 20: Carry Devices

Part Number	Description
PMLN6074_	Nylon Wrist Strap
PMLN7076_	Flexible Quick Release Hand Strap
PMLN7128_	Heavy-Duty Swivel Belt Clip
PMLN7190_	Swivel Carry Holster

Table 21: Chargers

Part Number	Description
PMLN7093_	Standard Multi-Unit Charger
PMLN7094_	Standard Single Unit Charger
PMLN7103_	Standard Multi-Unit Charger, AUS/NZ Plug
PMLN7111_	Standard Single Unit Charger, AUS/NZ Plug
PS000227A01	Power Supply Adaptor 100 V–240 V, Micro-USB

Part Number	Description
PS000042A14	Micro-USB Power Supply Adaptor, AC/DC Switch Mode, Wall Cube, 5 W, 100 V–240 V, AUS/NZ Plug

Table 22: Earbuds and Earpieces

Part Number	Description
PMLN7156_	Earbud with In-line Mic/PTT, MagOne
PMLN7157_	2-Wire with Transparent Tube, Black
PMLN7158_	1-Wire Surveillance Earpiece, In-Line Mic and PTT
PMLN7159_	Adjustable D-Style with In-Line Mic and PTT
PMLN7189_	Swivel Earpiece, In-line Mic and PTT
RLN6242_	Transparent Acoustic Tube
5080384F72	High Noise Yellow Foam Earpieces

Table 23: Miscellaneous

Part Number	Description
PMLN7074_	Battery Door

Table 24: Wireless

Part Number	Description
NNTN8191_	Push-to-Talk Module, without Charger
NNTN8294_	1-Wire Earbud, 29 cm Cord, Black
NNTN8295_	1-Wire Earbud, 116 cm Cord, Black
NNTN8299_	Eartips for Operations Critical Wireless Earbuds (Replacement for NNTN8294_ and NNTN8295_)
NNTN8385_	Wireless Neckloop Y-adapter and retention hook for Completely Discreet Kit
NNTN8433_	Discreet Surveillance Kit
PMLN6463_	Business Wireless Accessory Kit
PMLN7052_	Operations Critical Wireless 1-Wire Surveillance Kit with Translucent Tube
RLN4922_ [4]	Completely Discreet Earpiece Kit
RLN6490_	XBT Behind-the-Neck, Non-secure Wireless Heavy Duty Headset
RLN6491_	XBT Overhead, Non-secure Wireless Heavy Duty Headset
RLN6550_ [4]	Swivel Earpiece with In-Line Microphone
89409N	Non-Secure HK200 Mobile Bluetooth Headset

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[4] Contact your dealer on the availability of these accessories.