

PROFESSIONAL DIGITAL TWO-WAY RADIO SYSTEM

# MOTOTRBO™ DGM SERIES CONNECT PLUS DISPLAY MOBILE USER GUIDE





# Declaration of Conformity

## DECLARATION OF CONFORMITY

Per FCC CFR 47 Part 2 Section 2.1077(a)



### Responsible Party

Name: Motorola Solutions, Inc.

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

Phone Number: 1-800-927-2744

Hereby declares that the product:

Model Name: **DGM 6100/DGM 6100+**

conforms to the following regulations:

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

### **Class B Digital Device**

As a personal computer peripheral, this device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

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

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

# Contents

This User Guide contains all the information you need to use the MOTOTRBO Connect Plus DGM Series Digital Mobile Radios.

- Declaration of Conformity** ..... i
- Important Safety Information** .....vii
  - RF Energy Exposure and Product Safety Guide for Mobile Two-Way Radios ..... vii
- Software Version** .....vii
- Computer Software Copyrights** ..... viii
  - Open Source Software Legal Notices .....viii
- Getting Started** ..... 1
  - How to Use This User Guide ..... 1
  - What Your Dealer/System Administrator Can Tell You ..... 1
  - Powering Up the Radio .....2
  - Adjusting the Volume .....2
- Identifying Radio Controls** ..... 3
  - Radio Controls .....3
  - Programmable Buttons .....4
    - Assignable Radio Functions .....4
    - Assignable Settings/Utility Functions .....4

- Accessing the Programmed Functions ..... 5
- Push-To-Talk (PTT) Button ..... 5
- Switching Between Connect Plus and Non-Connect Plus Modes ..... 6
- Identifying Status Indicators** ..... 6
  - Display Icons .....7
  - Call Icons .....7
  - Sent Item Symbols ..... 8
  - LED Indicators .....8
  - Alert Tones .....9
  - Indicator Tones .....9
- Receiving and Making Calls** ..... 10
  - Selecting a Site ..... 10
    - Roam Request ..... 10
    - Site Lock On/Off ..... 11
    - Site Restriction ..... 11
  - Selecting a Zone ..... 11
    - Using Multiple Networks ..... 12
  - Selecting a Call Type ..... 12
  - Receiving and Responding to a Radio Call ..... 12
    - Receiving and Responding to a Group Call ..... 13
    - Receiving and Responding to a Private Call ..... 13
    - Receiving a Site All Call ..... 14
    - Receiving and Responding to a Phone Call ..... 14

|  |           |   |    |
|--|-----------|---|----|
| Phone Call as Private Call .....               | 14        | Turning Scan On or Off .....                    | 24 |
| Phone Call as Group Call .....                 | 15        | Editing the Scan List .....                     | 25 |
| Making a Radio Call .....                      | 15        | Enabling, Disabling or Deleting a               |    |
| Making a Call with the Channel Rocker .....    | 15        | Scan List Group .....                           | 25 |
| Making a Group Call .....                      | 15        | Add or Delete a Group via the                   |    |
| Making a Private Call .....                    | 16        | Add Members Menu .....                          | 26 |
| Making a Site All Call .....                   | 17        | Understanding Scan Operation .....              | 28 |
| Making a Multigroup Call .....                 | 17        | Talking Back During Scanned Calls .....         | 28 |
| Making a Private Call with the                 |           | Editing Priority for a Talkgroup .....          | 29 |
| One Touch Call Button .....                    | 17        | Contacts Settings .....                         | 30 |
| Making a Privacy-Enabled (scrambled) Call .... | 18        | Making a Private Call from Contacts .....       | 30 |
| Busy Queue .....                               | 18        | Call Indicator Settings .....                   | 31 |
| <b>Advanced Features .....</b>                 | <b>19</b> | Activating and Deactivating Call Ringers        |    |
| Home Channel Reminder .....                    | 19        | for Private Calls .....                         | 31 |
| Muting the Home Channel Reminder .....         | 19        | Activating and Deactivating Call Ringers        |    |
| Setting a New Home Channel .....               | 20        | for Text Messaging .....                        | 31 |
| Auto Fallback .....                            | 20        | Assigning Ring Styles .....                     | 32 |
| Indications of Auto Fallback Mode .....        | 20        | Call Log Features .....                         | 32 |
| Making / Receiving Calls in Fallback Mode .... | 21        | Viewing Recent Calls .....                      | 32 |
| Returning to Normal Operation .....            | 21        | Missed Call Screen .....                        | 33 |
| Radio Check .....                              | 22        | Deleting a Call from a Call List .....          | 33 |
| Sending a Radio Check .....                    | 22        | Call Alert Operation .....                      | 34 |
| Remote Monitor .....                           | 23        | Receiving and Acknowledging a Call Alert ....   | 34 |
| Initiating Remote Monitor .....                | 23        | Making a Call Alert from the Contacts List .... | 34 |
| Selectable Group Scan .....                    | 24        | Making a Call Alert with the One Touch          |    |

|   |    |  |    |
|---|----|--|----|
| Call Button .....                         | 35 | Viewing a Text Message from the Inbox .....      | 46 |
| Emergency Operation .....                 | 35 | Replying to a Text Message with Quick Text ..    | 46 |
| Receiving an Emergency Call .....         | 36 | Deleting a Text Message from the Inbox .....     | 47 |
| Initiating an Emergency Call .....        | 36 | Deleting All Text Messages from the Inbox ...    | 48 |
| Initiating an Emergency Call with         |    | Enhanced Privacy .....                           | 48 |
| Voice to Follow .....                     | 37 | Privacy Icon .....                               | 48 |
| Responding to an Emergency Call .....     | 38 | LED Operation .....                              | 49 |
| Exiting Emergency Mode .....              | 39 | Enable/Disable Privacy .....                     | 49 |
| Receiving an Emergency Alert .....        | 39 | Security .....                                   | 50 |
| Initiating an Emergency Alert .....       | 40 | Radio Disable .....                              | 50 |
| Text Messaging Features .....             | 41 | Radio Enable .....                               | 51 |
| Sending a Quick Text Message .....        | 41 | Utilities .....                                  | 52 |
| Sending a Quick Text Message with the     |    | Setting the Power Level .....                    | 52 |
| One Touch Call Button .....               | 42 | Controlling the Display Backlight .....          | 53 |
| Managing Fail-to-Send Text Messages ..... | 42 | Turning Horns/Lights On or Off .....             | 53 |
| Resending a Text Message .....            | 42 | Turning the Radio All Tones/Alerts On or Off ... | 54 |
| Forwarding a Text Message .....           | 43 | Turning the Talk Permit Tone On or Off .....     | 55 |
| Managing Sent Text Messages .....         | 43 | Turning the LED Indicators On or Off .....       | 55 |
| Viewing a Sent Text Message .....         | 43 | Checking the Language .....                      | 56 |
| Sending a Sent Text Message .....         | 44 | Turning the Call Ringer Tones On/Off or          |    |
| Deleting All Sent Text Messages from      |    | Changing the Ringer Style .....                  | 56 |
| Sent Items .....                          | 45 | Call Alert .....                                 | 56 |
| Receiving a Text Message .....            | 45 | Private Call .....                               | 57 |
| Reading a Text Message .....              | 45 | Accessing General Radio Information .....        | 57 |
| Managing Received Text Messages .....     | 46 | Checking the Radio Model Number Index .....      | 58 |

|   |           |  |           |
|---|-----------|--|-----------|
| Displaying the Site ID (Site Number) . . . . .                      | 58        | Making a Call Alert by Manual Dial . . . . .       | 71        |
| Checking the Site Info . . . . .                                    | 58        | Text Messaging . . . . .                           | 72        |
| Checking My Number (Radio ID) . . . . .                             | 59        | Writing and Sending a Text Message . . . . .       | 72        |
| Checking the Firmware Version . . . . .                             | 59        | Replying to Text Messages from the Inbox . . . . . | 73        |
| Checking the Codeplug Version . . . . .                             | 59        | Editing a Quick Text Message . . . . .             | 74        |
| Checking the Option Board<br>Firmware Version . . . . .             | 60        | Managing Fail-to-Send Text Messages . . . . .      | 74        |
| Checking the Option Board Frequency<br>File Version . . . . .       | 60        | Resending a Text Message . . . . .                 | 75        |
| Checking the Option Board<br>Hardware Version . . . . .             | 60        | Forwarding a Text Message by Manual Dial . . . . . | 75        |
| Checking the Option Board<br>Codeplug Version . . . . .             | 60        | Editing a Text Message . . . . .                   | 75        |
| Checking the CRC of the Option Board<br>OTA Codeplug File . . . . . | 61        | Sending a Site All Call Text Message . . . . .     | 76        |
| Checking for Updates . . . . .                                      | 61        | Security . . . . .                                 | 77        |
| <b>Keypad Microphone Features . . . . .</b>                         | <b>66</b> | Radio Disable via Manual Dial . . . . .            | 77        |
| Using the Keypad . . . . .  | 66        | Radio Enable via Manual Dial . . . . .             | 77        |
| Turning Keypad Tones On or Off . . . . .                            | 66        | <b>Accessories . . . . .</b>                       | <b>78</b> |
| Additional Advanced Features . . . . .                              | 68        | Antennas . . . . .                                 | 78        |
| Initiating a Radio Check by Manual Dial . . . . .                   | 68        | Audio . . . . .                                    | 79        |
| Initiating Remote Monitor by Manual Dial . . . . .                  | 68        | Cables . . . . .                                   | 80        |
| Making a Private Call by Manual Dial . . . . .                      | 69        | Desktop Accessories . . . . .                      | 80        |
| Making a Phone Call by Phone Manual Dial . . . . .                  | 70        | Mounting Kits . . . . .                            | 80        |
| Making a Private Call by Alias Search . . . . .                     | 71        | Remote Mount Adaptor Kits . . . . .                | 80        |
|   |           | Speakers . . . . .                                 | 81        |
|   |           | Miscellaneous Accessories . . . . .                | 81        |
|   |           | <b>Limited Warranty . . . . .</b>                  | <b>82</b> |
|   |           | <b>Notes . . . . .</b>                             | <b>85</b> |



## Important Safety Information

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

#### ATTENTION!

**This radio is restricted to Occupational use only.**

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

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

<http://www.motorolasolutions.com>

## Software Version

All the features described in the following sections are supported by the radio's software version **R01.06.30** or later.

See ***Checking the Firmware Version*** on page 59 to determine your radio's software version.

Please check with your dealer or system administrator for more details of all the features supported.

## Computer Software Copyrights

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

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

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

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

### Open Source Software Legal Notices

This Motorola Product contains Open Source Software. For information regarding licenses, acknowledgements, required copyright notices, and other usage terms, refer to the Documentation for this Motorola Product at:

<https://businessonline.motorolasolutions.com/>

Go to:

**Motorola Online>Resource Center>Product Information>Manuals>MOTOTRBO>Connect Plus**

---

## Getting Started

Take a moment to review the following:

|   |        |
|---|--------|
| How to Use This User Guide . . . . .                            | page 1 |
| What Your Dealer/System Administrator<br>Can Tell You . . . . . | page 1 |
| Powering Up the Radio . . . . .                                 | page 2 |
| Adjusting the Volume . . . . .                                  | page 2 |

## ■ How to Use This User Guide

---

This User Guide covers the basic operation of MOTOTRBO Mobiles that are equipped with a Connect Plus Option Board, and are operating in a Connect Plus zone.

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

## ■ What Your Dealer/System Administrator Can Tell You

---

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

- Is your radio programmed with any preset conventional channels?
- Which buttons have been programmed to access other features?
- What optional accessories may suit your needs?

## ■ Powering Up the Radio

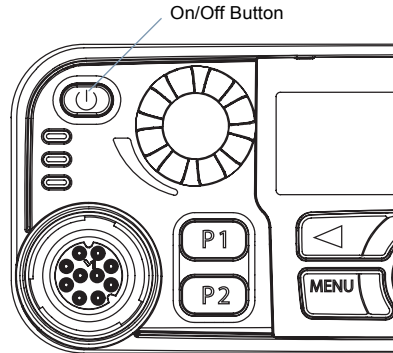
Press the **On/Off Button** briefly.

Motorola and MOTOTRBO (TM) appears momentarily on the radio's display, followed by the channel number and Option Board firmware version. The radio must locate and register with a Connect Plus site before the radio user can initiate and receive calls. After successfully registering on a site, the radio sounds a beep, displays the site number, and then displays the ID or alias for the selected channel.

The green LED blinks and the Home screen lights up if the backlight setting is set to turn on automatically.

**NOTE:** The Home screen does not light up during a power up if the LED indicators are disabled (see **Turning the LED Indicators On or Off** on page 55).

A brief tone sounds, indicating that the power up test is successful.



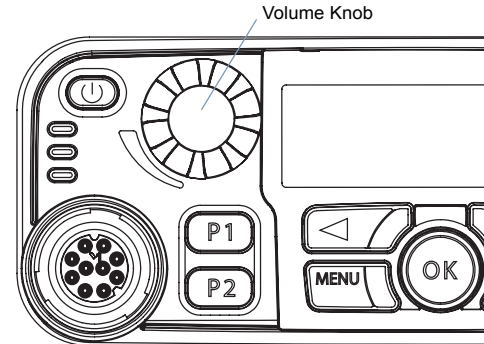
**NOTE:** There is no power up tone if the radio tones/alerts function is disabled (see **Turning the Radio All Tones/Alerts On or Off** on page 54).

If your radio does not power up, contact your dealer.

*To turn off the radio, press and hold the On/Off Button until you see **Powering Down** on the radio's display.*

## ■ Adjusting the Volume

To increase the volume, turn the **Volume Knob** clockwise.



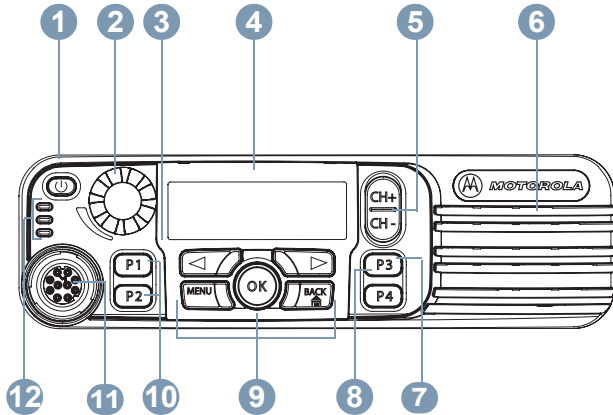
To decrease the volume, turn this knob counterclockwise.

## Identifying Radio Controls

Take a moment to review the following:

|  |        |
|--|--------|
| Radio Controls . . . . .   | page 3 |
| Programmable Buttons . . . . .   | page 4 |
| Accessing the Programmed Functions . . . . .                           | page 5 |
| Push-To-Talk (PTT) Button . . . . .                                    | page 5 |
| Switching Between Connect Plus and<br>Non-Connect Plus Modes . . . . . | page 6 |

### ■ Radio Controls



- 1 On/Off Button
- 2 Volume Knob
- 3 Front Button P1\*
- 4 Display
- 5 Channel Rocker
- 6 Speaker
- 7 Front Button P3\*
- 8 Front Button P4\*
- 9 Menu Navigation Buttons
- 10 Front Button P2\*
- 11 Accessory Connector
- 12 LED Indicators

*\* These buttons are programmable.*

## ■ Programmable Buttons

---

Your dealer can program the programmable buttons as shortcuts to radio functions or preset call types depending on the duration of a button press:

- Press – Pressing and releasing rapidly (0.05 seconds).
- Long press – Pressing and holding for the programmed duration (between 0.25 seconds and 3.75 seconds).
- Hold down – Keeping the button pressed.

### ☐ Assignable Radio Functions

**Busy Queue Cancellation** – Exits the busy mode when a non-Emergency call in the Busy Queue was initiated. Emergency calls, once accepted into the Busy Queue, cannot be cancelled.

**Contacts** – Provides direct access to the Contacts list.

**Emergency** – Initiates an Emergency call or Emergency Alert, and also cancels an Emergency call or Emergency Alert, if the Emergency request has yet to be transmitted.

**Manual Dial** – Initiates a call by keying in any subscriber ID.

**One Touch Call** – Initiates a predefined Call Alert, Private Call, or Quick Text message.

**Phone Manual Dial** – Initiates a Private Phone Call by keying in the phone number.

**Privacy On/Off** – Used to toggle transmit privacy On or Off for the currently selected channel position. The privacy setting only affects transmitted voice calls from this position, not received calls.

**Radio Check** – Determines if a radio is active in a system.

**Radio Enable** – Allows a target radio to be remotely enabled.

**Radio Disable** – Allows a target radio to be remotely disabled.

**Remote Monitor** – Turns on the microphone of a target radio without it giving any indicators.

**Roam Request** – Requests to search for a different site.

**Scan** – Toggles Selectable Group Scan on or off.

**Site Lock On/Off** – When toggled on, the radio searches the current site only. When toggled off, the radio will search other sites in addition to the current site.

**Text Message** – Selects the text message menu.

**Zone** – Allows selection from a list of zones.

### ☐ Assignable Settings/Utility Functions

**All Tones/Alerts** – Toggles all tones on or off.

**Backlight** – Toggles display backlight on or off.

**Power Level** – Toggles transmit power level between high and low.

**Privacy Menu** – Toggles transmit privacy on or off.

**Horns/Lights** – Toggles horns and lights feature on or off.

## ■ Accessing the Programmed Functions







You can access various radio functions in one of the following ways:

- A short or long press of the relevant programmable buttons.

OR



- Use the Menu Navigation Buttons as follows:

- 1 To access the menu, press the  button. Press the appropriate **Menu Scroll** button ( or ) to access the menu functions.
- 2 To select a function or enter a sub-menu, press the  button.
- 3 To go back one menu level, or to return to the previous screen, press the  button. Long press the  button to return to the Home screen.

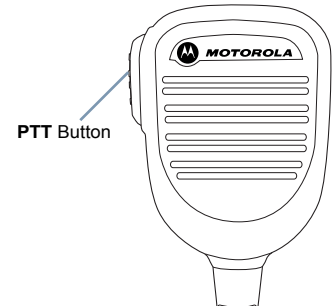
*The Menu Navigation Buttons are also available on the keypad microphone (see **Using the Keypad** on page 66).*

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

## ■ Push-To-Talk (PTT) Button

The **PTT** button on the side of the microphone serves two basic functions:

- While a call is in progress, the **PTT** button allows the radio to transmit to other radios in the call.



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

The microphone is activated when the **PTT** button is pressed.

- While a call is not in progress, the **PTT** button is used to make a new call (see **Making a Radio Call** on page 15).

*If the Talk Permit Tone (see **Turning the Talk Permit Tone On or Off** on page 55) is enabled, wait until the short alert tone ends before talking.*

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

*You will also hear the Channel Free Indication tone if your call is interrupted.*

*You can turn off the Channel Free Indication tone by disabling all radio tones and alerts (see **Turning the Radio All Tones/Alerts On or Off** on page 54).*

## ■ Switching Between Connect Plus and Non-Connect Plus Modes

---

To switch to a non-Connect Plus mode, you must change to another zone, if programmed by your dealer or system administrator. Check with your dealer or system administrator to see if your radio has been programmed with non-Connect Plus zones, and what features are available while operating in non-Connect Plus zones.

## Identifying Status Indicators

Your radio indicates its operational status through the following:

|                            |        |
|----------------------------|--------|
| Display Icons . . . . .    | page 7 |
| Sent Item Symbols. . . . . | page 8 |
| Sent Item Symbols. . . . . | page 8 |
| LED Indicators . . . . .   | page 8 |
| Alert Tones. . . . .       | page 9 |
| Indicator Tones . . . . .  | page 9 |



## ■ Display Icons

---

The full dot matrix, black and white, liquid crystal display (LCD) of your radio shows the radio status, text entries, and menu entries.

The following are the icons that appear on the radio's display:



### **Received Signal Strength Indicator (RSSI)**

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



### **Power Level**

Radio is set at Low power.

Radio is set at High power.



### **Option Board**

The Option Board is enabled.



### **Option Board Non-Function**

The Option Board is disabled.



### **GPS Available**

The GPS feature is enabled. The icon stays lit when a position fix is available.



### **GPS Not Available/Out of Range**

The GPS feature is enabled but is not receiving data from the satellite.



### **Scan**

Scan feature is enabled.



### **Unread Message**

User has unread message(s) in the Inbox.



### **Emergency**

Radio is in Emergency initiation mode.



### **Site Roaming**

Searching for a site.



### **Secure**

The Privacy feature is enabled.



### **Unsecure**

The Privacy feature is disabled.

## ■ Call Icons

---



### **Phone Call as Private Call**

Indicates a Private Phone Call in progress.

## Sent Item Symbols

The following symbols appear in the top right corner of the radio's display in the Sent Items folder:



### Sent Successful

The text message is sent successfully.

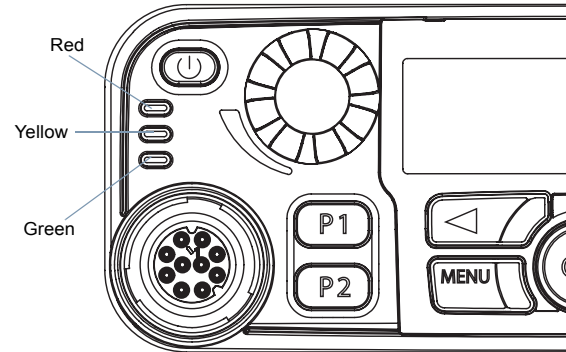


### Sent Failed

The text message was not sent successfully.

## LED Indicators

LED indicators show the operational status of your radio.



**Blinking red** – Radio has failed the self-test upon powering up, or received an Emergency Call or Emergency Alert.

**Rapidly Blinking Red** – Radio is receiving an over-the-air file transfer (Option Board firmware file, Network Frequency file or Option Board Codeplug file), or upgrading to a new Option Board firmware file.

**Blinking yellow** – Radio is receiving a Call Alert, received a text message, or Scan is enabled.

**Rapidly blinking yellow** – Radio is searching for a new site.





**Solid green** – Radio is transmitting.

**Blinking green** – Radio is powering up or detecting activity over the air. LED blinks in an even pattern (blink, blink, blink) while monitoring the Control Channel or receiving unscrambled transmissions. LED blinks in an uneven pattern (blink, blink, pause) while receiving scrambled transmissions.

**NOTE:** When the green LED blinks, it indicates the radio detects activity over the air. Due to the nature of the digital protocol, this activity may or may not affect the radio's programmed channel.


## ■ Alert Tones

Alert tones provide you with audible indications of the radio's status or the radio's response to received data.

- |   |   |
|---|---|
| <b>Continuous Tone</b>  | A monotone sound. Sounds continuously until termination.  |
|  |   |
| <b>Periodic Tone</b>  | Sounds periodically depending on the duration set by the radio. Tone starts, stops, and repeats itself. |
|  |   |
| <b>Repetitive Tone</b>  | A single tone that repeats itself until it is terminated by the user.                                   |
|  |   |
| <b>Momentary Tone</b>   | Sounds only once for a short period of time defined by the radio.                                       |
|  |   |

## ■ Indicator Tones

High pitched tone 

Low pitched tone 



Positive Indicator Tone



Negative Indicator Tone

## Receiving and Making Calls

Once you understand how your MOTOTRBO Mobile is configured, you are ready to use your radio.

Use this navigation guide to familiarize yourself with the basic Call features:

|   |         |
|---|---------|
| Selecting a Site . . . . .                        | page 10 |
| Selecting a Zone . . . . .                        | page 11 |
| Selecting a Call Type . . . . .                   | page 12 |
| Receiving and Responding to a Radio Call. . . . . | page 12 |
| Making a Radio Call . . . . .                     | page 12 |

## Selecting a Site

A site provides coverage for a specific area. A Connect Plus site has a site controller and a maximum of 15 repeaters. In a multisite network, the Connect Plus radio will automatically search for a new site when the signal level from the current site drops to an unacceptable level.

### Roam Request

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

This is programmed by your dealer or system administrator.

Use the following procedure for a Roam Request.

#### **Procedure:**

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

## Site Lock On/Off

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

Use the following procedure for Site Lock.

### Procedure:

- 1 Press the programmed **Site Lock** button.

---

- 2 You hear a positive indicator tone, indicating the radio has locked to the current site. The display shows `Site Locked`.  
**OR**  
You hear a negative indicator tone, indicating the radio is unlocked. The display shows `Site Unlocked`.

## Site Restriction

Your radio system administrator has the ability to decide which network sites your radio is and is not allowed to use. Your radio does not have to be reprogrammed to change your list of allowed and disallowed sites. If your radio attempts to register at a disallowed site, you will see a brief message stating: `Site (number given) Not Allowed`. The radio then searches for a different network site.

## ■ Selecting a Zone

The radio can be programmed with a maximum of 16 Connect Plus Zones, and each Connect Plus zone contains a maximum of 16 assignable positions on the Channel Rocker. Each assignable Channel Rocker position can be used to start one of the following voice call types; Group Call, Multigroup Call, Site All Call, or Private Call. Non-Connect Plus zones can be used for analog mode or non-Connect Plus digital modes.


Use the following procedure to select a zone.

### Procedure:




Press the programmed **Zone** button and proceed to Step 3 below.

### OR

Follow the procedure below.

- 1  to access the menu.




---

- 2  or  to **Zone** and press  to select.

---

- 3 The current zone is displayed and indicated by a ✓.

---

- 4  or  to the required zone and press  to select.

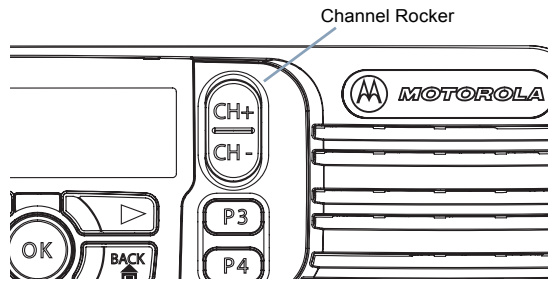
---

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

## Using Multiple Networks

If your radio has been programmed to use multiple Connect Plus networks, you can select a different network by switching to the Connect Plus zone that is assigned to the desired network. These network-to-zone assignments are configured by your dealer through radio programming.

## Selecting a Call Type



### Procedure:

Once the required zone is displayed, press the Channel Rocker up or down to select the call type.

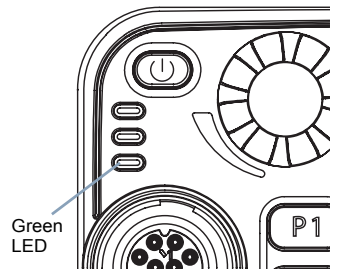
**NOTE:** When in Connect Plus mode, the Channel Rocker is used to select the call type that is started when you press PTT. This can be a Group Call, Multigroup Call, Site All Call or Private Call, depending on how your radio is programmed. If you change the Channel

Rocker to a different position (that has a call type assigned to it), this causes the radio to re-register with the Connect Plus site. The radio registers with the Registration Group ID that has been programmed for the new Channel Rocker position. If you select a position that has no call type assigned to it, your radio sounds a continuous tone and the display shows unprogrammed. Because your radio does not operate when selected to an unprogrammed channel, use the Channel Rocker to select a programmed channel instead.

## Receiving and Responding to a Radio Call

Once the call type is displayed, you can proceed to receive and respond to calls.

*The green LED lights up solid green while the radio is transmitting and blinks green when the radio is receiving a call. The blinking pattern is even (blink, blink, blink) when receiving an unsecure (unscrambled) transmission. The blinking pattern is uneven (blink, blink, pause) when receiving a privacy-enabled (scrambled) transmission. To unscramble a privacy-enabled call, your radio must have the same Key Value and Key ID (programmed by your dealer), as the transmitting radio (the*



radio you are receiving the call from). See **Enhanced Privacy** on page 48 for more information.

## Receiving and Responding to a Group Call

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


### **Procedure:**

When you receive a Group Call (while on the Home screen):

- 1 The green LED blinks.
- 2 The first line of the display shows the caller alias or ID, and the RSSI icon. The second line displays the group alias or ID.
- 3 If the Channel Free Indication feature is enabled, you will hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond.
- 4 Press the **PTT** button to respond to the call. The green LED lights up.
- 5 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 6 Release the **PTT** button to listen.
- 7 If there is no voice activity for a predetermined period of time, the call ends.

See **Making a Group Call** on page 15 for details on making a Group Call.

**NOTE:** If the radio receives a Group Call while not on the Home screen, it remains on its current screen prior to answering the call.

Long press the  button to go to Home screen to view the caller alias before replying.

## Receiving and Responding to a Private Call

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

In the Connect Plus operation, the controller performs a presence check before setting up the call.

### **Procedure:**

When you receive a Private Call:

- 1 The green LED blinks.
- 2 The first line of the display shows the subscriber alias or ID, and the RSSI icon. The second line displays *Private Call*.
- 3 If the Channel Free Indication feature is enabled, you will hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond.

- 4 Press the **PTT** button to respond to the call. The green LED lights up.
- 5 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 6 Release the **PTT** button to listen.
- 7 If there is no voice activity for a predetermined period of time, the call ends.
- 8 The display shows `Call Ended`.

See **Making a Private Call** on page 16 for details on making a Private Call.

### Receiving a Site All Call

A Site All Call is a call from an individual radio to every radio on that site. It is used to make important announcements requiring the user's full attention.

#### **Procedure:**

When you receive a Site All Call:

- 1 A tone sounds and the green LED blinks.
- 2 The first line of the display shows the caller alias or ID. The second line displays `All Call`.
- 3 Once the Site All Call ends, the radio returns to the previous screen before receiving the call.  
If the Channel Free Indication feature is enabled, you will

hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is now available for use.

*You cannot respond to a Site All Call.*

See **Making a Site All Call** on page 17 for details on making a Site All Call.

**NOTE:** During a Site All Call, you will not be able to use any programmed button functions until the call ends.

### Receiving and Responding to a Phone Call

**NOTE:** If Phone Call permission has been enabled for your radio and/or Group, you are able to respond to a telephone user. Check with your dealer or system administrator for more information.


### Phone Call as Private Call

#### **Procedure:**

When you receive a Phone Call as Private Call:

- 1 The display shows `Phone Call`. You may also hear ringing, depending on your radio's volume level and tone configuration.
- 2 Press the **PTT** button to talk and release it to listen.
- 3 The Phone Call can be ended by the phone user or the radio user.



- 4 Press  to end the call.
- 5 When the call is over, the display shows Phone Call Ended.

### Phone Call as Group Call

Depending on your Group permission(s) in the system, a phone user can initiate or join a Group Call. Transmissions from the phone user are similar to transmissions from another radio. For more information, see the section called Receiving and Responding to a Group Call.

**NOTE:** The phone user cannot understand scrambled transmissions. It is recommended that the radio users should turn Privacy OFF while the Group Call has a phone user as participant.

## ■ Making a Radio Call

You can select a call type by using:

- The Channel Rocker
- A programmed **One Touch Call** button (Call Alert, Private Call, or Text Message)
- The Contacts list (see **Contacts Settings** on page 30)

- Manual Dial (via Contacts) – This method is for Private Calls only and is dialed using the keypad (see **Making a Private Call by Manual Dial** on page 69)

### Making a Call with the Channel Rocker

#### Making a Group Call

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

#### Procedure:

- 1 Press the Channel Rocker to select the group alias or ID.
- 2 Press the **PTT** button to make the call. The green LED lights up. The display shows the group alias or ID.
- 3 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 4 Release the **PTT** button to listen. When the target radio responds, the green LED blinks. You see the group alias or ID, and the transmitting radio alias or ID on your display.
- 5 If the Channel Free Indication feature is enabled, you will hear a short alert tone the moment the target radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond.  
**OR**  
If there is no voice activity for a predetermined period of time, the call ends.

- 6 Radio returns to the screen you were on prior to the call.

### **Making a Private Call**

While you can receive and/or respond to a Private Call initiated by an authorized individual radio, your radio must be programmed for you to initiate a Private Call.

You will hear a negative indicator tone, when you make a Private Call via the Menu, Call Log, Contacts list, the **One Touch Call** button, or the Channel Rocker, if this feature is not enabled.

#### **Procedure:**

- 1 Press the Channel Rocker to select the subscriber alias or ID.

---
- 2 Press the **PTT** button to make the call. The green LED lights up. The first line displays the subscriber alias or ID. The second line displays `Private Call`.

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

---
- 4 Release the **PTT** button to listen. When the target radio responds, the green LED blinks.

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

**OR**

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

---

You can also make a Private Call via Contacts (see **Making a Private Call from Contacts** on page 30), manually dial a Private Call (see **Making a Private Call by Manual Dial** on page 69) or perform a quick alphanumeric search for the required target alias via a keypad entry (see **Making a Private Call by Alias Search** on page 71).

### **Making a Site All Call**

This feature allows you to transmit to all users on the site that are not currently engaged in another call. Your radio must be programmed to allow you to use this feature.

#### **Procedure:**

- 1 Press the Channel Rocker up or down to select the Site All Call group alias or ID.
  - 2 Press the **PTT** button to make the call. The green LED lights up. The display shows the Site All Call group alias or ID.
  - 3 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 

*Users on the site cannot respond to a Site All Call.*

### **Making a Multigroup Call**

This feature allows you to transmit to all users on multiple groups. Your radio must be programmed to allow you to use this feature.

#### **Procedure:**

- 1 Press the Channel Rocker up or down to select the Multigroup alias or ID.
  - 2 Press the **PTT** button to make the call. The LED lights up. The display shows the Multigroup alias or ID.
  - 3 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 

*Users on the groups cannot respond to a Multigroup Call.*

### **Making a Private Call with the One Touch Call Button**

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

**NOTE:** Programmable buttons press must be initiated from the Home screen.

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

**Procedure:**

- 1 Press the programmed **One Touch Call** button to make a Private Call to the pre-defined Private Call alias or ID.
- 2 Press the **PTT** button to make the call. The green LED lights up. The display shows the Private Call alias or ID.
- 3 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 4 Release the **PTT** button to listen. When the target radio responds, the LED blinks green.
- 5 If the Channel Free Indication feature is enabled, you will hear a short alert tone the moment the target radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond.  
**OR**  
If there is no voice activity for a predetermined period of time, the call ends.

 **Making a Privacy-Enabled (scrambled) Call**

Toggle privacy on using the programmed privacy button or by using the menu. Your radio must have the Privacy feature enabled for the currently selected channel position to send a privacy-enabled transmission. When privacy is enabled for the currently selected channel position, all voice transmissions made by your radio will be scrambled. This includes Group Call, Multigroup Call, talk-back during scanned calls, Site All Call, Emergency Call, and Private Call. Only receiving radios with the

same Key Value and Key ID as your radio will be able to unscramble the transmission. See **Enhanced Privacy** on *page 48* for more information on privacy as well as instructions on enabling/disabling the feature.

 **Busy Queue**

In the Connect Plus operation, if a call is initiated and approved, but there are no available channels, the call is placed in a Busy Queue. Once a channel becomes available, the call proceeds as normal.

**NOTE:** The radio will stay in “Busy” mode until the call is assigned, or until the user presses the **Busy Queue Cancellation** button. Check with the dealer or system administrator to find out if your radio has been programmed with a **Busy Queue Cancellation** button.

## Advanced Features

Use this navigation guide to learn more about advanced features available with your radio:

|   |         |
|---|---------|
| Home Channel Reminder . . . . .           | page 19 |
| Auto Fallback. . . . .                    | page 20 |
| Radio Check . . . . .                     | page 22 |
| Remote Monitor. . . . .                   | page 23 |
| Selectable Group Scan . . . . .           | page 24 |
| Editing Priority for a Talkgroup. . . . . | page 29 |
| Contacts Settings . . . . .               | page 30 |
| Call Indicator Settings . . . . .         | page 31 |
| Call Log Features . . . . .               | page 32 |
| Call Alert Operation . . . . .            | page 34 |
| Emergency Operation . . . . .             | page 35 |
| Text Messaging Features . . . . .         | page 41 |
| Enhanced Privacy . . . . .                | page 48 |
| Security . . . . .                        | page 50 |
| Utilities. . . . .                        | page 52 |

## Home Channel Reminder

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

If this feature is enabled via the CPS, the Home Channel Reminder tone and announcement sound, the first line of the display shows `Non` and the second line shows `Home Channel` periodically when the radio is not set to the home channel for a period of time.

You can respond to the reminder by performing one of the following actions:

- Return to the home channel.
- Mute the reminder temporarily via the programmable button.
- Set a new home channel via the programmable button.

### Muting the Home Channel Reminder

When the Home Channel Reminder occurs, you can temporarily mute the reminder by performing the following action.

#### Procedure:

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

## Setting a New Home Channel











When the Home Channel Reminder occurs, you can set a new home channel by performing one of the following actions:

### Procedure:

- 1 Press the **Reset Home Channel** programmable button.
- 2 The first line of the display shows the channel alias and the second line shows *New Home Ch.*

### Procedure:

Set a new home channel via the menu:

- 1  to access the menu.
- 2  or  to *Utilities* and press  to select.
- 3  or  to *Radio Settings* and press  to select.
- 4  or  to *Home Channel* and press  to select.
- 5 Select from the list of valid channels.
- 6 The display shows ✓ beside the selected home channel alias.

## Auto Fallback

Auto Fallback is a system feature that allows you to continue to make and receive non-emergency calls on the selected Group Contact in the event of certain types of Connect Plus system failures.

If one of these failures occurs, your radio attempts to roam to a different Connect Plus site. This search process may result in your radio finding an operable Connect Plus site, or it may result in your radio finding a “Fallback Channel” (if your radio is enabled for Auto Fallback). A Fallback Channel is a repeater that is normally part of an operable Connect Plus site, but is currently unable to communicate with either its site controller or the Connect Plus network. In Fallback mode, the repeater operates as a “stand-alone” digital repeater. Auto Fallback Mode supports non-emergency Group Calls only. No other call types are supported in Fallback Mode.

### Indications of Auto Fallback Mode

When your radio is using a Fallback channel, you will hear the intermittent “Fallback Tone” approximately once every 15 seconds (except while transmitting). You will also notice that your radio only permits PTT on the selected Group Contact (Group Call, Multigroup Call, or Site All Call). It does not allow you to make other types of calls.

## Making / Receiving Calls in Fallback Mode

Making calls in Fallback mode is similar to normal functioning. Simply select the group contact you wish to use (using the radio's normal channel selection method), and then press the PTT to start your call. It is possible that the channel may be in use already by another group. If the channel is in use, you will receive a busy tone and the display will say "Channel Busy". You may select Group, Multigroup or Site All Call contacts using your radio's normal channel selection method. While the radio is operating on the Fallback Channel, the Multigroup operates just like other Groups. It is only heard by radios that are currently selected to the same Multigroup. Enhanced Privacy is supported in Fallback mode.

**NOTE:** Calls are heard only by radios that are monitoring the same Fallback channel and selected to the same Group. Calls are not networked to other sites or other repeaters.

Emergency voice calls or Emergency Alerts are not available in Fallback mode. If you press the emergency button in Fallback mode, the radio will provide an invalid key press tone. Display-equipped radios also show the message, "Feature not available".

Private (radio to radio) calls are not available in Fallback mode. If you attempt a call to a private contact, you will receive a denial tone. At this point you should select a desired group contact. Other non-

supported calls include Remote Monitor, Call Alert, Radio Check, Radio Enable, Radio Disable, Text messaging, Location Updates, and packet data calls.

Enhanced Traffic Channel Access (ETCA) is not supported in Auto Fallback mode. If two or more radio users press PTT at the same time (or at almost the same time), it is possible that both radios will transmit until PTT is released. In this event, it is possible that none of the transmissions will be understood by receiving radios.

## Returning to Normal Operation

If the site returns to normal trunking operation while you are in range of your Fallback repeater, your radio will automatically exit Auto Fallback mode. A registration "beep" will be heard when your radio successfully registers. If you believe that you are in range of an operable site (that is not in Fallback mode), you may press the Roam Request button (if programmed for your radio) to force your radio to search for and register on an available site. If no other site is available, your radio will return to Auto Fallback mode after searching is complete. If you drive out of coverage of your Fallback repeater, your radio will enter Search mode (display will indicate "Searching").

## ■ Radio Check

---

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

This feature is only applicable for subscriber aliases or IDs.

### 📄 Sending a Radio Check




**NOTE:** Programmable buttons press must be initiated from the Home screen.

#### Procedure:

Use the programmed **Radio Check** button.

- 1 Press the programmed **Radio Check** button.

---

- 2  or  to the required subscriber alias or ID and press  to select.

---

- 3 The display shows `Radio Check: <Subscriber Alias or ID>`, indicating that Radio Check is in progress.

---

- 4 Wait for acknowledgement.

---


- 5 If the target radio is active in the system, a tone sounds and the display shows `Target Radio Available`.  
**OR**  
If the target radio is not active in the system, a tone sounds and the display shows `Destination ID Not Available`.

- 6 Radio returns to the subscriber alias or ID screen.
- 




#### OR

#### Procedure:




Use the menu.

- 1  to access the menu.




---

- 2  or  to `Contacts` and press  to select.

---

- 3  or  to the required subscriber alias or ID and press  to select.

---

- 4  or  to `Radio Check` and press  to select.

---

- 5 The display shows `Radio Check: <Subscriber Alias or ID>`, indicating that Radio Check is in progress.

---

- 6 Wait for acknowledgement.

---

- 7 If the target radio is active in the system, a tone sounds and the display shows `Target Radio Available`.  
**OR**  
If the target radio is not active in the system, a tone sounds and the display shows `Destination ID Not Available`.

---

- 8 Radio returns to the subscriber alias or ID screen.

*You can also initiate Radio Check via manual dial (see **Initiating a Radio Check by Manual Dial** on page 68).*



## ■ Remote Monitor

---

Use the Remote Monitor feature to turn on the microphone of a target radio (subscriber alias IDs only). No audible or visual indication is given to the target radio. You can use this feature to monitor, remotely, any audible activity surrounding the target radio.

Your radio must be programmed to allow you to use this feature.

### Initiating Remote Monitor




**NOTE:** Programmable buttons press must be initiated from the Home screen.

#### **Procedure:**

Use the programmed **Remote Monitor** button.

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

---

- 2  or  to the required subscriber alias or ID and press  to select.

---

- 3 While waiting for acknowledgment, the radio displays Remote Mon on the first line and <Subscriber Alias or ID> on the second line.

---

- 4 Radio sounds an alert tone and the display briefly shows Remote Monitor Successful.

#### **OR**

Radio sounds an alert tone and the display shows Remote Monitor Failed.

---

- 5 If successful:

Once the timer expires, the radio sounds a tone and displays Ending Remote Monitor.

Then, the radio briefly displays Remote Monitor Ended.

#### **OR**

If unsuccessful:


The controller repeats the attempt until the programmed number of retries expires.

---




#### **OR**

#### **Procedure:**




Use the menu.

- 1  to access the menu.




---

- 2  or  to Contacts and press  to select.

---

- 3  or  to the required subscriber alias or ID and press  to select.

---

- 4  or  to Remote Mon and press  to select.

---

- 5 While waiting for acknowledgement, the radio displays Remote Mon on the first line and <Subscriber Alias or ID> on the second line.

---

6 Radio sounds an alert tone and the display briefly shows  
Remote Monitor Successful.

**OR**

Radio sounds an alert tone and the display shows Remote  
Monitor Failed.

---

7 If successful:

Once the timer expires, the radio sounds a tone and  
displays Ending Remote Monitor.

Then, the radio briefly displays Remote Monitor Ended.

**OR**

If unsuccessful:

The controller repeats the attempt until the programmed  
number of retries expires.

---

*You can also manually select a target radio address (see  
**Initiating Remote Monitor by Manual Dial** on page 68).*

## ■ Selectable Group Scan

---

This feature allows your radio to monitor and join group calls, other than the currently selected group. If this feature is used, your radio will be programmed with a list of groups to scan when Selectable Group Scan, or Scan, is enabled. This is your scan list. Your radio may also be programmed to allow you to edit members of your programmed scan list. If so programmed, you can add groups to the scan list (and remove groups from the list) via the menu. You can also enable or disable scan for individual scan list members. Only groups that are assigned to a Channel Selector position can be on your scan list.

Scan can be turned on or off from the menu, or by pressing a programmed **Scan On/Off** button.


**NOTE:** This feature functions only when the radio is not currently involved in a call. If you are presently listening to a call, your radio cannot scan for other group calls, and is therefore unaware they are in progress. Once your call is finished, your radio returns to the control channel time slot, and is able to scan for groups that are in the scan list.

### Turning Scan On or Off



If Scan is turned on, the Scan icon appears on your display. When Scan is on and you are not participating in a call, the LED blinks yellow continuously and slowly.

The procedure for turning Scan on or off depends on how your radio is programmed. If programmed with a **Scan On/Off** button, use the button to toggle the feature on or off. If your radio has been programmed so that Scan can be turned on or off via the menu, follow the procedure below.


#### Procedure:

- 1  to access the menu.


---

- 2  or  to Scan option.

---

- 3 Press  to select. The display will read Scan On or Scan Off.

---

- 4 Press  to select Scan on or off. The display will momentarily show Scan On or Scan Off depending on your selection.

---

**NOTE:** This procedure turns the Scan feature On or Off for all Connect Plus zones with the same Network ID as your currently selected zone. It is important to note that even when the Scan feature is turned on via this procedure, scan may still be disabled for some (or all) groups on your scan list. See the next section for more information.

#### Editing the Scan List

Your scan list determines which groups can be scanned. The list is usually created when your radio is programmed. If your radio has been programmed to allow you to edit the scan list, you can

add groups to the scan list and remove groups from the scan list via the menu. In addition, the edit scan list feature allows you to selectively enable/disable scan for individual groups on the list.

#### Enabling, Disabling or Deleting a Scan List Group


If your radio has been programmed to allow you to edit the scan list, you can Enable, Disable or Delete a group that is currently on the zone scan list.

**Enable:** Turns scan “on” for this specific group, even though scan may be turned off for other groups.




**Disable:** Turns scan “off” for this specific group, even though scan may be turned on for other groups. This allows you disable scan for the group, while leaving it on the scan list. By leaving the group on the scan list, scan can easily be re-enabled for the group at a later time.

**Delete:** Removes the group from the zone scan list. This is helpful when the scan list is full, and you want to delete a group to make room for a different group.




#### Procedure:

- 1  to access the menu.






---

- 2  or  to Scan option and press  to select.

---

- 3  or  to <View/Edit List> and press  to select.

---


- 4 The first line of the display shows the Connect Plus zone, the total number of entries in the scan list, and which entry is currently selected. E.g. Zone 1 3/16\*. An asterisk indicates that scan functionality is currently enabled for the group. The second line of the display shows the group alias.
- 
- 5  or  to the desired group and press  to view the options for that group. If the group is currently enabled, <Disable> is displayed. If the group is currently disabled, <Enable> is displayed. Press the right or left arrow to view the <Delete> option.
- 
- 6 To Disable/Enable scan for the group: While the <Disable> or <Enable> option is displayed, press  to accept the prompt and to Enable (or Disable) scan for that group. When scan is disabled for a group, the asterisk on the group's scan list entry disappears. When scan is enabled for a group, the asterisk reappears.
- 
- 7 To Delete the group from the scan list: While the <Delete> option is displayed, press  to accept the prompt. The group is removed from the scan list of the currently selected zone.
- 

**NOTE:** If the scan list entry happens to be the radio's currently selected group, the radio listens for activity on this group regardless of whether the list entry currently shows an asterisk or not. Whenever a Connect Plus radio is not in a call, the radio listens for activity on its Selected Group, Multigroup and Site All Call. This operation cannot be disabled.




## Add or Delete a Group via the Add Members Menu

If your radio has been programmed to allow you to edit the scan list, you can use the Add Members menu to add a group to the scan list of the currently selected zone, or to delete a group from the scan list of the currently selected zone.




### Procedure:

- 1  to access the menu.

---

- 2  or  to Scan option and press  to select.



---

- 3  or  to <Add Members> and press  to select.


---

- 4 The display shows "Add Members from Zone n" (n = the Connect Plus zone number of the first Connect Plus zone in your radio with the same Network ID as your currently selected zone). If the group you want to add to the scan list is assigned to a channel selector position in that zone, go to Step 6 below. If the group you want to add to the scan list is assigned to a channel selector position in a different Connect Plus zone, proceed to Step 5.

---

- 5  or  to scroll a list of Connect Plus zones that have the same Network ID as the currently selected zone.



---

- 6 After locating the Connect Plus zone where the desired group is assigned to a channel selector position, press  to select.


---

- 7 Your radio displays the first entry in a list of groups assigned to a channel position in that zone. The groups on the list are called “scan candidates”, because they can be added to the scan list of your currently selected zone (or they are already on the zone scan list). If the zone doesn’t have any groups that can be added to the scan list, the radio displays `No Candidates`.


---

- 8  or  to scroll through the list of candidate groups. If a plus sign (+) is displayed immediately before the group alias, this indicates the group is currently on the scan list for the selected zone. If the plus sign (+) is not displayed immediately before the alias, the group is not currently on the scan list, but can be added.


---

- 9 Press  when the desired group alias is displayed. If this group is not currently on the scan list for the currently selected zone, the `Add (Group Alias)` message is displayed. If this group is already on the scan list for the currently selected zone, the `Delete (Group Alias)` message is displayed.

---

- 10 Press  to accept the displayed message (`Add` or `Delete`). If deleting a group from the list, you will know the operation is successful because the plus sign (+) will no longer display immediately before the alias. If adding a group to the list, you will know the operation is successful because the plus sign (+) will display before the alias. If you are attempting to add a group, and the list is already full, the radio displays `List Full`. If this should occur, it will be

necessary to delete a group from the scan list prior to adding a new one.

- 11 When finished, press  as many times as necessary to return to the desired menu.

**NOTE:** The Connect Plus radio does not allow a duplicate group number or a duplicate group alias to be placed on a zone scan list (or to be shown as a “scan candidate”). Because of this rule, the list of “scan candidates” previously described in Step 7 and Step 8 sometimes changes after adding or deleting a group from the zone scan list.

## Understanding Scan Operation

There are some circumstances in which you can miss calls for groups that are in your scan list. When you miss a call for one of the following reasons, this does not indicate a problem with your radio. This is a normal scan operation for Connect Plus.

- Scan feature is not turned on (check for the scan icon on the display).
- Scan list member has been disabled via the menu (see **Editing the Scan List** on page 25).
- You are participating in a call already.
- No member of the scanned group is registered at your site (Multisite systems only).

## Talking Back During Scanned Calls

If your radio scans into a call from your selectable group scan list, and if you press **PTT** during the scanned call, your radio's operation depends on whether Scan Talkback was enabled or disabled during radio programming. For more information on how your radio is programmed, please contact your radio dealer (or your radio system administrator).

**Scan Talkback Disabled:** Your radio leaves the scanned call and attempts to transmit on the contact for your currently selected channel position. After the call on your currently selected contact, the radio waits until its Scan Hang Timer

expires before it joins another call from the selectable group scan list.

**Scan Talkback Enabled:** If you press **PTT** during the Group Hang Time of the scanned call, your radio attempts to transmit to the scanned group.

**NOTE:** If you scan into a call for a group that is not assigned to a channel position in your currently selected zone and you miss the call's Hang Time, you will have to switch to the proper zone and then select the group's channel position to talk back to that group.


## ■ Editing Priority for a Talkgroup

The Priority Monitor feature allows the radio to automatically receive transmission from the talkgroup with higher priority when it is in another call. A tone sounds when the radio switches to the call with higher priority.



There are two levels of priority for the talkgroups: P1 and P2. P1 has higher priority than P2.

**NOTE:** If Default Emergency Revert Group ID is configured in MOTOTRBO Connect Plus Option Board CPS, there are three levels of priority for talkgroups: P0, P1 and P2. P0 is the permanent Emergency Revert Group ID and the highest priority. Check with your dealer or system administrator for more information.


### Procedure:

- 1  to access the menu.




---

- 2  or  to Scan option.




---

- 3 Press  to select.




---




- 4  or  to View/Edit List and press  to select.

---

- 5  or  to the required talkgroup and press  to select.

---

- 6  or  to Edit Priority and press  to select.

- 7  or  to the required priority level and press  to select.

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

## ■ Contacts Settings

Contacts provide “address-book” capabilities on your radio. Each entry corresponds to an alias or ID that you use to initiate a call.

Each Connect Plus zone supports up to 100 contacts. The following contact types are available in Connect Plus:

- Private Call
- Group Call
- Multigroup Call
- Site All Call Voice
- Site All Call Text
- Dispatch Call

The Dispatch Call contact type is used to send a text message to a dispatcher PC by way of a third-party Text Message Server.

Each entry within Contacts displays the following information:

- Call Alias
- Call ID







**NOTE:** You can add, delete, or edit Subscriber IDs (Private IDs) for the Connect Plus Contacts List.

If the Privacy feature is enabled for the currently selected channel position, you can make a

privacy-enabled voice call. Only receiving radios with the same Key Value and Key ID as your radio will be able to unscramble the transmission. See **Enhanced Privacy** on page 48 for more information.

### Making a Private Call from Contacts

#### Procedure:

- 1  to access the menu.
- 2  or  to **Contacts** and press  to select. The entries are alphabetically sorted.
- 3  or  to the required subscriber alias or ID.
- 4 Press the **PTT** button to make the call. The green LED lights up. The display shows **Calling** <Subscriber Alias or ID>, while the call is being set up. Once the call is set up, the first line displays **Private Call**. The second line displays <Subscriber Alias or ID>.  
**OR**  
If the call cannot be placed, the display shows **Party Not Available**.
- 5 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 6 Release the **PTT** button to listen. When the target radio responds, the green LED blinks and the display continues to show the transmitting user's alias or ID.



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

**OR**

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

















- 8 The display shows `Call Ended`.


## ■ Call Indicator Settings

### 📄 Activating and Deactivating Call Ringers for Private Calls


You can turn on or off the ringing tones for a received Private Call.

**Procedure:**

- 1  to access the menu.
- 2  or  to `Utilities` and press  to select.
- 3  or  to `Radio Settings` and press  to select.
- 4  or  to `Tones/Alerts` and press  to select.
- 5  or  to `Call Ringers` and press  to select.
- 6  or  to `Private Call` and press  to select.

- 7 The display shows `Turn On`. Press  to enable Call Ringers for Private Calls. The display shows `Private Call Ringer On`.

















**OR**

The display shows `Turn Off`. Press  to disable Call Ringers for Private Calls. The display shows `Private Call Ringer Off`.

### 📄 Activating and Deactivating Call Ringers for Text Messaging

You can turn on or off the ringing tones for a received Text Message.

**Procedure:**

- 1  to access the menu.
- 2  or  to `Utilities` and press  to select.
- 3  or  to `Radio Settings` and press  to select.
- 4  or  to `Tones/Alerts` and press  to select.
- 5  or  to `Call Ringers` and press  to select.
- 6  or  to `Text Message` and press  to select.
- 7 The current tone is indicated by a ✓.

- 8 or to the preferred tone and press to select. The display shows `Tone <Number> Selected` and a ✓ appears left of the selected tone.

**OR**

- or to `Turn Off` and press to select. The display shows `Text Message Ringer Off` and a ✓ appears left of `Turn Off`.

### Assigning Ring Styles

You can program your radio to sound one of ten pre-defined ringing tones when receiving a Call Alert or a Text Message from a particular contact.

#### Procedure:

- 1 to access the menu.
- 2 or to `Contacts` and press to select. The entries are alphabetically sorted.
- 3 or to the required alias or ID and press to select.
- 4 or to `Ring Style` and press to select.
- 5 A ✓ indicates the current selected tone.
- 6 or to the required tone and press to select.
- 7 The display shows `Contact Saved`.

*The radio sounds out each ring style as you navigate through the list.*

## ■ Call Log Features

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

### Viewing Recent Calls

The lists are `Missed`, `Answered`, and `Outgoing`.

#### Procedure:

- 1 to access the menu.
- 2 or to `Call Log` and press to select.
- 3 or to preferred list and press to select.
- 4 The display shows the most recent entry at the top of the list.
- 5 or to view the list.

*Press the **PTT** button to start a Private Call with the currently selected alias or ID.*

## Missed Call Screen

Whenever a call is missed, your radio displays a missed call message. Select **View** to view it immediately or **View Later** to view at a later time.

**NOTE:** The missed call message is displayed only when on the Home screen.

The radio exits the Missed Call screen and sets up a Private Call if you press the **PTT** button while viewing a missed call number.

### Procedure:

- 1 The display shows **Missed Calls** and **View**.

---

- 2 Press **OK** to view the missed call alias or ID. The missed call log list appears on the display.  
Press **OK** to delete the entry.

**OR**

- ◀** or **▶** to **View Later** and press **OK** to select. You return to the Home screen.

---

## Deleting a Call from a Call List

### Procedure:

- 1 **menu** to access the menu.

---

- 2 **◀** or **▶** to **Call Log** and press **OK** to select.

---

- 3 **◀** or **▶** to the required list and press **OK** to select.

---

- 4 **◀** or **▶** to the required alias or ID and press **OK** to select.

---

- 5 **◀** or **▶** to **Delete Entry?** and press **OK** to select.

---

- 6 Press **OK** to select **Yes** and delete the entry. The display shows **Entry Deleted**.

**OR**

- ◀** or **▶** to **No** and press **OK** return to the previous screen.

---

*When you select a call list and it contains no entries, the display shows **List Empty**, and sounds a low tone if Keypad Tones are turned on (see **Turning Keypad Tones On or Off** on page 66).*

## ■ Call Alert Operation

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


This feature is applicable to subscriber aliases or IDs only and is accessible through the menu via Contacts.

### 📄 Receiving and Acknowledging a Call Alert

When you receive a Call Alert page, you see `Call Alert` that alternates with the alias or ID of the calling radio on the display.











**NOTE:** The call alert is displayed only when on the Home screen.

#### Procedure:

- 1 You hear a repetitive tone. The yellow LED blinks (green LED is also blinking).
- 2 Press the **PTT** button to start a Private Call to the radio that sent the Call Alert.  
**OR**  
Press  to select `Ignore?` and exit the Call Alert.

### 📄 Making a Call Alert from the Contacts List

#### Procedure:

- 1  to access the menu.
- 2  or  to `Contacts` and press  to select.
- 3  or  to the required subscriber alias or ID and press  to select.
- 4  or  to `Call Alert` and press  to select.
- 5 The display shows `Call Alert: <Subscriber Alias or ID>`, indicating that the Call Alert has been sent.
- 6 If the Call Alert acknowledgement is received, a tone sounds and the display shows `Call Alert Successful`.  
**OR**  
If the Call Alert acknowledgement is not received, a tone sounds and the display shows `Call Alert Failed`.

*You can also send a Call Alert by manually dialing the subscriber ID (see **Making a Call Alert by Manual Dial** on page 71).*

## Making a Call Alert with the One Touch Call Button

**NOTE:** Programmable buttons press must be initiated from the Home screen.

### Procedure:

- 1 Press the programmed **One Touch Call** button to make a Call Alert to the predefined alias or ID.

---

- 2 The display shows `Call Alert: <Subscriber Alias or ID>`, indicating that the Call Alert has been sent.

---

- 3 If the Call Alert acknowledgement is received, a tone sounds and the display shows `Call Alert Successful`.  
**OR**  
If the Call Alert acknowledgement is not received, a tone sounds and the display shows `Call Alert Failed`.

---

## ■ Emergency Operation

An Emergency call is used to indicate a critical situation. You can initiate an Emergency at any time on any screen display, even when there is activity on the current channel. Pressing the **Emergency** button initiates the programmed Emergency mode. The Emergency features may be disabled in your radio.

When your radio is selected to a Connect Plus zone, it supports three Emergency modes:

- **Emergency Call** – You must press the **PTT** button to talk on the assigned emergency time slot.
- **Emergency Call with Voice to Follow** – For the first transmission on the assigned emergency time slot, the microphone is automatically unmuted and you may talk without pressing the **PTT** button. The microphone will stay “hot” in this fashion for a time period programmed into the radio. For subsequent transmissions in the same Emergency call, you must press the **PTT** button.
- **Emergency Alert** – An Emergency Alert is not a voice call. It is an emergency notification that is sent to radios that are configured to receive these alerts. The radio sends an emergency alert via the control channel of the currently registered site. The Emergency Alert is received by radios in the Connect Plus network that are programmed to receive them (regardless of which network site they are registered to).

Only **ONE** of the Emergency modes can be assigned to the **Emergency** button per Connect Plus zone. In addition, each Emergency mode has the following types:

- **Regular** – Radio initiates an Emergency call or Emergency Alert and shows audio and/or visual indicators.
- **Silent** – Radio initiates an Emergency call or Emergency Alert without any audio or visual indicators. The radio will suppress all audio or visual indications of the Emergency call until you press the **PTT** button to start a voice transmission.
- **Silent with Voice** – The same as Silent operation, except that the radio will also unmute for some voice transmissions.


**NOTE:** If your radio is programmed for “Silent” or “Silent with voice” emergency initiation, in most cases it will automatically exit silent operation after the Emergency Call or Emergency Alert is finished. The exception to this rule is when “Emergency Alert” is the configured Emergency Mode and “Silent” is the configured Emergency Type. If your radio is programmed in this manner, the silent operation will continue until you cancel silent operation by pressing PTT or the button configured for “Emergency Off”.

Emergency voice calls and Emergency Alerts are not supported when operating in Fallback mode. For more information see the **Auto Fallback** section on page 20.

### Receiving an Emergency Call

Your radio may be programmed to sound an alert tone and also display information about the call. If so programmed, when receiving an Emergency call, the display shows *Emergency* and alternates with the alias or ID of the sender and the Emergency group ID.

Depending on how your radio has been programmed, the visual indications may persist until you press a special button sequence to clear the Emergency indications.

**NOTE:** Short press , then press the programmed **Emergency Off** button to clear the Emergency received indications.

The Emergency Off function is on the same button used to start the Emergency call. If Emergency On is a short press, then Emergency Off is a long press. If Emergency On is a long press, then Emergency Off is a short press.

In addition, if the radio is programmed for Emergency Alert Tone, an alternating tone sounds when an Emergency call is received. The tone may be silenced by pressing any button.

### Initiating an Emergency Call

#### **Procedure:**

To start a call on the Emergency group:

- 1 Press the programmed **Emergency** button. The Emergency Search Tone sounds. It is temporarily muted when the radio transmits or receives voice. The tone stops when the radio exits Emergency mode.
- 

**NOTE:** The Emergency Search Tone is an optional feature, it can be enabled or disabled via the CPS programming software. This feature is disabled, if Silent Emergency is enabled. Check with your dealer or system administrator to determine how your radio has been programmed.

- 2 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth and press the **PTT** button to initiate a voice transmission on the Emergency group.
-

- 3 When you release the **PTT** button, the Emergency call continues for the time allotted for the Emergency Call Hang Time. If you press the **PTT** button during this time, the Emergency call continues.
- 

*If your radio is set to Silent, it will not display any audio or visual indicators during Emergency mode until you press the **PTT** button to initiate a voice transmission.*

*If your radio is set to Silent with Voice, it will not initially display any audio or visual indicators that the radio is in Emergency mode. However, your radio will un-mute for the transmissions of radios responding to your emergency. The emergency indicators will only appear once you press the **PTT** button to initiate a voice transmission from your radio.*

*For both “Silent” and “Silent with Voice” operation, the radio will automatically exit silent operation after the Emergency Call is finished.*

### **Initiating an Emergency Call with Voice to Follow**

Your radio must be programmed for this type of operation.

When enabled for this operation, when you press the programmed **Emergency** button, and when your radio receives the time slot assignment, the microphone is automatically activated without you needing to press the **PTT** button. This activated microphone state is also known as “hot mic”. The “hot mic” applies to the first voice transmission from your radio

during the Emergency call. For subsequent transmissions in the same Emergency call, you must press the **PTT** button.

#### **Procedure:**

To start a call on the Emergency group:

- 1 Press the programmed **Emergency** button. The Emergency Search Tone sounds. It is temporarily muted when the radio transmits or receives voice. The tone stops when the radio exits Emergency mode.
- 

**NOTE:** The Emergency Search Tone is an optional feature, it can be enabled or disabled via the CPS programming software. This feature is disabled, if Silent Emergency is enabled. Check with your dealer or system administrator to determine how your radio has been programmed.

- 2 The radio's display will show **Emergency** and alternate with the group ID for the Emergency call.
  - 3 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth and speak.
  - 4 Microphone will remain active for the “hot mic” time specified in your radio's codeplug programming. During this time, the green LED lights up.
  - 5 Press and hold the **PTT** button to talk longer than the programmed duration.
-

## Responding to an Emergency Call

### Procedure:

When receiving an Emergency call:

- 1 If Alert Tone is sounding, press any button to stop the Emergency Alert tone.

---
- 2 Hold the microphone 1 to 2 inches (2.5 to 5.0 cm) from your mouth and press the **PTT** button to initiate a voice transmission on the Emergency group. All radios that are monitoring this Emergency group will hear your transmission.

---
- 3 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone. The green LED lights up. Your radio remains in the Emergency mode.

---
- 4 Release the **PTT** button to listen. You see *Emergency*, the initiator's ID or alias and the group ID or group alias on your display.

---
- 5 If emergency indications continue to display on your screen after the Emergency call is over, use the button sequence described in ***Receiving an Emergency Call*** on page 36 to cancel the emergency indications.

---
- 6 The radio returns to the Home screen.

---

**NOTE:** If you do not respond to the Emergency call within the time allotted for the Emergency Call Hang Time, the Emergency call will be completed. You will not have an

indication of this on the radio. In this case, when you press the **PTT** button, you will be talking on your currently selected group. This is true even if your radio's display still shows all of the Emergency call received indications (prior to you clearing it).



## Exiting Emergency Mode

If you initiate an Emergency call by pressing the programmed **Emergency** button, your radio will automatically be assigned a channel when one becomes available. Once your radio has transmitted a message indicating the emergency, you cannot cancel your Emergency call. However, if you pressed the button by accident or the emergency no longer exists, you may wish to say this over the assigned channel. When you release the **PTT** button, the Emergency call will be discontinued after the Emergency Call Hang Time expires.

If your radio was configured for Emergency with Voice to Follow, use the “hot mic” period to explain your error, then press and release the **PTT** button to discontinue the transmission. The Emergency call will be discontinued after the Emergency Call Hang Time expires.

**NOTE:** If the Emergency call ends due to the expiration of the Emergency Hang Time, but the emergency condition is not over, press the **Emergency** button again to start over the process.

## Receiving an Emergency Alert

Your radio may be programmed to sound an alert tone and also display information about the Emergency Alert. If so programmed, when receiving an Emergency Alert, the display alternates between the following:

- Line 1: “Emergency Alert”
- Line 2: The currently selected contact Alias or ID, Next:
- Line 1: The alias or ID of the sender
- Line 2: The Emergency Group alias.

The visual indications may will persist until you press a special button sequence to clear the Emergency indications.

**NOTE:** Short press the  button, then press the programmed **Emergency Off** button to clear the Emergency received indications.

The Emergency Off function is on the same button used to initiate the Emergency Alert. If “Emergency On” is a short press, then “Emergency Off” is a long press. If “Emergency On” is a long press, then “Emergency Off” is a short press.

In addition, if the radio is programmed for **Emergency Alert Receive (Alert Indication)**, an alternating tone will sound when an Emergency Alert is received. The tone may be silenced by pressing any button.

## Initiating an Emergency Alert

Procedure:

To send an Emergency Alert on the Emergency group:

- 1 Press the Emergency button. The Emergency Search Tone sounds. It is temporarily muted when the radio transmits or receives voice. The tone stops when the radio exits Emergency mode.
- 

**NOTE:** The Emergency Search Tone is an optional feature, it can be enabled or disabled via the CPS programming software. This feature is disabled, if Silent Emergency is enabled. Check with your dealer or system administrator to determine how your radio has been programmed.

- 2 The radio's display shows the Emergency icon and Emergency Pending until the Emergency Alert is sent, then it shows Sending Emergency Alert until the Emergency Alert is received by the site controller and broadcast.
  - 3 Once the Emergency Alert is successfully sent and is being broadcast for other radios to hear, a positive indicator tone is played and the radio's display shows Emergency Alert Successful.
- 

**NOTE:** If your radio is programmed for "Silent" or "Silent with Voice", it will not provide any audio or visual indications that it is sending an Emergency Alert. If programmed for "Silent", the silent operation continues indefinitely

until you press PTT or the button configured for "Emergency Off". If programmed for "Silent with Voice", the radio automatically cancels silent operation when the site controller broadcasts the Emergency Alert.

## Responding to an Emergency Alert

An Emergency Alert from a radio indicates that the user is in an urgent situation. You may respond to the alert by initiating a private call to the radio who declared the emergency, initiating a group call to their talkgroup, sending the radio a Call Alert, initiating a Remote Monitor of that radio, etc. The proper response is determined by your organization and the individual situation.

## ■ Text Messaging Features

---

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

### Sending a Quick Text Message

Your radio supports a maximum of ten (10) Quick Text messages as programmed by your dealer.














**NOTE:** While Quick Text messages are predefined, you can edit each message before sending it. Only available with a keypad microphone (see *Editing a Quick Text Message* on page 74).

#### **Procedure:**

Press the programmed **Text Messaging** button and proceed to Step 3 below.

#### **OR**

Follow the procedure below.

- 1  to access the menu.
  - 2  or  to Messages and press  to select.
  - 3  or  to Quick Text and press  to select.
  - 4  or  to the required Quick Text and press  to select.
  - 5  or  to the required alias or ID and press  to select.
-

6 The display shows `Sending Message` confirming your message is being sent.

---

7 If the message is sent successfully, a tone sounds and the display shows `Message Sent`.

**OR**

If the message cannot be sent, a low tone sounds and the display shows `Message Send Failed`.

---

*If the menu was used to send the quick text message and the text message fails to send, the radio returns to the `Resend` option screen (see **Managing Fail-to-Send Text Messages** on page 42).*

*If the programmed button was used to send the quick text message and the text message fails to send, the radio returns to the Home screen (see **Managing Sent Text Messages** on page 43).*

### Sending a Quick Text Message with the One Touch Call Button

1 Press the programmed **One Touch Call** button to send a predefined Quick Text message to a predefined alias or ID.

---

2 The display shows `Sending Message` confirming your message is being sent.

---

3 If the message is sent successfully, a tone sounds and the display shows `Message Sent`.

**OR**

If the message cannot be sent, a low tone sounds and the display shows `Message Send Failed`.

---

*If the text message fails to send, the radio returns you to the Home screen (see **Managing Sent Text Messages** on page 43).*


### Managing Fail-to-Send Text Messages

You can select one of the following options while at the `Resend` option screen:

- Resend
- Forward
- Edit (Only available with a keypad microphone – see *Editing a Text Message* on page 75 for more information)

### Resending a Text Message

**Procedure:**

1 Press  to resend the same message to the same subscriber/group alias or ID.

---

2 If the message is sent successfully, a tone sounds and the display shows `Message Sent`.

**OR**




If the message cannot be sent, the display shows `Message Send Failed`.

---




## Forwarding a Text Message

Select **Forward** to send the message to another subscriber/group alias or ID.

### Procedure:

- 1  or  to **Forward** and press  to select.

---

- 2  or  to the required alias or ID and press  to select.

---

- 3 The display shows **Sending Message** confirming your message is being sent.

---



- 4 If the message is sent, a tone sounds and the display shows **Message Sent**.  
**OR**  
If the message is not sent, a low tone sounds and the display shows **Message Send Failed**.

*You can also manually select a target radio address (see **Forwarding a Text Message by Manual Dial** on page 75).*

## Managing Sent Text Messages

Once a message is sent to another radio, it is saved in **Sent Items**. The most recent sent text message is always added to the top of the **Sent Items** list.

The **Sent Items** folder is capable of storing a maximum of thirty (30) last sent messages. When the folder is full, the next sent text message automatically replaces the oldest text message in the folder.

**NOTE:** Press  at any time to return to the previous screen or long press  at any time to return to the Home screen.


## Viewing a Sent Text Message

### Procedure:




Press the programmed **Text Message** button and proceed to Step 3 below.

### OR




Follow the procedure below.

- 1  to access the menu.




---

- 2  or  to **Messages** and press  to select.

---

- 3  or  to **Sent Items** and press  to select.

---

- 4  or  to the required message and press  to select.

A subject line may be shown if the message is sent from an e-mail application.

---





The icon at the top right corner of the screen indicates the status of the message (see **Sent Item Symbols** on page 8).


### **Sending a Sent Text Message**

You can select one of the following options while viewing a sent text message:



- Resend
- Forward
- Edit
- Delete

#### **Procedure:**

- 1 Press  again while viewing the message.
  - 2  or  to Resend and press  to select.
  - 3 The display shows **Sending Message** confirming that the same message is being sent to the same target radio.
  - 4 If the message is sent, a tone sounds and the display shows **Message Sent**.  
**OR**  
If the message is not sent, a low tone sounds and the display shows **Message Send Failed**.
- 

If the text message fails to send, the radio returns you to the **Resend** option screen. Press  to resend the message to the same subscriber/group alias or ID.

**NOTE:** The display returns to the **Resend** option screen if you press the **PTT** button to respond to a Private Call (except when the radio is displaying the Missed Call screen), and at the end of a Site All Call.

Press  or  to access the **Forward, Edit, or Delete** option screen:

- Select **Forward** to send the selected text message to another subscriber/group alias or ID (see **Forwarding a Text Message** on page 43). You can also manually select a target radio address using a keypad microphone (see **Forwarding a Text Message by Manual Dial** on page 75).
- Select **Edit** to edit the selected text message before sending it (see **Editing a Text Message** on page 75). Only available with a keypad microphone.
- Select **Delete** to delete the text message.


## **Deleting All Sent Text Messages from Sent Items**

### **Procedure:**




Press the programmed **Text Message** button and proceed to Step 3 below.

### **OR**




Follow the procedure below.

- 1  to access the menu.




---

  - 2  or  to **Messages** and press  to select.





---

  - 3  or  to **Sent Items** and press  to select.

---

  - 4  or  to **Delete All** and press  to select.

---

  - 5 At **Delete Message?**, press  to select **Yes**. The display shows **Sent Items Cleared**.
- OR**
- At **Delete Message?**,  or  to **No** and press  to return to the previous screen.

When you select **Sent Items** and it contains no text messages, the display shows *List Empty*

## **Receiving a Text Message**

When receiving a message, the display shows the alias or ID of the sender and the message icon [X] at the far left of the screen. A tone sounds and the yellow LED starts blinking until a button is pressed.




**NOTE:** The incoming text message alert is displayed only when in the Home screen.

You can select one of the following options when receiving a text message:

- Read
- Read Later
- Delete

## **Reading a Text Message**



### **Procedure:**



- 1  or  to **Read?** and press  to select.

---

  - 2 Selected message in the Inbox opens.  
A subject line may be shown if the message is from an e-mail application.

---

  - 3 Press  to reply, forward, or delete the text message.
- OR**
- Press  to return to the Inbox.

Press  or  to access the **Read Later** or **Delete** option screen:

- *Select **Read Later** to return to the Home screen.*
- *Select **Delete** to delete the text message.*



## Managing Received Text Messages

Use the Inbox to manage your text messages. The Inbox is capable of storing a maximum of 30 messages.

Your radio supports the following options for text messages:








- Reply (via Quick Text)
- Forward
- Delete
- Delete All



Text messages in the Inbox are sorted by the most recently received.

**NOTE:** Press  at any time to return to the previous screen or long press  at any time to return to the Home screen.



## Viewing a Text Message from the Inbox

**Procedure:**

- 1  to access the menu.
- 2  or  to **Messages** and press  to select.
- 3  or  to **Inbox** and press  to select.

- 4  or  to view the messages.

A subject line may be shown if the message is from an e-mail application.

- 5 Press  to select the current message, and press  again to reply, forward, or delete that message.

**OR**

Long press  to return to the Home screen.

*Unread messages are indicated with an exclamation mark (!).*












## Replying to a Text Message with Quick Text

**Procedure:**




Press the programmed **Text Messaging** button and proceed to Step 3 below.

**OR**




Follow the procedure below.

- 1  to access the menu.
- 2  or  to **Messages** and press  to select.
- 3  or  to **Inbox** and press  to select.
- 4  or  to the required message and press  to select.  
A subject line may be shown if the message is from an e-mail application.
- 5 Press  once more to access the sub-menu.






- 6  or  to Reply and press  to select.

---

- 7  or  to Quick Text and press  to select.

---

- 8  or  to the required message and press  to select.

---

- 9 The display shows `Sending Message` confirming your message is being sent.

---

- 10 If the message is sent successfully, a tone sounds and the display shows `Message Sent`.  
**OR**  
 If the message cannot be sent, a low tone sounds and the display shows `Message Send Failed`.

*If the menu was used to send the quick text message and the text message fails to send, the radio returns you to the `Resend` option screen (see **Managing Fail-to-Send Text Messages** on page 42).*

*If the programmed button was used to send the quick text message and the text message fails to send, the radio returns you to the Home screen (see **Managing Sent Text Messages** on page 43).*

**NOTE:** If you are using a keypad microphone, you can also write and send a new message (see **Writing and Sending a Text Message** on page 72) or modify a Quick Text message before sending it (see **Editing a Quick Text Message** on page 74).


### **Deleting a Text Message from the Inbox**

#### **Procedure:**




Press the programmed **Text Messaging** button and proceed to Step 3 below.

#### **OR**




Follow the procedure below.

- 1  to access the menu.




---

- 2  or  to Messages and press  to select.


---

- 3  or  to Inbox and press  to select.




---

- 4  or  to the required message and press  to select.  
 A subject line may be shown if the message is from an e-mail application.




---

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

---

- 6  or  to Delete and press  to select.

---

- 7 At `Delete Message?`,  or  to Yes and press  to select.

---

- 8 The display shows `Message Deleted`.

---

- 9 The screen returns to the Inbox.














## **Deleting All Text Messages from the Inbox**

### **Procedure:**

Press the programmed **Text Messaging** button and proceed to Step 3 below.

### **OR**

Follow the procedure below.

- 1  to access the menu.
- 2  or  to Messages and press  to select.
- 3  or  to Inbox and press  to select.
- 4  or  to Delete All and press  to select.
- 5 At Delete Message?,  or  to Yes and press  to select.
- 6 The display shows `Inbox Cleared`.

*When you select the Inbox and it contains no text messages, the display shows `List Empty`.*

## **Enhanced Privacy**

If enabled, this feature helps to prevent eavesdropping by unauthorized users via a software-based scrambling solution. Only the voice portions of a call are scrambled. Your radio must have privacy enabled on the selected channel position to send a privacy-enabled transmission. While selected to a privacy-enabled channel position, the radio is still able to receive clear (unscrambled) transmissions. If your radio is configured with a matching Key ID and Key Value, it can correctly unscramble voice transmissions, even when transmit Privacy is not enabled for the currently selected channel position.

There are several different ways that a channel position can become enabled (or disabled) for privacy. It can be enabled (or disabled) for privacy via radio programming, or it can be enabled (or disabled) for privacy by the radio user via the Privacy on/off button or the Privacy menu option. You can observe the privacy status of a channel position by looking at the Privacy icon while your radio is not currently in a call. See the next section for more information. When transmitting scrambled audio, the talk permit tone is slightly lower in pitch than it is when transmitting unscrambled audio.


### **Privacy Icon**


When the radio is idle (not currently transmitting or receiving), a


 indicates that transmit privacy is enabled for the currently

selected channel position. If you press PTT, the radio will transmit scrambled voice.

When the radio is idle (not currently transmitting or receiving),

an  indicates that privacy is disabled for the currently selected channel position. If you press PTT, the radio will transmit unscrambled voice.

When receiving a call, a  indicates that scrambled audio is being received. If your radio is programmed with a matching Key ID and Key Value, the radio will unscramble the transmission and you will hear normal audio through the speaker. However, if your radio is not programmed with a matching Key ID and Key Value, you will hear either garbled

audio or silence. When receiving a call, an  indicates that unscrambled audio is being received.

**NOTE:** If there is a privacy setting mismatch between audio being received and the privacy setting for the selected channel position, the padlock icon will flash (open or closed, depending on the mismatch). For example, a co-worker disables privacy on the “Production” group position in their radio. Your radio has privacy enabled for the current channel position. In this case the open padlock will flash when you receive unscrambled transmissions from that coworker. This indicates that although you are receiving an unscrambled transmission, your own transmissions will be scrambled. A flashing Closed padlock means that you

are receiving a scrambled transmission, but your own transmissions will be unscrambled.

## LED Operation

When transmitting, the green LED displays solid green, regardless of whether the transmission is scrambled or unscrambled. When receiving scrambled transmissions, the green LED will blink at an uneven rate (flash, flash, pause). This pattern repeats for the duration of the transmission. If the transmission is clear, then the green LED blinks at an even rate (flash, flash, flash). This pattern repeats for the duration of the transmission.


## Enable/Disable Privacy

### Procedure:



Press the programmed Privacy On/Off button to toggle privacy on or off for the selected channel position.

### OR


Follow the procedure below.

- 1 Press  button.



---

- 2 Press  or  to locate the Utilities option.


---

- 3 Press  to select Utilities.





---

- 4 Press  or  (if necessary) to locate Radio Settings option.

---

- 5 Press  to select Radio Settings.

---

- 6 Press  or  to locate the Enh. Privacy option and press  to select.
- 7 The display shows Turn On or Turn Off, depending on whether Privacy is currently turned off or on.
- 8 Press  to toggle the current Privacy setting.
- 9 The display briefly shows Enh. Privacy On or Enh. Privacy Off to indicate the new privacy setting.

**NOTE:** Toggling the privacy setting on or off affects the currently selected channel position only. The radio tracks the privacy setting (on or off) for each channel position separately.

## ■ Security

---




You can enable or disable any radio in the system. For example, you might want to disable a stolen radio, to prevent the thief from using it, and enable that radio, when it is recovered.

**NOTE:** Performing Radio Disable and Enable is limited to radios with these functions enabled. Check with your dealer or system administrator for more information.

### Radio Disable

#### **Procedure:**


Use the programmed **Radio Disable** button.

- 1 Press the programmed **Radio Disable** button.
- 2  or  to the required subscriber alias or ID and press  to select.
- 3 The display shows Radio Disable: <Subscriber Alias or ID>.
- 4 Wait for acknowledgment.
- 5 If successful, a tone sounds and the display shows Radio Disable Successful.  
**OR**  
If not successful, a low tone sounds and the display shows Radio Disable Failed.




OR

**Procedure:**




Use the menu.

- 1  to access the menu.




---

- 2  or  to **Contacts** and press  to select. The entries are alphabetically sorted.

---

- 3  or  to the required subscriber alias or ID and press  to select.

---

- 4  or  to **Radio Disable** and press  to select.

---

- 5 The display shows **Radio Disable: <Subscriber Alias or ID>**.

---

- 6 Wait for acknowledgment.

---

- 7 If successful, a tone sounds and the display shows **Radio Disable Successful**.

**OR**

If not successful, a low tone sounds and the display shows **Radio Disable Failed**.

*You can also access this feature using manual dial (see **Radio Disable via Manual Dial** on page 77).*




 **Radio Enable**

**Procedure:**

Use the programmed **Radio Enable** button.

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

---

- 2  or  to the required subscriber alias or ID and press  to select.

---

- 3 The display shows **Radio Enable: <Subscriber Alias or ID>**.

---

- 4 Wait for acknowledgment.

---

- 5 If successful, a tone sounds and the display shows **Radio Enable Successful**.


**OR**

If not successful, a low tone sounds and the display shows **Radio Enable Failed**.




OR

**Procedure:**




Use the menu.




- 1  to access the menu.

---

- 2  or  to **Contacts** and press  to select. The entries are alphabetically sorted.

---

- 3  or  to the required subscriber alias or ID and press  to select.

- 4  or  to Radio Enable and press  to select.

---

- 5 The display shows Radio Enable: <Subscriber Alias or ID>.

---

- 6 Wait for acknowledgment.

---

- 7 If successful, a tone sounds and the display shows Radio Enable Successful.  
**OR**  
If not successful, a low tone sounds and the display shows Radio Enable Failed.

You can also access this feature using manual dial (see **Radio Enable via Manual Dial** on page 77).

## Utilities

### Setting the Power Level

You can toggle your radio's power setting between high or low for each channel.


**Settings:** High enables communication with radios located at a considerable distance from you. Low enables communication with radios in closer proximity.

#### Procedure:




Press the programmed **Power Level** button to toggle transmit power level between high and low.

#### OR




Follow the procedure below.

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.

---

- 3  or  to Radio Settings and press  to select.


---

- 4  or  to Power and press  to select.

---


- 5 Change your current setting as prompted on the display.

---

- 6 Press  to select a new power level.

---

- 7 Screen returns to the previous menu.

Long press  to return to the Home screen. The power level icon is visible.

## Controlling the Display Backlight


You can use a programmable button or the radio menu to toggle the Display Backlight on or off. The setting also affects the keypad backlighting on a keypad microphone.

### Procedure:




Press the programmed Backlight button to toggle the Backlight on or off.

### OR




Follow the procedure below.

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.

---

- 3  or  to Radio Settings and press  to select.



---

- 4  or  to Backlight and press  to select.


---

- 5 If the Backlight is currently enabled, the display shows Turn Off. If the Backlight is currently disabled, the display shows Auto On.

---

- 6 Press  to change the current Backlight setting, or press  to keep the current setting.

---

- 7 If the user press  to change the current setting, the display shows Backlight Off or Backlight On to confirm

the change, and then the screen returns to the Radio Settings menu.

**NOTE:** To disable the display backlight, turn off the backlight setting in both Connect Plus mode and non-Connect Plus mode.

*The display backlight buttons and/or keypad backlighting are automatically turned off if the LED indicators are disabled (see Turning the LED Indicators On or Off on page 55)*

## Turning Horns/Lights On or Off

Your radio is able to notify you of an incoming Call Alert via the horns and lights feature. When activated, an incoming Call Alert sounds your vehicle's horn and turns on its lights. This feature needs to be installed through your radio's rear accessory connector by your dealer. In some cases, this feature may be permanently active. In this case, turning it on or off is not necessary.













When a Call Alert arrives, you have a programmed amount of time to respond before the Horns and Lights feature activates ("Delay Time"). If you respond to the call by pressing your PTT or any other button on the radio before the programmed delay timer expires, the Horns and Lights feature will not be activated. If activated, Horns and Lights sounds for a programmed duration or until you respond by pressing a button on the radio. In some cases, the radio may be programmed to sound the horns and lights indefinitely until you respond.

**Procedure:**

Press the programmed **Horns/Lights** button to toggle horns and lights feature on or off.

**OR**

Follow the procedure below.

- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Settings and press  to select.
- 4  or  to Horns/Lights and press  to select.
- 5 The display shows Turn On. Press  to enable the horns and lights feature. The display shows Horns/Lights On.  
**OR**  
The display shows Turn Off. Press  to disable the Horns/Lights feature. The display shows Horns/Lights Off.

 **Turning the Radio All Tones/Alerts On or Off**
















You can enable and disable all radio tones and alerts if needed.

**Procedure:**

Press the programmed **All Tones/Alerts** button to toggle all tones on or off.

**OR**

Follow the procedure below.


- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Settings and press  to select.
- 4  or  to Tones/Alerts and press  to select.
- 5  or  to All Tones and press  to select.
- 6 The display shows Turn On. Press  to enable all tones and alerts. The display shows All Tones On.  
**OR**  
The display shows Turn Off. Press  to disable all tones and alerts. The display shows All Tones Off.






## Turning the Talk Permit Tone On or Off

You can enable and disable the Talk Permit Tone if needed.




### Procedure:

- 1  to access the menu.




---

  - 2  or  to Utilities and press  to select.




---

  - 3  or  to Radio Settings and press  to select.



---

  - 4  or  to Tones/Alerts and press  to select.

---

  - 5  or  to Talk Permit and press  to select.

---

  - 6 Select Turn On. Press  to enable the Talk Permit Tone. The display shows Talk Permit Tone On.
- OR**
- Select Turn Off. Press  to disable the Talk Permit Tone. The display shows Talk Permit Tone Off.


**NOTE:** Your radio may have a “Pre-Tone” feature enabled. The Pre-Tone is a series of short beeps prior to the Talk Permit Tone. The Pre-Tone starts when the user presses PTT and ends when the radio receives a response from the system. It is followed by the Talk Permit Tone (when a channel is assigned), the Busy Tone (if the call is placed in the Busy Queue), or a Negative Indicator tone (if the call request fails or is denied).

If the Pre-Tone has been enabled in your radio, turning the Talk Permit Tone on (via the menu) also turns the Pre-Tone on. Turning the Talk Permit Tone off (via the menu) also turns the Pre-Tone off.




## Turning the LED Indicators On or Off

You can enable and disable the LED Indicators if needed.




### Procedure:

- 1  to access the menu.




---

  - 2  or  to Utilities and press  to select.



---

  - 3  or  to Radio Settings and press  to select.

---

  - 4  or  to LED Indicator and press  to select.

---











  - 5 The display shows Turn On. Press  to enable the LED Indicator. The display shows All LEDs On.
- OR**
- The display shows Turn Off. Press  to disable the LED Indicator. The display shows All LEDs Off.

*The display backlight, buttons and/or keypad backlighting are automatically turned off if the LED Indicators are disabled (see **Controlling the Display Backlight** on page 53).*

## Checking the Language

You can check your radio's display language.

### Procedure:




















- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Settings and press  to select.
- 4  or  to Language and press  to select.  
*The current selection is marked with a ✓ before the name of the language.*

**NOTE:** The current language support for the radio display is English only.

## Turning the Call Ringer Tones On/Off or Changing the Ringer Style

### Call Alert


#### Procedure:

- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Settings and press  to select.
- 4  or  to Tones/Alerts and press  to select.
- 5  or  to Call Ringers and press  to select.
- 6  or  to Call Alert and press  to select.
- 7  or  to select ring tone and press  to select.




*The current selection is marked with a ✓ before the tone number. As the tone is displayed, it will sound the tone style.*

## Private Call




### Procedure:

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.




---

- 3  or  to Radio Settings and press  to select.




---

- 4  or  to Tones/Alerts and press  to select.



---

- 5  or  to Call Ringers and press  to select.

---

- 6  or  to Private Call and press  to select.

---



- 7 The display shows Turn On. Press  to enable the Private Call Ringer. The display shows Private Call Ringer On.  
OR  
The display shows Turn Off. Press  to disable the Private Call Ringer. The display shows Private Call Ringer Off.

---

## Accessing General Radio Information

Your radio contains information on the following:











- My Number (Radio ID)
- Firmware Version
- Codeplug Version
- Option Board Firmware Version
- Option Board Frequency Version
- Option Board Hardware Version
- Option Board Codeplug Version
- Updates

**NOTE:** Press  at any time to return to the previous screen or long press  to return to the Home screen.

### **Checking the Radio Model Number Index**

This index number identifies your radio's model-specific hardware. Your radio system administrator may ask for this number when preparing a new Option Board codeplug for your radio.











#### **Procedure:**

- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Info and press  to select.
- 4  or  to Model Index and press  to select.
- 5 The display shows the Model Number Index.

### **Displaying the Site ID (Site Number)**

The radio briefly shows the Site ID as it registers with a Connect Plus site. Following registration, the radio does not generally indicate the Site Number. To display the registered Site Number, do the following:

#### **Procedure:**

- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Info and press  to select.
- 4  or  to Site Number and press  to select.
- 5 The display shows the Network ID and the Site Number.

**NOTE:** If you are not currently registered at a site, the display shows `Not Registered`.


### **Checking the Site Info**

The Site Info feature provides information that can be useful to a service technician. It consists of the following information:




- Repeater number of current Control Channel repeater.
- RSSI: Last signal strength value measured from Control Channel repeater.
- Neighbor List (NL) sent by Control Channel repeater (five numbers separated by commas).

If a system technician or administrator asks you to use this feature, please report the displayed information exactly as it appears on the screen.




**Procedure:**

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.

---

- 3  or  to Radio Info and press  to select.

---

- 4  or  to Site Info and press  to select.

---


- 5 The display shows the Site Info.

**NOTE:** If you are not currently registered at a site, the display shows `Not Registered`.




 **Checking My Number (Radio ID)**

Displays the ID of your radio.




**Procedure:**

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.

---

- 3  or  to Radio Info and press  to select.

---

- 4  or  to My Number and press  to select.


---

- 5 The display shows the radio ID.




 **Checking the Firmware Version**

Displays the firmware version on your radio.




**Procedure:**

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.

---

- 3  or  to Radio Info and press  to select.

---

- 4  or  to Firmware Ver. and press  to select.


---

- 5 The display shows the current firmware version.




 **Checking the Codeplug Version**

Displays the codeplug version on your radio.




**Procedure:**

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.

---

- 3  or  to Radio Info and press  to select.

---

- 4  or  to CP Ver. and press  to select.











---

- 5 The display shows the current codeplug version.

### **Checking the Option Board Firmware Version**

Displays the option board firmware version on your radio.











#### **Procedure:**

- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Info and press  to select.
- 4  or  to Opt Bd FW Ver and press  to select.
- 5 The display shows the current option board firmware version.

### **Checking the Option Board Frequency File Version**

Displays the option board frequency file version on your radio.











#### **Procedure:**

- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Info and press  to select.
- 4  or  to Opt Bd Freq Ver and press  to select.
- 5 The display shows the current option board frequency file version.

### **Checking the Option Board Hardware Version**

Displays the option board hardware version on your radio.











#### **Procedure:**

- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Info and press  to select.
- 4  or  to Opt Bd HW Ver and press  to select.
- 5 The display shows the current option board hardware version.

### **Checking the Option Board Codeplug Version**

Displays the option board codeplug version on your radio.


#### **Procedure:**

- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Info and press  to select.
- 4  or  to Opt Bd CP Ver and press  to select.
- 5 The display shows the current option board codeplug version.




## **Checking the CRC of the Option Board OTA Codeplug File**

Follow the instructions below if your radio system administrator asks you to view the Option Board OTA (over-the-air) Codeplug File CRC (Cyclic Redundancy Check). This menu option only appears if the Option Board received its last codeplug update OTA.




### **Procedure:**

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.

---

- 3  or  to Radio Info and press  to select.

---

- 4  or  to Opt Bd OTA CPcrc and press  to select.

---

- 5 The display shows some letters and numbers. Communicate this information to your radio system administrator exactly as shown.

---

## **Checking for Updates**

Connect Plus provides the ability to update certain files (Option Board Codeplug, Network Frequency File and Option Board Firmware File) over-the-air. Check with the dealer or network administrator to determine whether this feature has been enabled for your radio.

Any display Connect Plus radio has the ability to show its current Option Board OTA Codeplug CRC, Frequency File version or Option Board firmware file version via a menu option. In addition, display radios that have been enabled for over-the-air file transfer can display the version of a "pending file". A "pending file" is a Frequency File or Option Board firmware file that the Connect Plus radio knows about via system messaging, but the radio has not yet collected all of the file packets. If a display Connect Plus radio has a pending file, the menu provides options to:

- see the version number of the pending file
- see what percentage of packets has been collected so far
- request the Connect Plus radio to resume collecting file packets

If the radio is enabled for Connect Plus over-the-air file transfer, there may be times when the radio automatically joins a file transfer without first notifying the radio user. While the radio is collecting file packets, the LED rapidly blinks red. The screen alternates between displaying the alias for the current Channel Rocker position and "File Transfer".

**NOTE:** The Connect Plus radio cannot collect file packets and receive calls at the same time. If you wish to cancel the file transfer, press and release the **PTT** button. This causes the radio to request a call on the selected Contact Name, and it will also cancel the file transfer for that radio until the process resumes at a later time.

There are several things that can make the file transfer process start again. The first example applies to all over-the-air file types. The other examples apply only to the Network Frequency File and Option Board Firmware File:

- The radio system administrator re-initiates the over-the-air file transfer.
- The Option Board's pre-defined timer expires, which causes the Option Board to automatically resume the process of collecting packets.
- The timer has not yet expired, but the radio user requests the file transfer to resume via the menu option.














After the Connect Plus radio finishes downloading all file packets, it must upgrade to the newly acquired file. For the Network Frequency File, this is an automatic process and does not require a radio reset. For the Option Board Codeplug File, this is an automatic process that will cause a brief interruption to service as the Option Board loads the new codeplug information and re-acquires a network site. How quickly the radio upgrades to a new Option Board firmware file depends on how the radio has been configured by the dealer or system administrator. The radio will either upgrade immediately after collecting all file

packets, or it will wait until the next time that the user turns the radio on. Check with your dealer or system administrator to determine how your radio has been programmed. The process of upgrading to a new Option Board firmware file takes several seconds, and it requires the Connect Plus Option Board to reset the radio. Once the upgrade starts, the radio user will not be able to make or receive calls until the process is completed.

## Firmware File

## Firmware Up to Date


### Procedure:

- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Info and press  to select.
- 4  or  to Updates and press  to select.
- 5  or  to Firmware and press  to select.
- 6 The display shows **Firmware is Up to Date.**






## Pending Firmware – Version




### Procedure:

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.




---

- 3  or  to Radio Info and press  to select.




---

- 4  or  to Updates and press  to select.

---

- 5  or  to Firmware and press  to select.

---

- 6  or  to Version and press  to select.

---


- 7 If there is no pending Firmware File, the display shows Firmware is Up to Date.

### OR




If there is a pending Firmware File, the user will have additional menu options: %Received and Download.

## Pending Firmware – % Received




### Procedure:

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.




---

- 3  or  to Radio Info and press  to select.




---

- 4  or  to Updates and press  to select.

---

- 5  or  to Firmware and press  to select.

---


- 6  or  to %Received and press  to select.

---




- 7 The screen displays the percentage of firmware file packets collected so far. When at 100%, the radio needs to be power cycled On and Off to initiate the firmware upgrade.

## Pending Firmware – Download




### Procedure:

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.




---

- 3  or  to Radio Info and press  to select.




---

- 4  or  to Updates and press  to select.

---

- 5  or  to Firmware and press  to select.



---

- 6  or  to Download and press  to select.

---

- 7 The screen displays Start Download.



---

- 8  or  to Yes to start the download.

---

- OR**


---

-  or  to No to return to the previous menu.

---

- 9 The screen displays Download in Progress.

---


- 10 Press  to return to the previous screen.

**NOTE:** If the Connect Plus radio has previously left an OTA Option Board Firmware File Transfer with a partial file, the unit will automatically rejoin the file transfer (if still ongoing) when an internal timer expires. If you want the unit to re-join an ongoing file Option Board Firmware File transfer prior to expiration of this internal timer, use the “Download” option as described above.




## Frequency File

### Frequency File Up to Date




#### Procedure:

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.




---

- 3  or  to Radio Info and press  to select.

---

- 4  or  to Updates and press  to select.

---

- 5  or  to Frequency and press  to select.

---

- 6 If there is no pending Frequency File, the display shows Freq. File is Up to Date.

---


- OR**

---




- If there is a pending Frequency File, the user will have additional menu options: Version, %Received and Download.

### Frequency File Pending – Version




#### Procedure:

- 1  to access the menu.




---







- 2  or  to Utilities and press  to select.

---

- 3  or  to Radio Info and press  to select.

















---

- 4  or  to Updates and press  to select.

- 5  or  to Frequency and press  to select.
- 6  or  to Version and press  to select.
- 7 The display shows Freq. File on the first line and <Version> of the pending frequency file on the second.























### Frequency File Pending – % Received

#### Procedure:

- 1  to access the menu.
- 2  or  to Utilities and press  to select.
- 3  or  to Radio Info and press  to select.
- 4  or  to Updates and press  to select.
- 5  or  to Frequency and press  to select.
- 6  or  to %Received and press  to select.
- 7 The screen displays the percentage of frequency file packets collected so far.

### Frequency File Pending – Download

#### Procedure:

- 1  to access the menu.
  - 2  or  to Utilities and press  to select.
  - 3  or  to Radio Info and press  to select.
  - 4  or  to Updates and press  to select.
  - 5  or  to Frequency and press  to select.
  - 6  or  to Download and press  to select.
  - 7 The screen displays Start Download.
  - 8  or  to Yes to start the download.
- OR**
-  or  to No or  to return to the previous menu.
  - 9 The screen displays Download in Progress.
  - 10 Press  to return to the previous screen.

**NOTE:** If the Connect Plus radio has previously left an OTA Network Frequency File Transfer with a partial file, the unit will automatically re-join the file transfer (if still ongoing) when an internal timer expires. If you want the unit to re-join an ongoing Network Frequency file transfer prior to expiration of this internal timer, use the “Download” option as described above.

## ■ Keypad Microphone Features

The following additional features for your radio are available with a keypad-enabled microphone:


|  |         |
|--|---------|
| Using the Keypad . . . . .             | page 66 |
| Additional Advanced Features . . . . . | page 68 |
| Text Messaging . . . . .               | page 72 |
| Security . . . . .                     | page 77 |

## ■ Using the Keypad




### ☞ Turning Keypad Tones On or Off

You can enable and disable Keypad Tones if needed.




#### Procedure:

- 1  to access the menu.




---

- 2  or  to Utilities and press  to select.




---

- 3  or  to Radio Settings and press  to select.



---

- 4  or  to Tones/Alerts and press  to select.

---













- 5  or  to Keypad Tones and press  to select.

---

- 6 The display shows Turn On. Press  to enable keypad tones. The display shows Keypad Tone On.  
**OR**  
 The display shows Turn Off. Press  to disable keypad tones. The display shows Keypad Tone Off.

**NOTE:** If the keypad tones have been turned off in a non-Connect Plus zone, they cannot be turned on in Connect Plus until they are re-enabled in the non-Connect Plus zone.


You can use the 3 x 4 alphanumeric keypad on the keypad microphone (Motorola part number: RMN5065\_) to access your radio's features. You can use the keypad to enter subscriber aliases or IDs, and text messages. Many characters require that you press a key multiple times. The table below shows the number of times a key needs to be pressed to generate the required character.

| Key   | Number of Times Key is Pressed |   |   |   |   |   |   |   |   |    |    |    |    |
|---|--------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|
|   | 1                              | 2   | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|  | 1                              | .   | , | ? | ! | @ | & | ' | % | -  | :  | *  | #  |
|  | A                              | B   | C | 2 |   |   |   |   |   |    |    |    |    |
|  | D                              | E   | F | 3 |   |   |   |   |   |    |    |    |    |
|  | G                              | H   | I | 4 |   |   |   |   |   |    |    |    |    |
|  | J                              | K   | L | 5 |   |   |   |   |   |    |    |    |    |
|  | M                              | N   | O | 6 |   |   |   |   |   |    |    |    |    |
|  | P                              | Q   | R | S | 7 |   |   |   |   |    |    |    |    |
|  | T                              | U   | V | 8 |   |   |   |   |   |    |    |    |    |
|  | W                              | X   | Y | Z | 9 |   |   |   |   |    |    |    |    |
|  | 0                              | <b>NOTE:</b> Press to enter "0" and long press to activate the CAPS lock. Another long press to turn off the CAPS lock. |   |   |   |   |   |   |   |    |    |    |    |
|  | * or del                       | <b>NOTE:</b> Press during text entry to delete the character. Press during numeric entry to enter an ""*"".             |   |   |   |   |   |   |   |    |    |    |    |
|  | # or space                     | <b>NOTE:</b> Press during text entry to insert a space. Press during numeric entry to enter a "#".                      |   |   |   |   |   |   |   |    |    |    |    |




## ■ Additional Advanced Features

### 📄 Initiating a Radio Check by Manual Dial




#### Procedure:

- 1  to access the menu.



---

- 2  or  to `Contacts` and press  to select.




---

- 3  or  to `Manual Dial` and press  to select.

---

- 4 If there is a previously dialed subscriber ID, the ID appears along with a cursor.  
Use the keypad to edit the ID. Press  to select.  
**OR**  
Use the keypad to enter a new subscriber ID. Press  to select.

---

- 5  or  to `Radio Check` and press  to select.

---

- 6 The display shows `Radio Check: <Subscriber ID>`, indicating that Radio Check is in progress.

---

- 7 Wait for acknowledgement.


- 8 If the target radio is active in the system, a tone sounds and the display shows `Target Radio Available`.  
**OR**  
If the target radio is not active in the system, a tone sounds and the display shows `Target Radio Not Available`.

---




- 9 Radio returns to the subscriber ID screen.

### 📄 Initiating Remote Monitor by Manual Dial




#### Procedure:

- 1  to access the menu.



---

- 2  or  to `Contacts` and press  to select.




---

- 3  or  to `Manual Dial` and press  to select.

---

- 4 If there is a previously dialed subscriber ID, the ID appears along with a cursor.  
Use the keypad to edit the subscriber ID. Press  to select.  
**OR**  
Use the keypad to enter a new subscriber ID. Press  to select.








---

- 5  or  to `Remote Mon.` and press  to select.

- 6 Wait for acknowledgment, the radio displays `Remote Mon` on the first line and `<Subscriber Alias or ID>` on the second line.
- 
- 7 Radio sounds an alert tone and the display shows `<Subscriber Alias or ID>` on the first line and `Remote Mon` on the second line.  
**OR**  
 Radio sounds an alert tone and the display shows `Remote Monitor Failed`.
- 
- 8 If successful:  
 Once the timer expires, the radio sounds a tone and displays `Ending Remote Monitor`.  
 Then, the radio briefly displays `Remote Monitor Ended`.  
**OR**  
 If unsuccessful:  
 The controller repeats the attempt until the programmed number of tries expires.
- 

### Making a Private Call by Manual Dial

#### Procedure:


- 1  to access the menu.
- 
- 2  or  to `Contacts` and press  to select. The entries are alphabetically sorted.
- 
- 3  or  to `Manual Dial` and press  to select.
- 

- 4 If there is a previously dialed subscriber ID, the ID appears along with a cursor.  
 Use the keypad to edit the subscriber ID.  
**OR**  
 Use the keypad to enter a new subscriber ID.
- 
- 5 Press the **PTT** button to make the call. The green LED lights up. The displays shows `Calling <Subscriber Alias or ID>`, while the call is being set up. Once the call is set up, the first line displays `Private Call`. The second line displays `<Subscriber Alias or ID>`.  
**OR**  
 If the call cannot be made, the display shows `Party Not Available`.
- 
- 6 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 
- 7 Release the **PTT** button to listen. When the target radio responds, the green LED blinks and the display continues to show the transmitting user's ID.
- 
- 8 If the Channel Free Indication feature is enabled, you will hear a short alert tone the moment the target radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond.  
**OR**  
 If there is no voice activity for a programmed period of time, the call ends.
- 
- 9 The display shows `Call Ended`.
-




## Making a Phone Call by Phone Manual Dial

Depending on how your radio is programmed, there are two possible ways to make a Private Phone Call by using the Phone Manual Dial feature.




### Procedure:

- 1 Press the **Phone Manual Dial** programmable button, and then go to Step 5 below.  
**OR**  
Press  and follow the following steps.




---

- 2  or  (if necessary) to **Contacts** and press .




---

- 3  or  to **Manual Dial** and press .

---

- 4  or  (if necessary) to **Phone Number** and press .

---

- 5 The first line of the display shows **Phone Number:**. The second line of the display shows a cursor. Use the keypad to enter a telephone number. When entering the phone number you can insert a pause between digits by pressing  followed immediately by . The radio displays the letter **P** to indicate the pause. Press  to proceed.

---

- 6 The first line of the display shows **Calling**. The second line of the display shows the dialed number, and the **Phone Call** icon.

---

- 7 If successful, you will hear audio from the phone line (ringing, busy tone, etc.). The display shows **Phone Call**.

### OR


If unsuccessful, a tone sounds and the display shows **Phone Call Failed** (or other message).

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

---

- 9 Press the **PTT** button to talk and release it to listen.


---

- 10 To enter extra digits if requested by the Phone Call:  
**Buffer Dial Method:** Press any keypad key (0-9,\*,#) to begin the input of extra digits. The first line of the display shows **Extra Digits:**. The second line of the display shows a cursor. Enter the extra digits and press  to proceed.  
**OR**  
**Live Dial Method:** Press and hold **PTT**, and then press and release each extra digit. The radio sends a DTMF tone for each extra digit. Release **PTT** when finished.

---

- 11 The Phone Call can be ended by the phone user or the radio user.

---

- 12 Press  to end the call.

---

- 13 When the call is over, the display shows **Phone Call Ended**.




## Making a Private Call by Alias Search




You can also use alias or alphanumeric search to retrieve the required subscriber alias.

This feature is only applicable while in Contacts.

### Procedure:

- 1  to access the menu.



---

- 2  or  to **Contacts** and press  to select. The entries are alphabetically sorted.

---

- 3 Key in the first character of the alias.

---

- 4  or  to the required alias.

---

- 5 Press the **PTT** button to make the call. The green LED lights up and the display shows **Calling** <Subscriber Alias or ID> while the call is being set up. Once the call is set up, the first line displays **Private Call**. The second line displays <Subscriber Alias or ID>.
 

OR

If the call cannot be made, you hear a short tone and see **Party Not Available**.

---

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

---

- 7 Release the **PTT** button to listen. When the target radio responds, the green LED blinks.

---

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

### OR


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

- 9 You hear a short tone. The display shows **Call Ended**.




---

## Making a Call Alert by Manual Dial




### Procedure:

- 1  to access the menu.


---

- 2  or  to **Contacts** and press  to select.




---

- 3  or  to **Manual Dial** and press  to select.

---

- 4 A cursor appears. Enter the subscriber ID you want to send the Call Alert to and press .

---

- 5  or  to **Call Alert** and press  to select.

---

- 6 The display shows **Call Alert: <Subscriber ID>**, confirming that the Call Alert has been sent.



---

- 7 If the Call Alert acknowledgement is received, a tone sounds and the display shows `Call Alert Successful`.  
**OR**  
 If the Call Alert acknowledgement is not received, a tone sounds and the display shows `Call Alert Failed`.
- 

## ■ Text Messaging

---

The **maximum** length of characters for a text message, including the subject line (seen when receiving message from an e-mail application), is **138**.

**NOTE:** Press  to return to the previous screen or long press  to return to the Home screen. You cannot return to the previous screen or Home screen if the radio is in the process of sending the message.


### Writing and Sending a Text Message

#### Procedure:




Press the programmed **Text Messaging** button and proceed to Step 3 below.

#### **OR**




Follow the procedure below.

- 1  to access the menu.



---

- 2  or  to `Messages` and press  to select.


---

- 3  or  to `Write` and press  to select.








---

- 4 A cursor appears. Use the keypad to type your message.  
 Press  to move one space to the left.  
 Press  to move one space to the right.  
 Press the # key to insert a space.  
 Press the \* key to delete any unwanted characters.

---

- 5 Press  once the message is composed.

---

- 6  or  to the required subscriber alias or ID and press  to select.  
**OR**  
 or  to `Manual Dial` and press  to select.  
 Key in the subscriber ID and press .

---

- 7 The display shows `Sending Message` confirming your message is being sent.

---

- 8 If the message is sent, a tone sounds and the display shows `Message Sent`.  
**OR**  
 If the message is not sent, the display shows `Message Send Failed`.

---

*If the menu was used to send the quick text message and the text message fails to send, the radio returns you to the `Resend` option screen (see **Managing Fail-to-Send Text Messages** on page 74).*

If the programmed button was used to send the quick text message and the text message fails to send, the radio returns you to the Home screen (see **Managing Sent Text Messages** on page 43).


## **Replying to Text Messages from the Inbox**

### **Procedure:**




Press the programmed **Text Messaging** button and proceed to Step 3 below.

### **OR**




Follow the procedure below.

- 1  to access the menu.




---

- 2  or  to **Messages** and press  to select.


---

- 3  or  to **Inbox** and press  to select.




---

- 4  or  to the required message and press  to select.  
A subject line may be shown if the message is from an e-mail application.






---

- 5 Press  once more to access additional options.

---


- 6  or  to **Reply** and press  to select.

---

- 7  or  to **Write** and press  to select.  
A cursor appears. Use the keypad to type your message.  
Press  to move one space to the left.  
Press  to move one space to the right.

Press the # key to insert a space.

Press the \* key to delete any unwanted characters.

- 8 Press  once the message is composed.

---

- 9 The display shows **Sending Message** confirming your message is being sent.

---

- 10 If the message is sent, a tone sounds and the display shows **Message Sent**.  
**OR**  
If the message is not sent, a low tone sounds and the display shows **Message Send Failed**.

If the menu was used to send the quick text message and the text message fails to send, the radio returns you to the *Resend option screen* (see **Managing Fail-to-Send Text Messages** on page 74).

If the programmed button was used to send the quick text message and the text message fails to send, the radio returns you to the Home screen (see **Managing Sent Text Messages** on page 43).

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





















## Editing a Quick Text Message

### Procedure:

Press the programmed **Text Messaging** button and proceed to Step 3 below.

### OR

Follow the procedure below.

- 1  to access the menu.
- 2  or  to **Messages** and press  to select.
- 3  or  to **Quick Text** and press  to select.
- 4  or  to the required Quick Text and press  to select.
- 5 A cursor appears. Use the keypad to edit the message.  
Press  to move one space to the left.  
Press  to move one space to the right.  
Press the # key to insert a space.  
Press the \* key to delete any unwanted characters.
- 6 Press  once the message is composed.
- 7  or  to the required subscriber alias or ID and press  to select.  
**OR**  
 or  to **Manual Dial** and press  to select.  
Key in the subscriber ID and press .

8 The display shows **Sending Message** confirming your message is being sent.

9 If the message is sent, a tone sounds and the display shows **Message Sent**.

### OR

If the message is not sent, a low tone sounds and the display shows **Message Send Failed**.

*If the menu was used to send the quick text message and the text message fails to send, the radio returns you to the **Resend** option screen (see **Managing Fail-to-Send Text Messages** on page 74).*

*If the programmed button was used to send the quick text message and the text message fails to send, the radio returns you to the **Home** screen (see **Managing Sent Text Messages** on page 43).*


## Managing Fail-to-Send Text Messages

if the message fails to send, the radio returns you to the **Resend** option screen.

- Resend
- Forward
- Edit

### Resending a Text Message

#### Procedure:

- 1 Press  to resend the same message to the same subscriber/group alias or ID.
- 2 If the message is sent successfully, a tone sounds and the display shows *Message Sent*.








#### OR

If the message is not sent, a low tone sounds and the display shows *Message Send Failed*.

### Forwarding a Text Message by Manual Dial

Select *Forward* to send the message to another subscriber/group alias or ID.

#### Procedure:

- 1  or  to *Forward* and press  to select.
- 2  or  to *Manual Dial* and press  to select.
- 3 Key in the subscriber ID and press .
- 4 The display shows *Sending Message* confirming your message is being sent.

- 5 If the message is sent, a tone sounds and the display shows *Message Sent*.

#### OR







If the message is not sent, a low tone sounds and the display shows *Message Send Failed*.








### Editing a Text Message

Select *Edit* to edit the message before sending it.

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

#### Procedure:

- 1  or  to *Edit* and press  to select.
- 2 A cursor appears beside the message. Use the keypad to edit your message. Press  to move one space to the left. Press  to move one space to the right. Press the # key to insert a space. Press the \*DEL key to delete any unwanted characters.
- 3 Press  once the message is composed.

- 4  or  to the required alias or ID and press  to select.  
**OR**  
 or  to Manual Dial and press  to select.  
Key in the subscriber ID and press .

---

- 5 The display shows `Sending Message` confirming your message is being sent.


---

- 6 If the message is sent, a tone sounds and the display shows `Message Sent`.  
**OR**  
If the message is not sent, a low tone sounds and the display shows `Message Send Failed`.




### Sending a Site All Call Text Message

This feature allows you to transmit to all users on the current site. Your radio must be programmed to allow you to use this feature.




Follow the procedure below.



- 1  to access the menu.

---


- 2  or  to `Messages` and press  to select.

---




- 3  or  to `Write` and press  to select.

- 4 A cursor appears. Use the keypad to edit the message.  
Press  to move one space to the left.  
Press  to move one space to the right.  
Press the # key to insert a space.  
Press the \*DEL key to delete any unwanted characters.




---

- 5 Press  once the message is composed.

---

- 6  or  to `Send` and press  to send message.

---

- 7  or  to `Site All Text` and press  to select.

---

- 8 The display shows `Sending Message` confirming your message is being sent.

---

- 9 If the message is sent, a tone sounds and the display shows `Message Sent`.  
**OR**  
If the message is not sent, a low tone sounds and the display shows `Message Send Failed`.


*If the message fails to send, the radio returns you to the Resend option screen (see **Managing Fail-to-Send Text Messages** on page 74).*

## ■ Security




---

### ☰ Radio Disable via Manual Dial





#### Procedure:

- 1  to access the menu.




---

- 2  or  to `Contacts` and press  to select. The entries are alphabetically sorted.

---

- 3  or  to `Manual Dial` and press  to select. Key in the subscriber ID and press .

---

- 4  or  to `Radio Disable` and press  to select.

---

- 5 The display shows `Radio Disable: <Subscriber ID>`.

---

- 6 Wait for acknowledgment.


---

- 7 If successful, a tone sounds and the display shows `Radio Disable Successful`.  
**OR**  
If not successful, a low tone sounds and the display shows `Radio Disable Failed`.




---

### ☰ Radio Enable via Manual Dial





#### Procedure:

- 1  to access the menu.




---

- 2  or  to `Contacts` and press  to select. The entries are alphabetically sorted.

---

- 3  or  to `Manual Dial` and press  to select. Key in the subscriber ID and press .

---

- 4  or  to `Radio Enable` and press  to select.

---

- 5 The display shows `Radio Enable: <Subscriber ID>`.

---

- 6 Wait for acknowledgment.

---

- 7 If successful, a tone sounds and the display shows `Radio Enable Successful`.  
**OR**  
If not successful, a low tone sounds and the display shows `Radio Enable Failed`.

---

## Accessories

Your radio is compatible with the accessories listed in this chapter. Contact your dealer for details.

|                                     |         |
|-------------------------------------|---------|
| Antennas . . . . .                  | page 78 |
| Audio . . . . .                     | page 79 |
| Cables . . . . .                    | page 80 |
| Desktop Accessories . . . . .       | page 80 |
| Mounting Kits . . . . .             | page 80 |
| Remote Mount Adaptor Kits . . . . . | page 80 |
| Speakers . . . . .                  | page 81 |
| Miscellaneous Accessories . . . . . | page 81 |

### ■ Antennas

- VHF, 136 – 144 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAD4006\_)
- VHF, 146 – 150.8 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAD4007\_)
- VHF, 150.8 – 162 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAD4008\_)

- VHF, 162 – 174 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAD4009\_)
- VHF, 146 – 172 MHz, 3.0 dB Gain, Through-Hole Mount, Mini-U (HAD4014\_)
- UHF, 403 – 430 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAE4002\_)
- UHF, 450 – 470 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAE4003\_)
- UHF, 470 – 527 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAE4004\_)
- UHF, 406 – 420 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (HAE4010\_)
- UHF, 450 – 470 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (HAE4011\_)
- UHF, 470 – 494 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (HAE4012\_)
- UHF, 494 – 512 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (HAE4013\_)
- UHF, 403 – 527 MHz, 2.0 dB Gain, Through-Hole Mount, Mini-U (HAE6022\_)
- UHF, 450 – 470 MHz, 5.0 dB Gain, Through-Hole Mount, Mini-U (RAE4004\_)



### For DGM 6100+ GPS Models Only

- Combination GPS/VHF, 136 – 144 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (RAD4214\_)
- Combination GPS/VHF, 146 – 150.8 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (RAD4215\_)
- Combination GPS/VHF, 150.8 – 162 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (RAD4216\_)
- Combination GPS/VHF, 162 – 174 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (RAD4217\_)
- Combination GPS/VHF, 146 – 172 MHz, 3.0 dB Gain, Through-Hole Mount, Mini-U (RAD4218\_)
- Combination GPS/UHF, 403 – 527 MHz, 2.0 dB Gain, Through-Hole Mount, Mini-U (HAE6019\_)
- Combination GPS/UHF, 470 – 527 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (HAE6020\_)
- Combination GPS/UHF, 470 – 494 MHz, 3.0 dB Gain, Through-Hole Mount, Mini-U (HAE6024\_)
- Combination GPS/UHF, 494 – 512 MHz, 3.0 dB Gain, Through-Hole Mount, Mini-U (HAE6026\_)
- Combination GPS/UHF, 403 – 430 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (PMAE4030\_)
- Combination GPS/UHF, 450 – 470 MHz, 1/4 Wave, Through-Hole Mount, Mini-U (PMAE4031\_)
- Combination GPS/UHF, 406 – 420 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (PMAE4032\_)
- Combination GPS/UHF, 450 – 470 MHz, 3.5 dB Gain, Through-Hole Mount, Mini-U (PMAE4033\_)
- Combination GPS/UHF, 450 – 470 MHz, 5.0 dB Gain, Through-Hole Mount, Mini-U (PMAE4034\_)
- Fixed Mount GPS Active Antenna (PMAN4000\_)
- Window Mount GPS Active Antenna (PMAN4001\_)
- Magnetic Mount GPS Active Antenna (PMAN4002\_)

### ■ Audio

---

- Telephone Style Handset (HMN4098\_)
- Desktop Microphone (RMN5050\_)
- Compact Microphone (RMN5052\_)
- Heavy Duty Microphone with Enhanced Audio (RMN5053\_)
- Visor Microphone with Enhanced Audio (RMN5054\_)
- Keypad Microphone with Enhanced Audio (RMN5065\_)

## ■ Cables

---

- Power Cable to Battery, 10-foot (3-metre) Cable, 15 amp (1 – 25 Watt) (HKN4137\_)
- Power Cable to Battery, 10-foot (3-metre) Cable, 20 amp (1 – 45 Watt) (HKN4191\_)
- Power Cable to Battery, 20-foot (6-metre) Cable, 20 amp (1 – 45 Watt) (HKN4192\_)
- Mobile and Repeater Rear Accessory Connector Universal Cable (PMKN4018\_)
- Ignition Sense Cable (RKN4136\_)

## ■ Desktop Accessories

---

- Radio Power Cable for GPN6145 (GKN6266\_)
- Desktop Tray without Speaker (GLN7318\_)
- Desktop Tray with Speaker (RSN4005\_)
- Switchmode Power Supply (1 – 25 Watt Models) (CE marked) (GPN6145\_)
- Mobile Mini-U Antenna Adapter, 8-foot (2.4-metre) Cable (HKN9088\_)
- Power Supply and Cable (25 – 60 Watt Models) (HPN4007\_)

- Power Supply and Cable (1 – 25 Watt Models) (HPN4008\_)
- US Line Cord (NTN7373\_)
- Euro Line Cord (NTN7374\_)
- UK Line Cord (NTN7375\_)
- Argentina Line Cord (NTN9246\_)
- Hardware Kit for Rear Accessory Connector (PMLN5072\_)

## ■ Mounting Kits

---

- In Dash (DIN) Mounting Kit (RLN5933\_)
- Low Profile Trunnion Kit (RLN6077\_)
- High Profile Trunnion Kit (RLN6078\_)
- Key Lock Trunnion Kit (RLN6079\_)

## ■ Remote Mount Adaptor Kits

---

- Mobile Remote Mount 5-Meter Cable Kit (PMKN4073\_)
- Mobile Remote Mount 3-Meter Cable Kit (PMKN4074\_)
- Mobile Remote Mount Adaptor Kit (PMLN5404\_)

## ■ Speakers

---

- 13-Watt External Speaker (RSN4002\_)
- 7.5-Watt External Speaker (RSN4003\_)
- 5-Watt External Speaker (RSN4004\_)

## ■ Miscellaneous Accessories

---

- Display Mobile Button Kit (Includes buttons for Monitor, Scan, Backlight, and Talkaround) (HKNL4289\_)
- PL259/Mini-U Antenna Adapter, 8-foot (2.4-metre) Cable (HKN9557\_)
- Microphone Hang Up Clip (All Microphones) (HLN9073\_)
- Universal Microphone Hang Up Clip (All Microphones) (HLN9414\_)
- Push Button **PTT** (RLN5926\_)

## Limited Warranty

### **MOTOROLA COMMUNICATION PRODUCTS**

#### **I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:**

MOTOROLA SOLUTIONS INC. (“MOTOROLA”) warrants the MOTOROLA manufactured Communication Products listed below (“Product”) against defects in material and workmanship under normal use and service for a period of time from the date of purchase as scheduled below:

|                                  |               |
|----------------------------------|---------------|
| DGM Series Digital Mobile Radios | Two (2) Years |
| Product Accessories              | One (1) Year  |

MOTOROLA, at its option, will at no charge either repair the Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the Product during the warranty period provided it is returned in accordance with the terms of this warranty. Replaced parts or boards are warranted for the balance of the original applicable warranty period. All replaced parts of Product shall become the property of MOTOROLA.

This express limited warranty is extended by MOTOROLA to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no

obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of MOTOROLA.

Unless made in a separate agreement between MOTOROLA and the original end user purchaser, MOTOROLA does not warrant the installation, maintenance or service of the Product.

MOTOROLA cannot be responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system which may use the Product is unique, MOTOROLA disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

#### **II. GENERAL PROVISIONS:**

This warranty sets forth the full extent of MOTOROLA'S responsibilities regarding the Product. Repair, replacement or refund of the purchase price, at MOTOROLA'S option, is the exclusive remedy. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR

INABILITY TO USE SUCH PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW.

### III. STATE LAW RIGHTS:

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSIONS MAY NOT APPLY.

This warranty gives specific legal rights, and there may be other rights which may vary from state to state.

### IV. HOW TO GET WARRANTY SERVICE:

You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and, also, deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location. Warranty service will be provided by MOTOROLA through one of its authorized warranty service locations. If you first contact the company which sold you the Product (e.g., dealer or communication service provider), it can facilitate your obtaining warranty service.

### V. WHAT THIS WARRANTY DOES NOT COVER:

- A) Defects or damage resulting from use of the Product in other than its normal and customary manner.
- B) Defects or damage from misuse, accident, water, or neglect.
- C) Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.
- D) Breakage or damage to antennas unless caused directly by defects in material workmanship.
- E) A Product subjected to unauthorized Product modifications, disassembles or repairs (including, without limitation, the addition to the Product of non-MOTOROLA supplied equipment) which adversely affect performance of the Product or interfere with MOTOROLA's normal warranty inspection and testing of the Product to verify any warranty claim.
- F) Product which has had the serial number removed or made illegible.
- G) Rechargeable batteries if:
  - (1) any of the seals on the battery enclosure of cells are broken or show evidence of tampering.
  - (2) the damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.
- H) Freight costs to the repair depot.
- I) A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA's published specifications or the FCC type acceptance labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.
- J) Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.
- K) Normal and customary wear and tear.

## VI. PATENT AND SOFTWARE PROVISIONS:

MOTOROLA will defend, at its own expense, any suit brought against the end user purchaser to the extent that it is based on a claim that the Product or parts infringe a United States patent, and MOTOROLA will pay those costs and damages finally awarded against the end user purchaser in any such suit which are attributable to any such claim, but such defense and payments are conditioned on the following:

- A) that MOTOROLA will be notified promptly in writing by such purchaser of any notice of such claim;
- B) that MOTOROLA will have sole control of the defense of such suit and all negotiations for its settlement or compromise; and
- C) should the Product or parts become, or in MOTOROLA's opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit MOTOROLA, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes non-infringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by MOTOROLA.

MOTOROLA will have no liability with respect to any claim of patent infringement which is based upon the combination of the Product or parts furnished hereunder with software, apparatus or devices not furnished by MOTOROLA, nor will MOTOROLA have any liability for the use of ancillary equipment or software not furnished by MOTOROLA which is attached to or used in connection with the Product. The foregoing states the entire liability of MOTOROLA with respect to infringement of patents by the Product or any parts thereof.

Laws in the United States and other countries preserve for MOTOROLA certain exclusive rights for copyrighted MOTOROLA software such as the exclusive rights to reproduce in copies and distribute copies of such MOTOROLA software. MOTOROLA software may be used in only the Product in which the software was originally embodied and such software in such Product may not be replaced, copied, distributed, modified in any way, or used to produce any derivative thereof. No other use including, without limitation, alteration, modification, reproduction, distribution, or reverse engineering of such MOTOROLA software or exercise of rights in such MOTOROLA software is permitted. No license is granted by implication, estoppel or otherwise under MOTOROLA patent rights or copyrights.

## VII. GOVERNING LAW:

This Warranty is governed by the laws of the State of Illinois, U.S.A.

---

## Notes



Motorola Solutions, Inc.  
1303 East Algonquin Road  
Schaumburg, Illinois 60196 U.S.A.

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners.

© 2011–2015 Motorola Solutions, Inc. All rights reserved.

June 2015.

[www.motorolasolutions.com/motrbo](http://www.motorolasolutions.com/motrbo)



68012005043-F