


PROFESSIONAL DIGITAL TWO-WAY RADIO

# MOTOTRBO™ DP2600

## LIMITED KEYPAD PORTABLE

# USER GUIDE

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This User Guide contains all information you need to use the MOTOTRBO DP2600 Digital Portable Radio.


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# Notes

# Important Safety Information

## Product Safety and RF Exposure Compliance




Before using this product, read the operating instructions for safe usage contained in the Product Safety and RF Exposure booklet enclosed with your radio.

**ATTENTION!**

**This radio is restricted to occupational use only to satisfy FCC/ICNIRP RF energy exposure requirements.** Before using this product, read the RF energy awareness information and operating instructions in the Product Safety and RF Exposure for Portable Two-Way Radios (Motorola Publication part number 6864117B25) to ensure compliance with RF energy exposure limits.

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

http://www.motorolasolutions.com/governmentandenterprise

# Firmware Version

All the features described in the following sections are supported by the radio's software version **R02.04.00.**

See ***Checking the Firmware Version and Codeplug Version and Codeplug Version*** on page 79 to determine your radio's software version.

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.

# Handling Precautions

The MOTOTRBO DP2600 Portable Radio meets IP55 specifications with antenna attached, allowing the radio to withstand adverse field conditions such as being used in rain or dusty environment.

- If the radio has been exposed to water or rain, shake the radio well to remove any water that may be trapped inside the speaker grille, microphone port and aesthetic cover (if applicable). Trapped water in speaker grille and microphone port could cause decreased audio performance. If aesthetic cover is attached onto radio, trapped water in aesthetic cover could cause corrosion on the slim connector interface gold contacts.
- If the radio's battery contact area has been exposed to water, clean and dry battery contacts on both the radio and the battery before attaching the battery to the radio. The residual water could short-circuit the radio.
- If the radio has been exposed to corrosive substance (e.g.saltwater), rinse the radio and battery in fresh water then dry the radio and battery.
- To clean the exterior surfaces of the radio, use a diluted solution of mild dishwashing detergent and fresh water (i.e. one teaspoon of detergent to one gallon of water).
- The radio with antenna attached properly is designed to be protected against dust and low pressure jets of water projected with nozzle 6.3mm diameter at flow rate of 12.5 l/min, with water pressure at 30 kN/m2 and from a distance of 2.5m to 3m for at least 3 min. Exceeding either maximum limit or use without antenna may result in damage to the radio.
- When cleaning the radio, do not use a high pressure jet spray on the radio as this may cause to leak.



Caution

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

# Getting Started

Take a moment to review the following:

How to Use This Guide . . . . . page 1
What Your Dealer/System Administrator Can Tell You . . . . . page 1

## How to Use This Guide

This User Guide covers the basic operation of the MOTOTRBO Portables.

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.

Throughout this publication, the icons below are used to indicate features supported in either the conventional Analog mode or conventional Digital mode:



Indicates a conventional Analog Mode-Only feature.



Indicates a conventional Digital Mode-Only feature.

For features that are available in **both** conventional Analog and Digital modes, **no** icon is shown.

For features that are available in a conventional multi-site mode, see ***IP Site Connect*** on page 13 for more information.

Selected features are **also** available on the single-site trunking mode, Capacity Plus. See ***Capacity Plus*** on page 13 for more information.

Selected features are **also** available in the multi-site trunking mode, Linked Capacity Plus. See ***Linked Capacity Plus*** on page 14 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?
- What are the best radio usage practices for effective communication?
- What maintenance procedures will help promote longer radio life?

# Preparing Your Radio for Use

Assemble your radio by following these steps:


Charging the Battery . . . . . page 2
Attaching the Battery . . . . . page 3
Attaching the Antenna . . . . . page 3
Attaching the Belt Clip . . . . . page 4
Attaching the Universal Connector Cover (Dust Cover) . . . . . page 4
Powering Up the Radio . . . . . page 5
Adjusting the Volume . . . . . page 6


## Charging the Battery

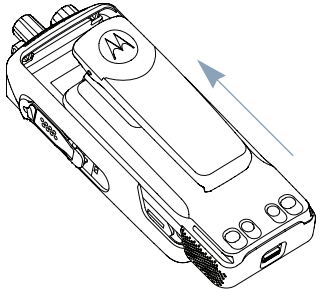
Your radio is powered by aNickel Metal-Hydride (NiMH) or Lithium-Ion (Li-Ion) battery. To avoid damage and comply with warranty terms, charge the battery using a Motorola charger *exactly* as described in the charger user guide.

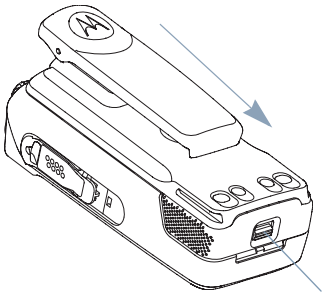
Charge a new battery 14 to 16 hours before initial use for best performance.

**IMPORTANT**: **ALWAYS** charge your IMPRES battery with an IMPRES charger for optimized battery life and valuable battery data. IMPRES batteries charged exclusively with IMPRES chargers receive a 6-month capacity warranty extension over the standard Motorola Premium battery warranty duration.

## Attaching the Battery

Align the battery with the rails on the back of the radio. Press the battery firmly, and slide upward until the latch snaps into place.

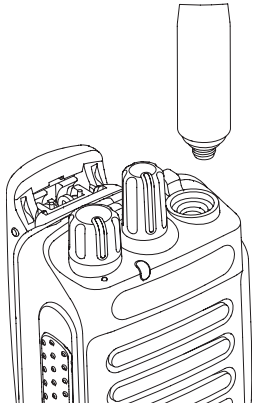





*To remove the battery, turn the radio off. Move the battery latch into unlock position and hold, and slide the battery down and off the rails.*

## Attaching the Antenna

With the radio turned off, set the antenna in its receptacle and turn clockwise.



*To remove the antenna, turn the antenna counterclockwise.*

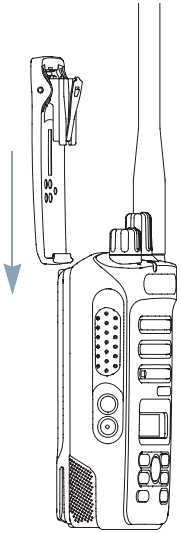
Caution

If antenna needs to be replaced, ensure that only MOTOTRBO antennas are used. Neglecting this will damage your radio.

## Attaching the Belt Clip

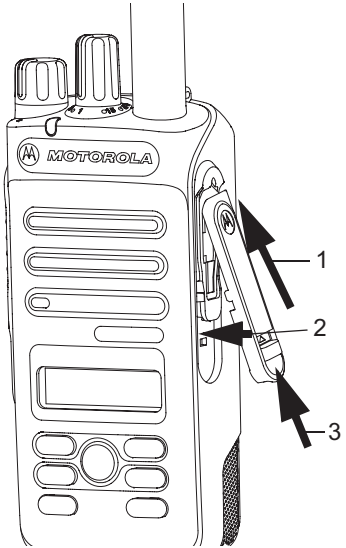
Align the grooves on the clip with those on the battery and press downward until you hear a click.

*To remove the clip, press the belt clip tab away from the battery using a key. Then slide the clip upward and away from the radio.*



## Attaching the Universal Connector Cover (Dust Cover)

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




Insert the slanted end of the cover into the slots above the universal connector. Press downward on the cover to seat the dust cover properly on the Universal Connector.

Secure the dust cover to the radio by pushing the latch upwards.

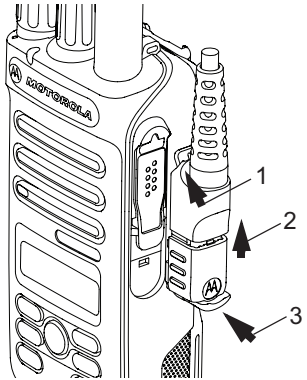
*To remove the dust cover, push the latch downwards. Lift the cover up and slide down the dust cover from the universal connector to remove it.*

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

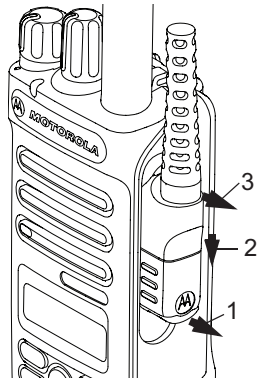
## Attaching the Accessory Connector

The accessory connector is to be secured to the universal connector on the antenna side of the radio.

To attach the accessory connector, refer to the steps shown in the diagram.



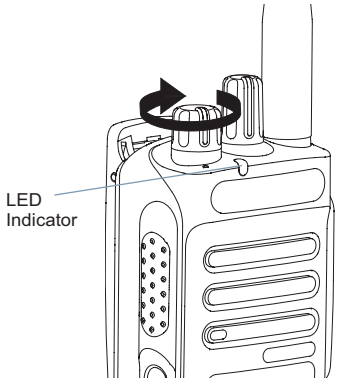

*To remove the accessory connector, refer to the steps shown in the diagram.*




## Powering Up the Radio

Rotate the **On/Off/Volume Control Knob** clockwise until you hear a click. You see MOTOTRBO (TM) on the radio's display momentarily, followed by a welcome message.

The LED lights up solid green 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 indicator is disabled (see Turning the LED Indicator On or Off on page 73).

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 Tones/ Alerts On or Off on page 69).

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

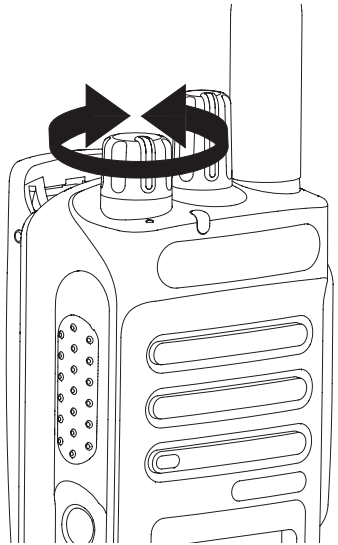
*To turn off the radio, rotate this knob counterclockwise until you hear a click. You see a brief* `Powering Down` *on the radio's display.*

## Adjusting the Volume

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

*To decrease the volume, turn this knob counterclockwise.*

**NOTE:** Your radio can be programmed to have a minimum volume offset where the volume level cannot be turned down fully. Check with your dealer or system administrator for more information.

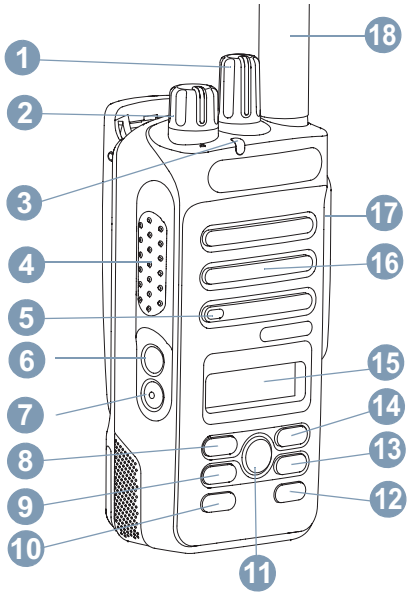


# Identifying Radio Controls

Take a moment to review the following:

Radio Controls . . . . . page 8
Programmable Buttons . . . . . page 9
Accessing the Programmed Functions . . . . . page 11
Push-To-Talk (PTT) Button . . . . . page 11
Switching Between Conventional Analog and Digital Mode . . . . . page 12
IP Site Connect . . . . . page 13
Capacity Plus . . . . . page 13
Linked Capacity Plus . . . . . page 14

## Radio Controls




1. Channel Selector Knob
2. On/Off/Volume Control Knob
3. LED Indicator
4. Push-to-Talk (**PTT**) Button
5. Microphone
6. Side Button 1*
7. Side Button 2*
8. Left Navigation Button
9. Menu Button
10. Front Button P1*
11. OK Button
12. Front Button P2*
13. Back/Home Button
14. Right Navigation Button
15. Display
16. Speaker
17. Universal Connector for Accessories
18. Antenna

** These buttons are programmable.*

## Programmable Buttons

Your dealer can program the programmable buttons as shortcuts to **radio functions** or **preset channels/groups** depending on the duration of a button press:

- Short press – Pressing and releasing rapidly.
- Long press – Pressing and holding for the programmed duration.
- Hold down – Keeping the button pressed.

**NOTE:** The programmed duration of a button press is applicable for all assignable radio/utility functions or settings. See *Emergency Operation* on page 46 for more information on the programmed duration of the Emergency button.

### Assignable Radio Functions

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

**Call Alert** – Direct access to the radio contacts list to select a radio contact to send a call alert to.

**Call Forwarding** – Toggles Call Forwarding on or off.

**Call Log** – Selects the call log list.

**Channel Announcement** – Plays zone and channel announcement voice messages for the current channel.

**Emergency** – Depending on the programming, initiates or cancels an emergency alarm or call.

**Intelligent Audio On/Off** – Toggles intelligent Audio on or off.

**Manual Site Roam***‡ – Starts the manual site search.

**Mic AGC On/Off** – Toggles the internal microphone automatic gain control (AGC) on or off.

**Monitor** – Monitors a selected channel for activity.

**Nuisance Channel Delete***‡ – Temporarily removes an unwanted channel, except for the Selected Channel, from the scan list. The Selected Channel refers to the user's selected zone/channel combination from which scan is initiated.

* *Not applicable in Capacity Plus*
‡ *Not applicable in Linked Capacity Plus*

**One Touch Access** – Directly initiates a predefined Private or Group Call or a Call Alert or a Quick Text message.

**Permanent Monitor***‡ – Monitors a selected channel for all radio traffic until function is disabled.

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

**Radio Alias and ID** – Provides radio alias and ID.

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

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

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

**Repeater/Talkaround***‡ – Toggles between using a repeater and communicating directly with another radio.

**Scan***‡ – Toggles scan on or off.

**Site Lock On/Off***‡ – Toggles the automatic site roam on or off.

** Not applicable in Capacity Plus*
*‡ Not applicable in Linked Capacity Plus*

**Transmit Interrupt Remote Dekey** – Stops the transmission of a remote monitored radio without giving any indicators, or an ongoing interruptible call to free the channel. (A Software License Key sold separately is required to use this feature.)

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

**Voice Announcement On/Off** – Toggles Voice Announcement on or off.

**Voice Operating Transmission (VOX)** – Toggles VOX on or off.

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

### Assignable Settings or Utility Functions

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

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

**Backlight brightness** – Adjusts the brightness level.

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

**Squelch** – Toggles squelch level between tight and normal.

## Accessing the Programmed Functions

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

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

**OR**



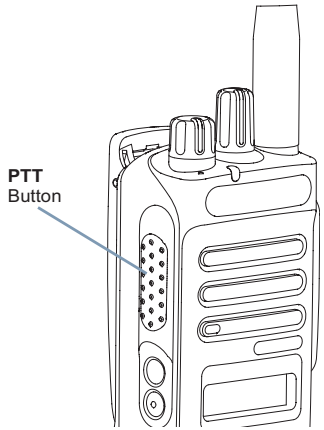

- Use the Menu Navigation Buttons as follows:

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 OK 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.

**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 radio serves two basic purposes:




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

  Press and hold 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 26).

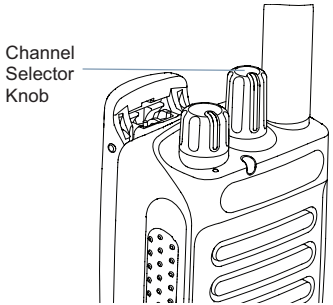
*If the Talk Permit Tone (see **Turning the Talk Permit Tone On or Off** on page 70) or the **PTT** Sidetone is enabled, wait until the short alert tone ends before talking.*

*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 a continuous talk prohibit tone, if your call is interrupted, indicating that you should release the PTT button, for example when the radio receives an Emergency Call.*

## Switching Between Conventional Analog and Digital Mode

Each channel in your radio can be configured as a conventional analog or conventional digital channel. Use the Channel Selector Knob to switch between an analog or a digital channel.




When switching from digital to analog mode, certain features are unavailable. Icons for the digital features (such as Messages) reflect this change by appearing ‘greyed out’. Disabled features are hidden in the menu.

Your radio also has features available in both analog and digital mode. However, the minor differences in the way each feature works does **NOT** affect the performance of your radio.

Your radio also switches between digital and analog modes during a dual mode scan (see *Scan* on page 35).

## IP Site Connect

This feature allows your radio to extend conventional communication beyond the reach of a single site, by connecting to different available sites which are connected via an Internet Protocol (IP) network.

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

If the radio is set to do this automatically, it scans through all available sites when the signal from the current site is weak or when the radio is unable to detect any signal from the current site. It then locks on to the repeater with the strongest Received Signal Strength Indicator (RSSI) value.

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

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

Channels with this feature enabled can be added to a particular roam list. The radio searches the channel(s) in the Members roam list during the automatic roam operation to locate the best site.

A roam list supports a maximum of 16 channels (including the Selected Channel).

You cannot manually add or delete an entry to the roam list. A Software License Key sold separately is required to use this feature

Check with your dealer or system administrator for more information.

## Capacity Plus

Capacity Plus is a single-site trunking configuration of the MOTOTRBO radio system, which uses a pool of channels to support hundreds of users and up to 254 Groups. This feature allows your radio to efficiently utilize the available number of programmed channels while in Repeater Mode.

Icons of features not applicable to Capacity Plus are not available in the menu. You hear a negative indicator tone if you try to access a feature not applicable to Capacity Plus via a programmable button press.

Your radio also has features that are available in conventional digital mode, and Capacity Plus. However, the minor differences in the way each feature works does **NOT** affect the performance of your radio. A Software License Key sold separately is required to use this feature.

Check with your dealer or system administrator for more information on this configuration.

## Linked Capacity Plus

Linked Capacity Plus is a multi-site multi-channel trunking configuration of the MOTOTRBO radio system, combining the best of both Capacity Plus and IP Site Connect configurations.

Linked Capacity Plus allows your radio to extend trunking communication beyond the reach of a single site, by connecting to different available sites which are connected via an Internet Protocol (IP) network. It also provides an increase in capacity by efficiently utilizing the combined available number of programmed channels supported by each of the available sites.

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

If the radio is set to do this automatically, it scans through all available sites when the signal from the current site is weak or when the radio is unable to detect any signal from the current site. It then locks on to the repeater with the strongest Received Signal Strength Indicator (RSSI) value.

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

Any channel with Linked Capacity Plus enabled can be added to a particular roam list. The radio searches these channels during the automatic roam operation to locate the best site.

**NOTE:** You cannot manually add or delete an entry to the roam list. Check with your dealer or system administrator for more information.

Similar to Capacity Plus, icons of features not applicable to Linked Capacity Plus are not available in the menu. You hear a negative indicator tone if you try to access a feature not applicable to Linked Capacity Plus via a programmable button press. A Software License Key sold separately is required to use this feature.

Check with your dealer or system administrator for more information on this configuration.

## Identifying Status Indicators

Your radio indicates its operational status through the following:


Identifying Status Indicators. . . . . page 15
Call Icons. . . . . page 16
Advanced Menu Icons. . . . . page 17
Mini Notice Icons . . . . . page 17
Sent Item Icons . . . . . page 18
Audio Tones. . . . . page 19
Indicator Tones . . . . . page 20


## Display Icons

The 132 x 36 pixels, monochrome display, liquid crystal display (LCD) of your radio shows radio status, text entries, and menu entries.

The following are icons that appear on the status bar at the top of the radio's display. Icons are displayed on the status bar, arranged left-to-right, in order of appearance/usage.



**Received Signal Strength Indicator (RSSI)**
The number of bars displayed represents the radio signal strength. Four bars indicate the strongest signal. The icon is only displayed while receiving.



**Battery**
The number of bars (0 – 4) shown indicates the charge remaining in the battery. Blinks when the battery is low.



**Emergency**
Radio is in emergency mode.



**Notification**
Notification List has one or more missed events.



**Scan***‡
Scan feature is enabled.



**Scan – Priority 1***‡
Radio detects activity on channel/group designated as Priority 1

**Scan Priority 2***‡
Radio detects activity on channel/group designated as Priority 2.

**Vote Scan**
Vote scan feature is enabled.

OR

**Monitor**
Selected channel is being monitored.

**Talkaround***‡
In the absence of a repeater, radio is currently configured for direct radio to radio communication.

**Site Roaming***
The site roaming feature is enabled.

**Secure**
The Privacy feature is enabled.

**Unsecure**
The Privacy feature disabled.

**Tones Disabled**
Tones are turned off.

**Power Level**
Radio is set at Low Power

OR

Radio is set at High Power

** Not applicable in Capacity Plus*
*‡ Not applicable in Linked Capacity Plus*

## Call Icons

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

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

Group Call/All Call
Indicates a Group Call or All Call in progress. In the Contacts list, it indicates a group alias (name) or ID (number)

## Advanced Menu Icons

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



Checkbox (Empty)
Indicates the option is not selected.



Checkbox (Checked)
Indicates the option is selected.



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

## Mini Notice Icons

The following icons appear momentarily on the radio's display after an action to perform task is take.



Successful Transmission (Positive)
Successful action taken.



Failed Transmission (Negative)
Failed action taken.



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

## Sent Item Icons

The following icons appear in the Sent Items folder.

Sent Successfully
The text message is sent successfully.

Send Failed
The text message cannot be sent.

OR

In-Progress

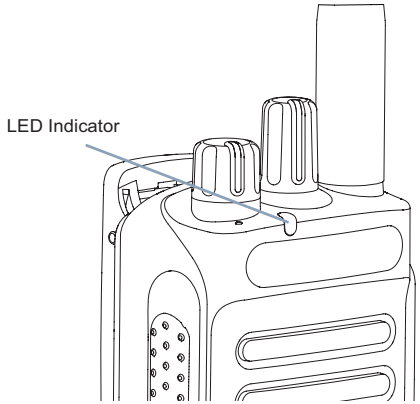
- The text message to a group alias or ID is pending transmission.

OR

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

## LED Indicator

The LED indicator shows the operational status of your radio.




**Blinking red** – Radio is transmitting at low battery condition, receiving an emergency transmission or has failed the self-test upon powering up.

**Solid yellow** – Radio is monitoring a conventional channel. Also indicates fair battery charge when programmable button is pressed.

**Blinking yellow** – Radio is scanning for activity or receiving a Call Alert, or all local Linked Capacity Plus channels are busy.

**Double blinking yellow** – Radio is no longer connected to the repeater while in Capacity Plus or Linked Capacity Plus, all Capacity Plus channels or Linked Capacity Plus channels are currently busy. Auto roaming is enabled, radio is actively searching for a new site. Also indicates radio has yet to respond to a group call alert, or radio is locked.

**Solid green** – Radio is powering up, or transmitting. Also indicates full charge of the battery when programmable button is pressed.

**Blinking green** – Radio is receiving a non-privacy-enabled call or data, or detecting activity over the air.

**Double blinking green** – Radio is receiving a privacy-enabled call or data.

**NOTE:** While in conventional mode, when the LED blinks green, 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.

**NOTE:** For Capacity Plus and Linked Capacity Plus, there is no LED indication when the radio is detecting activity over the air.

## Audio Tones

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

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

## Indicator Tones

High pitched tone ☐ Low pitched tone ■



Positive Indicator Tone



Negative Indicator Tone

# Making and Receiving Calls

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

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


Selecting a Zone . . . . . page 21
Selecting a Channel. . . . . page 22
Receiving and Responding to a Radio Call . . . . . page 22
Making a Radio Call. . . . . page 26
Stopping a Radio Call . . . . . page 29
Talkaround . . . . . page 30
Monitoring Features. . . . . page 30

## Selecting a Zone

A zone is a group of channels. Your radio supports up to 128 channels and 50 zones, with a maximum of 128 channels per zone.

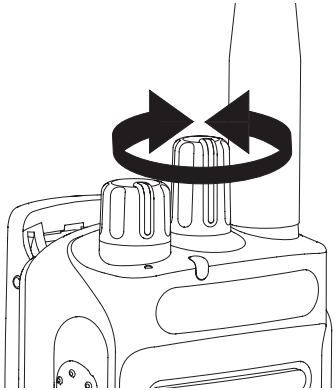
Use the following procedure to select a zone.

**Procedure:**
Press the programmed Zone button and proceed to Step 3.
**OR**
Follow the procedure below.

1. ⊞ to access the menu.
2. ◄ or ► to `Zone` and press OK to select.
3. The current zone is displayed and indicated by a ✓.
4. ◄ or ► to the required zone and press OK to select.
5. The display shows `<Zone> Selected` momentarily and returns to the selected zone screen.

## Selecting a Channel

Transmissions are sent and received on a channel. Depending on your radio's configuration, each channel may have been programmed differently to support different groups of users or supplied with different features. After selecting the relevant Zone, select the relevant channel you require to transmit or receive on.



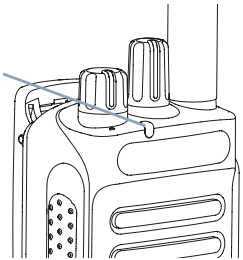
**Procedure:**

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

## Receiving and Responding to a Radio Call

Once the channel, subscriber ID or group ID is displayed, you can proceed to receive and respond to calls.

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




**NOTE:** The LED lights up solid green while the radio is transmitting and double blinks green when the radio is receiving a privacy-enabled call.
To unscramble a privacy-enabled call, your radio must have the same Privacy Key, OR the same Key Value and Key ID (programmed by your dealer), as the transmitting radio (the radio you are receiving the call from).

See *Privacy* on page 60 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 LED blinks green.
2. The Group Call icon appears in the top right corner. The first text line shows the caller alias. The second text line displays the group call alias. Your radio unmutes and the incoming call sounds through the radio speaker.
3. To respond, hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
4. 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.
   Press the **PTT** button to respond to the call.
   **OR**
   If the Voice Interrupt feature is enabled, press the **PTT** button to stop the current call from the transmitting radio and free the channel for you to talk/respond.

5 The LED lights up solid green.

6 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
**OR**
Wait for the **PTT** Sidetone to finish (if enabled) and speak clearly into the microphone.

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

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

*See **Making a Group Call** on page 26 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 the 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.

**Procedure:**
When you receive a Private Call:

1 Depending on how your radio is programmed:
The LED lights up solid yellow momentarily. Then, the LED blinks green.
**OR**
The LED blinks green.

2 The first text line shows private call icon. The second text line displays the private call alias. Your radio unmutes and the incoming call sounds through the radio speaker.

3 To respond, hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

4 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.
Press the **PTT** button to respond to the call.
**OR**
If the Voice Interrupt feature is enabled, press the **PTT** button to stop the current call from the transmitting radio and free the channel for you to talk/respond.

5 The LED lights up solid green.

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

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

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

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

*See **Making a Private Call** on page 27 for details on making a Private Call.*

### Receiving an All Call

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

**Procedure:**
When you receive an All Call:

1 A tone sounds and the LED blinks green.

2 The Group Call icon appears in the top right corner. The first text line shows the caller alias. The second text line displays `All Call`. Your radio unmutes and the incoming call sounds through the radio speaker.

3 Once the All Call ends, the radio returns to the previous screen before receiving the call. An all call does not wait for a predetermined period of time before ending.

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 an All Call.*

*See **Making an All Call** on page 28 for details on making an All Call.*

**NOTE:** The radio stops receiving the All Call if you switch to a different channel while receiving the call.
During an All Call, you will not be able to use any programmed button functions until the call ends.

### Receiving and Responding to a Selective Call

A Selective Call is a call from an individual radio to another individual radio. It is a Private Call on an analog system.

**Procedure:**
When you receive a Selective Call:

1. The LED blinks green.
2. The Private Call icon appears in the top right corner. The first text line shows the caller alias or `Selective Call` or `Alert with Call`. Your radio unmutes and the incoming call sounds through the radio's speaker.
3. To respond. hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
4. 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.
   Press the **PTT** button to respond to the call.
5. The LED lights up solid green.
6. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
7. Release the **PTT** button to listen.
8. If there is no voice activity for a predetermined period of time, the call ends.
9. You hear a short tone. The display shows `Call Ended`.

**NOTE:** *See Making a Selective Call on page 28 for details on making a Private Call.*

## Making a Radio Call

You can select a channel, subscriber ID, or group by using:

- The Channel Selector Knob
- A programmed **One Touch Access** button
- A programmable button – This method is for Phone Calls only.
- The Contacts list (see ***Contacts Settings*** on page 38)

**NOTE:** Your radio must have the Privacy feature enabled on the channel to send a privacy-enabled transmission. Only target radios with the same Privacy Key OR the same Key Value and Key ID as your radio will be able to unscramble the transmission.

See *Privacy* on page 60 for more information.

The One Touch Access feature allows you to make a Group or Private Call to a predefined ID easily. This feature can be assigned to a short or long programmable button press.You can **ONLY** have one ID assigned to a **One Touch Access** button. Your radio can have multiple **One Touch Access** buttons programmed.

### Making a Call with the Channel Selector Knob

#### *Making a Group Call*

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

**Procedure:**

1. Select the channel with the active subscriber alias or ID. See ***Selecting a Channel*** on ***page 21***.
   **OR**
   Press the programmed **One Touch Access** button.
2. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
3. Press the **PTT** button to make the call. The LED lights up solid green. The first text line shows the group call icon. The second text line shows the group call alias,
4. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
   **OR**
   Wait for the **PTT** Sidetone to finish (if enabled) and speak clearly into the microphone.
5. Release the **PTT** button to listen.When the target radio responds, the LED blinks green. You see the Group Call icon, the group alias or ID, and transmitting radio alias or ID on your display.

6 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.

7 Radio returns to the screen you were on prior to initiating the call.

*You can also make a Group Call via Contacts (see **Making a Group Call from Contacts** on page 39).*

### *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.

There are two types of Private Calls. The first type, where a radio presence check is performed prior to setting up the call, while the other sets up the call immediately.

Only **one** of these call types can be programmed to your radio by your dealer.

You hear a negative indicator tone, when you make a Private Call via the Contacts list, Call Log, **One Touch Access** button, the programmed number keys, or the Channel Selector Knob, if this feature is not enabled.

Use the Text Message or Call Alert features to contact an individual radio. See ***Call Alert Operation*** on page 45 for more information.

**Procedure:**

1 Select the channel with the active subscriber alias or ID. See ***Selecting a Channel*** on ***page 21***.
**OR**
Press the programmed **One Touch Access** button.

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

3 Press the **PTT** button to make the call. The LED lights up solid green. The first text line shows the private call icon. The second text line displays the private call alias.

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

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

6 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.

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

*You can also make a Private Call via Contacts (see **Making a Private Call from Contacts** on page 39).*

### *Making an All Call*

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

**Procedure:**

1. Select the channel with the active subscriber alias or ID. See ***Selecting a Channel*** on ***page 21***.
2. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
3. Press the **PTT** button to make the call. The LED lights up solid green. The first text line shows the `All Call` icon. The second text line displays the `All Call` alias.
4. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
   **OR**
   Wait for the **PTT** Sidetone to finish (if enabled) and speak clearly into the microphone.

*Users on the channel cannot respond to an All Call.*

### *Making a Selective Call*

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

**Procedure:**

1. Select the channel with the active subscriber alias or ID. See ***Selecting a Channel*** on ***page 21***.
2. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
3. Press the **PTT** button to make the call. The LED lights up solid green. The Private Call icon appears in the top right corner. The first text line shows the subscriber alias. The second text line displays the call status. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
   **OR**
   Wait for the **PTT** Sidetone 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.

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

## Stopping a Radio Call

This feature allows you to stop an ongoing Group or Private Call to free the channel for transmission. For example, when a radio experiences a “stuck microphone” condition where the **PTT** button is inadvertently pressed by the user.

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

**Procedure:**

While on the required channel:

1 Press the programmed **Transmit Interrupt Remote Dekey** button.

2 The display shows `Remote Dekey`.

3 Wait for acknowledgment.

4 The radio sounds a positive indicator tone and the display shows `Remote Dekey Success`, indicating that the channel is now free.
**OR**
The radio sounds a negative indicator tone and the display shows `Remote Dekey Failed`.

*On the interrupted radio, the display shows `Call Interrupted`, and the radio sounds a negative indicator tone until you release the **PTT** button, if it is transmitting an interruptible call that is stopped via this feature.*

## Talkaround

You can continue to communicate when your repeater is not operating, or when your radio is out of the repeater's range but within talking range of other radios.

This is called "talkaround".

**NOTE:** This feature is not applicable in Capacity Plus and Linked Capacity Plus.

**Procedure:**
Press the programmed **Repeater/Talkaround** button to toggle between talkaround and repeater modes.
**OR**
Follow the procedure below.

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. Press OK to enable Talkaround. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable Talkaround. The ✓ disappears from beside Enabled.
5. The screen automatically returns to the previous menu.

*The Talkaround setting is retained even after powering down*

**NOTE:** At Step 4, you can also use ◄ or ► to change the selected option.

## Monitoring Features

### Monitoring a Channel

Use the Monitor feature to make sure a channel is clear before transmitting.

**NOTE:** This feature is not applicable in Capacity Plus and Linked Capacity Plus.

**Procedure:**

1. Press and hold the programmed **Monitor** button and listen for activity.
2. The Monitor icon appears on the status bar and the LED lights up solid yellow.
3. You hear radio activity or total silence, depending on how your radio is programmed.
4. When you hear "white noise" (that is, the channel is free), press the **PTT** button to talk and release it to listen.

### Permanent Monitor

Use the Permanent Monitor feature to continuously monitor a selected channel for activity.

**NOTE:** This feature is not applicable in Capacity Plus and Linked Capacity Plus.

**Procedure:**

1. Press the programmed **Permanent Monitor** button.
2. Radio sounds an alert tone, the LED lights up solid yellow, and the display shows `Permanent Monitor On`. The Monitor icon appears on the status bar.
3. Press the programmed **Permanent Monitor** button to exit Permanent Monitor mode.
4. Radio sounds an alert tone, the LED turns off, and display shows `Permanent Monitor Off`.

**NOTE**:Radio users who switch from analog to digital channels often assume that the lack of static on a digital channel is an indication that the radio is not working properly. This is not the case. Digital technology quiets the transmission by removing the noise from the signal and allowing only the clear voice or data information to be heard.

# Advanced Features

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


Radio Check . . . . . page 32
Scan Lists . . . . . page 33
Scan . . . . . page 35
Vote Scan . . . . . page 38
Contacts Settings . . . . . page 38
Call Indicator Settings . . . . . page 41
Call Log Features . . . . . page 43
Call Alert Operation . . . . . page 45
Emergency Operation . . . . . page 46
Text Message Features . . . . . page 52
Analog Status Update . . . . . page 59
Privacy . . . . . page 60
Dual Tone Multi Frequency (DTMF) . . . . . page 61
Multi-Site Controls . . . . . page 61
Security . . . . . page 64
Lone Worker . . . . . page 66
Password Lock Features . . . . . page 66
Notification List . . . . . page 68
Utilities . . . . . page 69
Front Panel Programming (FPP) . . . . . page 79


## 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

**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 OK to select.
3. The display shows transitional mini notice, indicating the request is in progress. The LED lights up solid green.
4. Wait for acknowledgement.
5. If successful, a positive indicator tone sounds and the display shows positive mini notice.
   **OR**
   If unsuccessful, a negative indicator tone sounds and the display shows negative mini notice.
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 transitional mini notice, indicating the request is in progress. The LED lights up solid green.
6. Wait for acknowledgement.
7. If successful, a positive indicator tone sounds and the display shows positive mini notice.
   **OR**
   If unsuccessful, a negative indicator tone sounds and the display shows negative mini notice.
8. Radio returns to the subscriber alias or ID screen.

*If the button is pressed when the radio is waiting for acknowledgement, a tone sounds, and the radio terminates all retries and exits Radio Check mode.*

## Scan Lists

Scan lists are created and assigned to individual channels/ groups. Your radio scans for voice activity by cycling through the channel/group sequence specified in the scan list for the current channel/group.

Your radio can support up to 250 scan lists, with a maximum of 16 members in a list. Each scan list supports a mixture of both analog and digital entries.

You can add, delete, or prioritize channels by editing a scan list.

You can attach a new scan list to your radio via Front Panel Programming.

**NOTE:** This feature is not applicable in Capacity Plus and Linked Capacity Plus.

### Viewing an Entry in the Scan List

**Procedure:**

1. to access the menu.
2. or to Scan and press to select.
3. or to Scan List and press to select.
4. Use or to view each member on the list.

*The priority icon appears left of the member's alias, if set, to indicate whether the member is on a Priority 1 or Priority 2*

*channel list. You **cannot** have multiple Priority 1 or Priority 2 channels in a scan list.*

*There is no priority icon if priority is set to **None**.*

## Editing the Scan List

### *Adding a New Entry to the Scan List*

**Procedure:**

1. MENU to access the menu.
2. ◄ or ► to Scan and press OK to select.
3. ◄ or ► to Scan List and press OK to select.
4. ◄ or ► to Add Member and press OK to select.
5. ◄ or ► to the required alias or ID.
6. ◄ or ► to the required priority level and press OK to select.
7. The display shows positive mini notice, followed immediately by Add Another?.
8. ◄ or ► to Yes and press OK to select, to add another entry, and repeat Steps 5 to 8.
   **OR**
   ◄ or ► to No and press OK to select to save the current list.

### *Deleting an Entry from the Scan List*

**Procedure:**

1. MENU to access the menu.
2. ◄ or ► to Scan and press OK to select.
3. ◄ or ► to Scan List and press OK to select.
4. ◄ or ► to the required alias or ID.
5. Press OK to select.
6. ◄ or ► to Delete and press OK to select.
7. At Delete Entry?, ◄ or ► to Yes and press OK to select, to delete the entry. The display shows positive mini notice.
   **OR**
   ◄ or ► to No and press OK to select to return to the previous screen.
8. Repeat Steps 4 to 9 to delete other entries.

*After deleting all required aliases or IDs, long press BACK to return to the Home screen.*

### *Setting and Editing Priority for an Entry in the Scan List*

**Procedure:**

1. Menu to access the menu.
2. Left or Right to Scan and press OK to select.
3. Left or Right to Scan List and press OK to select.
4. Left or Right to the required alias or ID.
5. Press Menu to select.
6. Left or Right to Edit Priority and press OK to select.
7. Left or Right to the required priority level and press OK to select.
8. The display shows positive mini notice before returning to the previous screen.
9. The priority icon appears left of the member's name.

*There is no priority icon if priority is set to **None**.*

## Scan

When you start a scan, your radio cycles through the programmed scan list for the current channel looking for voice activity.

The LED blinks yellow and the scan icon appears on the status bar.

During a dual mode scan, if you are on a digital channel, and your radio locks onto an analog channel, it automatically switches from digital mode to analog mode for the duration of the call. This is also true for the reverse.

There are two ways of initiating scan:

- **Main Channel Scan (Manual)**: Your radio scans all the channels/groups in your scan list. On entering scan, your radio may – depending on the settings – automatically start on the last scanned "active" channel/group or on the channel where scan was initiated.
- **Auto Scan (Automatic)**: Your radio automatically starts scanning when you select a channel/group that has Auto Scan enabled.

**NOTE:** This feature is not applicable in Capacity Plus and Linked Capacity Plus.

## Starting and Stopping Scan

**Procedure**:
Press the programmed **Scan** button to start or stop Scan.
**OR**
Follow the procedure below.

1. Use the Channel Selector Knob to select a channel programmed with a scan list.
2. ☰ to access the menu.
3. ◄ or ► to `Scan` and press OK to select.
4. ◄ or ► to `Scan State` and press OK to select.
5. ◄ or ► to required scan state and press OK to select.
6. The display shows `Scan On` when scan is enabled. The LED blinks yellow and the scan icon appears.
   **OR**
   The display shows `Scan Off` if scan is disabled. The LED turns off and the scan icon disappears.

*While scanning, the radio will only accept data (e.g. text messagelocation, or PC data) if received on its Selected Channel.*

## Responding to a Transmission During a Scan

During scanning, your radio stops on a channel/group where activity is detected. The radio stays on that channel for a programmed time period known as “hang time”.

**Procedure:**

1. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
   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.
2. Press the **PTT** button during hang time. The LED lights up solid green.
3. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
   **OR**
   Wait for the **PTT** Sidetone to finish (if enabled) and speak clearly into the microphone.
4. Release the **PTT** button to listen.
5. If you do not respond within the hang time, the radio returns to scanning other channels/groups.

## Deleting a Nuisance Channel

If a channel continually generates unwanted calls or noise (termed a “nuisance” channel), you can temporarily remove the unwanted channel from the scan list.

This capability does not apply to the channel designated as the Selected Channel.

**Procedure:**

1. When your radio “locks on to” an unwanted or nuisance channel, press the programmed **Nuisance Channel Delete** button until you hear a tone.
2. Release the **Nuisance Channel Delete** button. The nuisance channel is deleted.

*Deleting a “nuisance” channel is **only** possible through the programmed **Nuisance Channel Delete** button. This feature is **not** accessible through the menu.*

## Restoring a Nuisance Channel

**Procedure:**
To restore the deleted nuisance channel, do **one** of the following:

- Turn the radio off and then power it on again, **OR**
- Stop and restart a scan via the programmed **Scan** button or menu, **OR**
- Change the channel via the Channel Selector Knob.

## Vote Scan

Vote Scan provides you with wide area coverage in areas where there are multiple base stations transmitting identical information on different analog channels.

Your radio scans analog channels of multiple base stations and performs a voting process to select the strongest received signal. Once that is established, your radio unmutes to transmissions from that base station.

The LED blinks yellow and the vote scan icon appears on the status bar.

*To respond to a transmission during a Vote Scan, follow the same procedures as Responding to a Transmission During a Scan on page 36.*

## Contacts Settings

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

Each entry, depending on context, associates with **one** of five types of calls: Group Call, Private Call, All Call, PC Call or Dispatch Call.

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

**NOTE:** If the Privacy feature is enabled on a channel, you can make privacy-enabled Group Call, Private Call, and All Call on that channel. Only target radios with the same Privacy Key OR the same Key Value and Key ID as your radio will be able to unscramble the transmission.

See ***Privacy*** on page 60 for more information.

Your radio supports two Contacts lists, one for Analog contacts and one for Digital contacts, with a maximum of 500 members for each Contacts list.

Each entry within Contacts displays the following information:

- Call Type
- Call Alias
- Call ID

**NOTE:** You can add, or edit subscriber IDs for the Digital Contacts list. Deleting subscriber IDs can only be performed by your dealer.

For the Analog Contacts list, you can only view the subscriber IDs, edit the subscriber IDs, and initiate a Call Alert. Adding and deleting capabilities can only be performed by your dealer.

### Making a Group 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 group alias or ID.
4. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
5. Press the **PTT** button to make the call. The LED lights up solid green.
6. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
   **OR**
   Wait for the **PTT** Sidetone to finish (if enabled) and speak clearly into the microphone.
7. Release the **PTT** button to listen. When any user in the group responds, the LED blinks green. You see the Group Call icon, the group ID, and that user's ID on your display.
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.

### 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 to select.
5. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
6. Press the **PTT** button to make the call. The LED lights up solid green. The display shows the destination alias.

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

8 Release the **PTT** button to listen. When the target radio responds, the LED blinks green and the display shows the transmitting user's ID.

9 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.

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

## Setting Default Contact

**Procedure:**

Follow the procedure below.

1 ▭ to access the menu.

2 ◀ or ▶ to `Contacts` and press OK to select.

3 ◀ or ▶ to the required alias or ID and press OK to select.

4 ◀ or ▶ to `Set as Default` and press OK to select.

5 The radio sounds a positive indicator tone and the display shows positive mini notice.

6 A ✓ appears beside the selected default alias or ID.

## Call Indicator Settings

### Activating and Deactivating Call Ringers for Call Alert

You can select, or turn on or off ringing tones for a received Call Alert.

**Procedure:**

1. ▦ to access the menu.
2. ◀ or ▶ to `Utilities` and press OK to select.
3. ◀ or ▶ to `Radio Settings` and press OK to select.
4. ◀ or ▶ to `Tones/Alerts` and press OK to select.
5. ◀ or ▶ to `Call Ringers` and press OK to select.
6. ◀ or ▶ to `Call Alert` and press OK to select. The current tone is indicated by a ✓.
7. ◀ or ▶ to the required tone and press OK to select. ✓ appears beside selected tone.

**NOTE:** At Step 6, you can also use ◀ or ▶ to change the selected option.

### 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 OK to select.
3. ◀ or ▶ to `Radio Settings` and press OK to select.
4. ◀ or ▶ to `Tones/Alerts` and press OK to select.
5. ◀ or ▶ to `Call Ringers` and press OK to select.
6. ◀ or ▶ to `Private Call`.
7. Press OK to enable Private Call ringing tones. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable Private Call ringing tones. The ✓ disappears from beside Enabled.

**NOTE:** At Step 6, you can also use ◀ or ▶ to change the selected option.

## Activating and Deactivating Call Ringers for Selective Call

You can select, or turn on or off ringing tones for a received Selective Call.

**Procedure:**

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Tones/Alerts` and press OK to select.
5. ◄ or ► to `Call Ringers` and press OK to select.
6. ◄ or ► to `Selective Call` and press OK to select. The current tone is indicated by a ✓.
7. ◄ or ► to the required tone and press OK to select. ✓ appears beside selected tone.

**NOTE:** At Step 6, you can also use ◄ or ► to change the selected option.

## Assigning Ring Styles

You can program your radio to sound one of ten predefined ringing tones when receiving a Call Alert or a Text Messagefrom a particular contact.

**Procedure:**

1. ⊞ to access the menu.
2. ◄ or ► to `Contacts` and press OK to select.The entries are alphabetically sorted.
3. ◄ or ► to the required alias or ID and press OK to select.
4. ◄ or ► to `Edit` and press OK to select.
5. Press ⊞ until display shows `Edit Ringtone` menu.
6. A ✓ indicates the current selected tone.
7. ◄ or ► to the required tone and press OK to select. ✓ appears beside selected tone.
8. The display shows a positive mini notice.

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

### Escalating Alarm Tone Volume

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

**Procedure:**

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Tones/Alerts` and press OK to select.
5. ◄ or ► to `Escalert`.
6. Press OK to enable Escalert. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable Escalert. The ✓ disappears from beside Enabled.

**NOTE:** At Step 5, you can also use ◄ or ► to change the selected option.

## Call Log Features

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

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

- Delete
- View Details

### Viewing Recent Calls

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

**Procedure:**

1. ⊞ to access the menu.
2. ◄ or ► to `Call Log` and press OK to select.
3. ◄ or ► to required list and press OK 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 current selected alias or ID.*

## Deleting a Call from a Call List

**Procedure:**

1. ▣ 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` and press OK to select.
6. Press OK to select `Yes` to delete the entry. The display shows positive mini notice.
   **OR**
   ◀ or ▶ to `No` to return to the previous screen.

*When you select a call list and it contains no entries, the display shows `List Empty`.*

## *Viewing Details from a Call List*

**Procedure:**

1. ▣ to access the menu.
2. ◀ or ▶ to `Call Log` and press OK to select.
3. ◀ or ▶ to the required list and press OK to select.
4. ◀ or ▶ to the required alias or ID and press OK to select.
5. ◀ or ▶ to `View Details` and press OK to select. Display shows details.

## Call Alert Operation

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

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

### Receiving and Responding to a Call Alert

When you receive a Call Alert page, you see the notification list listing a Call Alert with the alias or ID of the calling radio on the display.

**Procedure:**

1. You hear a repetitive tone. The LED blinks yellow.
2. Press the **PTT** button while the display still shows the Call Alert in the Notification List to respond with a Private Call.
   **OR**
   Press ⏎ to exit the Notification List. The alert is moved to the Missed Call Log.

*See **Notification List** on page 68 for details about the Notification List.*

*See **Call Log Features** on page 43 for details about the Missed Call List.*

### Making a Call Alert from the Contacts List

**Procedure:**

1. ☰ to access the menu.
2. ◀ or ▶ to `Contacts` and press OK to select.
3. ◀ or ▶ to the required subscriber alias or ID and press OK to select.
4. ◀ or ▶ to `Call Alert` and press OK to select.
5. The display shows `Call Alert` and the subscriber alias or ID, indicating that the Call Alert has been sent.
6. The LED lights up solid green when your radio is sending the Call Alert.
7. If the Call Alert acknowledgement is received, the display shows positive mini notice.
   **OR**
   If the Call Alert acknowledgement is not received, the display shows negative mini notice.

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

**Procedure:**

1. Press the programmed **One Touch Access** button to make a Call Alert to the predefined alias or ID.
2. The display shows `Call Alert` and the subscriber alias or ID, indicating that the Call Alert has been sent.
3. The LED lights up solid green when your radio is sending the Call Alert.
4. If the Call Alert acknowledgement is received, the display shows positive mini notice.
   **OR**
   If the Call Alert acknowledgement is not received, the display shows negative mini notice.

## Emergency Operation

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

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

- Short press – Between 0.05 seconds and 0.75 seconds
- Long press – Between 1.00 second and 3.75 seconds

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

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

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

**NOTE:** Side Button 1 or Side Button 2 can be programmed as the ***Emergency Button***.

Your radio supports **three** Emergency Alarms:

- Emergency Alarm
- Emergency Alarm with Call

- Emergency Alarm with Voice to Follow 

In addition, each alarm has the following types:

- **Regular** – Radio transmits an alarm signal and shows audio and/or visual indicators.
- **Silent** – Radio transmits an alarm signal without any audio or visual indicators. Radio receives calls without any sound through the radio's speaker, until you press the **PTT** button to initiate the call.
- **Silent with Voice** – Radio transmits an alarm signal without any audio or visual indicators, but allow incoming calls to sound through the radio's speaker.

Only **ONE** of the Emergency Alarms above can be assigned to the programmed **Emergency** button.

## Sending an Emergency Alarm

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

**Procedure:**

1. Press the programmed **Emergency On** button.
2. The display shows `Tx Alarm` and the destination alias. The LED lights up solid green and the Emergency icon appears.
   **OR**
   The display shows `Tx Telegram` and the destination alias. The LED lights up solid green and the Emergency icon appears.
3. When an Emergency Alarm acknowledgment is received, the Emergency tone sounds and the LED blinks green. The display shows `Alarm Sent`.
   **OR**
   If your radio does not receive an Emergency Alarm acknowledgement, and after all retries have been exhausted, a tone sounds and the display shows `Alarm Failed`.
4. Radio exits the Emergency Alarm mode and returns to the Home screen.

*If your radio is set to Silent, it will not display any audio or visual indicators during Emergency mode.*

## Sending an Emergency Alarm with Call

This feature allows you to send an Emergency Alarm to a group of radios. Upon acknowledgement by a radio within the group, the group of radios can communicate over a programmed Emergency channel.

**Procedure:**

1. Press the programmed **Emergency On** button.
2. The display shows `Tx Alarm` and the destination alias. The LED lights up solid green and the Emergency icon appears.
   **OR**
   The display shows `Tx Telegram` and the destination alias. The LED lights up solid green and the Emergency icon appears.
3. When an Emergency Alarm acknowledgment is received, the Emergency tone sounds and the LED blinks green. The display shows `Alarm Sent`.
4. Your radio enters the emergency call mode when the display shows `Emergency` and the destination group alias.
5. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
6. Press **PTT** button to make the call. The LED lights up solid green and the group icon appears on the display.
7. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
   **OR**
   Wait for the **PTT** Sidetone to finish (if enabled) and speak clearly into the microphone.
8. Release the **PTT** button to listen.
   When you receive a group call, the display shows the caller alias and group alias.
9. When the channel is free for you to respond, a short alert tone sounds ( if the Channel Free Indication feature is enabled). Press the **PTT** button to respond.
   **OR**
   Once your call ends, press the programmed **Emergency Off** button to exit the Emergency mode.
10. The radio returns to the Home screen.

*If your radio is set to Silent, it will not display any audio or visual indicators during Emergency mode, or allow any received calls to sound through the radio's speaker, until you press the **PTT** button to initiate the call.*

*If your radio is set to Silent with Voice, it will not display any audio or visual indicators during Emergency mode, but allow incoming calls to sound through the radio's speaker. The indicators will only appear once you press the **PTT** button to initiate, or respond to, the call.*

## Sending an Emergency Alarm with Voice to Follow

This feature allows you to send an Emergency Alarm to a group of radios. Your radio's microphone is automatically activated, allowing you to communicate with the group of radios without pressing the **PTT** button.

This activated microphone state is also known as "hot mic".

If your radio has Emergency Cycle Mode enabled, repetitions of hot mic and receiving period are made for a programmed duration.

**NOTE:** During Emergency Cycle Mode, received calls sound through the radio's speaker.

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

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

**Procedure:**

1. Press the programmed **Emergency On** button.
2. The display shows `Tx Alarm` and the destination alias. The LED lights up solid green and the Emergency icon appears.
   **OR**
   The display shows `Tx Telegram` and the destination alias. The LED lights up solid green and the Emergency icon appears.
3. Once the display shows `Alarm Sent`, speak clearly into the microphone. When hot mic has been enabled, the radio automatically transmits without a **PTT** press until the hot mic duration expires.
   While transmitting, the LED lights up solid green and the Emergency icon appears.
4. The radio automatically stops transmitting when:
   Once the cycling duration between hot mic and receiving calls expires, if Emergency Cycle Mode is enabled.
   **OR**
   Once the hot mic duration expires, if Emergency Cycle Mode is disabled.
5. To transmit again, press the **PTT** button.
   **OR**
   Press the programmed **Emergency Off** button to exit the Emergency mode.
6. The radio returns to the Home screen.

*If your radio is set to Silent, it will not display any audio or visual indicators during Emergency mode, or allow any received calls to sound through the radio's speaker, until the programmed hot mic transmission period is over, and you press the **PTT** button.*

*If your radio is set to Silent with Voice, it will not display any audio or visual indicators during Emergency mode when you are making the call with hot mic, but allow sound through the radio's speaker when the target radio responds after the programmed hot mic transmission period is over. The indicators will only appear when you press the **PTT** button.*

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

### Reinitiating an Emergency Mode

**NOTE:** This feature is only applicable to the radio sending the Emergency Alarm.

There are two instances where this can happen:

- You change the channel while the radio is in Emergency mode. This exits the Emergency mode. If Emergency Alarm is enabled on this new channel, the radio reinitiates Emergency.
- You press the programmed **Emergency On** button during an Emergency initiation/transmission state. This causes the radio to exit this state, and to reinitiate Emergency.

## Exiting Emergency Mode

**NOTE:** This feature is only applicable to the radio sending the Emergency Alarm.

Your radio exits Emergency mode when **one** of the following occurs:

- Emergency Alarm acknowledgement is received (for **Emergency Alarm** only), **OR**
- An Emergency Exit Telegram is received, **OR**
- All retries to send the alarm have been exhausted, **OR**
- The **Emergency Off** button is pressed.

**NOTE:** If your radio is powered off, it exits the Emergency mode. The radio will not reinitiate the Emergency mode automatically when it is turned on again.

If you change channels when your radio is in Emergency mode to a channel that has no emergency system configured, `No Emergency` is shown on your display.

## Text Message Features

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

The **maximum** length of characters for a text message, including the subject line (seen when receiving message from an e-mail application), is 140 for sending and receiving.

The radio exist the current screen once the inactivity timer expires. Any text message in the writing/editing screen is automatically saved to the Drafts folder.

**NOTE:** Long press ⏎ at any time to return to the Home screen.

### Sending a Quick Text Message

**Procedure:**

1. ◀ or ▶ to `Message` and press OK to select.
2. ◀ or ▶ to `Quick Text` and press OK to select.
3. ◀ or ▶ to the required message. Press OK to send.
4. The display shows transitional mini notice, confirming your message is being sent.
5. If the message is sent, a tone sounds and the display shows positive mini notice.
   **OR**
   If the message is not sent, a low tone sounds and the display shows negative mini notice.

*If the text message fails to send, the radio returns you to the* `Resend` *option screen (see* ***Managing Fail-to-Send Text Messages*** *on* ***page 53****).*

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

**Procedure:**

1. Press the programmed **One Touch Access** button to send a predefined Quick Text message to a predefined alias or ID.
2. The display shows transitional mini notice, confirming your message is being sent.
3. If the message is sent, a tone sounds and the display shows the positive mini notice.
   **OR**
   If the message is not sent, a low tone sounds and the display shows negative mini notice.

*If the text message fails to send, the radio returns you to the* `Resend` *option screen (see* ***Managing Fail-to-Send Text Messages*** *on* ***page 53****)*

## Managing Fail-to-Send Text Messages

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

- Resend
- Forward
- Edit

**NOTE:** If the channel type (i.e. conventional digital) is not a match, you can only edit and forward a Fail-to-Send message.

### *Resending a Text Message*

Procedure:

1. Press OK to resend the same message to send to the same subscriber/group alias or ID.
2. If the message is sent, a tone sounds and the display shows positive mini notice.
   **OR**
   If the message is not sent, a low tone sounds and the display shows negative mini notice.

### *Forwarding a Text Message*

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

**Procedure:**

1. ◀ or ▶ to Forward and press OK to select.
2. ◀ or ▶ to the required alias or ID and press OK to select.
3. The display shows transitional mini notice, confirming your message is being sent.
4. If the message is sent, a tone sounds and the display shows positive mini notice.
   **OR**
   If the message is not sent, a low tone sounds and the display shows negative mini notice.

## Managing Sent Text Messages

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

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

**NOTE:** Long press ⏎ at any time to return to the Home screen.

### *Viewing a Sent Text Message*

**Procedure:**
Press the programmed **Text Message** button and proceed to Step 3.
**OR**
Follow the procedure below.

1. ☰ to access the menu.
2. ◄ or ► to `Messages` and press OK to select.
3. ◄ or ► to `Sent Items` and press OK to select.
4. ◄ or ► to the required message and press OK to select.
   A subject line may be shown if the message is from an e-mail application.

*The icon beside each message indicates the status of the message (see **Sent Item Icons** on page 18).*

### *Sending a Sent Text Message*

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

- Resend
- Forward
- Delete

If the channel type (i.e. conventional digital) is not a match, you can only edit, forward, or delete a Sent message.**Procedure:**

1. Press ☰ again while viewing the message.
2. ◄ or ► to `Resend` and press OK to select.
3. The display shows transitional mini notice, 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 positive mini notice.
   **OR**
   If the message is not sent, a low tone sounds and the display shows negative mini notice.

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

**NOTE:** Changing the volume, and pressing any button, except for OK, ◄, or ►, returns you to the message.

The radio exits the `Resend` option screen if you press the **PTT** button to initiate a Private or Group Call, or to respond to a Group Call. The radio also exits the screen when it receives a text or telemetry message, an emergency call or alarm, or a call alert.

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 an All Call.

*Press* ◀ or ▶ *to access the* Forward, 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 53****).*
- *Select* Delete *to delete the text message.*

**NOTE:** If you exit the message sending screen while the message is being sent, the radio updates the status of the message in the Sent Items folder without providing any indication in the display or via sound.

If the radio changes mode or powers down before the status of the message in Sent Items is updated, the radio cannot complete any In-Progress messages and automatically marks it with a Send Failed icon.

The radio supports a maximum of five (5) In-Progress messages at one time. During this period, the radio cannot send any new message and automatically marks it with a Send Failed icon.

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

**Procedure:**
Press the programmed **Text Message** button and proceed to Step 3.
**OR**
Follow the procedure below.

1. ☰ to access the menu.
2. ◀ or ▶ to Messages and press OK to select.
3. ◀ or ▶ to Sent Items and press OK to select.
4. ◀ or ▶ to Delete All and press OK to select.
5. ◀ or ▶ to Yes and press OK to select. The display shows positive mini notice
   **OR**
   ◀ or ▶ to No and press OK 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 your radio receives a message, the display shows the Notification List with the alias or ID of the sender and the message icon.

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

- Read
- Read Later
- Delete

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

### Reading a Text Message

**Procedure:**

1 ◀ or ▶ to `Read?` and press OK 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 return to the Inbox.
**OR**
Press OK to reply, forward, or delete the text message.

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

- *Select* `Read Later` *to return to the screen you were on prior to receiving the text message.*
- *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:

- Forward
- Delete
- Delete All

**NOTE:** If the channel type (i.e. conventional digital) is not a match, you can only forward, delete, or delete all Received messages.

Text messages in the Inbox are sorted according to the most recently received.

**NOTE:** 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 OK to select.
3. ◀ or ▶ to `Inbox` and press OK 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 OK to select the current message, and press OK again to reply, forward, or delete that message.
   **OR**
   Long press ↩ to return to the Home screen.

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

**Procedure:**

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

**OR**

Follow the procedure below.

1. ▣ to access the menu.
2. ◀ or ▶ to `Messages` and press OK to select.
3. ◀ or ▶ to `Inbox` and press OK to select.
4. ◀ or ▶ to the required message and press OK to select.
   A subject line may be shown if the message is from an e-mail application.
5. Press OK once more to access the sub-menu.
6. ◀ or ▶ to `Delete` and press OK to select.
7. ◀ or ▶ to `Yes` and press OK to select.
8. The display shows positive mini notice.
9. The screen returns to the Inbox.

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

**Procedure:**

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

**OR**

Follow the procedure below.

1. ▣ to access the menu.
2. ◀ or ▶ to `Messages` and press OK to select.
3. ◀ or ▶ to `Inbox` and press OK to select.
4. ◀ or ▶ to `Delete All` and press OK to select.

5 ◀ or ▶ to Yes and press OK to select.

6 The display shows positive mini notice.

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

## Analog Message Encode

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

### Sending MDC Message Encode to Dispatcher

**Procedure:**

1 ◀ or ▶ to Message and press OK to select.

2 ◀ or ▶ to Quick Text and press OK to select.

3 ◀ or ▶ to the required message. Press OK to send.

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

5 If the message is sent, a tone sounds and the display shows positive mini notice.
OR
If the message is not sent, a low tone sounds and the display shows negative mini notice.

### Sending 5-Tone Message Encode to Contact

Procedure:

1 ◀ or ▶ to Message and press OK to select.

2 ◀ or ▶ to Quick Text and press OK to select.

3 ◀ or ▶ to the required message. Press OK to select.

4 ◀ or ▶ to the required contact. Press OK to select.

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

6 If the message is sent, a tone sounds and the display shows positive mini notice.
**OR**
If the message is not sent, a low tone sounds and the display shows negative mini notice.

## Analog Status Update

Your radio is able to send preprogrammed messages from the Status List indicating your current activity to a radio contact (for 5-Tone systems) or to the dispatcher (for MDC systems).

The last acknowledged message is kept at the top of the Status List. The other messages are arranged in alphanumeric order.

### Sending Status Update to Predefined Contact

**Procedure:**

1. ◄ or ► to `Status` and press OK to select.
2. ◄ or ► to the required status. Press OK to select.
3. ◄ or ► to `Set as Default`. Press OK to send the status update.
4. The display shows transitional mini notice, confirming your status update is being sent.
5. If the status update is acknowledged, a tone sounds and the display shows positive mini notice. A ✓ appears beside the acknowledged status.
   **OR**
   If the status update is not acknowledged, a low tone sounds and the display shows negative mini notice. A ✓ remains beside the previous status.

*For 5-Tone systems, see **Setting Default Contact** on page 40 for details on setting the default contact.*

*For 5-Tone systems, a **PTT** button press while in the status list sends the selected status update and returns to the Home screen to initiate a voice call.*

### Viewing a 5-Tone Status Details

Procedure:

1. ◄ or ► to `Status` and press OK to select.
2. ◄ or ► to the required status. Press OK to select.
3. ◄ or ► to `View Details`. Press OK to select.
4. The display shows details of the selected status.

**NOTE:** A Software License Key sold separately is required to use this feature

## Privacy

If enabled, this feature helps to prevent eavesdropping by unauthorized users on a channel by the use of a software-based scrambling solution. The signaling and user identification portions of a transmission are not scrambled.

Your radio must have privacy enabled on the channel to send a privacy-enabled transmission, although this is not a necessary requirement for receiving a transmission. While on a privacy-enabled channel, the radio is still able to receive clear (unscrambled) transmissions.

Your radio supports two types of privacy:

- Basic Privacy
- Enhanced Privacy. (A Software License Key sold separately is required for this feature.)

Only **ONE** of the privacy types above can be assigned to the radio.

To unscramble a privacy-enabled call or data transmission, your radio must be programmed to have the same Privacy Key (for Basic Privacy), OR the same Key Value and Key ID (for Enhanced Privacy) as the transmitting radio.

If your radio receives a scrambled call that is of a different Privacy Key, OR a different Key Value and Key ID, you will either hear a garbled transmission (Basic Privacy) or nothing at all (Enhanced Privacy).

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

Some radio models may not offer this Privacy feature. Check with your dealer or system administrator for more information.**Procedure:**
Press the programmed **Privacy** button to toggle privacy on or off.
**OR**
Follow the procedure below.

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Privacy`
5. Press OK to enable Privacy. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable Privacy. The ✓ disappears from beside Enabled.

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

**NOTE:** At Step 4, you can also use ◀ or ▶ to change the selected option.

## Dual Tone Multi Frequency (DTMF)

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

**Procedure:**

To initiate a DTMF call.

1. Press and hold the **PTT** button.
2. Enter the desired number, * or #.

*You can turn off the DTMF tone by disabling all radio tones and alerts (see **Turning the Radio Tones/Alerts On or Off** on **page 69**).*

## Multi-Site Controls

These features are applicable when your current radio channel is part of an IP Site Connect or Linked Capacity Plus configuration.

See **IP Site Connect** on page 13 and **Linked Capacity Plus** on page 14 for more details about these configurations.

### Starting an Automatic Site Search

**NOTE:** The radio **only** scans for a new site if the current signal is weak or when the radio is unable to detect any signal from the current site. If the RSSI value is strong, the radio remains on the current site.

**Procedure:**
Press the programmed **Site Lock On/Off** button.

1. A tone sounds and the display shows `Site Unlocked`.
2. The LED blinks yellow rapidly when the radio is actively searching for a new site, and turns off once the radio locks on to a site.
3. The display shows the channel alias and the site roaming icon appears.

**OR**

**Procedure:**
Use 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 Site Roaming and press to select.
5. or to Unlock Site and press to select. A tone sounds and the display shows Site Unlocked.
6. The radio returns to the Home screen. The display shows the channel alias and the site roaming icon appears.
7. The LED blinks yellow rapidly when the radio is actively searching for a new site, and turns off once the radio locks on to a site.

*The radio also performs an automatic site search (site is unlocked) during a **PTT** button press or data transmission if the current channel, multi-site channel with an attached roam list, is out of range.*

## Stopping an Automatic Site Search

When the radio is actively searching for a new site:

**Procedure:**
Press the programmed **Site Lock On/Off** button.

1. A tone sounds and the display shows Site Locked.
2. The LED turns off and the display shows the channel alias.

**OR**

**Procedure:**
Use 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 Site Roaming and press to select.
5. or to Lock Site State.
6. Press to lock site. The display shows ✓ beside Enabled.
   **OR**
   Press to unlock site. The ✓ disappears from beside Enabled. The LED turns off and the radio returns to the Home screen. The display shows the channel alias.

**NOTE:** At Step 5, you can also use ◀ or ▶ to change the selected option.

### Starting a Manual Site Search

**Procedure:**
Press the programmed **Manual Site Roam** button and proceed to Step 6.
**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 `Site Roaming` and press ⊞ to select.
5. ◀ or ▶ to `Active Search` and press ⊞ to select.
6. A tone sounds and the display shows `Finding Site`. The LED blinks green.
7. If a new site is found, a tone sounds and the LED turns off. The display shows `Site <Alias> Found`.
   **OR**
   If there is no available site within range, a tone sounds and the LED turns off. The display shows `Out of Range`.
   **OR**
   If a new site is within range, but the radio is unable to connect to it, a tone sounds and the LED turns off. The display shows `Channel Busy`.
8. The radio returns to the Home screen.

## 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 alias or ID and press OK to select.
3. The display shows transitional mini notice, indicating the request is in progress. The LED blinks green.
4. Wait for acknowledgment.
5. If successful, a positive indicator tone sounds and the display shows positive mini notice.
   **OR**
   If unsuccessful, a negative indicator tone sounds and the display shows negative mini notice.

**OR**

**Procedure:**
Use the menu.

1. ☰ to access the menu.
2. ◄ or ► to `Contacts` and press OK to select. The entries are alphabetically sorted.
3. ◄ or ► to the required alias or ID and press OK to select.
   ◄ or ► to `Radio Disable` and press OK to select.
4. The display shows transitional mini notice, indicating the request is in progress. The LED blinks green.
5. Wait for acknowledgment.
6. If successful, a positive indicator tone sounds and the display shows positive mini notice.
   **OR**
   If unsuccessful, a negative indicator tone sounds and the display shows negative mini notice.

*Do not press ⌂ during the Radio Disable operation as you will not get an acknowledgement message.*

## Radio Enable

**Procedure:**
Use the programmed **Radio Enable** button.

1. Press the programmed **Radio Enable** button.
2. ◄ or ► to the required alias or ID and press OK to select.
3. The display shows `Radio Enable` and the subscriber alias or ID. The LED lights up solid green.
4. Wait for acknowledgment.
5. If successful, the radio sounds a positive indicator tone and the display shows positive mini notice.
   **OR**
   If unsuccessful, the radio sounds a negative indicator tone and the display shows negative mini notice.

**OR**

**Procedure:**
Use the menu.

1. ⊞ to access the menu.
2. ◄ or ► to `Contacts` and press OK to select. The entries are alphabetically sorted.
3. ◄ or ► to the required alias or ID and press OK to select.
4. ◄ or ► to `Radio Enable` and press OK to select. The LED blinks green.
5. The display shows `Radio Enable` and the subscriber alias or ID. The LED lights up solid green.
6. Wait for acknowledgment.
7. If successful, the radio sounds a positive indicator tone and the display shows positive mini notice.
   **OR**
   If unsuccessful, the radio sounds a negative indicator tone and the display shows negative mini notice.

*Do not press ⌂ during the Radio Enable operation as you will not get an acknowledgement message.*

## Lone Worker

This feature prompts an emergency to be raised if there is no user activity, such as any radio button press or activation of the channel selector, for a predefined time.

Following no user activity for a programmed duration, the radio pre-warns the user via an audio indicator once the inactivity timer expires.

If there is still no acknowledgment by the user before the predefined reminder timer expires, the radio initiates an Emergency Alarm.

Only **one** of the following Emergency Alarms is assigned to this feature:

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

The radio remains in the emergency state allowing voice messages to proceed until action is taken. See ***Emergency Operation*** on page 46 on ways to exit Emergency.

**NOTE:** This feature is limited to radios with this function enabled. Check with your dealer or system administrator for more information.

## Password Lock Features

If enabled, this feature allows you to access your radio via password upon powering up.

### Accessing the Radio from Password

**Procedure:**
Power up the radio.

1. You will be prompt to enter a four-digit password.
2. Enter your current four-digit password. Press ◄ or ► to choose each digit's numeric value (0-9). Press ► or ▦ to move to next digit. Each digit changes to ●. Press OK to confirm your selection.

   You hear a positive indicator tone for every digit pressed. Press ◄ to remove the each ● on the display.
3. If the password is correct:
   Your radio proceeds to power up. See ***Powering Up the Radio*** on page 5.
   **OR**
   If the password is incorrect:
   The display shows `Wrong Password`. Repeat Step 2.

   **OR**
   After the third incorrect password, the display shows `Wrong`

Password and then, shows Radio Locked. A tone sounds and the LED double blinks yellow.

*Your radio enters into locked state for 15 minutes, and responds to inputs from **On/Off/Volume Control Knob** and programmed **Backlight Auto** button only.*

**NOTE:** The radio is unable to receive any call, including emergency calls, in locked state.

### Unlocking the Radio from Locked State

**Procedure:**

Wait for 15 minutes. Repeat Steps 1 to 3 in ***Accessing the Radio from Password*** on page 66.

**OR**

Power up the radio, if you have powered down the radio during locked state:

1. A tone sounds and the LED double blinks yellow. The display shows Radio Locked.
2. Wait for 15 minutes. Repeat ***Accessing the Radio from Password*** on page 66.

*Your radio restarts the 15 minutes timer for locked state when you power up.*

### Turning the Password Lock On or Off

**Procedure:**

1. ☰ to access the menu.
2. ◄ or ► to Utilities and press OK to select.
3. ◄ or ► to Radio Settings and press OK to select.
4. ◄ or ► to Passwd Lock and press OK to select.
5. Enter your current four-digit password.
   See Step 2 in ***Accessing the Radio from Password*** on ***page 66***.
6. If the password is correct:
   Press OK to enable Password Lock. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable Password Lock. The ✓ disappears from beside Enabled.
   **OR**
   If the password is incorrect:
   The display shows Wrong Password and automatically returns to the previous menu.

**NOTE:** At Step 6, you can also use ◄ or ► to change the selected option.

### Changing the Password

**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 Passwd Lock and press to select.

5 Enter your current four-digit password.
See Step 2 in ***Accessing the Radio from Password*** on page 66.

6 If the password is correct:
or to Change Pwd and press to select.
**OR**
If the password is incorrect:
The display shows Wrong Password and automatically returns to the previous menu.

7 Enter a new four-digit password. See Step 2 in ***Accessing the Radio from Password*** on ***page 66***.

8 Re-enter the new four-digit password. See Step 2 in ***Accessing the Radio from Password*** on ***page 66***.

9 If both of the new password inputs match:
The display shows Password Changed.
**OR**
If both of the new password inputs do not match:
The display shows Passwords Do Not Match.

10 The screen automatically returns to the previous menu.

## Notification List

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

The Notification icon appears on the status bar when the Notification List has one or more events.

The list supports a maximum of forty (40) unread events. When it is full, the next event automatically replaces the oldest event.

After the events are read, they are removed from the Notification List.

### Accessing the Notification List

**Procedure:**

1 to access the menu.

2 or to Notification and press to select.

3 or to the required event and press to select.

*Long press to return to the Home screen.*

## Turning the Radio Tones/Alerts On or Off

You can enable and disable all radio tones and alerts (except for the incoming Emergency alert tone) if needed.

**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 OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Tones/Alerts` and press OK to select.
5. ◄ or ► to `All Tones` and press OK to select.
6. Press OK to enable all tones. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable all tones. The ✓ disappears from beside Enabled.

**NOTE:** At Step 5, you can also use ◄ or ► to change the selected option.

## Setting the Tone Alert Volume Offset Level

You can adjust the Tone Alert Volume Offset level if needed. This feature adjusts the volume of the tones/alerts, allowing it to be higher or lower than the voice volume.

**Procedure:**

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Tones/Alerts` and press OK to select.
5. ◄ or ► to `Vol. Offset` and press OK to select.
6. ◄ or ► to the required volume value. The radio sounds a feedback tone with each corresponding volume value.
7. Press OK to keep the required displayed volume value.
   **OR**
   Repeat Step 6 to select another volume value.
   **OR**
   ⊂⌂ to exit without changing the current volume offset settings.

## Turning the Talk Permit Tone On or Off

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

**Procedure:**

1. ☰ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Tones/Alerts` and press OK to select.
5. ◄ or ► to `Talk Permit` and press OK to select.
6. Press OK to enable Talk Permit Tone. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable Talk Permit Tone. The ✓ disappears from beside Enabled.

**NOTE:** At Step 5, you can also use ◄ or ► to change the selected option.

## Setting the Power Level

You can customize your radio's power setting to 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 OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Power` and press OK to select.
5. ◄ or ► to the required setting and press ☰ to select. ✓ appears beside selected setting.
6. Screen returns to the previous menu.

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

**NOTE:** At Step 4, you can also use ◀ or ▶ to change the selected option.

## Adjusting the Display Brightness

You can adjust radio's display brightness as needed.

**Procedure:**
Press the programmed **Brightness** button and proceed to Step 5.
**OR**
Follow the procedure below.

1. ☰ to access the menu.
2. ◀ or ▶ to `Utilities` and press OK to select.
3. ◀ or ▶ to `Radio Settings` and press OK to select.
4. ◀ or ▶ to `Brightness` and press OK to select.
5. The display shows a progress bar. Decrease display brightness by pressing ◀ or increase the display brightness by pressing ▶. Press OK to confirm your entry.

## Controlling the Display Backlight

You can enable or disable the radio's display backlight as needed. The setting also affects the Menu Navigation Buttons.

**Procedure:**
Press the programmed **Backlight Auto** button to toggle the backlight settings.
**OR**
Follow the procedure below.

1. ☰ to access the menu.
2. ◀ or ▶ to `Utilities` and press OK to select.
3. ◀ or ▶ to `Radio Settings` and press OK to select.
4. ◀ or ▶ to `Backlight Auto`
5. Press OK to enable backlight. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable backlight. The ✓ disappears from beside Enabled.

*The display backlight are automatically turned off if the LED indicator is disabled (see* ***Turning the LED Indicator On or Off*** *on page 73).*

**NOTE:** At Step 4, you can also use ◀ or ▶ to change the selected option.

## Setting the Squelch Level

You can adjust your radio's squelch level to filter out unwanted calls with low signal strength or channels that have a higher than normal background noise.

**Settings:** `Normal` is the default. `Tight` filters out (unwanted) calls and/or background noise. However, calls from remote locations may also be filtered out.

**Procedure:**
Press the programmed **Squelch** button to toggle squelch level between normal and tight.
**OR**
Follow the procedure below.

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Squelch` and press OK to select.
5. The display shows `Tight` and `Normal`. ◄ or ► to the required setting and press OK to enable. ✓ appears besides selected setting.
6. Screen returns to the previous menu.

**NOTE:** At Step 4, you can also use ◄ or ► to change the selected option.

## Turning the Introduction Screen On or Off

You can enable and disable the Introduction Screen if needed.

**Procedure:**

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Intro Screen` and press OK to select.
5. Press OK to enable Introduction Screen. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable Introduction Screen. The ✓ disappears from beside Enabled.

**NOTE:** At Step 4, you can also use ◄ or ► to change the selected option.

## Language

You can set your radio display to be in your required language.

**Procedure:**

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Language` and press OK to select.
5. ◄ or ► to the required language and press OK to enable. ✓ appears beside selected language.

**NOTE:** At Step 4, you can also use ◄ or ► to change the selected option.

## Turning the LED Indicator On or Off

You can enable and disable the LED Indicator if needed.

**Procedure:**

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `LED Indicator` and press OK to select.
5. Press OK to enable LED indicator. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable LED indicator. The ✓ disappears from beside Enabled.

*The display backlight, and buttons backlighting are automatically turned off if the LED indicator is disabled (see* ***Controlling the Display Backlight*** *on* ***page 71****).*

**NOTE:** At Step 4, you can also use ◄ or ► to change the selected option.

## Turning the Voice Operating Transmission (VOX) Feature On or Off

This feature allows you to initiate a hands-free voice activated call on a programmed channel. The radio automatically

transmits, for a programmed period, whenever the microphone on the VOX-capable accessory detects voice.

Pressing the **PTT** button during radio operation will disable VOX. To re-enable VOX, do **one** of the following:

- Turn the radio off and power it on again, **OR**
- Change the channel via the Channel Selector Knob, **OR**
- Follow the procedure below.

**NOTE:** Turning this feature on or off is limited to radios with this function enabled. Check with your dealer or system administrator for more information.

**Procedure:**
Press the programmed **VOX** button to toggle the feature on or off.
**OR**
Follow the procedure below.

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `VOX`.
5. Press OK to enable VOX. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable VOX. The ✓ disappears from beside Enabled.

*If the Talk Permit Tone feature is enabled (see **Turning the Talk Permit Tone On or Off** on **page 70**), use a trigger word to initiate the call. Wait for the Talk Permit Tone to finish before speaking clearly into the microphone.*

**NOTE:** At Step 4, you can also use ◄ or ► to change the selected option.

## Voice Announcement

This feature enables the radio to audibly indicate the current Zone or Channel the user has just assigned, or programmable button press. This audio indicator can be customized per customer requirements. This is typically useful when the user is in a difficult condition to read the content shown on the display.

Use the following features to toggle Voice Announcement on or off.

**Procedure:**

Press the programmed **Voice Announcement** button.
**OR**
Follow the procedure below.

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.

3 ◀ or ▶ to Radio Settings and press OK to select.

4 ◀ or ▶ to Voice Announcement.

5 Press OK to enable Voice Announcement. The display shows ✓ beside Enabled.
**OR**
Press OK to disable Voice Announcement. The ✓ disappears from beside Enabled.

**NOTE:** At Step 3, you can also use ◀ or ▶ to change the selected option.

## Call Forwarding

You can enable your radio to automatically forward voice calls to another radio.

**Procedure:**

1 ☰ to access the menu.

2 ◀ or ▶ to Utilities and press OK to select.

3 ◀ or ▶ to Call Forward.

4 Press OK to enable Call Forwarding. The display shows ✓ beside Enabled.
**OR**
Press OK to disable Call Forwarding. The ✓ disappears from beside Enabled.

**NOTE:** At Step 3, you can also use ◀ or ▶ to change the selected option.

## Menu Timer

Set the period of time your radio stays in the menu before it automatically switches to the Home screen.

**Procedure:**

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Menu Timer` and press OK to select.
5. ◄ or ► to the required setting and press OK to enable.

## Analog Mic Automatic Gain Control (AGC)

This feature controls the your radio's microphone gain automatically while transmitting on an analog system. It suppresses loud audio or boosts soft audio to a preset value in order to provide a consistent level of audio.

**Procedure:**

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Analog Mic AGC`.
5. Press OK to enable Analog Mic AGC. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable Analog Mic AGC. The ✓ disappears from beside Enabled.

**NOTE:** At Step 3, you can also use ◄ or ► to change the selected option.

## Digital Mic AGC

This feature controls the your radio's microphone gain automatically while transmitting on an digital system. It suppresses loud audio or boosts soft audio to a preset value in order to provide a consistent level of audio.

**Procedure:**

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Digital Mic AGC`.
5. Press OK to enable Digital Mic AGC. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable Digital Mic AGC. The ✓ disappears from beside Enabled.

**NOTE:** At Step 3, you can also use ◄ or ► to change the selected option.

## Intelligent Audio

Your radio automatically adjusts its audio volume to overcome current background noise in the environment.

Use the following features to toggle Intelligent Audio on or off.

**Procedure:**

Press the programmed **Intelligent Audio** button to toggle the feature on or off.
**OR**
Follow the procedure below.

1. ⊞ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Settings` and press OK to select.
4. ◄ or ► to `Intelligent Audio`.
5. Press OK to enable Intelligent Audio. The display shows ✓ beside Enabled.
   **OR**
   Press OK to disable Intelligent Audio. The ✓ disappears from beside Enabled.

**NOTE:** At Step 3, you can also use ◄ or ► to change the selected option.

## Accessing General Radio Information

Your radio contains information on the following:

- Battery
- Radio Alias and ID
- Firmware and Codeplug Versions

**NOTE:** Press ↩ at any time to return to the previous screen or long press ↩ to return to the Home screen. The radio exits the current screen once the inactivity timer expires.

### *Accessing the Battery Information*

Displays information on your radio battery.

**Procedure:**

1. ☰ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Info` and press OK to select.
4. ◄ or ► to `Battery Info` and press OK to select.
5. The display shows the battery information.
   **OR**
   For **IMPRES** batteries **ONLY**: The display reads `Recondition Battery` if the battery requires reconditioning in an IMPRES charger.
   After the reconditioning process, the display then shows the battery information.

### *Checking the Radio Alias and ID*

Displays the ID of your radio.

**Procedure:**
Press the programmed Radio Alias and ID button to check your radio alias and ID. You hear a positive indicator tone.
**OR**

Follow the procedure below.

1. ☰ to access the menu.
2. ◄ or ► to `Utilities` and press OK to select.
3. ◄ or ► to `Radio Info` and press OK to select.
4. ◄ or ► to `My Number` and press OK to select.
5. The first line of the display shows the radio alias. The second line of the display shows the radio ID

*You can also press the programmed **Radio Alias and ID** button to return to the previous screen.*

### *Checking the Firmware Version and Codeplug Version*

Displays the firmware and codeplug versions 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 Versions and press to select.
5. The display shows the current firmware and codeplug versions.

## Front Panel Programming (FPP)

Your radio is able to customize certain feature parameters to enhance the use of your radio.

### Entering FPP Mode

**Procedure:**

1. to access the menu.
2. or to Utilities and press to select.
3. or to Program Radio and press to select.

**NOTE:** Long press at any time to return to the Home screen.

### Editing FPP Mode Parameters

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

, – Scroll through options, increase/decrease values, or navigate vertically

– Select the option or enter a sub-menu

– Short-press to return to previous menu or to exit the selection screen. Long-press to return to Home screen.

# Notes

# Batteries and Chargers Warranty

## The Workmanship Warranty

The workmanship warranty guarantees against defects in workmanship under normal use and service.

| | |
|---|---|
| All MOTOTRBO Batteries | Two (2) Years |
| IMPRES Chargers (Single-Unit and Multi-Unit, Non-Display) | Two (2) Years |
| IMPRES Chargers (Multi-Unit with Display) | One (1) Year |

## The Capacity Warranty

The capacity warranty guarantees 80% of the rated capacity for the warranty duration.

| | |
|---|---|
| Nickel Metal-Hydride (NiMH) or Lithium-Ion (Li-Ion) Batteries | 12 Months |
| IMPRES Batteries, When Used Exclusively with IMPRES Chargers | 18 Months |

# 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:

| | |
|---|---|
| DP Series Digital Portable Radios | Two (2) Years |
| Product Accessories (Excluding Batteries and Chargers) | 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 certification 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.

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## VII. GOVERNING LAW:

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

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