

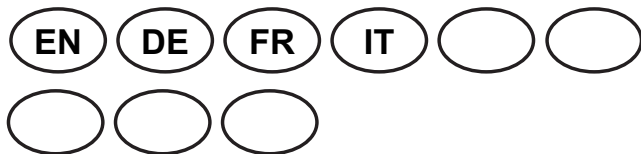
PROFESSIONAL DIGITAL TWO-WAY RADIOS

MOTOTRBO™

DM2600

ALPHANUMERIC DISPLAY MOBILE

USER GUIDE



Contents

This User Guide contains all the information you need to use the MOTOTRBO DM2600 Mobile Radio.

- Important Safety Information** **viii**
 - RF Energy Exposure and Product Safety Guide
for Mobile Two-Way Radiosviii
- Software Version** **viii**
- Computer Software Copyrights** **ix**
- Getting Started** **1**
 - How to Use This User Guide 1
 - What Your Dealer/System Administrator
Can Tell You 2
 - Powering Up the Radio 2
 - Adjusting the Volume 3
- Identifying Radio Controls** **3**
 - Radio Controls 4
 - Programmable Buttons 5
 - Assignable Radio Functions 5
 - Assignable Settings or Utility Functions 6
 - Accessing the Programmed Functions 7
 - Push-To-Talk (PTT) Button 7
 - Switching Between Conventional Analog and

- Digital Mode 8
- IP Site Connect 9
- Capacity Plus 9
- Linked Capacity Plus 10
- Identifying Status Indicators** **11**
 - Display Icons 11
 - Call Icons 13
 - Mini Notice Icons 13
 - Sent Item Icons 14
 - LED Indicators 14
 - Indicator Tones 15
 - Audio Tones 15
- Receiving and Making Calls** **16**
 - Selecting a Zone 16
 - Selecting a Channel 17
 - Receiving and Responding to a Radio Call 17
 - Receiving and Responding to a Group Call 18
 - Receiving and Responding to a Private Call 18
 - Receiving an All Call 19
 - Receiving and Responding to a Selective Call .. 20
 - Receiving and Responding to a Phone Call 20
 - Phone Call as Private Call 20
 - Phone Call as Group Call 21
 - Phone Call as All Call 21

Making a Radio Call	22	Assigning an Entry to a Programmable Number Key	35
Making a Group Call	22	Removing the Association between Entry and Programmable Number Key	36
Making a Private Call	23	Setting Default Contact	37
Making a Selective Call	24	Adding a New Contact	37
Stopping a Radio Call	26	Call Indicator Settings	38
Talkaround	26	Activating or Deactivating Call Ringers for Call Alerts	38
Permanent Monitor	27	Activating or Deactivating Call Ringers for Private Calls	38
Advanced Features	28	Activating or Deactivating Call Ringers for Selective Call	39
Scan Lists	28	Activating or Deactivating Call Ringers for Text Message	39
Viewing an Entry in the Scan List	28	Escalating Alarm Tone Volume	40
Editing the Scan List	29	Call Log Features	41
Adding a New Entry to the Scan List	29	Viewing Recent Calls	41
Deleting an Entry from the Scan List	29	Deleting a Call from a Call List	41
Setting and Editing Priority for an Entry in the Scan List	30	Deleting All Calls from a Call List	42
Scan	31	Call Alert Operation	43
Starting and Stopping Scan	31	Receiving and Responding to a Call Alert	43
Responding to a Transmission During a Scan	32	Making a Call Alert from the Contacts List	43
Deleting a Nuisance Channel	32	Making a Call Alert with the One Touch Access Button	44
Restoring a Nuisance Channel	32		
Vote Scan	33		
Contacts Settings	33		
Making a Group Call from Contacts	34		
Making a Private Call from Contacts	34		

Emergency Operation	44	Viewing a Text Message from the Inbox	56
Receiving an Emergency Alarm	45	Replying to a Text Message with Quick Text	56
Responding to an Emergency Alarm	45	Deleting a Text Message from the Inbox	57
Sending an Emergency Alarm	46	Deleting All Text Messages from the Inbox	58
Sending an Emergency Alarm with Call	47	Analog Message Encode	58
Sending an Emergency Alarm with		Sending MDC Message Encode to Dispatcher	58
Voice to Follow	48	Sending 5-Tone Message Encode to Contact	59
Reinitiating an Emergency Mode	49	Analog Status Update	59
Exiting Emergency Mode	50	Sending Status Update to Predefined Contact	59
Text Messaging Features	50	Viewing 5-Tone Status Details	60
Sending a Quick Text Message	50	Privacy	60
Sending a Quick Text Message with the		Analog Scrambling	62
One Touch Access Button	51	Turning Analog Scrambling On or Off	62
Managing Fail-to-Send Text Messages	51	Setting the Analog Scrambling Codes	62
Resending a Text Message	51	Multi-Site Controls	63
Forwarding a Text Message	52	Starting an Automatic Site Search	63
Managing Sent Text Messages	52	Stopping an Automatic Site Search	64
Viewing a Sent Text Message	52	Starting a Manual Site Search	64
Sending a Sent Text Message	53	Lone Worker	65
Deleting All Sent Text Messages from		Notification List	66
Sent Items	54	Accessing the Notification List	66
Receiving a Text Message	55	Auto-Range Transponder System (ARTS)	67
Reading a Text Message	55	Over-the-Air Programming (OTAP)	67
Managing Received Text Messages	55	Utilities	68

Turning the Radio Tones/Alerts On or Off	68	Site Information	79
Setting the Tone Alert Volume Offset Level	68	Keypad Microphone Features	80
Turning the Talk Permit Tone On or Off	69	Using the Keypad	81
Turning the Power Up Alert Tone On or Off	69	Turning Keypad Tones On or Off	82
Setting the Text Message Alert Tone	70	Additional Advanced Features	82
Setting the Power Level	70	Selecting a Zone by Alias Search	82
Adjusting the Display Brightness	71	Making a Private Call by Manual Dial	83
Turning Horns/Lights On or Off	71	Making a Phone Call by Manual Dial	83
Setting the Squelch Level	72	Making a Phone Call with the	
Turning the LED Indicators On or Off	72	One Touch Access Button	85
Language	73	Making a Group or Private with the	
Turning the Voice Operating Transmission (VOX)		Programmable Number Key	87
Feature On or Off	73	Making a Group, Private or Phone by	
Turning the Option Board Feature(s) On or Off	74	Alias Search	91
Voice Announcement	74	Viewing an Entry in the Scan List by	
Call Forwarding	75	Alias Search	92
Analog Mic AGC (Mic AGC-A)	76	Editing the Scan List by Alias Search	92
Digital Mic AGC (Mic AGC-D)	76	Adding a New Entry to the Scan List	92
Intelligent Audio	77	Deleting an Entry from the Scan List	93
Accessing General Radio Information	77	Setting and Editing Priority for an	
Checking the Radio Alias and ID	77	Entry in the Scan List	94
Checking the Firmware Version and		Storing an Alias or ID from a Call List	95
Codeplug Version	78	Making a Call Alert by Manual Dial	95
Software Update	78	RSSI Values	95

Text Messaging 96

 Managing Fail-to-Send Text Messages 96

 Forwarding a Text Message by Manual Dial .. 96

Dual Tone Multi Frequency (DTMF) 97

Password Lock Features 98

 Accessing the Radio from Password 98

 Unlocking the Radio from Locked State 99

 Turning the Password Lock On or Off 99

 Changing the Password 99

Front Panel Programming (FPP) 100

 Entering FPP Mode 100

 Editing FPP Mode Parameters 101

Limited Warranty 102

Notes 105

Important Safety Information

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

ATTENTION!

This radio is restricted to Occupational use only.

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

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

<http://www.motorolasolutions.com>

Software Version

All the features described in the following sections are supported by the radio's software version **R01.00.00**.

See *Checking the Firmware Version and Codeplug Version* on page 78 to determine your radio's software version.

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

Computer Software Copyrights

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

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

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

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

Open Source Software Legal Notices

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

<https://emeaonline.motorolasolutions.com>

Notes



Getting Started

Take a moment to review the following:

How to Use This User Guide	page 1
What Your Dealer/System Administrator Can Tell You	page 2
Powering Up the Radio	page 2
Adjusting the Volume	page 3

How to Use This User Guide

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

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** 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 9 for more information.

Selected features are available in the single-site trunking mode, Capacity Plus. See **Capacity Plus** on page 9 for more information.

Selected features are **also** available in the multi-site trunking mode, Linked Capacity Plus. See **Linked Capacity Plus** on page 10 for more information.

■ What Your Dealer/System Administrator Can Tell You

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

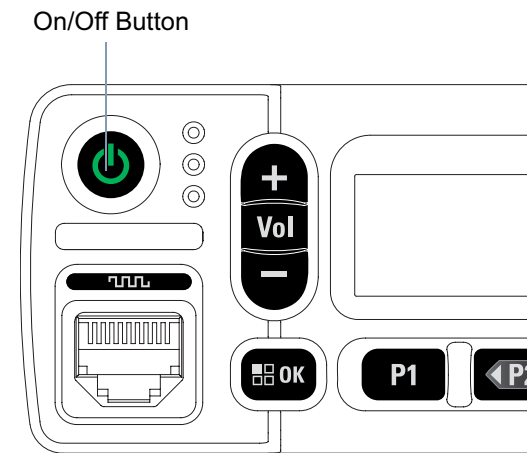
- Is your radio programmed with any preset conventional channels?
- Which buttons have been programmed to access other features?
- What optional accessories may suit your needs?
- What are the best radio usage practices for effective communication?
- What maintenance procedures will help promote longer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

■ Powering Up the Radio

Press the **On/Off Button** briefly. You see **MOTOTRBO (TM)** on the radio's display momentarily, followed by a welcome message or welcome image.

The green LED lights up and the Home screen lights up.

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 68).

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

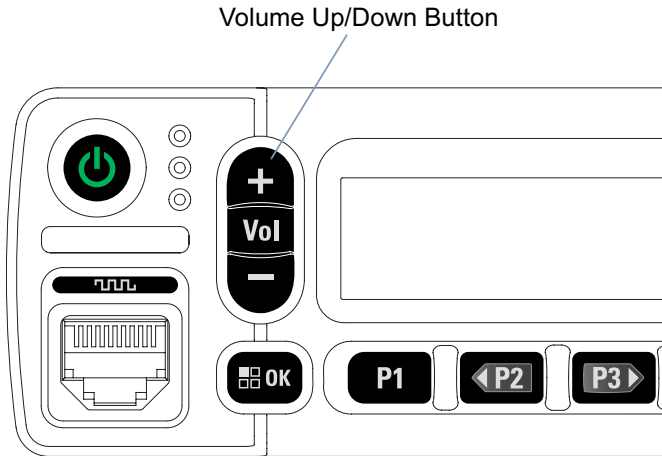
*To turn off the radio, press and hold the On/Off Button until you see **Powering Down** on the radio's display.*

NOTE: If the radio is locked up and unresponsive to button presses, press and hold the On/Off Button for at least 7 seconds. This will force a radio reset.

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

■ Adjusting the Volume

To increase the volume, press the volume “ + ” button.



To decrease the volume, press the volume “ - ” button.

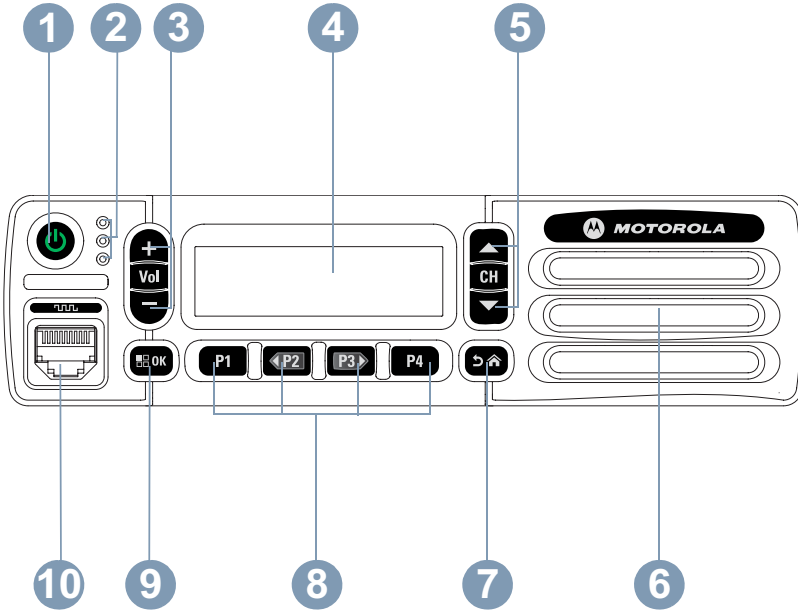
Your radio can be programmed to have a minimum volume offset where the volume level cannot be lowered past the programmed minimum volume. Check with your dealer or system administrator for more information.

Identifying Radio Controls

Take a moment to review the following:

Radio Controls	page 4
Programmable Buttons	page 5
Accessing the Programmed Functions	page 7
Push-To-Talk (PTT) Button	page 7
Switching Between Conventional Analog and Digital Mode	page 8
IP Site Connect	page 9
Capacity Plus	page 9
Linked Capacity Plus	page 10

Radio Controls



- 1 On/Off Button
- 2 LED Indicators
- 3 Volume Up/Down Button
- 4 Display
- 5 Channel Up/Down Button

- 6 Speaker
- 7 Return/Home Button
- 8 Front Programmable Buttons
- 9 Menu/OK Button
- 10 Accessory Connector


■ Programmable Buttons

Your dealer can program the programmable buttons as shortcuts to **radio functions** or up to a maximum of six (6) **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 44 for more information on the programmed duration of the **Emergency** button.

Assignable Radio Functions

Analog Scrambling  – Toggles analog scrambling on or off.

Contacts – Provides direct access to the contacts list.


Call Alert – Provides direct access to the contacts list for you to select a contact to whom a Call Alert can be sent.

Call Forwarding  – Toggles Call Forwarding on or off.

Call Log – Selects the call log list.

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

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


Manual Dial  – Depending on the programming, initiates a Private or Phone call by keying in any radio ID or phone number.

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

Monitor – Monitors a selected channel for activity.

Notifications – Provides direct access to the Notifications List.

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.

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

Option Board Feature – Toggles option board feature(s) on or off for option board-enabled channels.

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

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

Phone  – Provides direct access to the Phone Contacts list.


Privacy  – Toggles privacy on or off.

Radio Alias and ID – Provides radio alias and ID.

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

Scan^{*‡} – Toggles scan on or off.

Site Info^{*} – Displays current Linked Capacity Plus site name and ID. Plays site announcement voice messages for the current site (this function is unavailable when Voice Announcement is disabled).

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

Status – Selects the status list menu.

Text Message  – Selects the text message menu.

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.

Voice Announcement for Channel – Plays zone and channel announcement voice messages for the current channel. This function is unavailable when Voice Announcement is disabled.

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

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

Zone Toggle – Allows radio to switch between zones.

Assignable Settings or Utility Functions


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

Analog Scrambling Codes  – Toggles scrambling codes between 3.29KHz and 3.39KHz.

Backlight – Adjusts the brightness level.

Channel Up/Down – Depending on the programming, changes channel to previous or next channel.

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

Squelch  – Toggles squelch level between tight and normal.

^{*} Not applicable in Capacity Plus

[‡] Not applicable in Linked Capacity Plus







■ 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 **Left/ Right Navigation** button ( or ) to access the menu functions.
- 2 To select a function or enter a sub-menu, press the  button.
- 3 To go back one menu level, or to return to the previous screen, press the  button. Long press the  button to return to the Home screen.

The Menu Navigation Buttons are also available on a keypad microphone (see **Using the Keypad** on page 81).

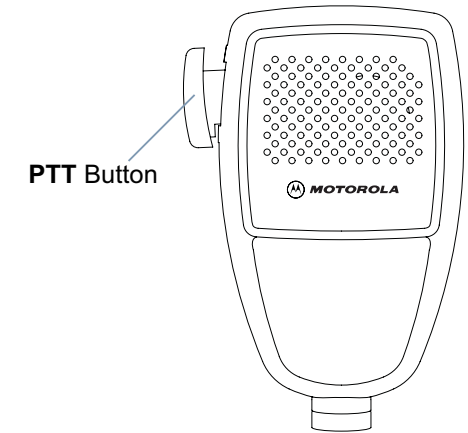
NOTE: Your radio automatically exits the menu after a period of inactivity and returns to your Home screen.

■ Push-To-Talk (PTT) Button

The **PTT** button on the side of the microphone serves two basic 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 22).

If the Talk Permit Tone (see **Turning the Talk Permit Tone On or Off** on page 69) 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 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.

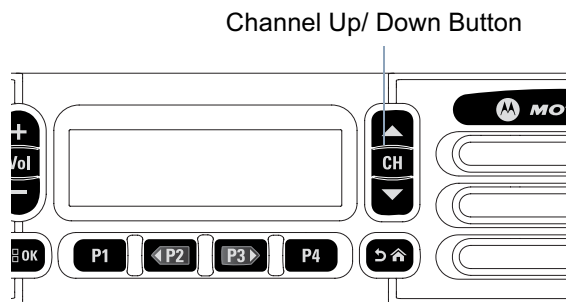
To switch between an analog or a digital channel, use the



Channel Up or **Channel Down** buttons

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.

NOTE: Your radio also switches between digital and analog modes during a dual mode scan (see **Scan** on page 31).



To use the **Left/ Right Navigation** buttons, while in the Home Screen of the required Zone, press  or  to select the required channel.

To use the programmed **Channel Up** or **Channel Down** buttons, while in the Home Screen of the required Zone, press **Channel Up** or **Channel Down** to select the required channel.

■ 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 roam list during the automatic roam operation to locate the best site.

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

NOTE: You cannot manually add or delete an entry to the roam list. 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, IP Site Connect, Capacity Plus and Linked Capacity Plus. However, the minor differences in the way each feature works does **NOT** affect the performance of your radio.

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

■ 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.

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:

Display Icons	page 11
Call Icons	page 13
Mini Notice Icons	page 13
Sent Item Icons	page 14
LED Indicators	page 14
Audio Tones	page 15
Indicator Tones	page 15

Display Icons

The liquid crystal display (LCD) of your radio shows the 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 and are channel specific.



Received Signal Strength Indicator (RSSI)

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



Emergency

Radio is in Emergency mode.



High Volume Data

Radio is receiving high volume data and channel is busy.



Notification

Notification List has one or more missed events.
















Scan*‡

Scan feature is enabled.

* Not applicable in Capacity Plus

‡ Not applicable in Linked Capacity Plus

-  **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.
-  **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 is disabled.
-  **Option Board**
The Option Board is enabled.

-  **Option Board Non-Function**
The Option Board is disabled.
-  **Over-the-Air Programming Delay Timer**
Indicates time left before automatic restart of radio.
-  **Tones Disable**
Tones are turned off.
-  **Power High**
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 alias or ID type.



Private Call

Indicates a Private Call in progress.

In the Contacts list, it indicates a radio alias (name) or ID (number).



Group Call/All Call

Indicates a Group Call or All Call in progress.

In the Contacts list, it indicates a group alias (name) or ID (number).



Phone Call as Private Call

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



Phone Call as Group/All Call

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

■ Mini Notice Icons

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



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

OR
The text message is sent successfully.



Send Failed

OR
The text message cannot be sent.

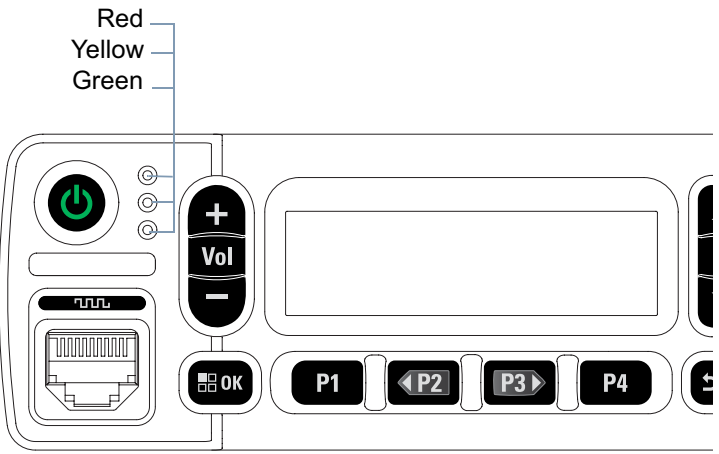


In-Progress

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

■ LED Indicators

LED indicators show the operational status of your radio.



Blinking red – Radio is receiving an emergency transmission or has failed the self-test upon powering up, or has moved out of range if radio is configured with Auto-Range Transponder System.

Solid green – Radio is powering up, or transmitting.

Blinking green – Radio is receiving a non-privacy-enabled call or data, or detecting activity or retrieving Over-the-Air Programming transmissions over the air.

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

Solid yellow – Radio is monitoring a conventional channel.

Blinking yellow – Radio is scanning for activity 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.

While in conventional mode, when the green LED blinks, it indicates the radio detects activity over the air. Due to the nature of the digital protocol, this activity may or may not affect the radio's programmed channel.

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

■ Indicator Tones

High pitched tone 

Low pitched tone 




Positive Indicator Tone





Negative Indicator Tone


■ 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.

Receiving and Making Calls

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

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


- Selecting a Zone page 16
- Selecting a Channel page 17
- Receiving and Responding to a Radio Call. page 17
- Making a Radio Call page 22
- Stopping a Radio Call page 26
- Talkaround page 26
- Permanent Monitor page 27




Selecting a Zone

A zone is a group of channels. Your radio supports up to 256 channels and 25 zones, with a maximum of 160 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  to select.

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

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

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

NOTE: You can also select a zone by alias search on a keypad microphone. See **Selecting a Zone by Alias Search** on page 82.

■ 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 required zone, select the channel you require to transmit or receive on.

Procedure:

Select a channel by using the **Channel Up/ Down** buttons.

- **Left/Right Navigation** buttons, OR
- **Channel Up/Down** buttons, OR
- The programmed **Channel Up** or **Channel Down** buttons

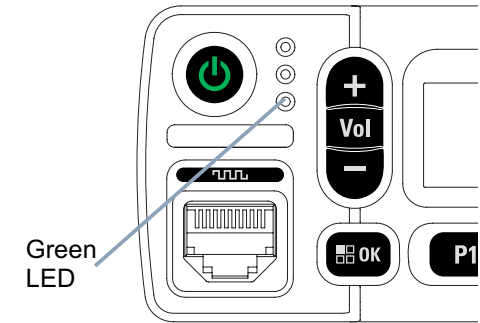
See **Selecting a Zone** on page 16 for more information on selecting your required zone.

See **Switching Between Conventional Analog and Digital Mode** on page 8 for information about **Channel Up/ Down** buttons.

■ Receiving and Responding to a Radio Call


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

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



NOTE: The green LED lights up while the radio is transmitting and double blinks 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 made to a group of users, your radio must be configured as part of that group.


Procedure:

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

- 1 The green LED blinks.
- 2 The caller ID information appears in the top right corner. The first text line displays the Group Call icon and the group call alias. Your radio unmutes and the incoming call sounds through the radio's speaker.
- 3  If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond.
Press the **PTT** button to respond to the call.
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.
- 4 The green LED lights up.

- 5 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.

- 6 Release the **PTT** button to listen.
- 7 If there is no voice activity for a predetermined period of time, the call ends.

See **Making a Group Call** on page 22 for details on making a Group Call.



Receiving and Responding to a Private Call

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

Procedure:

When you receive a Private Call:

- 1 The green LED blinks.
- 2 The first text line shows the Private Call icon and the caller alias. Your radio unmutes and the incoming call sounds through the radio's speaker.

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

- 4 The green LED lights up.

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

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

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

- 8 The display shows `Call Ended`.

See **Making a Private Call** on page 23 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 green LED blinks.

- 2 The caller ID information appears in the top right corner. The first text line displays the Group Call icon and `All Call`. Your radio unmutes and the incoming call sounds through the radio's 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 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.

NOTE: The radio stops receiving the All Call if you switch to a different channel while receiving the call. During an All Call, you are **not** able to continue with any menu navigation or editing 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 analogue system.

Procedure:

When you receive a Selective Call:

- 1 The green LED blinks.

- 2 The first text line shows the Private Call icon. The radio displays `Selective Call` or `Alert with Call`. Your radio unmutes and the incoming call sounds through the radio's speaker.

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

- 4 The green LED lights up.

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

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

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

- 8 The display shows `Call Ended`.

NOTE: See ***Making a Selective Call*** on page 24 for details on making a Selective Call.

Receiving and Responding to a Phone Call

NOTE: If Phone Call capability is enabled, you are able to respond to a Phone Call. Check with your dealer or system administrator for more information on this configuration.


Phone Call as Private Call

Procedure:

When you receive a Phone Call as a Private Call:

- 1 The Phone Call icon appears in the top right corner. The display shows the caller alias or `Phone Call`.

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

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

- 4 If successful:
A tone sounds and the display shows `Call Ended`.
OR
If unsuccessful:
Your radio returns to the Phone Call screen. Repeat Step 3 or wait for the telephone user to end the call.

If Phone Call capability is not enabled in your radio, the display shows `Unavailable` and your radio mutes the call. Your radio returns to the previous screen when the call ends.


Phone Call as Group Call

Procedure:

When you receive a Phone Call as a Group Call:

- 1 The Phone Group Call icon appears in the top right corner. The display shows the group alias and Phone Call.

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

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

- 4 If successful:
A tone sounds and the display shows Call Ended.
OR
If unsuccessful:
Your radio returns to the Phone Call screen. Repeat Step 3 or wait for the telephone user to end the call.

If Phone Call capability is not enabled in your radio, the display shows Unavailable and your radio mutes the call. Your radio returns to the previous screen when the call ends.


Phone Call as All Call

Procedure:

When you receive a Phone Call as an All Call:

- 1 The Phone Call icon appears in the top right corner. The display shows All Call and Phone Call.

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

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




- 4 If successful:
A tone sounds and the display shows All Call and Call Ended.
OR
If unsuccessful:
Your radio returns to the Phone Call screen. Repeat Step 3 to end the call.

If Phone Call capability is not enabled in your radio, the display shows Unavailable and your radio mutes the call. Your radio returns to the previous screen when the call ends.


NOTE: When you receive a Phone Call as an All Call, you can respond to the call or end the call, only if an All Call type is assigned to the channel.

■ Making a Radio Call

After selecting your channel, you can select a radio alias or ID, or group alias or ID by using:

- The Contacts list (see **Contacts Settings** on page 33)
- A programmed **One Touch Access** button 
- The programmed number keys – This method is for Group, Private and All Calls only and is used with the keypad microphone (see **Making a Group or Private with the Programmable Number Key** on page 87). 
- Manual Dial (via Contacts) – This method is for Private Calls and Phone Calls only and is dialed using a keypad microphone (see **Making a Private Call by Manual Dial** on page 83, **Making a Phone Call by Manual Dial** on page 83) 
- A programmable button – This method is for Phone Calls only (see **Making a Private Call by Manual Dial** on page 83)

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 as your radio are 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 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 group alias or ID. See **Selecting a Channel** on page 17.
OR
Press the programmed **One Touch Access** button.
- 2 Press the **PTT** button to make the call. The green LED lights up. The first text line shows the Group Call icon and the group call alias.
- 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. When the target radio responds, the green LED blinks. You see the Group Call icon, the group alias or ID, and transmitting radio alias or ID on your display.

- 5  If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the target radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond.
OR
If there is no voice activity for a predetermined period of time, the call ends.

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

You can also make a Group Call via Contacts (see **Making a Group Call from Contacts** on page 34).

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 Menu, Call Log, Contacts list, **One Touch Access** button, the programmed number keys, **Left/ Right Navigation** button, the **Volume Up/Down** Button or the **Channel Up/Down** button if this feature is not enabled.

Use the Text Message or Call Alert features to contact an individual radio. See **Text Messaging Features** on page 50 or **Call Alert Operation** on page 43 for more information.


Procedure:

- 1 Select the channel with the active radio alias or ID. See **Selecting a Channel** on page 17.
OR
Press the programmed **One Touch Access** button.

- 2 Press the **PTT** button to make the call. The green LED lights up. The display shows the Private Call icon, with the radio alias alternating with **Calling**.

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

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

- 5  If the Channel Free Indication feature is enabled, you 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 The display shows `Call Ended`.

You can also make a Private Call via Contacts (see **Making a Private Call from Contacts** on page 34), manually dial a Private Call (see **Making a Private Call by Manual Dial** on page 83) or perform a quick alphanumeric search for the required target alias via a keypad entry (see **Making a Group, Private or Phone by Alias Search** on page 91).

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 radio alias or ID. See **Selecting a Channel** on page 17.
- 2 Press the **PTT** button to make the call. The green LED lights up. The display shows the Private Call icon and the radio alias.

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




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

- 5 If 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`.

NOTE:  **Making a Phone Call**  Check with your dealer or system administrator for more information on this configuration.


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

 or  to the required radio alias or ID, and press  to select.

OR




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

- 2 If the access code was not preconfigured, the display shows `Access Code:`.

Enter the access code and press  to proceed.

- 3 Press the **PTT** button to make the call. The green LED lights up. The Phone Call icon appears in the top right corner. The

first text line shows the radio alias. The second text line displays the call status.

-
- 4 If successful:
The DTMF tone sounds. You hear the dialing tone of the telephone user. The first text line shows the radio alias. The Phone Call icon remains in the top right corner.
OR
If unsuccessful:
A tone sounds and the display shows `Phone Call Failed`. Your radio returns to the Access Code input screen. If the access code was preconfigured in the Contacts list, the radio returns to the screen you were on prior to initiating the call.
-
- 5 Press the **PTT** button to talk and release it to listen. To enter extra digits, if requested by the Phone Call:
Enter the extra digits using the keypad and press  to proceed. The DTMF tone sounds and the radio returns to the previous screen.
-
- 6 Press  to end the call.
If de-access code was not preconfigured in the Contacts list, the display shows `De-Access Code:.` Enter the de-access code and press  to proceed. The radio returns to the previous screen.
OR
Press **One Touch Access** button. The DTMF tone sounds.

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

-
- 7 The DTMF tone sounds and the display shows `Ending Phone Call`.
-
- 8 If successful:
A tone sounds and the display shows `Call Ended`.
OR
If unsuccessful:
Your radio returns to the Phone Call screen. Repeat Steps 6 and 7 or wait for the telephone user to end the call.

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

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

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

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

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

■ 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.

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

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  to select.

- 3  or  to `Radio Settings` and press  to select.

- 4  or  to `Talkaround` and press  to select.

- 5 Press  to enable Talkaround. The display shows ✓ beside `Enabled`.

OR

Press  to disable Talkaround. The ✓ disappears from beside Enabled.

- 6 The screen automatically returns to the previous menu.

The Talkaround setting is retained even after powering down.

■ 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 yellow LED lights up, 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 yellow LED turns off, and display shows Permanent Monitor Off.
-

Advanced Features

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

- Scan Lists page 28
- Scan page 31
- Vote Scan page 33
- Contacts Settings page 33
- Call Indicator Settings page 38
- Call Log Features page 41
- Call Alert Operation page 43
- Emergency Operation page 44
- Text Messaging Features page 50
- Analog Message Encode page 58
- Analog Status Update page 59
- Privacy page 60
- Analog Scrambling page 62
- Multi-Site Controls page 63
- Lone Worker page 65
- Notification List page 66
- Auto-Range Transponder System (ARTS) page 67
- Over-the-Air Programming (OTAP) page 67
- Utilities page 68

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 View/Edit 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  to access the menu.

- 2  or  to Scan and press  to select.




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

- 4  or  to Add Member and press  to select.




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

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

- 7 The display shows positive mini notice, followed immediately by Add Another?.


- 8  or  to Yes and press  to select, to add another entry, and repeat Steps 5 and 6.




OR




-  or  to No and press  to select to save the current list.
-




Deleting an Entry from the Scan List




Procedure:

- 1  to access the menu.

- 2  or  to Scan and press  to select.

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

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

- 5  or  to Delete and press  to select.

6 At Delete Entry?, **◀P2** or **P3▶** to Yes and press **☰ OK** to select, to delete the entry. The display shows positive mini notice.

OR

◀P2 or **P3▶** to No and press **☰ OK** to select to return to the previous screen.

7 Repeat Steps 4 to 6 to delete other entries.

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

Setting and Editing Priority for an Entry in the Scan List

Procedure:

1 **☰ OK** to access the menu.

2 **◀P2** or **P3▶** to Scan and press **☰ OK** to select.

3 **◀P2** or **P3▶** to View/Edit List and press **☰ OK** to select.

4 **◀P2** or **P3▶** to the required alias or ID and press **☰ OK** to select.

5 **◀P2** or **P3▶** to Edit Priority and press **☰ OK** to select.

6 **◀P2** or **P3▶** to the required priority level and press **☰ OK** to select.

7 The display shows positive mini notice before returning to the previous screen.

8 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 yellow LED blinks 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 **Left/ Right Navigation** buttons to select a channel programmed with a scan list.

- 2  to access the menu.

- 3  or  to Scan and press  to select.

- 4  or  to Turn On and press  to select.
OR
 or  to Turn Off and press  to select.


- 5 The display shows Scan On when scan is enabled. The yellow LED blinks and the scan icon appears.
OR
The display shows Scan Off if scan is disabled. The scan icon disappears.

While scanning, the radio can only accept data (e.g. text message, location 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:

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

- Press the **PTT** button during hang time. The green LED lights up.

- 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.

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

- 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:

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

- 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 Up/Down** buttons.

■ 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 yellow LED blinks 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 32.


■ 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 four types of calls: Group Call, Private Call, PC Call or Dispatch Call.

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

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

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

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

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 radio IDs for the Digital Contacts list. Deleting radio IDs can only be performed by your dealer.



For the Analog Contacts list, you can only view the radio IDs, edit the radio 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 Press the **PTT** button to make the call. The green LED lights up.

- 5 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.




- 6 Release the **PTT** button to listen. When any user in the group responds, the green LED blinks. You see the Group Call icon, the group alias or ID, and that user's alias or ID on your display.



 - 7  If the Channel Free Indication feature is enabled, you 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 radio alias or ID.

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

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

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

- 7  If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the target radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond.
OR
If there is no voice activity for a programmed period of time, the call ends.

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


NOTE: If you release the **PTT** button while the radio is setting up the call, it exits without any indication and returns to the previous screen.




Your radio may be programmed to perform a radio presence check prior to setting up the Private Call. If the target radio is not available, you hear a short tone and see negative mini notice on the display.




The radio returns to the menu prior to initiating the radio presence check.




Assigning an Entry to a Programmable Number Key







Procedure:

- 1  to access the menu.

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

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

- 4  or  to `Program Key` and press  to select.

- 5  or  to the desired number key and press  to select.
OR
If the number key is currently assigned to another entry, the display shows `The Key is Already Used` and then, the first line of the display shows `Overwrite?`.
 or  to `Yes` and press  to select.

- 6 The display shows `Contact Saved` and a positive mini notice.

NOTE: Each entry can be associated to different number keys. You see a checkmark before each number key that is


assigned to an entry. If the checkmark is before *Empty*, you have not assign a number key to the entry.

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

See ***Making a Group or Private with the Programmable Number Key*** on page 87 for details on making a Group or Private Call with the programmed number keys.


Removing the Association between Entry and Programmable Number Key




Procedure:




Long press the programmed number key to the required alias or ID, press  to select, and proceed to Step 4.




OR




Follow the procedure below.

- 1  to access the menu.




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

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

- 4  or  to *Program Key* and press  to select.

- 5  or  to *Empty* and press  to select.

- 6 The first line of the display shows *Clear from all keys*.

- 7  or  to *Yes* and press  to select.

- 8 The display shows *Contact Saved* and a positive mini notice.


- 9 The screen automatically returns to the previous menu.




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




Setting Default Contact




Procedure:

Follow the procedure below.

- 1  to access the menu.

- 2  or  to Contacts and press  to select.

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

- 4  or  to Set as Default and press  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.




Adding a New Contact


Procedure:


Follow the procedure below.




- 1  to access the menu.

- 2  or  to Contacts and press  to select.

- 3  or  to New Contact and press  to select.

- 4 Use the keypad to enter the contact number and press  to confirm.

- 5 Use the keypad to enter the contact name and press  to confirm.

- 6  or  to the required ringer type and press  to select.


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




■ Call Indicator Settings




📄 Activating or Deactivating Call Ringers for Call Alerts




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  to select.


 - 3  or  to Radio Settings and press  to select.

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


 - 5  or  to Call Ringers and press  to select.

 - 6  or  to Call Alert and press  to select. The current tone is indicated by a ✓.

 - 7  or  to the required tone and press  to select. ✓ appears beside selected tone.
- OR**
-  or  to the Off and press  to select.
-

- 8 Press  to disable the Call Alert ringing tones. The display shows ✓ beside Off.


OR




- Press  to enable the Call Alert ringing tones. The ✓ disappears from beside Off.
-




📄 Activating or Deactivating Call Ringers for Private Calls




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




Procedure:



- 1  to access the menu.

 - 2  or  to Utilities and press  to select.

 - 3  or  to Radio Settings and press  to select.

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

 - 5  or  to Call Ringers and press  to select.


 - 6  or  to Private Call.
-


- 7 **◀P2** or **P3▶** to On to enable to enable Private Call ringing tones. The display shows ✓ beside On.
OR
◀P2 or **P3▶** to Off to disable Private Call ringing tones. The display shows ✓ beside Off.
-


Activating or 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 **◀P2** or **P3▶** to Utilities and press  to select.



 - 3 **◀P2** or **P3▶** to Radio Settings and press  to select.

 - 4 **◀P2** or **P3▶** to Tones/Alerts and press  to select.

 - 5 **◀P2** or **P3▶** to Call Ringers and press  to select.

 - 6 **◀P2** or **P3▶** to Selective Call and press  to select.
 The current tone is indicated by a ✓.
-


- 7 **◀P2** or **P3▶** to the required tone and press  to select. ✓ appears beside selected tone.
OR
◀P2 or **P3▶** to the Off and press  to select.


 - 8 Press  to disable the Selective Call ringing tones. The display shows ✓ beside Off.
OR
 Press  to enable the Selective Call ringing tones. The ✓ disappears from beside Off.
-


Activating or Deactivating Call Ringers for Text Message


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

Procedure:

- 1  to access the menu.

 - 2 **◀P2** or **P3▶** to Utilities and press  to select.

 - 3 **◀P2** or **P3▶** to Radio Settings and press  to select.

 - 4 **◀P2** or **P3▶** to Tones/Alerts and press  to select.
-

- 5 **◀P2** or **P3▶** to Call Ringers and press **☰OK** to select.
-
- 6 **◀P2** or **P3▶** to Messages and press **☰OK** to select. The current tone is indicated by a ✓.
-
- 7 **◀P2** or **P3▶** to the required tone and press **☰OK** to select. ✓ appears beside selected tone.
OR
◀P2 or **P3▶** to the Off and press **☰OK** to select.
-
- 8 Press **☰OK** to disable the Text Message ringing tones. The display shows ✓ beside Off.
OR
 Press **☰OK** to enable the Text Message ringing tones. The ✓ disappears from beside Off.
-

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 **☰OK** to access the menu.

- 2 **◀P2** or **P3▶** to Utilities and press **☰OK** to select.

- 3 **◀P2** or **P3▶** to Radio Settings and press **☰OK** to select.

- 4 **◀P2** or **P3▶** to Tones/Alerts and press **☰OK** to select.

- 5 **◀P2** or **P3▶** to Escalert.

- 6 **◀P2** or **P3▶** to On to enable Escalert. The display shows ✓ beside On.
OR
◀P2 or **P3▶** to Off to disable Escalert. The display shows ✓ beside Off.

■ 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:

- Store alias or ID to Contacts (See **Storing an Alias or ID from a Call List** on page 95)
- Delete Call
- Delete All Calls
- 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  to select.
- 3  or  to preferred list and press  to select.
- 4 The display shows the most recent entry.
- 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  to select.
- 3  or  to the required list and press  to select.
- 4  or  to the required alias or ID and press  to select.
- 5  or  to Delete and press  to select.
- 6 Press  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, and sounds a low tone if Keypad Tones are turned on (see **Turning Keypad Tones On or Off** on page 82).




Deleting All Calls from a Call List




Procedure:




- 1  to access the menu.

- 2  or  to Call Log and press  to select.

- 3  or  to the required list and press  to select.


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




- 5  or  to Delete All and press  to select.




- 6 Press  to select Yes to delete all entries. The display shows positive mini notice.
OR
 or  to No to return to the previous screen.




Viewing Details from a Call List




Procedure:

- 1  to access the menu.

- 2  or  to Call Log and press  to select.

- 3  or  to the required list and press  to select.

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

- 5  or  to View Details and press  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 radio aliases or IDs only and is accessible through the menu via Contacts or manual dial.

☞ 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 yellow LED blinks.
- 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 66 for details about the Notification List.

See **Call Log Features** on page 41 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  to select.
- 3  or  to the required radio alias or ID and press  to select.
- 4  or  to **Call Alert** and press  to select.
- 5 The display shows **Call Alert** and the radio alias or ID, indicating that the Call Alert has been sent.
- 6 The green LED lights up 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.

You can also send a Call Alert by manually dialing the radio ID (see **Making a Call Alert by Manual Dial** on page 95).

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 radio alias or ID, indicating that the Call Alert has been sent.
- 3 The green LED lights up 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 **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 **Emergency** button is assigned to turn on the Emergency mode, then long press the **Emergency** button is assigned to exit the Emergency mode.*

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

Your radio supports **three** Emergency Alarms:

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




In addition, each alarm has the following types:

- **Regular** – Radio transmits an alarm signal and shows audio and/or visual indicators.
- **Silent** – Radio transmits an alarm signal without any audio or visual indicators. Radio receives calls without any sound through the 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 or the **Emergency** footswitch.

Receiving an Emergency Alarm



Procedure:


- 1 The emergency icon appears, a tone sounds, the red LED blinks, and the radio displays the Alarm List if there is more than one alarm listed. The emergency caller aliases are listed.  or  to the required alias and press  to view more details.

Press  again to view your action options.

OR

The emergency icon appears, a tone sounds, the red LED blinks, and the radio displays the emergency caller alias

Press  to view more details. Press  again to view your action options.




- 2 Press  and select **Yes** to exit the Alarm List.

To revisit the Alarm List, press  to access the menu and select **Alarm List**.

Responding to an Emergency Alarm


Procedure:

When receiving an Emergency Alarm:

- 1 In the Alarm List,  or  to the required alias.
- 2  If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond.
- 3 Press **PTT** button to transmit non-emergency voice to the same group that the Emergency Alarm was targeted to. The green LED lights up. Your radio remains in the Emergency mode.

- 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 emergency initiating radio responds, the green LED blinks. You see the Group Call icon, the group alias or ID, and transmitting radio alias or ID on your display.
-

- 6 Your radio displays the Alarm List.
-

Emergency voice can only be transmitted by the emergency initiating radio. All other radios (including the emergency receiving radio) transmit non-emergency voice.

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 or the **Emergency** footswitch.
-

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

OR

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

- 3 When an Emergency Alarm acknowledgment is received, the Emergency tone sounds and the green LED blinks. 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 does 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 or the **Emergency** footswitch.

- 2 The display shows Tx Alarm and the destination alias. The green LED lights up and the Emergency icon appears.
OR
 The display shows Tx Telegram and the destination alias. The green LED lights up and the Emergency icon appears.


- 3 When an Emergency Alarm acknowledgment is received, the Emergency tone sounds and the green LED blinks. The display shows Alarm Sent.

- 4 Your radio enters the emergency call mode when the display shows Emergency and the destination group alias.


- 5 Press **PTT** button to make the call. The green LED lights up and the group icon appears on the display.

- 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 you receive a group call, the display shows the caller alias and group alias.
-

- 8 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 **Emergency Off** button to exit the Emergency mode.

- 9 The radio returns to the Home screen.
-

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

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

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".

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

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 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 or the **Emergency** footswitch.

- 2 The display shows Tx Alarm and the destination alias. The green LED lights up and the Emergency icon appears.
OR
 The display shows Tx Telegram and the destination alias. The green LED lights up 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 green LED lights up 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 does 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 does 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 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, **OR**
- Turn the radio off and then power it on again if your radio has been programmed to remain on the Emergency Revert channel even after acknowledgement is received.

NOTE: If your radio is powered off, it exits the Emergency mode. The radio does 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 Messaging Features

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

Sending a Quick Text Message


Your radio supports a maximum of 50 Quick Text messages as programmed by your dealer.




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  to select.

- 3  or  to Quick Text and press  to select.

- 4  or  to the required Quick Text and press  to select.

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

- 6 The display shows transitional mini notice, confirming your message is being sent.
-
- 7 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 51).*

Sending a Quick Text Message with the One Touch Access Button

- 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 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 51).*

Managing Fail-to-Send Text Messages


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

- Resend
- Forward

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

Resending a Text Message




Procedure:




- 1 Press  to resend the same message to the same radio/group alias or ID.
-
- 2 If the message is sent successfully, a tone sounds and the display shows positive mini notice.
OR
If the message cannot be sent, the display shows negative mini notice.
-

Forwarding a Text Message

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

Procedure:

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

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

- 3 The display shows 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.

You can also manually select a target radio address (see **Forwarding a Text Message by Manual Dial** on page 96).

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  to select.

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

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

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

*The icon beside each message indicates the status of the message (see **Sent Item Icons** on page 14).*


Sending a Sent Text Message




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

- Resend
- Forward
- Delete

NOTE: If the channel type (i.e. conventional digital or Capacity Plus or Linked Capacity Plus) 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  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 text message fails to send, the radio returns you to the Resend option screen. Press  to resend the message to the same radio/group alias or ID.

NOTE: Changing the volume, and pressing any button, except for ,  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. It also exits the screen when the radio receives a text 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 if the radio is displaying the Missed Call screen).

Press  or  to access the Forward or Delete option screen:

- Select **Forward** to send the selected text message to another target radio (see **Forwarding a Text Message** on page 52). You can also manually select a target radio address using a keypad microphone (see **Forwarding a Text Message by Manual Dial** on page 96).
- 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  to select.

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

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

- 5  or  to **Yes** and press  to select. The display shows positive mini notice
OR
 or  to **No** and press  to return to the previous screen.

*When you select **Sent Items** and it contains no text messages, the display shows **List Empty**, and sounds a low tone if **Keypad Tones** are turned on (see **Turning Keypad Tones On or Off** on page 82).*

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  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  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:

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


NOTE: If the channel type (i.e. conventional digital or Capacity Plus or Linked Capacity Plus) 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  to select.

 - 3  or  to Inbox and press  to select.

 - 4  or  to view the messages.
A subject line may be shown if the message is from an e-mail application.

 - 5 Press  to select the current message, and press  again to reply, forward, or delete that message.
- OR**
- Long press  to return to the Home screen.


Replying to a Text Message with Quick Text


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  to select.




- 3  or  to Inbox and press  to select.

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

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

- 6  or  to Reply and press  to select.

- 7  or  to Quick Reply and press  to select.

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

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

- 10 If the message is sent successfully, a tone sounds and the display shows positive mini notice.
OR
If the message cannot be sent, 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 51).*


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  to select.

- 3  or  to Inbox and press  to select.

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

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

- 6  or  to Delete and press  to select.

- 7  or  to Yes and press  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  to select.

- 3  or  to Inbox and press  to select.

- 4  or  to Delete All and press  to select.

- 5  or  to Yes and press  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, and sounds a low tone if Keypad Tones are turned on (see **Turning Keypad Tones On or Off** on page 82).*


NOTE: Additional text messaging features are available with a keypad-enabled microphone. Refer to **Text Messaging** on page 96 for more details.




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  to access the menu.

 - 2  or  to Message and press  to select.

 - 3  or  to Quick Text and press  to select.


 - 4  or  to the required message. Press  to send.




 - 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.




Sending 5-Tone Message Encode to Contact




Procedure:

- 1  to access the menu.

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

- 3  or  to `Quick Text` and press  to select.

- 4  or  to the required message. Press  to select.

- 5  or  to the required contact. Press  to select.

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

- 7 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.

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


■ 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  to access the menu.

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

- 3  or  to the required status. Press  to select.

- 4  or  to `Set as Default`. Press  to send the status update.

- 5 The display shows transitional mini notice, confirming your status update is being sent.











- 6 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 37 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 5-Tone Status Details

Procedure:

- 1  to access the menu.
- 2  or  to Status and press  to select.
- 3  or  to the required status. Press  to select.
- 4  or  to View Details. Press  to select.
- 5 The display shows details of the selected status.

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

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

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 green LED lights up while the radio is transmitting and double blinks 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  to select.

 - 3  or  to Radio Settings and press  to select.

 - 4  or  to Privacy.

 - 5  or  to On to enable Privacy. The display shows ✓ beside On.
OR
 or  to Off to disable Privacy. The display shows ✓ beside Off.
-

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

■ Analog Scrambling

Analog Scrambling is an analog-only feature designed 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 analog scrambling enabled on the channel to send and receive an analog scrambling-enabled transmission. While on an analog scrambling-enabled channel, the radio is **NOT** able to receive clear (unscrambled) transmissions.

Your radio supports **TWO** analog scrambling codes that can be toggled via the programmable button.


Turning Analog Scrambling On or Off




Procedure:




Press the programmed **Analog Scrambling** button to enable or disable this function.

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 Scramble

- 5 Press  to enable Privacy. The display shows ✓ beside Enabled.

OR

Press  to disable Privacy. The ✓ disappears from beside Enabled.


Setting the Analog Scrambling Codes




Procedure:




Press the programmed **Analog Scrambling** button to enable or disable this function.



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 Scramble.

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

■ 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 9 and **Linked Capacity Plus** on page 10 for more details about these configurations.

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

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 yellow LED blinks 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 yellow LED blinks 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, a 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.

- 7 The LED turns off and the radio returns to the Home screen. The display shows the channel alias.














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 green LED blinks.
- 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.
-

■ 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 44 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.


■ Notification List

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

The 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.

NOTE: Your radio suspends Scan when the Notification List is displayed. Scanning resumes when your radio exits the Notification List. Press  to exit the Notification List or wait for the menu timer to expire.


Accessing the Notification List




Procedure:




Press the programmed **Notifications** button.

OR

Follow the procedure below.

- 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.

■ Auto-Range Transponder System (ARTS)

ARTS is an analog-only feature designed to inform you when your radio is out-of-range of other ARTS-equipped radios.

ARTS-equipped radios transmit or receive signals periodically to confirm that they are within range of each other. Your dealer can program your radio to transmit or receive the ARTS signal.

Your radio provides indications of states as follows:

- **First-Time Alert** – A tone sounds and the display shows `In Range` after the channel alias.
- **ARTS-in-Range Alert** – A tone sounds, if programmed, and the display shows `In Range` after the channel alias.
- **ARTS-Out-of-Range Alert** – A tone sounds, the LED rapidly blinks red, and the display alternates between `Out of Range` and the home screen.

■ Over-the-Air Programming (OTAP)

Your radio can be updated by your dealer remotely, via OTAP, without needing to be physically connected. Additionally, some settings can also be configured via OTAP.

While undergoing OTAP, the LED blinks green.

NOTE: When the radio is receiving high volume data, the High Volume Data icon appears and channel is busy. A PTT button press at this time may cause a negative tone to sound.

Once the programming is complete, depending on your radio's configuration:

- A tone sounds, the display shows `Updating Restarting`, and your radio restarts (powers off and on again).
- Select between `Restart Now` or `Postpone`. Selecting `Postpone` allows your radio to return to the previous display, with an OTAP Timer icon visible, for a period of time before the automatic restart occurs.

Upon power up after the automatic restart occurs, the display shows `Sw Update Completed` if the OTAP update is successful or `Sw Update Failed` if the OTAP update is unsuccessful.

See **Software Update** on page 78 for your updated software version.

Utilities

Turning the Radio Tones/Alerts On or Off


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




Procedure:




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




OR




Follow the procedure below.



- 1  to access the menu.

- 2  or  to Utilities and press  to select.



- 3  or  to Radio Settings and press  to select.

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

- 5  or  to All Tones and press  to select.

- 6  or  to On to enable All Tones. The display shows ✓ beside On.


OR




-  or  to Off to disable All Tones. The display shows ✓ beside Off.
-




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  to select.

- 3  or  to Radio Settings and press  to select.

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

- 5  or  to Vol. Offset and press  to select.


- 6  or  to the required volume value. The radio sounds a feedback tone with each corresponding volume value.




- 7 Press  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  to select.

- 3  or  to Radio Settings and press  to select.

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


- 5  or  to Talk Permit and press  to select.




- 6  or  to On to enable Talk Permit Tone. The display shows ✓ beside On.
OR
 or  to Off to disable Talk Permit Tone. The display shows ✓ beside Off.




Turning the Power Up Alert Tone On or Off




You can enable and disable the Power Up Alert Tone if needed.




Procedure:



- 1  to access the menu.

- 2  or  to Utilities and press  to select.

- 3  or  to Radio Settings and press  to select.

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

- 5  or  to Power Up and press  to select.

- 6  or  to On to enable Power Up Tone. The display shows ✓ beside On.
OR

◀P2 or **P3▶** to Off to disable Power Up Tone. The display shows ✓ beside Off.

Setting the Text Message Alert Tone

You can customize your radio's text message alert tone to Momentary or Repetitive for each entry in the Contacts list.

Procedure:

- 1 **☰ OK** to access the menu.

 - 2 **◀P2** or **P3▶** to Contacts and press **☰ OK** to select.

 - 3 **◀P2** or **P3▶** to the required radio alias or ID and press **☰ OK** to select.

 - 4 **◀P2** or **P3▶** to Message Alert and press **☰ OK** to select.

 - 5 The display shows Momentary and Repetitive.
◀P2 or **P3▶** to the required setting and press **☰ OK** to enable.
✓ appears besides selected setting.
-

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 **☰ OK** to access the menu.

 - 2 **◀P2** or **P3▶** to Utilities and press **☰ OK** to select.

 - 3 **◀P2** or **P3▶** to Radio Settings and press **☰ OK** to select.

 - 4 **◀P2** or **P3▶** to Power and press **☰ OK** to select.

 - 5 **◀P2** or **P3▶** to the required setting and press **☰ OK** 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.

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  to select.

 - 3  or  to Radio Settings and press  to select.

 - 4  or  to Brightness and press  to select.

 - 5 The display shows a progress bar.
Decrease display brightness by pressing  or increase the display brightness by pressing .
- Press  to confirm your entry.
-

Turning Horns/Lights On or Off

Your radio is able to notify you of an incoming call via the horns and lights feature. When activated, an incoming call sounds your vehicle's horn and turns on its lights.


This feature needs to be installed through your radio's rear accessory connector by your dealer.




Procedure:




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




OR





Follow the procedure below.

- 1  to access the menu.

 - 2  or  to Utilities and press  to select.

 - 3  or  to Radio Settings and press  to select.

 - 4  or  to Horns/Lights and press  to select.

 - 5  or  to Turn On to enable Horns/Lights The display shows ✓ beside Turn On.
- OR**
-  or  to Turn Off to disable Horns/Lights The display shows ✓ beside Turn Off.
-

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  to select.

- 3  or  to Radio Settings and press  to select.

- 4  or  to Squelch and press  to select.


- 5 The display shows Tight and Normal.
 or  to the required setting and press  to enable.
✓ appears besides selected setting.




- 6 Screen returns to the previous menu.




Turning the LED Indicators On or Off




You can enable and disable the LED Indicators if needed.





Procedure:

- 1  to access the menu.

 - 2  or  to Utilities and press  to select.

 - 3  or  to Radio Settings and press  to select.


 - 4  or  to LED Indicator and press  to select.




 - 5  or  to On to enable LED Indicator. The display shows ✓ beside On.
- OR**
- 5  or  to Off to disable LED Indicator. The display shows ✓ beside Off.




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  to select.

- 3  or  to Language and press  to select.

- 4  or  to the required language and press  to enable. ✓ appears beside selected language.

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. The microphone source must be preconfigured and the VOX-capable accessory attached to the preconfigured port.

NOTE: You may need to turn off the radio and power it up again after detaching the VOX-capable microphone from it to allow the radio to switch to another valid accessory.

Pressing the **PTT** button during radio operation disables 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 Up/Down** buttons, **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  to select.

- 3  or  to Radio Settings and press  to select.

- 4  or  to VOX and press  to select.

- 5  or  to On to enable VOX. The display shows ✓ beside On.
OR
 or  to Off to disable VOX. The display shows ✓ beside Off.

*If the Talk Permit Tone feature is enabled (see **Turning the Talk Permit Tone On or Off** on page 69), use a trigger word to initiate the call. Wait for the Talk Permit Tone to finish before speaking clearly into the microphone.*

 **Turning the Option Board Feature(s) On or Off**

Option board capabilities within each channel and can be assigned to programmable buttons. Refer to your dealer or system administrator for more information.

Procedure:

Press the programmed **Option Board Feature** button to toggle the feature on or off.

 **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  to select.


- 3  or  to Voice Announcement.




- 4  or  to On to enable Voice Announcement. The display shows ✓ beside On.
OR
 or  to Off to disable Voice Announcement. The display shows ✓ beside Off.



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  to select.

- 3  or  to Call Forward.


- 4  or  to On to enable Call Forwarding. The display shows ✓ beside On.
OR
 or  to Off to disable Call Forwarding. The display shows ✓ beside Off.




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




Analog Mic AGC (Mic AGC-A)



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  to select.

- 3  or  to Radio Settings and press  to select.


- 4  or  to Mic AGC-A.




- 5  or  to On to enable Analog Mic AGC. The display shows ✓ beside On.
OR
 or  to Off to disable Analog Mic AGC. The display shows ✓ beside Off.




Digital Mic AGC (Mic AGC-D)



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





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 Mic AGC-D.

- 5  or  to On to enable Digital Mic AGC. The display shows ✓ beside On.
OR
 or  to Off to disable Digital Mic AGC. The display shows ✓ beside Off.

Intelligent Audio

Your radio automatically adjusts its audio volume to overcome current background noise in the environment, inclusive of both stationary and non-stationary noise sources. This feature is a Receive-only feature and does not affect Transmit audio.


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  to select.


 - 3  or  to Radio Settings and press  to select.



 - 4  or  to Intelligent Audio.

 - 5  or  to On to enable Intelligent Audio. The display shows ✓ beside On.
- OR**
- 1  or  to Off to enable Intelligent Audio. The display shows ✓ beside Off.

Accessing General Radio Information

Your radio contains information on the following:

- Radio Alias and ID 
- Firmware and Codeplug Versions
- Software Update
- Site Information

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.

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  to select.

3  or  to Radio Info and press  to select.

4  or  to My Number and press  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.




The display shows the current firmware and codeplug versions.


Software Update




Displays the date and time of the latest software update carried out via Over-the-Air Programming (OTAP).

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 SW Update and press  to select.

5 The display shows the date and time of the latest software update.


See **Over-the-Air Programming (OTAP)** on page 67 for details on OTAP.




NOTE: Software Update menu is only available after at least one successful OTAP session.




Site Information




Displays the current Linked Capacity Plus site name your radio is on.

Procedure:

- 1  to access the menu.

- 2  or  to Utilities and press  to select.

- 3  or  to Radio Info and press  to select.

- 4  or  to Site Info and press  to select.

- 5 The display shows the current Linked Capacity Plus site name.

See **Linked Capacity Plus** on page 10 for details on *Linked Capacity Plus*.



■ Keypad Microphone Features

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

- Using the Keypad page 81
- Additional Advanced Features page 82
- Text Messaging page 96
- Dual Tone Multi Frequency (DTMF) page 97
- Password Lock Features. page 98
- Front Panel Programming (FPP). page 100

■ Using the Keypad


You can use the alphanumeric keypad on the 4-Way Navigation Keypad Microphone (Motorola part number PMMN4089_) to access your radio's features. You can use the keypad to enter radio aliases or IDs. Many characters require that you press a key multiple times. The table below shows the number of times a key needs to be pressed to generate the required character.




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




Turning Keypad Tones On or Off




You can enable and disable Keypad Tones if needed.




Procedure:





- 1  to access the menu.

- 2  or  to Utilities and press  to select.

- 3  or  to Radio Settings and press  to select.

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


- 5  or  to Keypad Tones and press  to select.




- 6  or  to On to enable Keypad Tones. The display shows ✓ beside On.
OR
 or  to Off to disable Keypad Tones. The display shows ✓ beside Off.

Additional Advanced Features



Selecting a Zone by Alias Search




Procedure:


- 1  to access the menu.

- 2  or  to Zone and press  to select.

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











- 4  or  to the required zone and proceed to Step 7.
OR
 Key in the first character of the required zone.

- 5 A blinking cursor appears.
 Use the keypad to type the required zone.
 Press  to move one space to the right.
 Press  to delete any unwanted characters.
 Long press  to toggle between lower case and upper case.

- 6 The first line of the display shows the characters you keyed in. The next lines of the display show the shortlisted search results.
The alias search is case-insensitive. If there are two or more zones with the same name, the radio displays the zone that is listed first in the zone list.
- 7 Press  to select.
- 8 The display shows <Zone> Selected momentarily and returns to the selected zone screen.

Making a Private Call by Manual Dial

Procedure:

- 1  to access the menu.
- 2  or  to Contacts and press  to select. The entries are alphabetically sorted.
- 3  or  to Manual Dial and press  to select.
- 4  or  to Radio Number and press  to select.
- 5 If there is a previously dialed radio ID, the ID appears along with a blinking cursor.
Use the keypad to edit the radio ID.

OR

Use the keypad to enter a new radio ID.




- 6 Press the **PTT** button to make the call. The green LED lights up. The display shows the destination alias.
- 7 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 8 Release the **PTT** button to listen. When the target radio responds, the green LED blinks.
- 9 If the Channel Free Indication feature is enabled, you 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 The display shows Call Ended.




Making a Phone Call by Manual Dial




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



Procedure:

- 1  to access the menu.

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

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


- 4  or  to `Phone Number` and press  to select.



- 5 The display shows `Number: .` The second line of the display shows a blinking cursor. Use the keypad to enter a telephone number and press  to proceed.
If the access code was not preconfigured in the Contacts list, the first line of the display shows `Access Code: .` The second line of the display shows a blinking cursor. Enter the access code and press  to proceed.

- 6 The green LED lights up. The Phone Call icon appears in the top right corner. The first text line shows the radio alias. The second text line displays the call status.

- 7 If successful:
The DTMF tone sounds. You hear the dialing tone of the telephone user. The first text line shows the radio alias. The Phone Call icon remains in the top right corner.
OR
If unsuccessful:
A tone sounds and the display shows `Phone Call Failed.` Your radio returns to the Access Code input screen.
If the access code was preconfigured in the Contacts list,

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

- 8 Press the **PTT** button to talk and release it to listen. The To enter extra digits, if requested by the Phone Call: Enter the extra digits using the keypad microphone and press  to proceed. The DTMF tone sounds and the radio returns to the previous screen.

- 9 Press  to end the call.
If deaccess code was not preconfigured in the Contacts list, the first line of the display shows `De-Access Code: .` The second line of the display shows a blinking cursor. Enter the deaccess code and press  to proceed. The radio returns to the previous screen.
OR
Press **One Touch Access** button. The DTMF tone sounds. If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.

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


- 11 If successful:
A tone sounds and the display shows `Call Ended.` Your radio returns to the Phone Call screen.
OR
If unsuccessful:

Your radio returns to the Phone Call screen. Repeat Steps 9 and 10 or wait for the telephone user to end the call.

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

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

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

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

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


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

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

Making a Phone Call with the One Touch Access Button

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

Procedure:


- 1 Press the programmed **One Touch Access** button to make a Phone Call to the predefined alias or ID.
If the entry for the **One Touch Access** button is empty, a negative indicator tone sounds.
If the access code was not preconfigured in the Contacts list, the first line of the display shows Access Code:. The second line of the display shows a blinking cursor. Enter the access code and press  to proceed.

- 2 The green LED lights up. The Phone Call icon appears in the top right corner. The first text line shows the radio alias. The second text line displays the call status.


- 3 If successful:
The DTMF tone sounds. You hear the dialing tone of the telephone user. The first text line shows the radio alias. The Phone Call icon remains in the top right corner.
OR
If unsuccessful:
A tone sounds and the display shows Phone Call Failed. Your radio returns to the Access Code input screen.
If the access code was preconfigured in the Contacts list,

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

- 4 Press the **PTT** button to talk and release it to listen. The To enter extra digits, if requested by the Phone Call:

Enter the extra digits using the keypad and press  to proceed. The DTMF tone sounds and the radio returns to the previous screen.

- 5 Press  to end the call.

If deaccess code was not preconfigured in the Contacts list, the first line of the display shows `De-Access Code:`. The second line of the display shows a blinking cursor. Enter the deaccess code and press  to proceed. The radio returns to the previous screen.

OR

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

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

- 7 If successful:
A tone sounds and the display shows `Call Ended`. Your radio returns to the Phone Call screen.


OR

If unsuccessful:

Your radio returns to the Phone Call screen. Repeat Step 5 or wait for the telephone user to end the call.

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

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

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

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

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

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

Making a Group or Private with the Programmable Number Key

The Programmable Number Key feature allows you to make a Group PrivateCall to a predefined alias or ID easily. This feature can be assigned to all the available number keys on a keypad microphone.

You can **ONLY** have one alias or ID assigned to a number key, but you can have more than one number key associated to an alias or ID.

Procedure:


When you are on the Home screen:

- 1 Long press the programmed number key to make a Group or Private Call to the predefined alias or ID.
If the number key is not associated to an entry, a negative indicator tone sounds.

- 2 Press the **PTT** button to make the call. The green LED lights up. The Group/Private Call icon appears in the top right corner. The first text line shows the caller alias. The second text line displays either the call status for a Private Call.

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

- 4 Release the **PTT** button to listen. When the target radio responds, the green LED blinks. The display shows the destination alias.



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

OR

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




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

For a Private Call, you hear a short tone when the call ends.

NOTE: See **Assigning an Entry to a Programmable Number Key** on page 35 for details on assigning an entry to a number key on the keypad.  **Making a Phone Call with the Programmable Phone Button**  Check with your dealer or system administrator for more information on this configuration.

Procedure:

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

- 2  or  to the required radio alias or ID, and press  to select.
If the access code was not preconfigured in the Contacts list, the first line of the display shows `Access Code:`. The

second line of the display shows a blinking cursor. Enter the access code and press  to proceed.


3 The first line of the display shows `Calling`. The second line of the display shows the radio alias or ID, and the Phone Call icon.

4 If successful:
The DTMF tone sounds. You hear the dialing tone of the telephone user. The first line of the display shows the alias or ID, and the RSSI icon. The second line of the display shows `Phone Call` and the Phone Call icon.

OR

If unsuccessful:


A tone sounds and the display shows `Phone Call Failed`. Your radio returns to the Access Code input screen. If the access code was preconfigured in the Contacts list, the radio returns to the screen you were on prior to initiating the call.

5 Press the **PTT** button to talk and release it to listen. The RSSI icon disappears during transmission. To enter extra digits, if requested by the Phone Call: The first line of the display shows `Extra Digits:`. The second line of the display shows a blinking cursor. Enter the extra digits using the keypad and press  to proceed. The DTMF tone sounds and the radio returns to the previous screen.

OR

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

6 Press  to end the call.

If deaccess code was not preconfigured in the Contacts list, the first line of the display shows `De-Access Code:`. The second line of the display shows a blinking cursor. Enter the deaccess code and press  to proceed. The radio returns to the previous screen.

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

8 If successful:
A tone sounds and the display shows `Phone Call Ended`. Your radio returns to the screen you were on prior to initiating the call.

OR


If unsuccessful:

Your radio returns to the Phone Call screen. Repeat Steps 6 and 7 or wait for the telephone user to end the call.

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

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

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

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

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

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




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



Making a Phone Call from Contacts

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

Procedure:


1  to access the menu.

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

3  or  to the required radio alias or ID.

OR

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


 or  to **Phone Number** and press  to select.

The first line of the display shows **Phone Number:**. The second line of the display shows a blinking cursor. Use the keypad to enter a telephone number.

4 Press  to select.

If the entry selected is empty, a negative indicator tone sounds and the display shows **Phone Call Invalid #**.

5  or  to **Call Phone** and press  to select.

If the access code was not preconfigured in the **Contacts** list, the first line of the display shows **Access Code:**. The second line of the display shows a blinking cursor. Enter the access code and press  to proceed.

6 The first line of the display shows **Calling**. The second line of the display shows the radio alias or ID, and the **Phone Call** icon.

7 If successful:
The DTMF tone sounds. You hear the dialing tone of the


telephone user. The first line of the display shows the radio alias or ID, and the RSSI icon. The second line of the display shows Phone Call and the Phone Call icon.

OR

If unsuccessful:


A tone sounds and the display shows Phone Call Failed. Your radio returns to the Access Code input screen.

If the access code was preconfigured in the Contacts list, the radio returns to the screen you were on prior to initiating the call.

- 8 Press the **PTT** button to talk and release it to listen. The RSSI icon disappears during transmission. To enter extra digits, if requested by the Phone Call: The first line of the display shows Extra Digits:. The second line of the display shows a blinking cursor. Enter the extra digits using the keypad and press  to proceed. The DTMF tone sounds and the radio returns to the previous screen.

OR

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

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

deaccess code and press  to proceed. The radio returns to the previous screen.

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

- 11 If successful:

A tone sounds and the display shows Phone Call Ended. Your radio returns to the Call Phone screen.

OR


If unsuccessful:

Your radio returns to the Phone Call screen. Repeat Steps 9 and 10 or wait for the telephone user to end the call.

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

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

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

NOTE: During channel access, press  to dismiss the call attempt and a negative indicator tone sounds. Your radio returns to the Call Phone screen.

During the call, when you press **One Touch Access**

button with the deaccess code preconfigured or enter the deaccess code as the input for extra digits, your radio attempts to end the call.

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

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


Making a Group, Private or Phone by Alias Search






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




This feature is only applicable while in Contacts.

Procedure:

- 1  to access the menu.

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

- 3 Key in the first character of the required alias.


- 4 A blinking cursor appears.
Use the keypad to type the required zone.
Press  to move one space to the right.
Press  to delete any unwanted characters.
Long press  to toggle between lower case and upper case.

- 5 The first line of the display shows the characters you keyed in. The next lines of the display show the shortlisted search results.
The alias search is case-insensitive. If there are two or more aliases with the same name, the radio displays the alias that is listed first in the Contacts list.

- 6 Press the **PTT** button to make the call. The green LED lights up. The first line displays the target radio's ID. The second line displays the call type and the Call icon.

- 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 green LED blinks. The display shows the destination alias.

- 9  If the Channel Free Indication feature is enabled, you 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`.




NOTE: Press  button or  to exit alias search.

Viewing an Entry in the Scan List by Alias Search




Procedure:

- 1  to access the menu.

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

- 3  or  to `Scan List` and press  to select.

- 4 Key in the first character of the required alias.

- 5 A blinking cursor appears.
Use the keypad to type the required zone.
Press  to move one space to the right.
Press  to delete any unwanted characters.
Long press  to toggle between lower case and upper case.


- 6 The first line of the display shows the characters you keyed in. The next lines of the display show the shortlisted search results.




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




Editing the Scan List by Alias Search




Adding a New Entry to 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  or  to `Add Member` and press  to select.

- 5 Key in the first character of the required alias.















- 6 A blinking cursor appears.
Use the keypad to type the required zone.
Press  to move one space to the right.
Press  to delete any unwanted characters.

Long press  to toggle between lower case and upper case.

- 7 The first line of the display shows the characters you keyed in. The next lines of the display show the shortlisted search results.
The alias search is case-insensitive. If there are two or more aliases with the same name, the radio displays the alias that is listed first in the list.
- 8 Press  to select.
- 9  or  to the required priority level and press  to select.
- 10 The display shows positive mini notice, followed immediately by Add Another?.
- 11  or  to Yes and press  to select, to add another entry, and repeat Steps 5 to 9.
OR
 or  to No and press  to select to save the current list.

Deleting an Entry from 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 Key in the first character of the required alias.
- 5 A blinking cursor appears.
Use the keypad to type the required zone.
Press  to move one space to the right.
Press  to delete any unwanted characters.
Long press  to toggle between lower case and upper case.
- 6 The first line of the display shows the characters you keyed in. The next lines of the display show the shortlisted search results.
The alias search is case-insensitive. If there are two or more entries with the same name, the radio displays the entry that is listed first in the scan list.
- 7 Press  to select.
- 8  or  to Delete and press  to select.

9 At Delete Entry?, **◀P2** or **P3▶** to Yes and press **OK** to select, to delete the entry. The display shows positive mini notice.

OR

◀P2 or **P3▶** to No and press **OK** to select to return to the previous screen.

10 Repeat Steps 4 to 9 to delete other entries.

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

Setting and Editing Priority for an Entry in the Scan List

Procedure:

1 **OK** to access the menu.

2 **◀P2** or **P3▶** to Scan and press **OK** to select.

3 **◀P2** or **P3▶** to Scan List and press **OK** to select.

4 Key in the first character of the required alias.

5 A blinking cursor appears.
Use the keypad to type the required zone.

Press **#** to move one space to the right.

Press ***** to delete any unwanted characters.

Long press **0** to toggle between lower case and upper case.

6 The first line of the display shows the characters you keyed in. The next lines of the display show the shortlisted search results.

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

7 Press **OK** to select.

8 **◀P2** or **P3▶** to Edit Priority and press **OK** to select.

9 **◀P2** or **P3▶** to the required priority level and press **OK** to select.


10 The display shows positive mini notice before returning to the previous screen.




11 The priority icon appears left of the member's name.




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




Storing an Alias or ID from a Call List




Procedure:


- 1  to access the menu.

- 2  or  to Call Log and press  to select.

- 3  or  to the required list and press  to select.

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

- 5  or  to Store and press  to select.




- 6 A blinking cursor appears. If needed, key in the alias for that ID and press .
- 7 The display shows positive mini notice.




You can also store an ID without an alias.





Making a Call Alert by Manual Dial

Procedure:

- 1  to access the menu.

- 2  or  to Contacts and press  to select.

- 3  or  to Manual Dial and press  to select.

- 4 A blinking cursor appears. Enter the radio ID you want to send the Call Alert to and press .
- 5  or  to Call Alert and press  to select.

- 6 The display shows Call Alert and the radio alias or ID, indicating that the Call Alert has been sent.

- 7 The green LED lights up when your radio is sending the Call Alert.



- 8 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.

RSSI Values


Your radio shows the Received Signal Strength Indicator (RSSI) icon at the top of your display. This feature allows you to view the RSSI values.

Procedure:

When you are on the Home screen:

1 Press  three times and long press , all within 8 seconds.

2 The display shows the current RSSI values.


Long press the  button to return to the Home screen.

See **Display Icons** on page 11 for details on the RSSI icon.

■ Text Messaging

The **maximum** length of characters for a text message, including the subject line (seen when receiving message from an e-mail application), is **140**, whereas to receive would be a maximum of **280** characters.

The radio exits 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.

Managing Fail-to-Send Text Messages

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

Forwarding a Text Message by Manual Dial

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

Procedure:

1  or  to Forward and press  to select.

- 2 **[P2]** or **[P3]** to Manual Dial and press **[OK]** to select.

The first line of the display shows Radio Number:.

Key in the radio ID and press **[OK]**.

- 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.

■ 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 68).*

■ Password Lock Features

If enabled, this feature allows you to access your radio via password upon powering up. You can use a keypad microphone or **Left/ Right Navigation** buttons to enter password.

Accessing the Radio from Password





Procedure:

Power up the radio.

- 1 You hear a continuous tone.
- 2 Enter your current four-digit password via keypad microphone.

The display shows ●●●●. Press  to proceed.

OR

Enter your current four-digit password. Press  or  to edit each digit's numeric value and  to enter the selected digit and move to the next digit. Each digit changes to ●. Press  to confirm your selection. You hear a positive indicator tone for every digit pressed.

- 3 If the password is correct:
Your radio proceeds to power up. See **Powering Up the Radio** on page 2.

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 yellow LED double blinks.

*Your radio enters into locked state for 15 minutes, and responds to inputs from **On/Off** button.*

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

The use of **Emergency** footswitch cancels out password input to access the radio.

Unlocking the Radio from Locked State

Procedure:

Wait for 15 minutes. Repeat Steps 1 to 3 in **Accessing the Radio from Password** on page 98.

OR











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

- 1 A tone sounds and the yellow LED double blinks. The display shows `Radio Locked`.
- 2 Wait for 15 minutes. Repeat **Accessing the Radio from Password** on page 98.



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  to select.
- 3  or  to Radio Settings and press  to select.
- 4  or  to Passwd Lock and press  to select.

- 5 Enter a four-digit password.
See Step 2 in **Accessing the Radio from Password** on page 98.

- 6 If the password is correct:
 or  to Turn On to enable Password Lock. The display shows ✓ beside Turn On.

OR











-  or  to Turn Off to disable Password Lock. The display shows ✓ beside Turn Off.

OR

- If the password is incorrect:
The display shows `Wrong Password` and automatically returns to the previous menu.

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 via keypad microphone.
See Step 2 in **Accessing the Radio from Password** on page 98.

- 6 If the password is correct:
<P2 or **P3>** to Change FWD and press **OK** 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 via keypad microphone.
See Step 2 in **Accessing the Radio from Password** on page 98.

- 8 Re-enter the new four-digit password. See Step 2 in **Accessing the Radio from Password** on page 98.

- 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.

■ 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 **OK** to access the menu.



- 2 **<P2** or **P3>** to Utilities and press **OK** to select.


- 3 **<P2** or **P3>** to Program Radio and press **OK** 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.

 or  – 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.

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:

DM2600 Mobile Radio	Two (2) Years
Product Accessories	One (1) Year

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

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

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

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

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

II. GENERAL PROVISIONS:

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

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

III. STATE LAW RIGHTS:

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

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

IV. HOW TO GET WARRANTY SERVICE:

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

V. WHAT THIS WARRANTY DOES NOT COVER:

- A) Defects or damage resulting from use of the Product in other than its normal and customary manner.
- B) Defects or damage from misuse, accident, water, or neglect.

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

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

VII. GOVERNING LAW:

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

TecniTrán

Telecomunicaciones

www.tecnitran.es info@tecnitran.es

Teléfono: 91 610 66 78

Síguenos en 



MOTOROLA

Motorola Solutions, Inc.

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license.

All other trademarks are the property of their respective owners.

© 2013 Motorola Solutions, Inc. All rights reserved.

July 2013.

www.motorolasolutions.com/mototrbo



68012008066-A