PROFESSIONAL DIGITAL TWO-WAY RADIOS

MOTOTRBO™ CP200d™ NON-DISPLAY PORTABLE USER GUIDE

Declaration of Conformity

This declaration is applicable to your radio ***only*** if your radio is labeled with the FCC logo shown below.

DECLARATION OF CONFORMITY

Per FCC CFR 47 Part 2 Section 2.1077(a)

Responsible Party
Name: Motorola Solutions, Inc.

Address: 1303 East Algonquin Road, Schaumburg, IL 60196-1078, U.S.A.
Phone Number: 1-800-927-2744

Hereby declares that the product:

Model Name: **CP200d** conforms to the following regulations:

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

Class B Digital Device

As a personal computer peripheral, this device complies with Part 15 of the FCC Rules. This device complies with Industry Canada licence-exempt RSS standard(s).Operation is subject to the following two conditions:

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

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

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

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

Contents

This User Guide contains all the information you need to use the MOTOTRBO CP200d Portable Radio.

Declaration of Conformity i

Important Safety Information vi

Product Safety and RF Exposure Compliance . . .vi

Firmware Version vi

Computer Software Copyrights vii

Handling Precautions viii

Getting Started 1

How to Use This Guide 1

What Your Dealer/System Administrator Can Tell You 1

Preparing Your Radio for Use 2

Charging the Battery 2

Attaching the Battery 2

Attaching the Antenna 3

Attaching the Belt Clip 3

Powering Up the Radio 4

Adjusting the Volume 4

Identifying Radio Controls 5

Radio Controls 6

Programmable Buttons 7

Assignable Radio Functions 7

Assignable Settings or Utility Functions 8

Push-To-Talk (PTT) Button 8

Switching Between Conventional Analog and Digital Mode 9

Identifying Status Indicators 10

LED Indicator 10

Audio Tones 11

Indicator Tones 11

Receiving and Making Calls 12

Selecting a Channel 12

Receiving and Responding to a Radio Call 13

The LED lights up solid green while the radio is transmitting. 13

Receiving and Responding to a Group Call 13

Receiving and Responding to a Private Call . . . 14

Receiving an All Call 15

Making a Radio Call 15

Making a Group Call 15

Making a Private Call 16

Making a Selective Call 17

Making an All Call 18
Talkaround 18
Monitoring Features 19
Monitoring a Channel 19
Permanent Monitor 19
Advanced Features 20
Scan Lists 20
Scan 21
Starting and Stopping Scan 21
Responding to a Transmission During a Scan . . 21
Deleting a Nuisance Channel 22
Restoring a Nuisance Channel 22
Vote Scan 23
Call Indicator Settings 23
Escalating Alarm Tone Volume 23
Call Alert Operation 23
Receiving and Responding to a Call Alert 23
Making a Call Alert with the One Touch Access Button 24
Emergency Operation 24
Sending an Emergency Alarm 25
Sending an Emergency Alarm with Voice to Follow 25
Reinitiating an Emergency Mode 26
Exiting an Emergency Mode 27
Privacy 27
Analog Scrambling 28
Password Lock Features 28
Accessing the Radio from Password 28
Unlocking the Radio from Locked State 29
Auto-Range Transponder System (ARTS) 30
Utilities 30
Setting the Squelch Level 30
Setting the Power Level 31
Turning the Voice Operating Transmission (VOX) Feature On or Off 31
Voice Announcement 32
Turning Radio Tones/Alerts On or Off 32
Checking the Battery Strength 32
Accessories 33
Antennas 33
Batteries 33
Cables 33
Chargers 34
Earbuds and Earpieces 34
Headsets and Headset Accessories 34
Carry Devices 34
Remote Speaker Microphones 35
Surveillance Accessories 35

Batteries Warranty **36**
Limited Warranty **36**
Notes **40**

Important Safety Information

RF Energy Exposure and Product Safety Guide for Portable 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 Portable Two-Way Radios which contains important operating instructions for safe usage and RF energy awareness and control for Compliance with applicable standards and Regulations.

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

http://www.motorolasolutions.com

Any modification to this device, not expressly authorized by Motorola, may void the user's authority to operate this device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter has been approved by Industry Canada to operate with Motorola-approved antenna with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Firmware Version

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

Check with your dealer or system administrator for more details for 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://businessonline.motorolasolutions.com

Handling Precautions

The MOTOTRBO CP200d Portable radio meets IP54 specifications with the antenna and dust cover attached. Your radio limits protection against dust and water exposure.

- Keep your radio clean and exposure to water should be avoided to help ensure proper functionality and performance.
- To clean the exterior surfaces of the radio, use a diluted solution of mild dishwashing detergent and fresh water (i.e. one teaspoon of detergent to one gallon of water).
- These surfaces should be cleaned whenever a periodic visual inspection reveals the presence of smudges, grease, and/or grime.

Caution

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

Getting Started

Take a moment to review the following:

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

How to Use This Guide

This User Guide covers the basic operation of the MOTOTRBO Non-Display Portables.

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

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

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

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

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

What Your Dealer/System Administrator Can Tell You

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

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

Preparing Your Radio for Use

Assemble your radio by following these steps:

Charging the Battery . . . . . page 2
Attaching the Battery . . . . . page 2
Attaching the Antenna . . . . . page 3
Attaching the Belt Clip . . . . . page 3
Powering Up the Radio . . . . . page 4
Adjusting the Volume . . . . . page 4

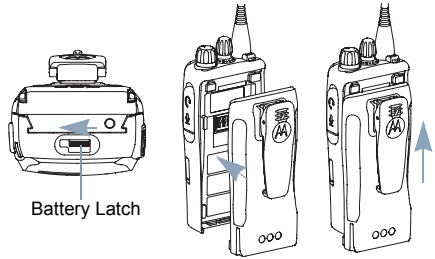
Charging the Battery

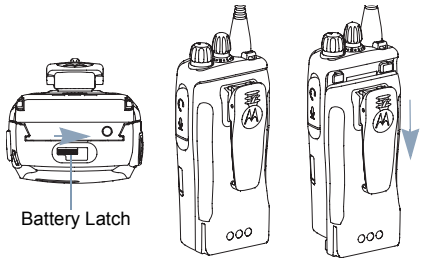
Your radio is powered by a Lithium-Ion (Li-Ion) battery. To avoid damage and comply with warranty terms, charge the battery using a Motorola charger *exactly* as described in the charger user guide. Please ensure your radio remains powered off while charging.

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

Attaching the Battery

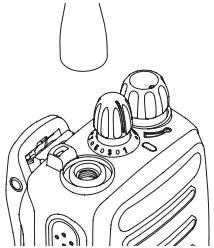
Ensure that the battery latch is unlocked before attaching the battery. Slide the battery latch to the right and slide downwards to unlock the battery. Align the battery to the battery rails on the back of the radio. Press the battery firmly to the radio and slide the battery upwards until the latch snaps into place to lock.





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

Attaching the Antenna



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

To remove the antenna, turn the antenna counterclockwise.

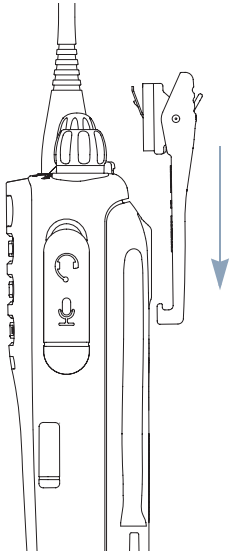
Caution

If the antenna needs to be replaced, ensure that only CP200d antennas are used. Neglecting this will damage your radio. See ***Antennas*** on page 33 for a list of available antennas.

Attaching the Belt Clip

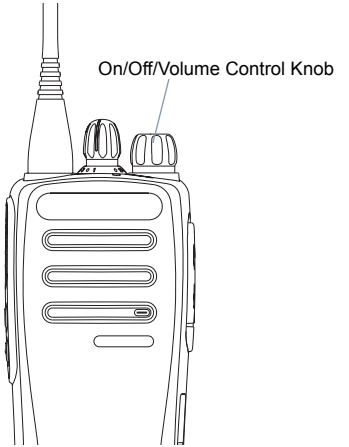
Align the grooves on the clip with those on the battery and press downwards until you hear a click.

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



Powering Up the Radio

Rotate the **On/Off/Volume Control Knob** clockwise until you hear a click. The LED lights up solid green.



A brief tone sounds, indicating that the power up test is successful.There is no power up tone if the radio tones/alerts function is disabled (see ***Turning Radio Tones/Alerts On or Off*** on page 32).

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

To turn off the radio, rotate this knob counterclockwise until you hear a click.

Adjusting the Volume

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

To decrease the volume, turn this knob counterclockwise.

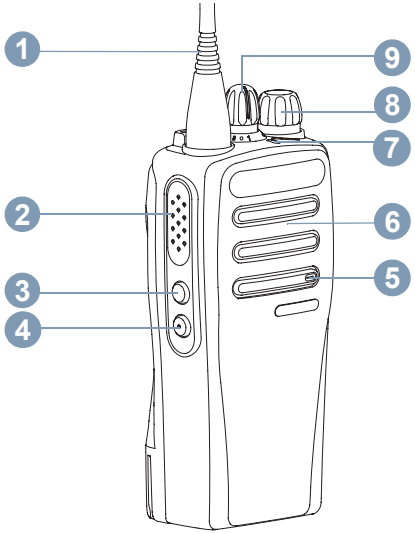
Note: Your radio can be programmed to have a minimum volume offset where the volume level cannot be turned down fully. Check with your dealer or system administrator for more information.

Identifying Radio Controls

Take a moment to review the following:

Radio Controls . . . . . page 6
Programmable Buttons . . . . . page 7
Push-To-Talk (PTT) Button . . . . . page 8
Switching Between Conventional Analog and Digital Mode . . . . . page 9

Radio Controls



1. Antenna
2. Push-to-Talk (**PTT**) Button
3. Side Button 1*
4. Side Button 2*
5. Microphone
6. Speaker
7. LED Indicator
8. On/Off/Volume Control Knob
9. Channel Selector Knob

** These buttons are programmable*

Programmable Buttons

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

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

The programmed duration of a button press is applicable for all assignable radio/utility functions or settings.

Assignable Radio Functions

Analog Scrambling – Toggles analog scrambling on or off.

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

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

Monitor – Monitors a selected channel for activity.

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

One Touch Access – Directly initiates a predefined Private or Group Call, a Call Alert.

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

Privacy – Toggles privacy on or off.

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

Scan – Toggles scan on or off.

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

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

Battery Strength – Indicates battery strength via the LED Indicator.

Assignable Settings or Utility Functions

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

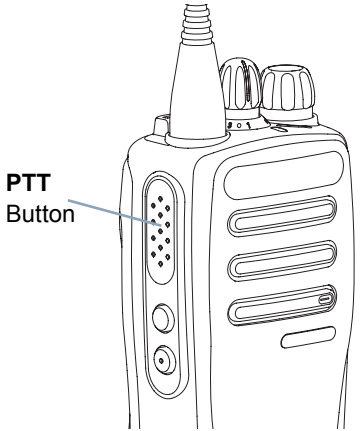
Analog Scrambling Codes – Toggles scrambling codes between 3.29KHz and 3.39KHz.

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

Squelch – Toggles squelch level between tight and normal.

Push-To-Talk (PTT) Button

The **PTT** button on the side of the radio serves two basic purposes:



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

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

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

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

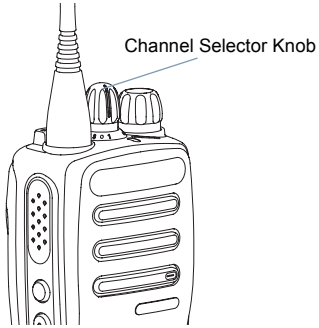
*Depending on programming, if the Talk Permit Tone or the **PTT** Sidetone is enabled, wait until the short alert tone ends before talking.*

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

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

Switching Between Conventional Analog and Digital Mode

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



NOTE: For Analog-only radios, each channel can only be configured as a conventional analog channel.

Use the Channel Selector Knob to switch between an analog or a digital channel.

When switching from digital to analog mode, certain features are unavailable.

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. A Software License Key sold separately is required to upgrade analog-only radios to digital radios.

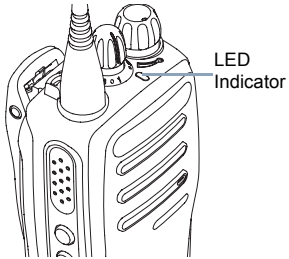
NOTE: Your radio also switches between digital and analog modes during a dual mode scan (see ***Scan*** on page 21).

Identifying Status Indicators

Your radio indicates its operational status through the following:

LED Indicator . . . . . page 10
Audio Tones . . . . . page 11
Indicator Tones . . . . . page 11

LED Indicator



The LED indicator shows the operational status of your radio.

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

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

Blinking yellow – Radio is scanning for activity or receiving a Call Alert.

Double blinking yellow – Indicates radio has yet to respond to a group call alert, or radio is locked.

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

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

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

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

Audio Tones

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

Continuous Tone A monotone sound. Sounds continuously until termination.

Periodic Tone Sounds periodically depending on the duration set by the radio. Tone starts, stops, and repeats itself.

Repetitive Tone A single tone that repeats itself until it is terminated by the user.

Momentary Tone Sounds only once for a short period of time defined by the radio.

Indicator Tones

High pitched tone Low pitched tone

Positive Indicator Tone

Negative Indicator Tone

Receiving and Making Calls

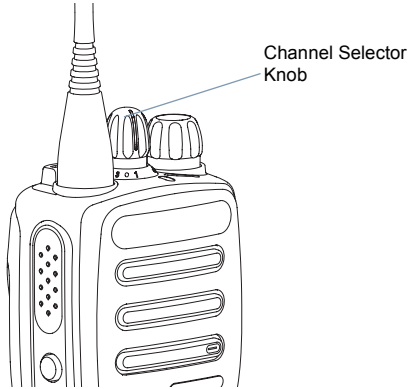
Once you understand how your MOTOTRBO Portable is configured, you are ready to use your radio.

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

Selecting a Channel . . . . . page 12
Receiving and Responding to a Radio Call. . . . . page 13
Making a Radio Call . . . . . page 15
Talkaround . . . . . page 18
Monitoring Features . . . . . page 19

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. Select the relevant channel you require to transmit or receive on.

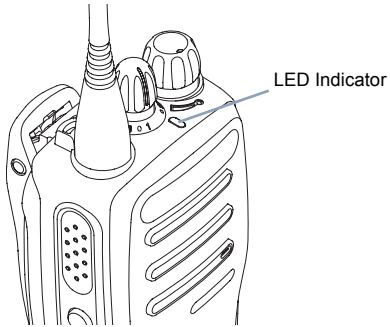


Procedure:

Turn the Channel Selector Knob to select the number that represents the channel, subscriber ID, or group ID.

Receiving and Responding to a Radio Call

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



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

The LED lights up solid green while the radio is transmitting.

The radio double blinks green when receiving a privacy-enabled call and blinks green when receiving a non-privacy 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).

NOTE: See **Privacy** on page 27 for more information.

Receiving and Responding to a Group Call

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

1. The LED blinks green. Your radio unmutes and the incoming call sounds through the radio's speaker.
2. To respond, hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
3. If the Channel Free Indication feature is enabled, you will hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond.
   Press the **PTT** button to respond to the call.
4. The LED lights up solid green.
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 15 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 LED blinks green. Your radio unmutes and the incoming call sounds through the radio's speaker.

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

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

4 Press the **PTT** button to respond to the call. The LED lights up solid green.

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

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

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

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

Receiving and Responding to a Selective Call

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

Procedure:

When you receive a Selective Call:

1 The LED blinks green. Your radio unmutes and the incoming call sounds through the radio's speaker.

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

3 Press the **PTT** button to respond to the call. The LED lights up solid green.

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

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

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

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

Receiving an All Call

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

Procedure:

When you receive an All Call:

1 A tone sounds and the LED blinks green. Your radio unmutes and the incoming call sounds through the radio's speaker.

2 An All Call does not wait for a predetermined period of time before ending.

If the Channel Free Indication feature is enabled, you will hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is now available for use.

You cannot respond to an All Call.

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

Making a Radio Call

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

- The Channel Selector Knob.
- A programmed **One Touch Access** button.

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 will be able to unscramble the transmission.

See ***Privacy*** on page 27 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 12.

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

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

3 Press the **PTT** button to make the call. The LED lights up solid green.

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

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

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

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 **One Touch Access** button or the Channel Selector Knob, if this feature is not enabled.

Use the Call Alert features to contact an individual radio. See ***Call Alert Operation*** on ***page 23*** for more information.

Procedure:

1. Select the channel with the active subscriber alias or ID. See ***Selecting a Channel*** on page 12.
   OR
   Press the programmed **One Touch Access** button.
2. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
3. Press the **PTT** button to make the call. The LED lights up solid green.
4. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
5. Release the **PTT** button to listen. When the target radio responds, the LED blinks green.
6. If the Channel Free Indication feature is enabled, you will hear a short alert tone the moment the target radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond.
   OR
   If there is no voice activity for a predetermined period of time, the call ends.

Making a Selective Call

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

Procedure:

1. Select the channel with the active subscriber alias or ID. See ***Selecting a Channel*** on page 12.
2. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
3. Press the **PTT** button to make the call. The LED lights up solid green.
4. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
5. Release the **PTT** button to listen. When the target radio responds, the LED blinks green.
6. If there is no voice activity for a predetermined period of time, the call ends.

Making an All Call

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

Procedure:

1. Select the channel with the active group alias or ID. See ***Selecting a Channel*** on page 12.
2. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
3. Press the **PTT** button to make the call. The LED lights up solid green.
4. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
   OR
   Wait for the **PTT** Sidetone to finish (if enabled) and speak clearly into the microphone.

Users on the channel cannot respond to an All Call.

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".

Procedure:

1. Press the programmed **Repeater/Talkaround** button.
2. You hear a positive indicator tone, indicating the radio is in Talkaround mode.
   OR
   You hear a negative indicator tone, indicating the radio is in Repeater mode.

The Talkaround setting is retained even after powering down.

Monitoring Features

Monitoring a Channel

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

Procedure:

1. Press and hold the programmed **Monitor** button and listen for activity.
2. The LED double blinks yellow when channel is busy.
3. When you hear “white noise” (that is, the channel is free), press the **PTT** button to talk and release it to listen.

Permanent Monitor

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

Procedure:

1. Press the programmed **Permanent Monitor** button.
2. Radio sounds alert tone, and the LED lights up solid yellow.
3. Press the programmed **Permanent Monitor** button to remove the radio from permanent monitor mode.
4. Radio sounds an alert tone and the LED turns off.

Advanced Features

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

Scan Lists . . . . . page 20
Scan . . . . . page 21
Call Indicator Settings . . . . . page 23
Call Alert Operation . . . . . page 23
Emergency Operation . . . . . page 24
Privacy . . . . . page 27
Password Lock Features . . . . . page 28
Auto-Range Transponder System (ARTS) . . . . . page 30
Utilities . . . . . page 30

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.

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

Scan

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

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 types of scans:

- **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.

Starting and Stopping Scan

Procedure:

1. Press the programmed **Scan** button.
   OR
   Use the Channel Selector Knob to select a channel with Auto Scan enabled.
2. When Scan is enabled, the LED blinks yellow and you hear a positive indicator tone.
   OR
   When Scan is disabled, the LED turns off and you hear a negative indicator tone.

Responding to a Transmission During a Scan

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

Procedure:

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

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

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

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

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

5 If you do not respond within the hang time, the radio returns to scanning other channels/groups.

Deleting a Nuisance Channel

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

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

Procedure:

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

2 Release the **Nuisance Channel Delete** button. The nuisance channel is deleted.

Restoring a Nuisance Channel

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

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

Vote Scan

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

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

The LED blinks yellow during the Vote Scan operation.

To respond to a transmission during a Vote Scan, follow the same procedures as Responding to a Transmission During a Scan on page 21.

Call Indicator Settings

You can turn on or off the ringing tones for a received Private Call (see ***Turning Radio Tones/Alerts On or Off*** on page 32).

Escalating Alarm Tone Volume

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

This feature is known as Escalert.

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 accessible via a programmed **One Touch Access** button.

Receiving and Responding to a Call Alert

Procedure:
When you receive a Call Alert page:

1. You hear a repetitive tone. The LED blinks yellow.
2. Press the **PTT** button within four (4) seconds of receiving a Call Alert page to respond to the Private Call.

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 ID.
2. The LED lights up solid green when your radio is sending the Call Alert.
3. If the Call Alert acknowledgement is received, two chirps sound.
   OR
   If the Call Alert acknowledgement is not received, a low-pitch tone sounds.

Emergency Operation

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

Your radio supports **two** Emergency Alarms:

- Emergency Alarm
- 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.

Sending an Emergency Alarm

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

Procedure:

1. Press the programmed **Emergency On** button.
2. The LED lights up solid green.
3. When an Emergency Alarm acknowledgment is received, the Emergency tone sounds. The LED blinks green.
   OR
   If your radio does not receive an Emergency Alarm acknowledgement, and after all retries have been exhausted, a low-pitch tone sounds.
4. Radio exits the Emergency Alarm mode.

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

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 you press the **PTT** button during the programmed hot mic transmission period, the radio ignores the **PTT** press and remains in Emergency mode.

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

Procedure:

1. Press the programmed **Emergency On** button.
2. The LED lights up solid green.
3. Once a tone sounds, speak clearly into the microphone. When hot mic has been enabled, the radio automatically transmits without a **PTT** press until the hot mic duration

expires.
While transmitting, the LED lights up solid green.

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.

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

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

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

Reinitiating an Emergency Mode

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

There are two instances where this can happen:

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

Exiting an 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.
- 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 will not reinitiate the Emergency mode automatically when it is turned on again.

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 only **Basic Privacy**.

To unscramble a privacy-enabled call or data transmission, your radio must be programmed to have the same Privacy Key as the transmitting radio. If your radio receives a scrambled call that is of a different Privacy Key, you will hear a garbled transmission. The LED lights up solid green while the radio is transmitting and blinks green rapidly when the radio is receiving an ongoing privacy-enabled transmission.

NOTE: 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.

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.

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

Password Lock Features

Your radio supports a 4-digit password input. If enabled, this feature allows you to access your radio via password upon powering up. Use the Channel Selector Knob and the two Side Buttons to enter password (see ***Radio Controls*** on page 6):

- Channel Selector Knob positions 1 to 9 represent numbers 1 to 9, and position 10 represents number 0.
- Side Buttons 1 and 2 represent numbers 1 and 2.

Accessing the Radio from Password

Procedure:
Power up the radio.

1. You hear a continuous tone.
2. Use the Channel Selector Knob to enter the first digit of the password.
3. Press Side Button 1 or 2 to enter each digit of the remaining three digits of the password. You hear a positive indicator tone for each Side Button press.
   When the second digit of the password is entered, your radio ignores any Channel Selector Knob position change.

4 When the last digit of the four-digit password is entered, your radio automatically checks the validity of the password.
If the password is correct:
Your radio proceeds to power up. See ***Powering Up the Radio*** on page 4.
OR
If the password is incorrect:
You hear a continuous tone. Repeat Steps 1 to 3.
OR
After the third incorrect password, your radio enters into locked state. A tone sounds and the LED double blinks yellow.

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

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

Unlocking the Radio from Locked State

Procedure:
Wait for 15 minutes. Repeat Steps 1 to 4 in ***Accessing the Radio from Password*** on page 28.
OR
Power up the radio, if you have powered down the radio during locked state:

1 A tone sounds and the LED double blinks yellow.

2 Wait for 15 minutes. Repeat Steps 1 to 4 in ***Accessing the Radio from Password*** on page 28.

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

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.
- **ARTS-in-Range Alert** – A tone sounds, if programmed.
- **ARTS-Out-of-Range Alert** – A tone sounds, and the LED rapidly blinks red.

Utilities

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:

1. Press the programmed **Squelch** button.
2. You hear a positive indicator tone, indicating the radio is operating in tight squelch.
   OR
   You hear a negative indicator tone, indicating the radio is operating in normal squelch.

Setting the Power Level

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

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

Procedure:

1. Press the programmed **Power Level** button.
2. You hear a positive indicator tone, indicating the radio is transmitting at low power.
   OR
   You hear a negative indicator tone, indicating the radio is transmitting at high power.

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.

To enable VOX, do **one** of the following:

- Prior to powering up the radio, connect the VOX-capable accessory to the accessory connector, **OR**
- Press the programmed **VOX** button and connect the VOX-capable accessory to the accessory connector.

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

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

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

Procedure:
Press the programmed **VOX** button to toggle the feature on or off.

If the Talk Permit Tone feature is enabled, use a trigger word to initiate the call. Wait for the Talk Permit Tone to finish before speaking clearly into the microphone.

Voice Announcement

This feature enables the radio to audibly indicate the Zone or Channel the user has just assigned, or programmable button press. This audio indicator can be customized per customer requirements.

Procedure:

1. Press the programmed **Voice Announcement** button.
2. You hear a positive indicator tone, indicating all tones and alerts are on.
   OR
   You hear a negative indicator tone, indicating all tones and alerts are off.

Turning 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:

1. Press the programmed **All Tones/Alerts** button.
2. You hear a positive indicator tone, indicating all tones and alerts are on.
   OR
   You hear a negative indicator tone, indicating all tones and alerts are off.

Checking the Battery Strength

You can check how much battery power you have left.

Settings: The LED Indicator in solid yellow indicates fair battery charge while solid green indicates full charge of the battery.

Procedure:
Press the programmed **Battery Strength** button to view the battery strength via the LED Indicator.

Accessories

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

Antennas . . . . . page 33
Batteries . . . . . page 33
Cables . . . . . page 33
Chargers . . . . . page 33
Earbuds and Earpieces . . . . . page 34
Headsets and Headset Accessories . . . . . page 34
Carry Devices . . . . . page 34
Remote Speaker Microphones . . . . . page 34
Surveillance Accessories. . . . . page 35

Antennas

- VHF, 146 – 162MHz, Stubby Antenna (HAD9742_)
- VHF, 162 – 174MHz, Stubby Antenna (HAD9743_)
- VHF, 146 – 174MHz, Heliflex Antenna (NAD6502_)
- UHF, 403 – 440MHz, Heliflex Stubby Antenna (NAE6521_)
- UHF, 438 – 470 MHz Stubby Antenna (NAE6522_)
- VHF, 136 – 155MHz, 9 cm Antenna (PMAD4012_)
- VHF, 136 – 155MHz, 14 cm Antenna (PMAD4014_)
- VHF, 136 – 150.8MHz, Heliflex Antenna (PMAD4042_)
- UHF, 403 – 433MHz, 9 cm Stubby Antenna (PMAE4002_)
- UHF, 430 – 470MHz, 9 cm Helical Antenna (PMAE4003_)
- UHF, 403 – 520MHz, Antenna Whip (PMAE4016_)

Batteries

- NiMH, 1400mAH Battery (NNTN4851_)
- Slim Li-Ion, 1600mAH Battery (NNTN4970_)
- Li-Ion, 2250 mAH Battery (NNTN4497_R)

Cables

- Programming Cable USB (PMKN4128_)

Chargers

- Rapid-rate Desktop Charger (WPLN4138_)
- Rapid-rate Charger with switchmode power supply (PMLN5193_)
- 10-hour Plug-in Charger (EPNN7997_)
- Rapid-rate Charger Transformer (EPNN9288_)

Earbuds and Earpieces

- Flexible Ear Receiver (BDN6720_)
- Receive-Only Earpiece with 3.5 mm Jack (AARLN4885_)
- Receive-Only Flexible Earpiece for Remote Speaker Microphone (WADN4190_)
- D-Shell Receive Only Earpiece (One Size) for Remote Speaker Microphone (PMLN4620_)
- Receiver-Only Earpiece with Translucent Tube and Rubber Eartip (RLN4941_)
- Earbud with In-Line Microphone/PTT/VOX Switch (Mag One) (PMLN6534_)
- Ear Receiver with In-Line Microphone/ PTT/VOX Switch (Mag One) (PMLN6531_)
- Swivel Earpiece with In-Line Microphone and PTT (PMLN6532_)
- D-Style Earpiece with Microphone/PTT (PMLN6535_)
- Earset with Boom Mic and In-Line PTT/VOX Switch (Mag One) (PMLN6537_)

Headsets and Headset Accessories

- Heavy Duty Headset, Noise Cancelling Boom Mic Headset (PMLN6540_)
- Lightweight Headset with Swivel Boom Microphone (PMLN6538_)
- Medium Weight Over-the-Head Dual Muff Headset (PMLN6539_)
- Lightweight Temple Transducer Headset (PMLN6541_)

Carry Devices

- Non-Display Leather case with Belt loop and D-rings (RLN5383_)
- Non-Display Leather case with 2.5" Swivel and D-rings (RLN5384_)
- Non-Display Leather case with 3" Swivel and D-rings (RLN5385_)
- Nylon case with belt loop & D-rings (HLN9701_)
- 2.5 inch Swivel Belt Loop (4280483B03)
- 3 inch Swivel Belt Loop (4280483B04)
- Spring Action 2 inch Belt clip (RLN5644_)
- Spring Action 3 inch Belt clip (HLN8255_)

Remote Speaker Microphones

- Remote Speaker Microphone IP57 (PMMN4029_)

- Remote Speaker Microphone (Mag One) (PMMN4092_)
- Remote Speaker Microphone with 3.5 mm Audio Jack (PMMN4013_)

Surveillance Accessories

- 2-Wire Surveillance Kit, with Clear Acoustic Earpiece, Black (Palm Garden) (PMLN6530_)
- 2-Wire Surveillance Kit with Quick Disconnect Acoustic Tube, Black (OTTO) (PMLN6536_)
- 2-Wire Surveillance Kit (Beige) with Clear Acoustic Earpiece (Palm Garden) (PMLN6445_)

Batteries Warranty

The Workmanship Warranty

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

All CP Batteries	Two (2) Years

The Capacity Warranty

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

Lithium-Ion (Li-Ion) Batteries	12 Months

Limited Warranty

MOTOROLA COMMUNICATION PRODUCTS

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

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

CP200d Portable Radios	Two (2) Years
Product Accessories (Excluding Batteries, Chargers and Mag One Accessories)	One (1) Year
Mag One Accessories	Six (6) Months

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. You can also call MOTOROLA at 1-800-927-2744 US/Canada.

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.

Notes

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

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license.
All other trademarks are the property of their respective owners.
© 2013 Motorola Solutions, Inc. All rights reserved.
May 2013.

www.motorolasolutions.com/mototrbo

68009615991-A