

Professional Digital Two-Way Radio System

MOTOTRBO™ XPR™ 6380

SmartZone™/SMARTNET® Trunking
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, Inc.

Address: 1301 East Algonquin Road, Schaumburg, IL 60196-1078, U.S.A.
Phone Number: 1-800-927-2744

Hereby declares that the product:

Model Name: **XPR 6380**

conforms to the following regulations:

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

Class B Digital Device

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

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

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

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

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

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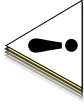
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Important Safety Information

Product Safety and RF Exposure Compliance

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



Caution enclosed with your radio.

ATTENTION!

This radio is restricted to occupational use only to satisfy FCC RF energy exposure requirements.

Before using this product, read the RF energy awareness information and operating instructions in the Product Safety and RF Exposure booklet enclosed with your radio (Motorola Publication part number 6881095C98) to ensure compliance with RF energy exposure limits.

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

<http://www.motorola.com/governmententerprise>

Software Version

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

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.

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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.

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, a note is shown for Conventional mode and Trunking mode only features to differentiate the features according to the two modes.

For features that are available in both Conventional and Trunking modes, no note 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?

Preparing Your Radio for Use

Assemble your radio by following these steps:

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

Charging the Battery

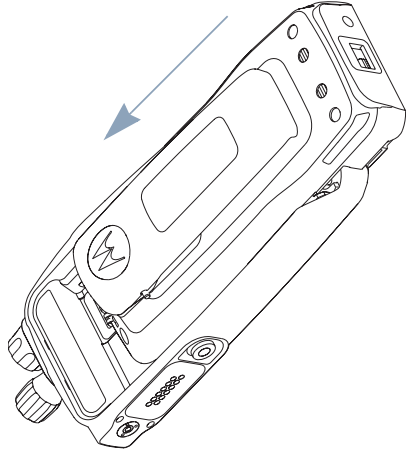
Your radio is powered by a Nickel Metal-Hydride (NiMH) or Lithium-Ion (Li-Ion) battery. To avoid damage and comply with warranty terms, charge the battery using a Motorola charger *exactly* as described in the charger user guide.

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

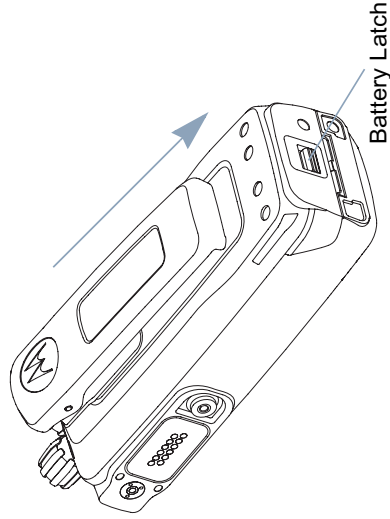
IMPORTANT: **ALWAYS** charge your IMPRES battery with the IMPRES charger. Using a conventional charger causes irrecoverable loss of IMPRES battery data. As a result, the battery functions as a non-IMPRES battery and cannot display the data on your radio. Additionally, it voids your IMPRES battery warranty, although the standard battery warranty still applies.

■ Attaching the Battery

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



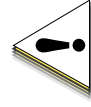
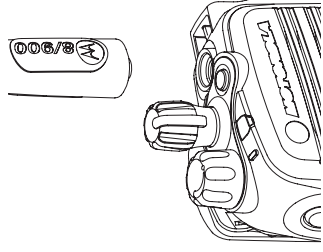
To remove the battery, turn the radio off. Move the battery latch into unlock position and hold, and slide the battery down and off the rails.



■ Attaching the Antenna

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

To remove the antenna, turn the antenna counterclockwise. Make sure you turn off the radio and remove the universal connector cover first.



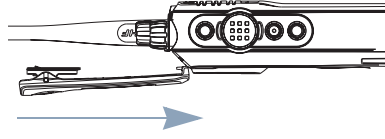
Caution

If antenna needs to be replaced, ensure that only MOTOTRBO antennas are used. Neglecting this will damage your radio. See **Antenna** on page 25 for the available antenna.

■ Attaching the Belt Clip

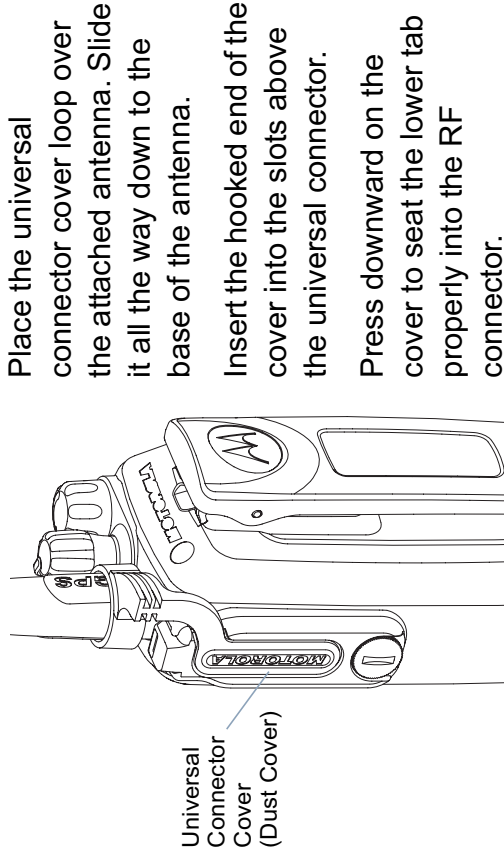
Align the grooves on the clip with those on the battery and press downward until you hear a click.

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



■ Attaching the Universal Connector Cover (Dust Cover)

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



Place the universal connector cover loop over the attached antenna. Slide it all the way down to the base of the antenna.

Insert the hooked end of the cover into the slots above the universal connector.

Press downward on the cover to seat the lower tab properly into the RF connector.

Turn the thumbscrew clockwise to secure the connector cover to the radio.

To remove the universal connector cover, press down on the cover and turn the thumbscrew counterclockwise. Lift the cover up, slide the connector cover loop upwards, and remove it from the attached antenna.

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

■ Powering Up the Radio

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

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 Radio Tones/Alerts On or Off** on page 24).

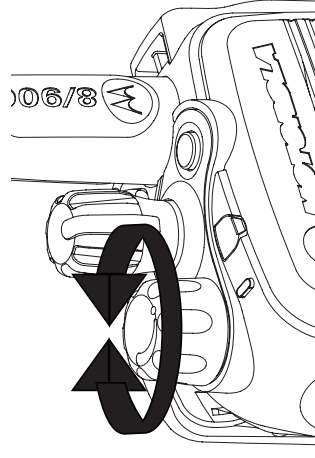
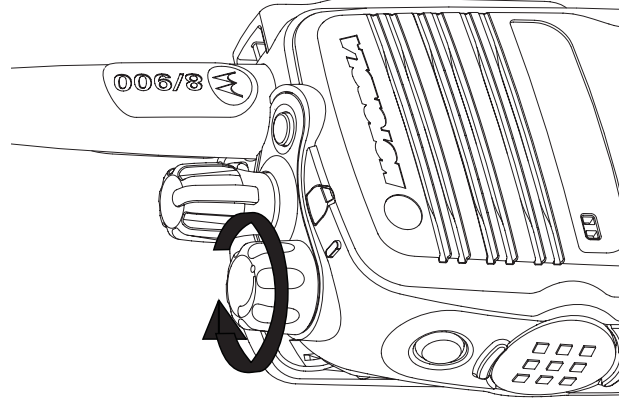
If your radio does not power up, check your battery. Make sure that it is charged and properly attached. If your radio still does not power up, contact your dealer.

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.

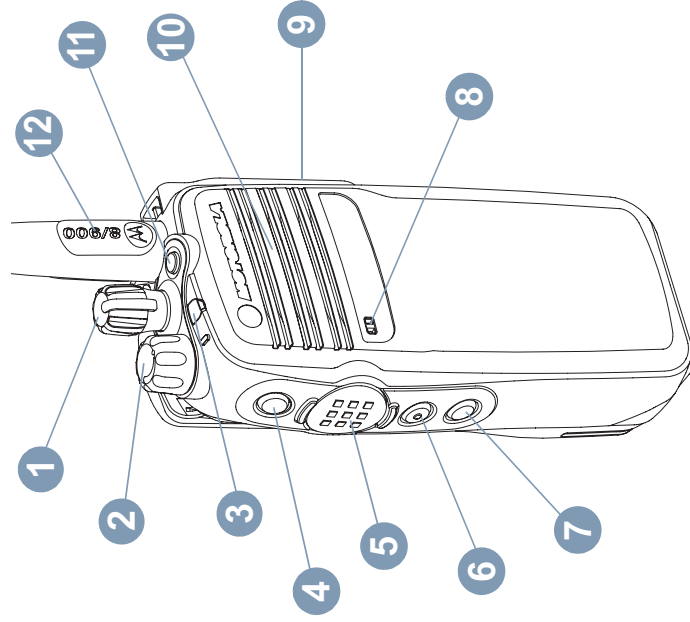


Identifying Radio Controls

Take a moment to review the following:

- Radio Controls You Will Be Using page 6
- Programmable Buttons page 7
- Push-To-Talk (PTT) Button page 8
- Switching Between Conventional and Trunking Mode page 8

Radio Controls You Will Be Using



- 1 Channel Selector Knob
- 2 On/Off/Volume Control Knob
- 3 LED Indicator
- 4 Side Button 1*
- 5 Push-to-Talk (**PTT**) Button
- 6 Side Button 2*
- 7 Side Button 3*
- 8 Microphone
- 9 Universal Connector for Accessories
- 10 Speaker
- 11 Emergency Button*
- 12 Antenna

* These buttons are programmable.

■ Programmable Buttons

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

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

📄 Assignable Radio Functions

Battery Indicator – Checks the battery charge status via the LED.

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

Monitor** – Monitors a selected channel for activity.

Nuisance Delete – Temporarily removes an unwanted channel from the scan list until the radio is powered off and on again.

One Touch Call* – Directly initiates a predefined Private Call, Phone Call, or a Call Alert to a target radio.

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

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

Scan – Toggles scan on or off.

Site Lock On/Off* – Toggles the automatic site roam on or off in Smart Zone operation.

Zone – Allows selection from a list of zones.

📄 Assignable Settings or Utility Functions

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

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

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

* *A trunking only feature*

** *A conventional only feature*

■ Push-To-Talk (PTT) Button

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

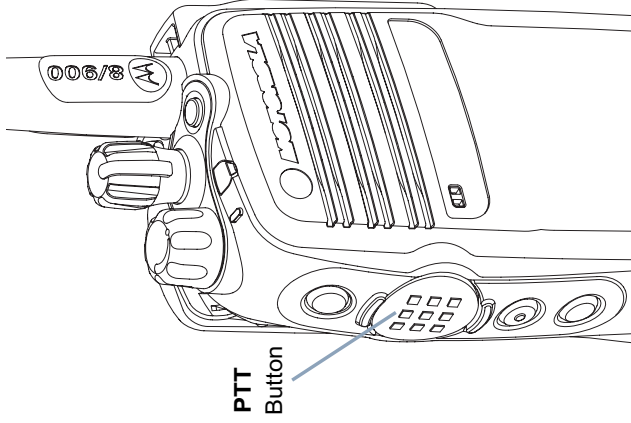
- While a call is in progress, the **PTT** button allows the radio to transmit to other radios in the call.

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 14).

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

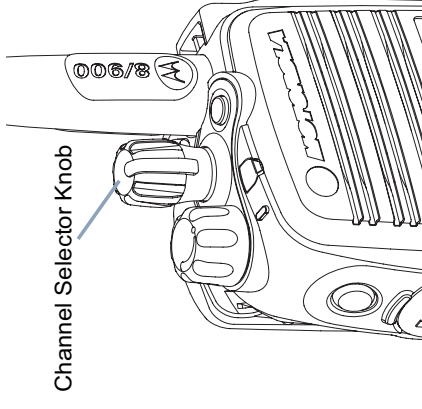


■ Switching Between Conventional and Trunking Mode

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

When switching from conventional to trunking mode, certain features are unavailable.

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



Identifying Status Indicators

Your radio indicates its operational status through the following:

LED Indicator page 9

Audio Tones page 10

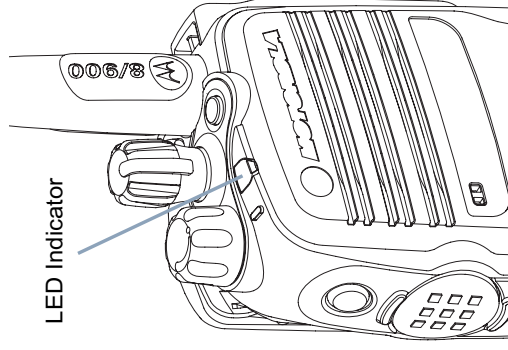
Indicator Tones page 10

LED Indicator

The LED indicator shows the operational status of your radio.

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

Solid yellow – Radio is in Permanent Monitor mode, at a fair battery condition, monitoring a channel, or requested trunked call has no voice channel or target is busy.



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

Solid green – Radio is transmitting or at a good battery condition.


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

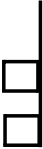
NOTE: When the LED blinks green, it indicates the radio detects activity over the air. Due to the nature of the digital protocol, this activity may or may not affect the radio's programmed channel.


Upon a **PTT** button press, if the radio is programmed for polite operation, the radio automatically determines whether a transmission is permitted via a Talk Permit or a Talk Denial 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.

■ 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 Zone	page 11
Selecting a Radio Channel	page 11
Receiving and Responding to a Radio Call.	page 12
Making a Radio Call	page 14
Talkaround.	page 15
Monitoring Features.	page 15

Selecting a Zone

A zone is a group of channels. Your radio supports up to a maximum of 2 zones.

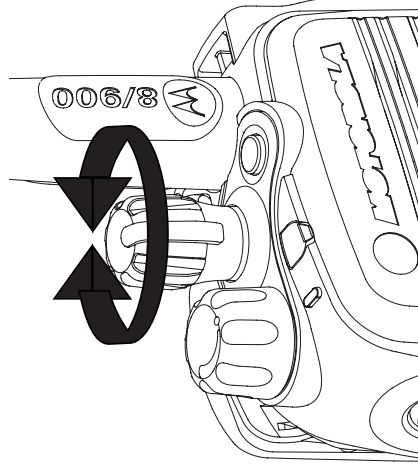
Procedure:

- 1 Press the programmed **Zone** button.
- 2 You hear a positive indicator tone, indicating the radio has switched from Zone 1 to Zone 2.
OR
You hear a negative indicator tone, indicating the radio has switched from Zone 2 to Zone 1.

Selecting a Radio Channel

Procedure:

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

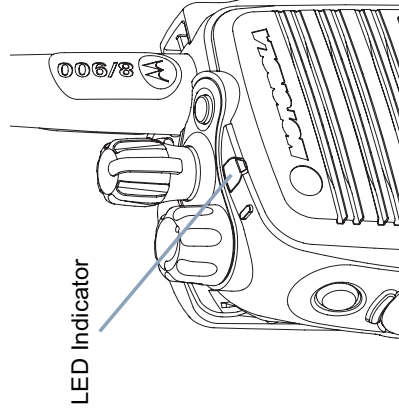


■ Receiving and Responding to a Radio Call

NOTE: This is a trunking only feature.

Once you have selected the required channel and/or zone, 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.



📄 Receiving and Responding to a Group Call

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

Procedure:

When you receive a group call:

- 1 The LED blinks green. You hear a voice from the Group Call request.
- 2 Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
- 3 Press the **PTT** button to talk.
- 4 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 5 Release the **PTT** button to listen.

See **Making a Group Call** on page 14 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.

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

Procedure:

When you receive a private call:

- 1 The LED blinks green.

OR

For Basic Private Call, the LED blinks green. You hear the caller's voice.

- 2 Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
- 3 Press the **Call** button to respond to the call. The LED lights up solid green.
- 4 Press the **PTT** button to talk.
- 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 Press **Call** button to end the call.

Receiving and Responding to a Phone Call

A Phone Call is a call similar to a standard phone call from a landline phone.

Procedure:

When you receive a phone call:

- 1 The LED blinks green.
- 2 Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
- 3 Press the **Phone** button to respond to the call. The LED lights up solid green.
- 4 The LED blinks green. You hear the caller's voice.
- 5 Press the **PTT** button to talk.
- 6 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 7 Release the **PTT** button to listen.
- 8 If there is no voice activity for a predetermined period of time, the call ends.

■ Making a Radio Call

NOTE: This is a trunking only feature.

📄 Making a Call with the Channel Selector Knob

📄 Making a Group Call

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

Procedure:

- 1 Turn the Channel Selector Knob to select the channel with the active group ID.
- 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 Press the **PTT** button to respond.
- 7 If there is no voice activity for a predetermined period of time, the call ends.

📄 Using the Dynamic Regrouping Feature

This feature allows the dispatcher to temporarily reassign selected radios to a single special channel so they can communicate with each other. This feature is typically used during special operations and is enabled by a qualified radio technician.

You will not notice whether your radio has this feature enabled until a dynamic regrouping command is sent by the dispatcher.

NOTE: If you try to access a zone or channel that has been reserved by the dispatcher as a dynamically regrouped mode for other users, an invalid tone sounds.

Procedure:

- 1 When your radio is dynamically regrouped, it automatically switches to the dynamically regrouped channel. A “gurgle” tone sounds.
- 2 Press the **PTT** button to talk. Release **PTT** button to listen.

When the dispatcher cancels dynamic regrouping, the radio automatically returns to the zone and channel that you were using before the radio was dynamically regrouped.

■ Talkaround

NOTE: This is a conventional only feature.

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

NOTE: This is a conventional only feature.

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 You hear radio activity or total silence, depending on how your radio is programmed.
- 3 When you hear "white noise" (that is, the channel is free), press the **PTT** button to talk and release it to listen. The LED lights up solid yellow.

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 16
Scan	page 16
Call Indicator Settings	page 18
Call Alert Operation	page 18
Emergency Operation	page 19
Utilities	page 23

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 128 scan lists, with a maximum of 16 members in a list.

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.

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.
- 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.
- 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 Delete** button until you hear a tone.
- 2 Release the **Nuisance 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 powering it on again, **OR**
- Stop and restart a scan via the programmed **Scan** button, **OR**
- Change the channel via the Channel Selector Knob.

■ 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 24).

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

NOTE: This is a trunking only feature.

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 Call** button.

Receiving and Acknowledging a Call Alert

Procedure:

When you receive a Call Alert page:

- 1 You hear a repetitive tone. The LED blinks yellow.
- 2 Press and release the **PTT** button to acknowledge the alert.

Making a Call Alert with the One Touch Call Button

Procedure:

- 1 Press the programmed **One Touch Call** 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 acknowledgment is received, two chirps sound.
OR
If the Call Alert acknowledgment is not received, a low-pitch tone sounds.

■ Emergency Operation

NOTE: This is a trunking only feature.

An Emergency feature 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 the following Emergency modes:

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

In addition, each mode 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. There will be no response (call) from the target radio until you press the **PTT** button to initiate the call.
- Silent with Voice – Radio transmits an alarm signal and is able to receive an incoming call, without any audio or visual indicators, until you press the **PTT** button to initiate, or respond to, the call.

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

Sending an Emergency Call

This feature gives your radio priority access on a channel.

NOTE: The radio operates in the normal dispatch manner while in Emergency Call, except, if enabled, it returns to one of the following:

- **Tactical/Non-Revert** – You talk on the channel you selected before you entered the emergency state.
- **Non-Tactical/Revert** – You talk on a programmed emergency channel. The emergency alarm is sent on this same channel.

Procedure:

- 1 Press the programmed **Emergency** button.
- 2 If the selected channel supports emergency, a Good Key Tone sounds. **OR**
If the selected channel does not support emergency, a low-pitch tone sounds.
- 3 Press **PTT** button to start the Emergency Call. The LED lights up solid green.
- 4 Long press the programmed **Emergency** button to exit Emergency Call mode.

If your radio is set to Silent, it will not have any audio or visual indicators related to the Emergency feature.

Sending an Emergency Alarm

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

Procedure:

- 1 Press the programmed **Emergency** button.
- 2 The LED lights up solid green. An Emergency Enter Tone sounds at each retry.
- 3 When an Emergency Alarm acknowledgment is received, the Emergency Acknowledgment Tone sounds. The LED blinks green.
OR
If your radio does not receive an Emergency Alarm acknowledgment, 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 have any audio or visual indicators related to the Emergency feature.

Sending an Emergency Alarm with Call

This feature allows you send an Emergency Alarm to another radio. Upon acknowledgment, both radios can communicate over a programmed Emergency channel.

Procedure:

- 1 Press the programmed **Emergency** button.
- 2 The LED lights up solid green. An Emergency Enter Tone sounds at each retry.
- 3 When an Emergency Alarm acknowledgment is received, the Emergency Acknowledgment Tone sounds. The LED blinks green.
- 4 Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
- 5 Press the **PTT** button to make the call. The LED lights up solid green.

- 6 Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 7 Release the **PTT** button to listen.
- 8 Press the **PTT** button to respond.
- 9 Long press the programmed **Emergency** button to exit the Emergency mode.

*If your radio is set to Silent, it will not have any audio or visual indicators related to the Emergency feature, or receive any response (call) from the target radio, until you press the **PTT** button to initiate the call.*

*If your radio is set to Silent with Voice, it will not have any audio or visual indicators related to the Emergency feature, or when you are receiving a call from the target radio. The indicators will only appear once you press the **PTT** button to initiate, or respond to, the call.*

Sending an Emergency Alarm with Voice to Follow

This feature allows you to send an Emergency Alarm to another radio. Upon acknowledgment, your radio's microphone is automatically activated, allowing you to communicate with the other radio without pressing the **PTT** button.

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

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** button.
- 2 The LED lights up solid green. An Emergency Enter Tone sounds at each retry.

3 When an Emergency Alarm acknowledgment is received, the Emergency Acknowledgment Tone sounds. The LED blinks green. Speak clearly into the microphone.

4 When hot mic has been enabled, the radio automatically transmits without a **PTT** press until the hot mic duration expires.

5 While transmitting, the LED lights up solid green.

6 Once the hot mic duration expires, the radio automatically stops transmitting. To transmit again, press the **PTT** button.

*If your radio is set to Silent, it will not have any audio or visual indicators related to the Emergency feature, or receive any response from the target radio, 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 have any audio or visual indicators related to the Emergency feature when you are making the call with hot mic, or 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.*

Reinitiating an Emergency Mode

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** button during an Emergency initiation/transmission state. This causes the radio to exit this state, and to reinitiate Emergency.

Exiting an Emergency Mode

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

- Emergency Alarm acknowledgment is received (for **Emergency Alarm** only), **OR**
- All retries to send the alarm have been exhausted (for **Emergency Alarm** only), **OR**
- The programmed **Emergency** button is long pressed.

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

Utilities

Setting the Squelch Level

NOTE: This is a conventional only feature.

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 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 Indicator** 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.

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Batteries	page 25
Chargers	page 25
Surveillance Accessories	page 25
Miscellaneous Accessories	page 25

Antenna

The diagram on the right shows the location of the color indicator for the following antennas. See the footnote at the end of the list for the colors.



- GPS Helical Antenna¹, 806 – 941 MHz (PMAF4003_)

Color Code:

- 1 Purple

Batteries

- IMPRES Li-Ion, 1400 mAh Battery with Box (FM) (PMNN4069_)
- IMPRES Li-Ion, 2200 mAh Submersible (IP57) Battery (PMNN4077_)

Chargers

- IMPRES Multi-Unit Charger (WPLN4212_)
- IMPRES Multi-Unit Charger with Displays (WPLN4219_)
- IMPRES Single-Unit Charger (WPLN4232_)

Surveillance Accessories

- IMPRES 3-Wire Surveillance, Black (PMLN5097_)
- Receive Only Surveillance Kit, Black (Single Wire) (RLN5878_)

Miscellaneous Accessories

- Break-A-Way Chest Pack (RLN4570_)



Notes

The Capacity Warranty

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

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

Batteries and Chargers Warranty

The Workmanship Warranty

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

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

Limited Warranty

MOTOROLA COMMUNICATION PRODUCTS

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

MOTOROLA 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:

XPR Series Digital Portable Radios	Two (2) Years
Product Accessories (Excluding Batteries and Chargers)	One (1) Year

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

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

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

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

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

II. GENERAL PROVISIONS:

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

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

III. STATE LAW RIGHTS:

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

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

IV. HOW TO GET WARRANTY SERVICE:

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

J) Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.

K) Normal and customary wear and tear.

VI. PATENT AND SOFTWARE PROVISIONS:

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

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

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

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VII. GOVERNING LAW:

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



MOTOROLA

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