Professional Portable Radio

EX560•XLS™

Expert Series

MOTOROLA

Two-Way Radio User Guide
Guide de l'utilisateur
de l'appareil radio émetteur-récepteur

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SAFETY

PRODUCT SAFETY AND RF EXPOSURE COMPLIANCE

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

ATTENTION!

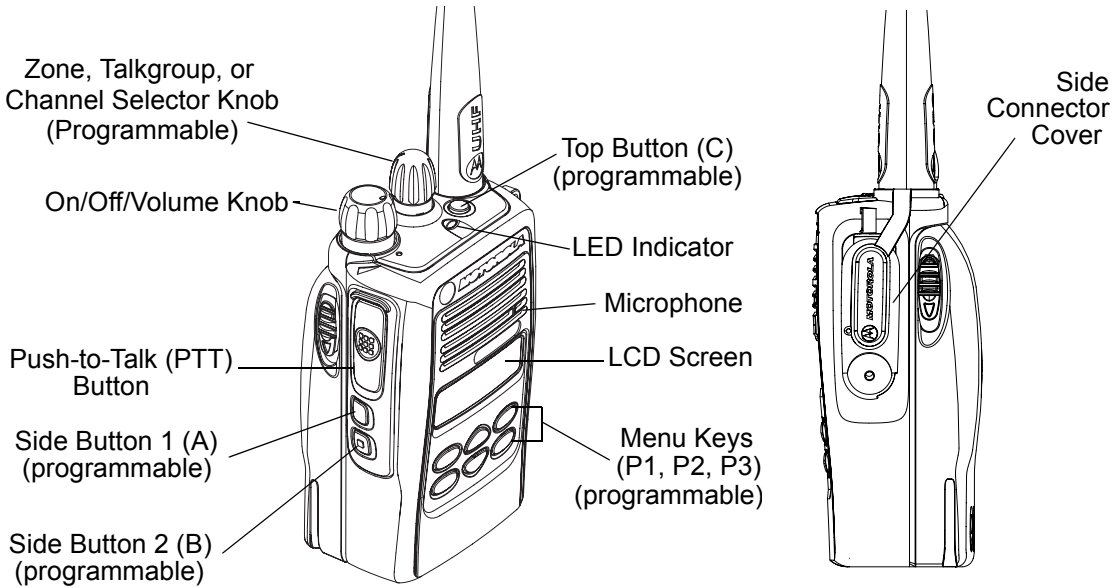
This radio is restricted to occupational use only to satisfy FCC RF energy exposure requirements. Before using this product, read the RF energy awareness information and operating instructions in the Product Safety and RF Exposure booklet enclosed with your radio (Motorola Publication part number 6881095C98)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

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

http://www.motorola.com/governmentandenterprise

RADIO OVERVIEW

EX560•XLS Model



The different programmable buttons of EX560•XLS radios are as follows:

The menu keys of EX560•XLS are as follows:

IP67 Battery Label

Note: IP67 water submersible radios MUST be fitted with Motorola authorized IP67 batteries to ensure proper functionality.

Warning: When charging a IP67 battery, make sure that the IP67 battery (or IP67 battery with IP67 radio) is not wet prior to placing in the charger.

Warning: The battery charger is not waterproof. For your safety and proper operation of the charger, IP67 radios **MUST** be dry prior to placing in the battery charger for charging. Do **NOT** operate the charger, when your hands are wet or while holding a wet IP67 radio. Do **NOT** touch the battery contacts, when your hands are wet. Do **NOT** put the battery into water, as this may cause the metal contacts to corrode.

On/Off/Volume Knob

Turns the radio on or off, and adjusts the radio's volume.

Channel or Zone Selector Knob

Switches the radio to different trunked or conventional zones. Also used for scrolling between conventional channels or trunked talkgroups.

LED Indicator

Indicates battery status (see page 17); or the status of power-up, scan, or receipt of a talkgroup or selective call (see table below):

LED Color	Indicates
Steady red	Radio is transmitting (**PTT** button pressed)
Blinking red	Radio is attempting to access trunked system (**PTT** button pressed), or Radio is receiving (**PTT** button released)
Single blinking yellow	Call Light feature
Double blinking yellow	Selective call received
Momentary green	Radio has powered-up successfully
Single blinking green	System or All Group Scan operation

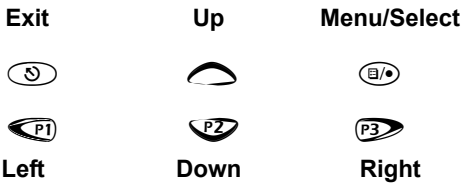
Push-to-Talk (PTT) Button

Press and hold down this button to talk; release it to listen.

Microphone

When sending a message, hold the microphone 1 to 2 inches (2.5 to 5 cm) away from your mouth, and speak clearly into the microphone.

Menu Keys



Menu/Select Key

Used to enter menu mode. When in menu mode, this key is also used to make menu selections.

Exit Key

Used to move to the previous menu level (short press) or to exit menu mode (long press).

Up Key and ***Down Key***

- Used to scroll through the preprogrammed talkgroups of a selected trunked zone, or through conventional channels when in conventional zone.
- Used for scrolling when in menu mode.
- The key can also be programmed with a radio feature (see page 11).

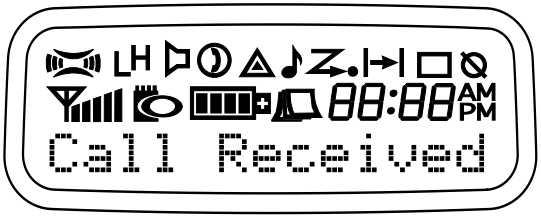
Right Key

Moves the cursor right or inserts a space when editing call, scan, and phone lists. This key can also be programmed with a radio feature (see page 11).

Left Key

Used as a backspace key when editing radio call, scan, and phone lists. This key can also be programmed with a radio feature (see page 11).

LCD Screen



The top two screen rows display menu and radio status information:

Symbol	Indication
Companding	The Companding feature is activated. When in narrow band, this feature improves audio quality.
LH **Power Level**	Low Power "L" or High Power "H" is activated.
Monitor	The selected channel is being monitored (conventional operation only).
Phone	Phone mode is selected.

Symbol	Indication
Emergency	An Emergency Siren is being sounded.
Call Received	A Selective Call or Call Alert has been received (trunked operation only).
Scan	When the green LED is blinking, indicates that the System or All Group Scan feature has been activated. • During Scan, indicates activity on a non-priority talkgroup or channel. When the green LED is off, indicates that non-prioritized Auto Group Scan has been activated.
•Priority 1 Scan (● blinking)	Indicates activity on a *Priority 1* talkgroup or channel during System Scan.

Symbol	Indication
Priority 2 Scan (● steady)	• When the green LED is on, indicates activity on a *Priority 2* talkgroup or channel during System Scan. • When the green LED is off, indicates prioritized Auto Group Scan has been activated.
Talkaround	You are not transmitting through a repeater (Conventional operation only).
Programming Mode	A Program list is being edited.
Keypad Lock	Keypad is locked.
Signal Strength	The more bars, the stronger the signal being received by your radio.

Symbol	Indication
Battery Level	The number of bars (0 – 4) shown indicates the charge remaining in your battery.
	Not Currently Assigned
88:88 AM PM **Clock**	Shows the time (12- or 24-hour).

Programmable Buttons

Several of your radio's buttons can be programmed by your dealer as shortcuts to many of the radio's features.

Programmable buttons include:

- The two Side Buttons (A, B) and the Top Button (C)
- The three Lower Menu Keys (P1, P2, P3) (when the radio is not in menu mode)

Each button can access up to two features, depending on the type of button press:

- **Short Press**—quickly pressing and releasing the programmable buttons,

or

- **Long Press**—pressing and holding the programmable buttons for a period of time (programmable for 1/2 to 1 1/2 seconds),

or

- **Hold Down**—pressing and holding down the programmable buttons while checking status or making adjustments.

The table on page 12 summarizes the programmable features available and shows the page number where the feature is explained.

In the "Button" column, have your dealer write down the programmable buttons next to the features that have been programmed to them.

Use the abbreviations (for example, A for Side Button 1, C for Top Button, etc.) shown in the radio illustration at the front of this manual.

Also, where a choice exists, have your dealer indicate whether the button press is short press (SP) or long press (LP).

Check with your dealer for a complete list of features your radio supports.

Programmable Features

Feature	Indicator	Short Press	Long Press	Hold Down	Page	Button
Battery Gauge	LED Color	—	—	Check the battery's charge status.	17	
Volume Set	—	—	—	Sound a tone for adjusting your radio's volume level.	22	
Repeater/ Talkaround §	|→|	Toggle between using a conventional repeater or transmitting directly to another radio.†		—	25	
Emergency Siren (Top button only)	⚠	Initiate Emergency Siren.	Cancel Emergency Siren.	—	26	
Radio Call ‡	LED Color	Directly access radio call menu.†		—	27	
Scan/Nuisance Channel Delete	⇄	Turn System or All Group Scan on or off.	Delete a nuisance channel while scanning.	—	37	
Phone	✆	Directly access Phone mode.†		—	41	
Speed Dial	—	Quickly access speed dial phone list.†		—	41	
Squelch §	—	Toggle squelch level between Tight and Normal.†		—	53	

† This feature is activated by **EITHER** a short **OR** a long press, but not both.

§ Conventional operation only. ‡LTR Trunked operation only.

Programmable Features (Continued)

Feature	Indicator	Short Press	Long Press	Hold Down	Page	Button
Power Level	LH	Toggle transmit power level between high and low.†		—	53	
Home Channel Revert	—	Access your favorite trunked talkgroup or conventional channel.†		—	—	
Keypad Lock	⊘	—	Toggle keypad between locked and unlocked.	—	—	
Light	—	Turn on your radio backlight.†		—	—	
Monitor §	⚐	Exit permanent monitor mode.	Enter permanent monitor mode.	Continually monitor channel	—	
Zone	—	Access your zone list.†		—	24	
† This feature is activated by **EITHER** a short **OR** a long press, but not both.						
§ Conventional operation only. ‡LTR Trunked operation only.						

AUDIO INDICATORS FOR PROGRAMMABLE BUTTONS

High-Low Tone

Low-High Tone

In addition to having visual indicators, some programmable buttons use tones to indicate one of two modes:

Button	High-Low Tone	Low-High Tone
Scan	**Stop** scan	**Start** scan
Power Level	**High** power selected	**Low** power selected
Squelch (no visual indicator)	**Normal** squelch	**Tight** squelch
Keypad Lock	Unlocked	Locked
Repeater/ Talkaround	**Uses** conventional repeater	**Does not use** conventional repeater

TRUNKED RADIO SYSTEMS

The EX560•XLS radio can operate in both LTR™ trunked and conventional radio systems.

Conventional typically refers to radio-to-radio communication, sometimes through a repeater.

A *trunked* radio system allows a large number of users to share a relatively small number of frequencies or repeaters without interfering with each other.

The airtime of all the repeaters in a trunked system is pooled, which maximizes the amount of airtime available to any one radio and minimizes channel congestion.

Some of the benefits of trunked two-way radio systems are:

- No channel monitoring required prior to transmission
- Improved system access
- Automatic channel selection
- Increased privacy among members of the same group

When an LTR trunked radio user wants to communicate with another radio, the user's radio sends a "channel request" to the home repeater. The system then sends back a "channel grant" to the user's radio. The channel grant message contains the number of a "go to" repeater to tell the radio which repeater to use. This "go to" repeater can be the same as the radio's home repeater or another repeater in the system.

The radio uses the "go to" repeater for transmission. Once the transmission has ended, this repeater is available for other users.

GETTING STARTED

BATTERY INFORMATION

Charging the Battery

If a battery is new or its charge level is very low, you need to charge it before you can use it.

Note: Batteries are shipped uncharged from the factory. Always charge a new battery 14 to 16 hours before initial use, regardless of the status indicated by the charger.

To charge the battery:

Place the battery, with or without the radio, in the charger. The charger LED indicates the charging progress:

LED Color	Battery/Charger Status
No LED Indication	Battery inserted incorrectly.
Single Green Blink	Successful charger power-up.
Blinking Red*	Battery unchargeable or not making proper contact.
Steady Red	Battery in rapid-charge mode.
Blinking Yellow	Battery in charger, not in rapid-charge mode but waiting to be charged.
Blinking Green†	Battery 90% (or more) charged.
Steady Green	Battery fully charged.

* Remove the battery from the charger and use a pencil eraser to clear the four metal contacts on the bottom of the battery. Place the battery back in the charger. If the LED indicator continues to blink red, replace the battery.

† A standard battery may require one hour to charge to 90%.

Battery Charge Status

You can check your battery's charge status in two ways:

- The charge status is shown by the status indicator symbol on the LCD screen. This does not require any action by you; the symbol is shown automatically.
- Hold down the preprogrammed **Battery Gauge** button (see page 12). The charge status is shown by the color of the radio's LED indicator.

Battery Level	LED Indicator	Status Indicator
High	Green	
Sufficient	Yellow	*or*
Low	Blinking red	
Very Low	None	(blinking)

Battery charges will only charge the Motorola authorized batteries listed below; other batteries may not charge.

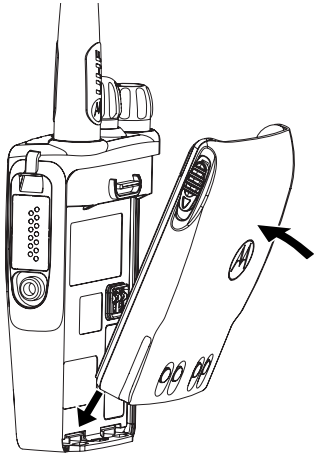
Table 1: IP54 Battery List

Part No.	Description
*JMNN4023_	Slim Li-Ion, 1000 mAh, 7.5 V Battery (IP54)
*JMNN4024_	High Capacity Li-Ion, 1320 mAh, 7.5 V Battery (IP54)
*JMNN4025_	NiMH, 700 mAh, 7.5 V FM Approved Battery (IP54)
* Important Note: These batteries meet IP54 specification but not IP67 specification. Do not use IP54 batteries with IP67 radios. When these batteries are used with IP67 radios, the total system is not IP67, hence will not function as per IP67 specification. Users are advised to use IP67 batteries with IP67 radios in order to have a total system that meets IP67 specification.	

Table 2: IP67 Battery List

Part No.	Description
PMNN4073_	Li-Ion FM IP67 Standard Battery
PMNN4074_	Li-Ion Non-FM IP67 Standard Battery

Attaching the Battery

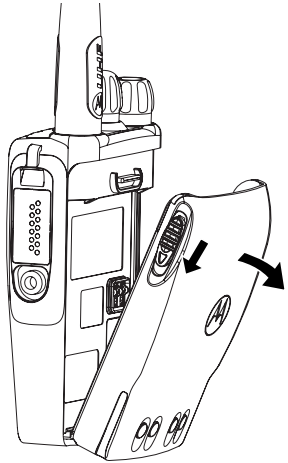


1 Fit the extensions at the bottom of the battery into the bottom slots on the radio.

2 Press the top part of the battery toward the radio until you hear a double click.

Note: It is important to make sure that both battery latches are secured.

Removing the Battery



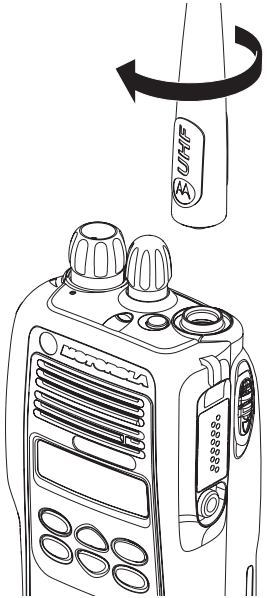
1 Turn off the radio (see page 21).

2 Slide both battery latches, on both sides of the battery, downwards.

3 Pull the top part of the battery away from the radio.

ACCESSORY INFORMATION

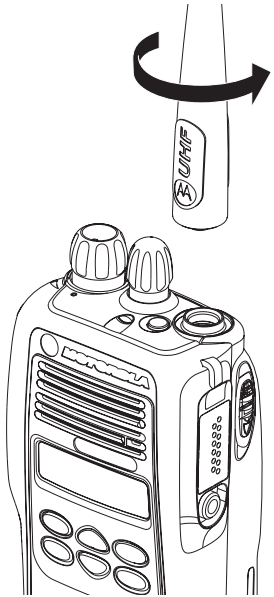
Attaching the Antenna



1 Align the threaded end of the antenna with the radio's antenna connector.

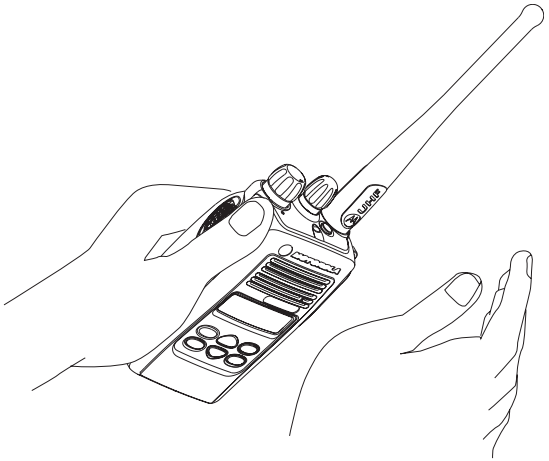
2 Turn the antenna clockwise to attach it.

Removing the Antenna



1 Turn the antenna counterclockwise to remove it.

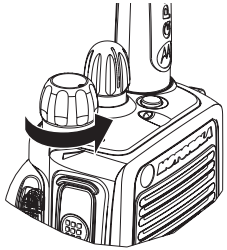
DRAINING WATER FROM THE IP67 EX560·XLS SPEAKER



If you accidentally drop your EX560•XLS radio into water, pick up the radio, and gently tap the radio (as shown above) to remove the water from the speaker grille and microphone port before using it.

Note: Do not submerge your radio for any longer than 30 minutes and no deeper than 1 metre. If these limits are exceeded then your radio could be permanently damaged.

TURNING THE RADIO ON OR OFF

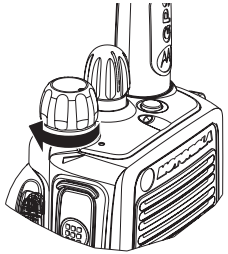


ON

Turn the **On/Off/ Volume** knob clockwise.

If power-up is successful, you hear the Self-Test Pass Tone and see the LED momentarily turn green.

If the radio fails to power up, you hear the Self-Test Fail Tone .



OFF

Turn the **On/Off/ Volume** knob counterclockwise until you hear a click.

ADJUSTING THE VOLUME

Turn the **On/Off/Volume Control** knob clockwise to increase the volume or counterclockwise to decrease the volume.

–or–

1. Hold down the **Volume Set** button (see Programmable Features on page 12); you hear a continuous tone.
2. Turn the **On/Off/Volume Control** knob to the desired volume level.
3. Release the **Volume Set** button.

SELECTING A TRUNKED ZONE AND TALKGROUP

Note: Throughout this manual there are features listed as trunked and conventional. **Trunked** indicates the feature functions in LTR zones unless otherwise noted. **Conventional** indicates the feature functions in Conventional zones only.

Up to 15 LTR trunked zones (containing 16 talkgroups each) can be programmed into your radio.

To select a trunked zone and talkgroup:

Note: The selection of zones can be programmed by your dealer either on the Zone/Channel Selector knob or via the menu keys.

1. Use the **Zone/Channel Selector** knob to select the appropriate trunked zone.
2. or until you see the desired preprogrammed talkgroup on the display.

–or–

1. to enter menu mode.
2. *or* until `Zone`
3. to select `Zone`
4. *or* until you see the desired zone on the display.

5 ⊟/● to select the desired zone.

6 ⌒ or P2 until you see the desired preprogrammed talkgroup on the display.

SENDING A TRUNKED CALL

To send a trunked call:

1 Turn your radio on.

2 Select the desired zone and talkgroup (see page 22 “Selecting a Trunked Zone and Talkgroup”).

3 Hold the radio in a vertical position at a distance of about 1 to 2 inches (2.5 to 5 cm) from your mouth.

4 Press and hold the **PTT** button.

–or–

Press and release the **PTT** button and wait 3 seconds.

- If access to the trunked system was successful, the LED indicator lights steady red.
  - In addition, your dealer can program your radio to sound a short, high-pitched (talk permit) tone, indicating successful trunked system access.
- If access to the trunked system was unsuccessful, the LED indicator blinks red and a low-pitched (talk prohibit) tone sounds, indicating that the system was busy or out-of-range.

5 With the **PTT** button depressed, speak clearly into the microphone.

6 Release the PTT button to listen.

SELECTING A CONVENTIONAL ZONE AND CHANNEL

Up to 160 conventional channels, in one or more conventional zones, can be programmed into your radio.

To select a conventional zone and channel

Note: The selection of zones can be programmed by your dealer either on the Zone/Channel Selector knob or via the menu keys.

1 Use the **Zone/Channel Selector** knob to select the appropriate conventional zone.

2 or until you see the desired conventional channel on the display.

–or–

1 to enter menu mode.

2 *or* until Zone

3 to select Zone

4 *or* until you see the desired zone on the display.

5 to select the desired zone.

6 or until you see the desired conventional channel on the display.

SENDING A CONVENTIONAL CALL

Note: In the United States, FCC regulations require you to monitor the conventional channels before sending a call. The monitor feature (see page 13) can be accessed through one of your programmable buttons.

To send a conventional call

1 Turn your radio on.

2 Select the desired channel (see “Selecting a Conventional Zone and Channel”).

3 Hold the radio in a vertical position at a distance of about 1 to 2 inches (2.5 to 5 cm) from your mouth.

4 Press the **PTT** button and speak clearly into the microphone. The LED indicator lights steady red while the call is being sent.

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

RECEIVING A TRUNKED OR CONVENTIONAL CALL

1 Turn your radio on.

2 Adjust your radio's volume (see page 22).

3 Select the desired trunked or conventional zone (see page 22, "Selecting a Trunked Zone and Talkgroup" or page 24, "Selecting a Conventional Zone and Channel".

- Make sure the **PTT** button is released.

4 Listen for voice activity. The LED indicator blinks red when your radio is receiving.

REPEATER OR TALKAROUND |→| MODE

(CONVENTIONAL OPERATION ONLY)

Talkaround mode enables you to communicate with another radio when either:

- The repeater is not operating

–or–

- Your radio is out of the repeater's range but within communicating distance of another radio.

Note: The |→| symbol appears on the LCD screen when talkaround mode is selected.

To select either repeater mode or talkaround mode:

Press the preprogrammed **Repeater/ Talkaround** button (see page 12) to toggle between repeater mode and talkaround mode.

–or–

1 ⊟/● to enter menu mode.

2 ⌒ *or* P2 until `Rptr/Talkarnd`

3	⊟/● to select	Rptr/Talkarnd
4	⌒ *or* P2 until	Rptr/Talkarnd
	–or– until	Talkarnd Mode
5	⊟/● to confirm your selection.	

HOME CHANNEL REVERT

The Home Channel Revert feature allows you to instantly access your favorite trunked talkgroup or conventional channel at the touch of a button.

To activate Home Channel Revert:

Press the preprogrammed **Home Channel Revert** button (see page 13).

SOUNDING AN EMERGENCY SIREN

In the event of an emergency, you may need to quickly get the attention of others for help. The Emergency Siren feature (if programmed by your dealer) causes your radio to emit a continuous, high-pitched tone.

Note: The ⚠ symbol appears on the LCD screen when the Emergency Siren has been activated.

To start the Emergency Siren:

Press the preprogrammed **Emergency Siren** button (see page 12).

To stop the Emergency Siren:

Press the **Emergency Siren** button again or press the **PTT** button.

RADIO CALLS

MAKING A SELECTIVE CALL

You can make a selective call to a particular radio or group of radios, as programmed by your dealer, provided that the receiving radio(s) has the associated decode capability.

To make a selective call:

Press the preprogrammed Radio Call button (see page 12), and proceed to step 4.

–or–

1 (M/•) to enter menu mode.

2 ( ) *or* (P2) until `Radio Call`

3 (M/•) to select `Radio Call`

4 ( ) *or* (P2) until `Selective Call`

5 (M/•) to select `Selective Call`

6 ( ) *or* (P2) to locate the desired ID in the Radio Call List.

–or–

Enter the ID number of the radio you want to call.

7 Press the **PTT** button to send the call.

The radio sounds a continuous tone, if programmed by your dealer.

8 Press the **PTT** button and talk; release the **PTT** button to listen.

9 (⏻) to return to `Selective Call`

–or–

Hold down (⏻) to exit menu mode.

RECEIVING A SELECTIVE CALL ♪

When you receive a selective call:

- The LCD screen displays ♪ and the preprogrammed name or ID of the calling radio.
- The LED indicator blinks yellow, if programmed by your dealer.
- You hear an alert tone.

To answer the call, press the **PTT** button.

Note: Unless you make a Selective Call back to the caller, your response is heard by all members of your talkgroup.

SENDING A CALL ALERT™ PAGE

You can alert another person by sending a *Call Alert* page.

To send a Call Alert page:

Press the preprogrammed Radio Call button (see page 12) and proceed to step 4:

1 ⊟/• to enter menu mode.

2 ⌒ *or* P2 until `Radio Call`

3 ⊟/• to select `Radio Call`

4 ⌒ *or* P2 until `Call Alert`

5 ⊟/• to select `Call Alert`

6 ⌒ *or* P2 to locate the desired ID in the Radio Call List.

–or–

Enter the ID number of the radio you want to page.

7 Press the **PTT** button. to send the page.

You see: `Call In Prog`

and the preprogrammed name or ID alternating in the LCD.

8 If the Call Alert page is received by the target radio, you see:

If not received, you see:

9 ⏻ to return to

–or–

Hold down ⏻ to exit menu mode.

RECEIVING A CALL ALERT™ PAGE

When you receive a Call Alert page:

- The LCD screen displays ♪ and the preprogrammed name or ID of the calling radio.
- You hear four alert tones, either once or continuously, as programmed by your dealer.

To answer the page, press the **PTT** button; to cancel the page, press any other key.

Note: Your radio displays only the last Call Alert page received. Also, your radio does not receive any Selective Calls until you clear the page.

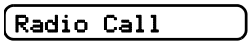
RADIO CHECK

This feature allows you to determine if a radio is within range and turned on, without disturbing the user of that radio. This feature can also be used when attempts with Selective Call and Call Alert fail. (This feature is available only if your signalling protocol supports it.)

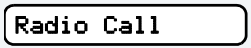
To perform a Radio Check:

1 ⊟/● to enter menu mode.

2 ⌒ *or* P2 until



3 ⊟/● to select



4 *or* until

5 to select

6 *or* to locate the desired ID in the Radio Call list

–or–

Enter the ID number of the radio you are checking.

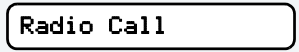
7 Press the **PTT** button.

You see:

8 If the Radio Check is received by the target radio, you see:

If not received, you see:

9 to return to



–or–

Hold down to exit menu mode.

EDITING A RADIO CALL LIST

Your radio has a Radio Call list that contains the names and radio IDs of several talkgroups or individuals.

The ID numbers in the Radio Call List are programmed by your dealer, and cannot be changed from your radio. However, you can edit the names associated with these IDs. The symbol appears on the LCD screen when you are editing.

Note: The radio cannot receive any calls while you are editing.

To edit a Call List entry:

1. ⊟/● to enter menu mode.
2. ⌒ *or* P2 until `Program Lists`
3. ⊟/● to select `Program Lists`
4. ⌒ *or* P2 until `RadioCall List`
5. ⊟/● to select `RadioCall List`
6. ⌒ *or* P2 until `Edit Entry?`
7. ⊟/● to select `Edit Entry?`
8. ⌒ *or* P2 until you locate the desired entry.
9. ⊟/● to select the entry.
10. Use your keypad to edit the entry (page 9).
11. ⊟/● to save your changes. `Edit Entry?`
12. ⏻ to return to `Edit Entry?`

    –or–
    Hold down ⏻ to exit menu mode.

NAME AND CALL ALERT TONE TAGGING

You can program your radio to sound a particular alert tone when a specific user is calling (name tone tagging), or when receiving a particular type of radio call (call tone tagging).

Note: Name and call tone tagging are valid only for selective calls and call alerts.

There are seven alert tones to select from. (See table, page 49.)

To tag a specific user's name:

1 ⊟/● to enter menu mode.

2 ⌒ *or* P2 until `Audio/Tones`

3 ⊟/● to select `Audio/Tones`

4 ⌒ *or* P2 until `Name Tone Tag`

5 ⊟/● to select `Name Tone Tag`

6 ⌒ *or* P2 until you see the name you want to tag.

7 ⊟/● to confirm the selection.

8 ⌒ *or* P2 until you see and hear the tone you want to use for this name.

9 ⊟/● to confirm the selection.

You see: `Name Tag Set`

10 ⏻ to return to `Name Tone Tag`

–or–
Hold down ⏻ to exit menu mode.

To tag a type of radio call:

1 ⊟/● to enter menu mode.

2 ⌒ *or* P2 until `Audio/Tones`

3 ⊟/● to select `Audio/Tones`

4 *or* until

Call Tone Tag

5 to select

Call Tone Tag

6 *or* until you see the call type you want to tag.

7 to confirm the selection.

8 *or* until you see and hear the tone you want to use for this type of call.

9 to confirm the selection.

You see:

Call Tone Set

10 to return to

Call Tone Tag

–or–

Hold down to exit menu mode.

SCAN

Your radio is equipped with the Scan feature, which allows you to search for, lock onto, and monitor voice activity on trunked talkgroups and conventional channels.

There are three types of Scan available in your radio:

- Auto Group Scan
- All Group Scan
- System Scan

The table below summarizes the Scan types available in each zone type.

Zone	LTR Auto Group Scan	LTR All Group Scan	System Scan
LTR Trunked	X	X	X
Conventional			X

TALKBACK

When activity is detected during any type of scan, scanning stops and the active talkgroup or channel appears and remains on the display until scanning resumes. Your dealer can program the amount of time you can respond (or “TALKBACK”) to the caller before your radio resumes scanning.

You must press the **PTT** button to participate in the call; otherwise, scanning continues to the other talkgroups or channels.

AUTO GROUP SCAN

(LTR TRUNKED OPERATION ONLY)

Auto Group Scan automatically scans talkgroups within an LTR zone as programmed by your dealer. Auto Group Scan can be either non-prioritized or prioritized.

- Non-prioritized Auto Group Scan automatically scans all talkgroups programmed with Auto Group Scan.
- Prioritized Auto Group Scan automatically scans the selected talkgroup and all lower 4-numbered talkgroups. For example, if talkgroups 1, 3, and 4 have been programmed by your dealer with Auto Group Scan and talkgroup 4 is selected, the radio automatically scans talkgroups 1, 3, and 4, and skips talkgroup 2.

To start Auto Group Scan:

Select a talkgroup that has been programmed for Auto Group Scan by your dealer.

Note: You do not need to press a preprogrammed **Scan** button.

- The Z symbol appears on the LCD screen when non-prioritized or prioritized Auto Group Scan has been activated.
- There is no LED indicator during Auto Group Scan.

To Stop Auto Group Scan:

Select a talkgroup that has not been programmed for Auto Group Scan by your dealer.

ALL GROUP SCAN Z
(LTR TRUNKED OPERATION ONLY)

All Group Scan scans all talkgroups within the selected LTR trunked zone.

When All Group Scan is Enabled:

- The Z symbol appears on the LCD screen.
- The LED indicator blinks green during All Group Scan operation; it stops blinking when the radio switches to an active talkgroup.

Note: If you enter menu mode while the radio is scanning, scanning stops. It resumes when you exit menu mode.

To Start or Stop All Group Scan Operation through a preprogrammed button (see page 12):

- Press the preprogrammed All Group Scan button once to start All Group Scan.
- Press the preprogrammed All Group Scan button again to stop All Group Scan.

–or–

To Start or Stop All Group Scan Operation through the menu:

1 ⊟/● to enter menu mode.

2 ⌒ or P2 until `All Group Scan`

3 ⊟/● to select `All Group Scan`

You see the current scan status.

4 ⌒ or P2 until `All Group On?`

–or– All Group Off?

5 (M/•) to confirm your selection.

SYSTEM SCAN

System Scan scans trunked talkgroups and conventional channels between LTR and conventional zones, as programmed by your dealer. Up to 16 different talkgroups or conventional channels can be programmed into each Scan list. You can edit these lists through your radio's menu (see page 37).

When System Scan is enabled:

- The symbol appears on the LCD screen.
- The LED indicator blinks green during System Scan operation; it stops blinking when the radio switches to an active talkgroup or channel.

Note: If you enter menu mode while the radio is scanning, scanning stops. It resumes when you exit menu mode.

To start or stop a System Scan operation:

Press the preprogrammed **System Scan** button (see page 12) to start or stop scanning,

–or–

Do the following:

1 (M/•) to enter menu mode.

2 ( ) *or* (PTT) until System Scan

3 (M/•) to select System Scan

You see the current scan status.

4 ( ) *or* (PTT) until Sys Scan On?

–or– Sys Scan Off?

5 (M/•) to confirm your selection.

DELETING A NUISANCE CHANNEL/ TALKGROUP
(SYSTEM SCAN OPERATION ONLY)

If a talkgroup or channel continually generates unwanted calls (a “nuisance” channel), use the preprogrammed **System Scan** button to temporarily delete the talkgroup or channel from the Scan list.

To temporarily delete the channel/ talkgroup:

1. While the radio’s receiving activity is on the nuisance channel, press and hold the preprogrammed Scan button until you hear a high-pitched tone (valid key press).
2. Release the Scan button. The nuisance channel has been temporarily deleted from your Scan list.

Restoring a Channel/Talkgroup Back to the Scan List

To restore a previously deleted talkgroup or channel back to the Scan list, restart the scan operation or turn your radio off and on again.

EDITING A SCAN LIST
(SYSTEM SCAN OPERATION ONLY)

One Scan list is assigned to each of the 16 positions on the **Zone/Channel Selector** knob. Each Scan list can contain up to 16 talkgroups and/or channels. The same talkgroup or channel can be included in several Scan lists, and the same Scan list can be assigned to several **Zone/Channel Selector** positions.

When you edit a Scan list, you can either add, delete, or prioritize talkgroups or channels.

Your radio cannot receive any calls while you are editing a Scan list. The ☐ symbol is displayed while you are in edit mode.

Note: In Conventional operation only, even if there is activity on a non-priority channel, your radio automatically switches to an active priority channel and indicates the activity with a short tone.

Adding or Deleting Talkgroups or Channels in a Scan List

1 ⓜ to enter menu mode.

2 ⌒ or Ⓟ until `Program Lists`

3 ⓜ to select `Program Lists`

4 ⌒ *or* Ⓟ until `Scan List`

Note: One Scan list per mode of operation is available.

5 ⓜ to select `Scan List`

6 ⌒ *or* Ⓟ until `Add Entry?`

–or until `Delete Entry?`

7 ⓜ to confirm your selection.

8 ⌒ *or* Ⓟ until you see the talkgroup or channel you want to add or delete.

Note: You cannot delete the Primary talkgroup off a Scan List.

9 ⓜ to confirm your selection.

10 If you added a talkgroup or channel,

you see `Entry Saved`
–or–

If you delete a talkgroup or channel,

You see: `Delete?`

ⓜ to confirm the deletion.

You see: `Entry Deleted`

11 ⓢ to return to `Add Entry?`

or to return to `Delete Entry?`
–or–

Hold down ⓢ to exit menu mode.

Prioritizing a Talkgroup or Channel in a Scan List

You may want to check the activity on one or two talkgroups or channels more frequently than others. You can do this by prioritizing them:

Priority Channel	Scanning Sequence
None specified	Ch1→Ch2→Ch3→ Ch4→…Ch1
Channel 2 (Priority 1)	Ch2Ch1→Ch2→Ch3→ Ch2→Ch4→Ch2→…Ch1
Channel 2 (Priority 1) and Channel 8 (Priority 2)	Ch2→Ch1→Ch8→Ch3→ Ch2→Ch4→Ch8→…Ch1

Note: In Conventional operation only, even if there is activity on a non-priority channel, your radio automatically switches to an active priority channel and indicates the activity with a short tone.

Setting Priority Talkgroups or Channels

1. Ⓜ to enter menu mode.
2. ⌒ *or* P2 until `Program Lists`
3. Ⓜ to select `Program Lists`
4. ⌒ *or* P2 until `Scan List`
5. Ⓜ to select `Scan List`
6. ⌒ or P2 until `Edit Priority?`
7. Ⓜ to select `Edit Priority?`
8. ⌒ *or* P2 until `Priority #1?`

   –*or* – until `Priority #2?`

You see the current priority talkgroup or channel.

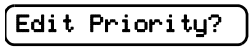
9 (E/●) to select the desired priority level.

10 ⌒ *or* (P2) until you see the talkgroup or channel you want to prioritize.

11 (E/●) to prioritize that talkgroup or channel.

12 (⏻) to return to

–or–



Hold down (⏻) to exit menu mode.

Note: You cannot reprioritize a *Priority 1* channel or talkgroup to *Priority 2* channel or talkgroup. If you want to reprioritize all channels or talkgroups, you must delete each priority channel from the scan list and add it back.

PHONE

Your radio allows you to place and receive telephone calls through trunked and conventional systems (depending on phone line availability). Telephone calls through a repeater allow only one person to speak at a time.

MAKING A PHONE CALL ✆ THROUGH AN LTR TRUNKED SYSTEM

You can make a phone call through a trunked repeater by using the preprogrammed **Phone** button (see page 12). or the menu. ✆ will appear on the LCD screen when you are in Phone Mode.

Note: The following instructions assume your radio has been programmed as follows by your dealer using CPS (Customer Programming Software).

- Dial type: Live
- Access/Deaccess type: Immediate Auto
- Tone Span: Timed - 100 ms tone duration

To initiate a phone call:

Do the following:

1 Select a trunked zone and talkgroup that have been programmed for telephone.

2 (⊟/●) to enter menu mode.
–or–
Press the preprogrammed **Phone** button, and skip to step 5.
–or–
Press and release the **Speed Dial** button to use the speed dial feature. Then press the (1 to 9) key corresponding to the number you want to call on the Phone list. Or press 0 if you want to call the last number dialed. Press the **PTT** button. A dial tone sounds. Press the **PTT** button again to send the phone number.
–or–
For LTR system, press and hold the **PTT** button while dialing a number. (If your radio has been programmed for Hot keypad, this is a radio-wide setting).

3 ⌒ *or* (P2) until Phone

4 ⊟/● to confirm

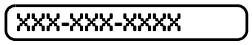
appears on the LCD when you are in Phone mode.

5 Press and Release the **PTT** button.

- If phone access is successful, a dial tone sounds.
- If phone access is unsuccessful, a low-pitched alternating tone sounds. Disconnect the call (see step 8) and try again.

6 Enter the phone number with the keypad. The number is automatically sent without pressing the **PTT** button again.
–or–

or PZ to select a number from the phone list.



Press and release the **PTT** button again to send the number.

7 Hold the radio in a vertical position with the microphone 1 to 2 inches (2.5 to 5 cm) away from your mouth. Press the **PTT** button to talk; release it to listen.

8 To disconnect the phone call:

Press and hold (to exit Phone.

no longer appears on the LCD.

MAKING A PHONE CALL ✆ THROUGH A CONVENTIONAL SYSTEM

To initiate a phone call:

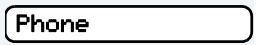
Press the preprogrammed **Phone** button, and skip to step 5.

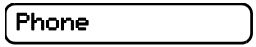
–or–

Press the **PTT** button, and if the Hot keypad feature has been programmed by your dealer, do the following:o the following:

1 Select a conventional zone and channel that have been programmed for telephone.

2 Ⓜ/● to enter menu mode.

3 ⌒ *or* P2 until 

4 Ⓜ/● to select 

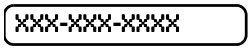
✆ appears on the LCD screen when you are in Phone Mode.

5 (For conventional operation with auto access only). You hear a series of tones, indicating that an access code is being sent automatically, and see your access code:

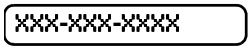
–or–

Enter your access code using the keypad.

6 When you hear a dial tone:

Enter the phone number using the keypad. 

–or–

⌒ *or* P2 to select a number from the phone list. 

–or– (see step 7)

7 a Press and release the preprogrammed **Speed Dial** button (see step 6) to use the Speed Dial feature.

b Press the key (1 to 9) corresponding to the number you want to call, or press 0 if you want to call the last number dialed.

Note: To redial the last number dialed (if not using Speed Dial), press and release the **PTT** button immediately after the access code is sent. The radio sends the last number dialed.

–or–

If you entered your access code using the keypad, press the ? key once to access the last number dialed; then press and release the **PTT** button.

8 Press and release the **PTT** button, if required for your radio.

9 Hold the radio in a vertical position with the microphone 1 to 2 inches (2.5 to 5 cm) away from your mouth. Press the **PTT** button to talk; release it to listen.

10 To disconnect a phone call, do one of the following:

Enter the deaccess code using the keypad.

–or–

If your radio has the deaccess code programmed, go to step 9.

11 To exit Phone Mode:

Press and hold # to disconnect the call. ⏻ disappears from the LCD.

RECEIVING A PHONE CALL THROUGH AN LTR TRUNKED OR CONVENTIONAL SYSTEM

To receive a phone call:

1 *or* to select a LTR talkgroup or conventional channel that has been programmed for telephone.

–or–

Activate any scan type containing a telephone talkgroup or channel (see page 34).

- When a phone call is received, a ringing tone sounds, alerting you to answer the phone call.

2 Press the **PTT** button to answer the phone call. Press the **PTT** button to talk; release it to listen.

3 To disconnect the phone call and exit Phone and menu mode:

Press and hold to disconnect the call.

MODIFYING THE PHONE LIST

Your radio contains a Phone list that holds up to 25 phone numbers. The Phone list is shared between trunked and conventional Phone operation. You can modify the Phone list in three ways through your radio's menu:

- Add an entry
- Delete an entry
- Edit an existing entry

The symbol appears on the LCD screen when you are modifying the phone list.

To Add an Entry:

1 (M/•) to enter menu mode.

2 ^ *or* (P2) until `Program Lists`

3 (M/•) to select `Program Lists`

4 ^ *or* (P2) until `Phone List`

5 (M/•) to select `Phone List`

6 ^ *or* (P2) until `Add Entry?`

7 (M/•) to select `Add Entry?`

You see: `Enter Name`

8 Use the keypad to enter the name (see page 7 and page 8).

9 (M/•) to store the name.

You see: `Enter Phone #`

10 Use the keypad to enter the phone number. You can also add a dash (press >) and a Pause Indicator (hold down # until the # character on the LCD screen changes to a "P").

11 (M/•) to store the phone number.

12 ^ *or* (P2) until you see the location in the list where you want to store the phone number.

13 (M/•) to store the phone number.

You see: `Entry Saved`

14 (M/•) to return to `Add Entry?`

Hold down (C) to exit menu mode.

To Delete an Entry:

1 ⊟/● to enter menu mode.

2 ⌒ *or* P2 until `Program Lists`

3 ⊟/● to select `Program Lists`

4 ⌒ *or* P2 until `Phone List`

5 ⊟/● to select `Phone List`

6 ⌒ *or* P2 until `Delete Entry?`

7 ⊟/● to select `Delete Entry?`

8 ⌒ *or* P2 until you see the entry you want to delete.

9 ⊟/● to select the entry.

10 You see: `Delete?`

⊟/● again to confirm the deletion.

You see: `Entry Deleted`

11 ⊘ to return to `Delete Entry?`

–or–

Hold down ⊘ to exit menu mode.

To Edit an Entry:

1 ⊟/● to enter menu mode.

2 ⌒ *or* P2 until `Program Lists`

3 ⊟/● to select `Program Lists`

4 ⌒ *or* P2 until `Phone List`

5 ⊟/● to select

```
Phone List
```

6 ⌒ *or* P2 until

```
Edit Entry?
```

7 ⊟/● to select

```
Edit Entry?
```

8 ⌒ *or* P2 until you see the entry you want to edit.

9 ⊟/● to select the entry.

10 ⌒ *or* P2 until

(to edit the name),

```
Edit Name?
```

–or– until

(to edit the phone number),

```
Edit Number?
```

–or– until

```
Edit Location?
```

(to edit the location in the phone list).

11 ⊟/● to confirm your selection.

12 Use the keypad to edit the entry (see page 9),

–or–

⌒ *or* P2 until you see the location where you want to store the phone number.

13 ⊟/● to store the information.

14 ⊘ to return to

```
Edit Entry?
```

–or–

Hold down ⊘ to exit menu mode.

AUDIO/TONE SETTINGS

You can customize the audio and tone feature settings on your radio by

1. Ⓜ to enter menu mode.
2. ⌒ *or* P2 until `Audio/Tones`
3. Ⓜ to select `Audio/Tones`
4. ⌒ *or* P2 until you see the feature you want to change (see the table on the next page).
5. Ⓜ to select the feature. You see the feature's current setting.
6. ⌒ *or* P2 for available settings. (For Name and Call Tone Tagging, see page 32.)
7. Ⓜ to set the desired setting.

Audio/Tone Settings

Feature	What it Does	Settings
`Alert Vol Lvl`	Makes the volume level of the audio and alert tones independent. If turned on, it makes the alert tones follow the settings in the CPS; if turned off, the alert tones follow the setting of the volume knob.	`Ind Alert Off` `Ind Alert On`
`Tone Disable`	Turns all alert and audio tones on or off.	`Tones On` `Tones Off`

Audio/Tone Settings

Feature	What it Does	Settings
Name Tone Tag ‡	Assigns a specific ring tone when receiving a call from a specific user (see page 32 for details).	Standard Alert #1 – #7
Call Tone Tag ‡	Assigns a specific tone when receiving a specific type of radio call (see page 32 for details).	Standard Alert #1 – #7
Escalert	Increases the volume of the alarm tones when a radio call is not answered.	Escalert On Escalert Off
Companding	Provides the same audio quality for 12.5 kHz and for 25 kHz channels.	Compand On Compand Off
Keypad Tones	Turns keypad tones on or off except for programmable buttons (see page 11).	Tones On Tones Off

‡ LTR trunking operation only.

UTILITIES

You can customize some of your radio's feature by:

1. (⊟/●) to enter menu mode.
2. ⌒ *or* (P2) until `Utilities`
3. (⊟/●) to select `Utilities`
4. ⌒ *or* (P2) until you see the feature you want to change (see the Utilities Features table).
5. (⊟/●) to select the feature. You see the feature's current setting.
6. ⌒ *or* (P2) for available settings.
7. (⊟/●) to select the desired setting.

Utilities Features

Feature	What it Does	Settings
`Squelch` §	Sets radio squelch at either normal or tight (see page 53).	`Sqlch Tight` `Sqlch Normal`

`Power Level`	Changes the power level of the radio to high, low, or auto (see page 53).	`Power High`
		`Power Low`
		`Power Auto`

§ Conventional operation only.

Utilities Features (Continued)

Feature	What it Does	Settings
Clock	Sets the time, or turns the clock on or off (see page 54).	Clock On Clock Off Set Time
Reminder Alarm	Sets the alarm, or turns it on or off (see page 54).	Alarm On Alarm Off Set Time
Language Selection	Selects the language to be shown in your radio's display.	English Spanish Portuguese French
Light Disable	Turns your radio's LED indicator, the display, and keypad backlight on or off.	Lights on Lights off
Software Ver #	Displays the radio's software version number when you press (M/•).	——

SETTING TIGHT OR NORMAL SQUELCH (CONVENTIONAL OPERATION ONLY)

Use this feature to filter out nuisance (unwanted) calls and/or background noise. However, tightening squelch could cause calls from remote locations to be filtered out as well. In this case, normal squelch may be more desired.

To select tight or normal squelch:

Press the preprogrammed **Squelch** button (see page 12) to toggle between tight and normal squelch,

–or–

Do the following:

⊟/● to enter menu mode.	
or P2 until	`Utilities`
⊟/● to select	`Utilities`
or P2 until	`Squelch`
⊟/● to select	`Squelch`
or P2 until	`Sqlch Tight?`
–or– until	`Sqlch Normal?`

⊟/● to confirm the selection.

SETTING THE POWER LEVEL L H

Each channel in your radio has a predefined transmit power level that can be changed.

- *High power* (H) allows you to reach a radio that is farther away.
- *Low power* (L) conserves the battery's charge.
- *Auto power* (conventional operation only) automatically sets the optimal power level based on the strength of the signal received. If the received signal is weak, the transmit level will be set to high, and vice versa.

Note: Be aware that a message received from a nearby radio might change your radio's power level to low. This may cause radios that are farther away not to receive your transmissions.

To set the power level:

Press the preprogrammed **Power Level** button (see page 12) to toggle between *low* and *high*,

–or–

Do the following:

⊟/● to enter menu mode.	
⌒ *or* P2 until	Utilities
⊟/● to select	Utilities
⌒ *or* P2 until	Power Level
⊟/● to select	Power Level
The display shows the current power level.	

⌒ *or* P2 until	Power High?
–or– until	Power Low?
–or– until	Power Auto?
8 ⊟/● to confirm the selection.	

SETTING THE CLOCK/ALARM

To set the clock/alarm:

⊟/● to enter menu mode.	
⌒ *or* P2 until	Utilities
⊟/● to select	Set Time?
⌒ *or* P2 until	Clock
–or– until	Reminder Alarm
⊟/● to confirm your selection.	

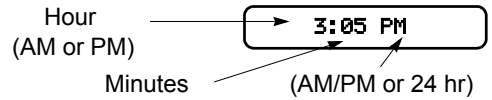
or P2 until

```
Set Time?
```

to select

```
Set Time?
```

When a setting is blinking, you can change it with *or* P2.



You cannot select “24 hr” for

```
Reminder Alarm
```

P1 *or* P3 to move to the previous *or* next setting.

to save your changes.

to return to

```
Utilities
```

–or– to return to

```
Reminder Alarm
```

–or–

Hold down to exit menu mode.

WARRANTY

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:

EX560•XLS Portable Units	Two (2) Years
Product Accessories	One (1) Year

Motorola, at its option, will at no charge either repair the Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the Product during the warranty period provided it is returned in accordance with the terms of this warranty. Replaced parts or boards are warranted for the balance of the original applicable warranty period. All replaced parts of Product shall become the property of MOTOROLA.
This express limited warranty is extended by MOTOROLA to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of MOTOROLA. Unless made in a separate agreement between MOTOROLA and the original end user purchaser, MOTOROLA does not warrant the installation, maintenance or service of the Product.

MOTOROLA cannot be responsible in any way for any ancillary equipment not furnished by MOTOROLA which is

attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system which may use the Product is unique, MOTOROLA disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

II.GENERAL PROVISIONS:

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

III.STATE LAW RIGHTS:

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

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

IV.HOW TO GET WARRANTY SERVICE:

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

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, USA.

ACCESSORIES

Motorola offers a number of accessories to enhance the productivity of your two-way radio. Many of the available accessories are listed below. For a complete list, see your Motorola dealer.

CARRY CASE

JMZN4023_	Plastic Carry Holster with Belt Clip
JMZN4020_	Radio Handstrap

CHARGERS

AAHTN3000_	120 Volt, Rapid Rate, Single-Unit Intelli-Charger
WPLN4187_	120 Volt, 6-unit Non Display Impres Rapid Rate Multi Unit Charger

AUDIO ACCESSORIES

JMMN4066_	Lightweight Headset with Boom Microphone and In-Line PTT - FM (Factory Mutual) Approved
PMMN4023_	SPEAKER MIC,IP57(MINI-PROF)
JMMN4064_	VOX/PTT Interface module for Ear Microphone
0180358B38_	Remote PTT for Ear Microphone System

BATTERIES

*JMNN4023_	Slim Li-Ion, 1000 mAh, 7.5 V Battery
*JMNN4024_	High Capacity Li-Ion, 1320 mAh, 7.5 V Battery
*JMNN4025_	NiMH, 700 mAh, 7.5 V FM Approved Battery
PMNN4073_	Li-Ion FM IP67 Standard Battery
PMNN4074_	Li-Ion Non-FM IP67 Standard Battery

* Important Note: These batteries meet IP54 specification but not IP67 specification. Do not use IP54 batteries with IP67 radios. When these batteries are used with IP67 radios, the total system is not IP67, hence will not function as per IP67 specification. Users are advised to use IP67 batteries with IP67 radios in order to have a total system that meets IP67 specification.

ANTENNAS

8505644V01	VHF 136-150.8 MHz (IP67)
NAD6567_	VHF 150.8-162 MHz (IP67)
8505644V03	VHF 162-174 MHz (IP67)
PMAE4022_	UHF1 403-470 MHz (IP67)
PMAE4025_	UHF2 450-527 MHz (IP67)
8505644V03	UHF (403-433 MHz) 9cm Stubby Antenna
8515969H02	UHF (430-470 MHz) 9cm Stubby Antenna
8571019M01	VHF Helical Antenna (136-147 MHZ)
8571020M01	VHF Helical Antenna (147-160 MHZ)
8571021M01	VHF Helical Antenna (160-174 MHZ)

Selecting a Trunked Zone and Talkgroup

1. Turn **Zone Selector** knob to appropriate trunked zone.
2. or P2 until you see desired preprogrammed talkgroup on the display.

Sending a Trunked Call

1. Press **PTT**. If trunked system access was successful — LED = steady red; if unsuccessful — LED = blinking red; low pitched tone sounds.
2. Speak clearly into microphone. Release **PTT** to listen.

Selecting a Conventional Zone and Channel

1. Turn **Zone Selector** knob to appropriate conventional zone.
2. or P2 until you see desired conventional channel on the display.

Sending a Conventional Call

- Press **PTT** and speak clearly into microphone. LED = steady red while call is being sent. Release **PTT** to listen.

Receiving a Trunked or Conventional Call

- Turn **Zone Selector** knob to desired trunked or conventional zone. Make sure **PTT** is released. When a call is received, the LED blinks red.

Making a Selective Call

1. From `Selective Call` menu, select or enter desired radio ID number.
2. Press **PTT** to send the call. The radio sounds a continuous tone.
3. Press **PTT** and talk; release **PTT** to listen.

Receiving a Selective Call

- When a Selective Call is received, the radio displays ♪ symbol and name or ID of calling radio; the LED blinks yellow. Press **PTT** to answer.

Sending a Call Alert™ Page

1. From `Call Alert` menu, select or enter desired radio ID number.
2. Press **PTT** to send the page. You will see `Call In Prog` (if programmed).
3. If received by target radio, you will see `Acknowledge`; if not received, you will see `No Acknowledge`.

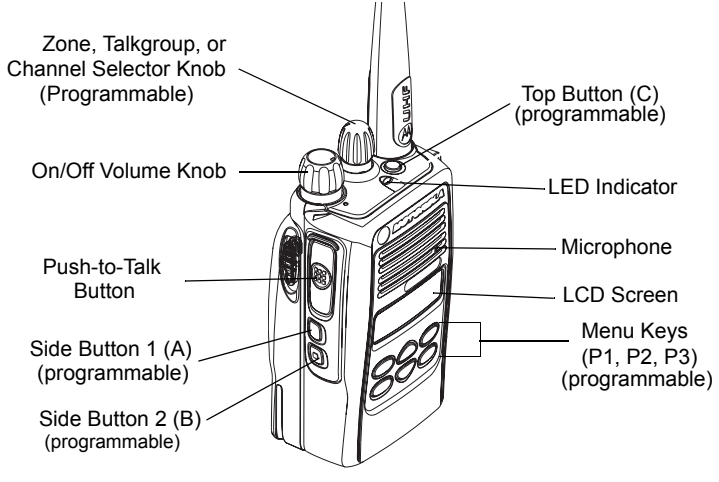
Receiving a Call Alert™ Page

- When a Call Alert page is received — radio continuously sounds 4 alert tones and displays ♪ symbol until you respond. Press **PTT** to answer; press any other key to cancel.

MOTOROLA

EX560•XLS™ Radio Quick Reference Card

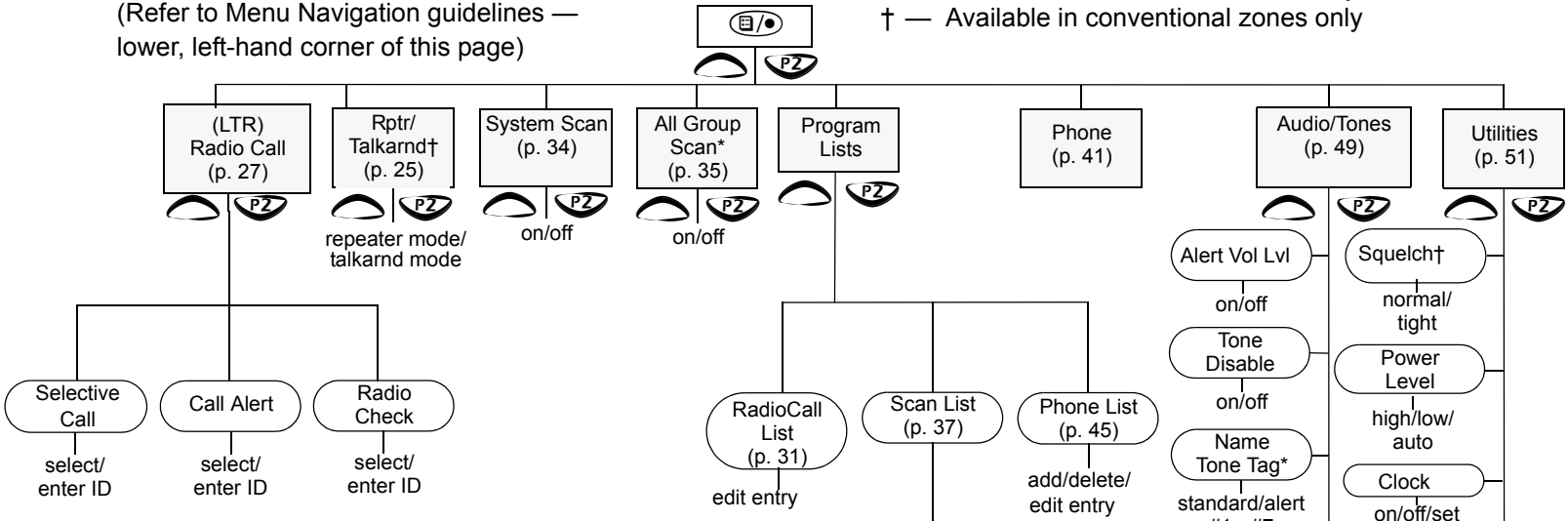
Record the functions for your radio's programmable buttons in the table provided below. For further information, see pages 12 and 13 in this User's Guide.



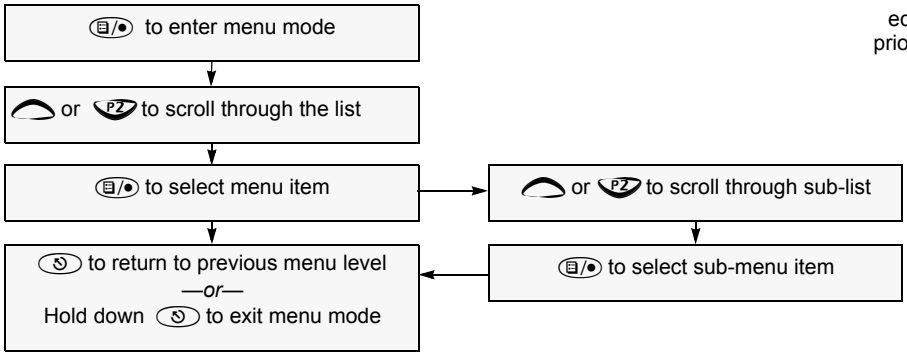
Button	Function	Short Press	Long Press	Hold Down	Page

Menu Navigation Chart
(Refer to Menu Navigation guidelines — lower, left-hand corner of this page)

* — Available in LTR trunked zones only
† — Available in conventional zones only



Menu Navigation



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