

APX™ Two-Way Radios



**APX 7500 05  
Control Head  
User Guide**







# ASTRO® APX™ 7500 Series O5 Control Head Digital Mobile Radio Quick Reference Card

## Product Safety and RF Exposure Compliance

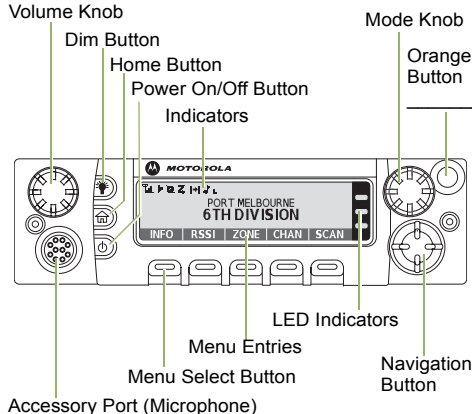


Before using this product, read the operating instructions for safe usage contained in the Product Safety and RF Exposure booklet enclosed with your radio.

### ATTENTION!

This radio is restricted to occupational use only to satisfy FCC 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.

## Radio Controls



## Radio On/Off

Press the Power On/Off button to toggle the power on or off.

## Adjusting Volume

Turn the Volume Knob clockwise to increase volume or counterclockwise to decrease the volume.

## Selecting a Zone

- 1 **▶** or **◀** to **ZONE**.
- 2 Press and hold the **PTT** button. Speak clearly into the microphone.
- 3 **▶** or **◀** button until the desired zone is displayed.
- 4 Press **⬆** or the **PTT** button to confirm the selected zone number.
- 5 Press the **PTT** button to begin transmitting on the displayed zone channel.

## Selecting a Channel

- 1 Press and hold **▶** to scroll to **CHAN** and press the **Menu Select** button directly below **CHAN**. The display shows the current zone and channel.
- 2 Rotate the **Mode** knob to the desired channel.
- 3 Press **⬆** or the **PTT** button to confirm the channel.
- 4 Press the **PTT** button to transmit on the displayed zone channel.

## Receiving and Transmitting

- 1 Take the control head off hook.
- 2 Select zone/channel.
- 3 Listen for a transmission.  
**OR**  
Turn the **Volume** Knob.  
**OR**  
**▶** or **◀** to **MON** then press the **Menu Select** button directly below **MON** and listen for activity.
- 4 Adjust volume, if necessary.
- 5 Press the **PTT** button to transmit; release to receive.

## Sending an Emergency Alarm

- 1 Press the preprogrammed **Emergency** button. A tone sounds and the display alternates **EMERGENCY** and the home display.
- 2 A dispatcher acknowledgment **ACK RECEIVED** display follows.  
**AND, Trunking Only:**  
A high-pitched tone indicates that the alarm has been received by the trunked system's central controller.
- 3 Press and hold the emergency button or the **PTT** button to return to normal operation.

*To exit emergency at any time, press and hold the **Emergency** button.*



PMLN5592A



## Sending an Emergency Call (Trunking Only)

1 Press preprogrammed Emergency button.

2 A tone sounds and the display alternates **EMERGENCY** and the home display.

**OR**

A talk prohibited tone sounds when the selected channel does not support emergency.

3 Press and hold the **PTT** button. Speak clearly into the microphone.

4 Release the **PTT** to end the transmission.

*To exit emergency at any time, press and hold the **Emergency** button.*





## Sending a Silent Emergency Alarm








1 Press the preprogrammed **Emergency** button to activate the silent alarm feature.







2 The display does not change; the LED does not light up, and there is no tone.

*If silent emergency alarm is used with emergency call, pressing the **PTT** button exits the silent mode and initiates the emergency call.*

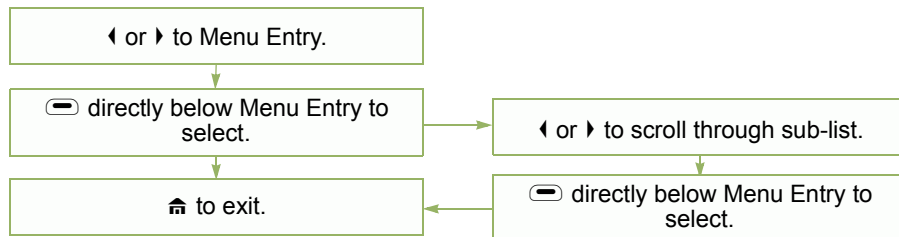
## Display Status Icons

	Receiving a call or data.
	Transmitting a call or data.
	Received an Individual Call.
	The more stripes, the stronger the signal strength for the current site (trunking only).

	Direct radio-to-radio communication or communication through a repeater. <b>On</b> = Direct <b>Off</b> = Repeater
	This channel is being monitored.
	Voice muting the affiliated trunking talkgroup or selected conventional channel. <b>On</b> = Enabled <b>Off</b> = Disabled
	<b>L</b> = Radio is set at Low power. <b>H</b> = Radio is set at High power.
	Scanning a scan list.
	<b>Blinking dot</b> = Detects activity on the Priority-One Channel during scan. <b>Steady dot</b> = Detects activity on the Priority-Two Channel during scan.
	Radio is in the view or program mode. <b>On steady</b> = View mode. <b>Blinking</b> = Program mode.

	The vote scan feature is enabled.
	<b>On</b> = Secure operation. <b>Off</b> = Clear operation. <b>Blinking</b> = Receiving an encrypted voice call.
	<b>On</b> = AES Secure operation. <b>Off</b> = Clear operation. <b>Blinking</b> = Receiving an encrypted voice call.
	<b>On</b> = Location feature enabled, and location signal available. <b>Off</b> = Location feature disabled. <b>Blinking</b> = Location feature enabled, but location signal unavailable.
	<b>On</b> = User is currently associated with the radio. <b>Off</b> = User is currently not associated with the radio. <b>Blinking</b> = Device registration or user registration with the server failed due to an invalid username or pin.
	Data activity is present.

## Menu Navigation



## 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: Motorola, Inc. 1301 E. Algonquin Rd. Schaumburg, IL60196-1078, U.S.A.  
Phone Number: 1-800-927-2744

Hereby declares that the product:

Model Name: **APX 7500**

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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## Important Safety Information

### Product Safety and RF Exposure Compliance



Caution

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

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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 6881095C99) to ensure compliance with RF energy exposure limits.

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

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

## Software Version

All the features described in the following sections are supported by the radio's software version **R02.00.00** or later.

**Accessing Radio Information** on page 93 to determine your radio's software version.

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

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## Getting Started

Take a moment to review the following:

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Notations Used in This Manual . . . . .	page 1
What Your Dealer/System Administrator Can Tell You . . . . .	page 2

### How to Use This User Guide

This User Guide covers the basic operation of the APX™ 7500 Mobiles.

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

### Notations Used in This Manual

Throughout the text in this publication, you will notice the use of **WARNING**, **Caution**, and **Note**. These notations are used to emphasize that safety hazards exist, and the care that must be taken or observed. The following special notations identify certain items:



An operational procedure, practice, or condition, etc., which may result in injury or death if not carefully observed.





**Caution**

An operational procedure, practice, or condition, etc., which may result in damage to the equipment if not carefully observed.

**Note:**

An operational procedure, practice, or condition, etc., which is essential to emphasize.

Example	Description
<b>Home</b> button or 	Buttons and keys are shown in bold print or as an icon.
<b>PHONE</b>	Menu entries are shown similar to the way they appear on the radio's display.
	This means "Press the right side of the 4-way Navigation button."

## ■ What Your Dealer/System Administrator Can Tell You

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

- Is your radio preprogrammed with any preset conventional channels?
- Which buttons have been programmed to access other features?
- What optional accessories may suit your needs?



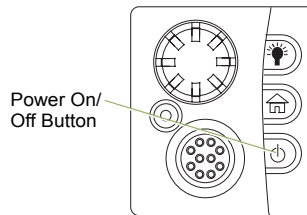
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## Turning On the Radio

Press the **Power On/Off Button** briefly to power on the radio.

After a short time, the red, yellow and green LEDs light up. The display then shows Zone and channel text, and menu items display on the screen.



The backlight will turn on to the last selected dim level.

**Note:** Pressing the **Power On/Off Button** before the LED lights up will be ignored.

If **FAIL ###/###** appears in the display, the radio will not function until the condition has been corrected.

If **ERROR ###/###** appears, some non-critical data has been changed. If either of these displays appear, if the display goes blank, or if the unit appears to be locked up, see **Helpful Tips** on page 99 for more information.

If **CH MISMATCH** appears, means that either the Control Head has been connected to an incompatible transceiver, or vice versa.

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

To turn off the radio, press the **Power On/Off Button** after the LEDs light up.

## 📄 Validating Compatibility During Power Up

The radio validates and updates the software and hardware of your control head(s) during power up. Follow the procedure below when your radio runs this task.

### Procedure:

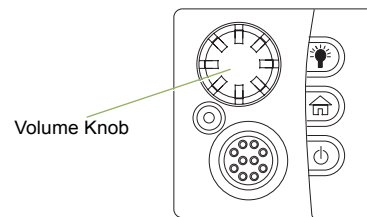
- 1 The display shows **MAINTENANCE MODE REMOTE DEVICE**; promptly followed by other maintenance statuses.
- 2 The display shows **UPDATE DONE PLEASE RESET** upon completion.  
**OR**  
The display shows **UPDATE FAILED PLEASE RESET** when it fails to update.
- 3 Press the **Power On/Off Button** to reset. The radio runs the usual power up operation if the software updates are complete.  
**OR**  
The radio runs the Maintenance Mode if the updates are not complete and repeat step 1.

**Note:** If **SW INCOMPLETE** appears, use Flashport Recovery Tool to update the control heads before you power on the radio again.

## ■ Adjusting the Volume

To increase the volume, rotate the **Volume Knob** clockwise to increase the volume.

To decrease the volume, rotate the **Volume Knob** counterclockwise.



Volume Knob

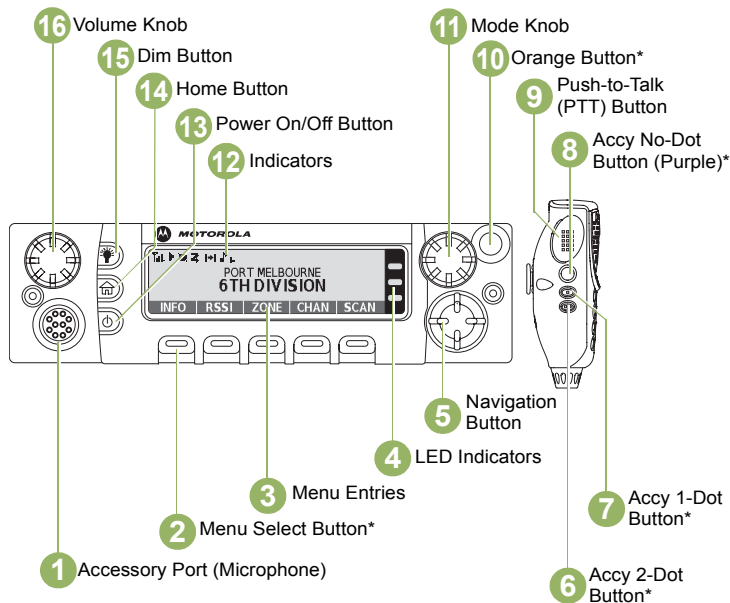
## Identifying Radio Controls

Take a moment to review the following:

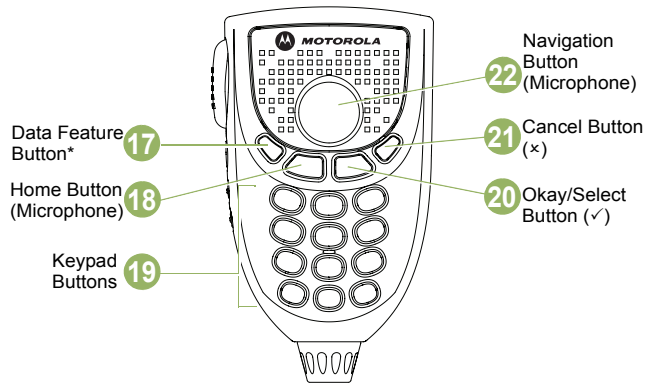
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## Radio Parts and Controls

### O5 Control Head and Microphone



\*These controls/buttons are programmable.



\*This button is programmable.

**Note:** The microphone is not part of a radio. It is an optional accessory.

## ■ Programmable Features

Any references in this manual to a control that is “preprogrammed” means that the control must be programmed by a dealer or a qualified radio technician using the radio’s programming software, in order to assign a feature to that control.

The programmable buttons can be programmed 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

**Call Alert** – Allows the radio to function like a pager, or to verify if a radio is active on the system.

**Call Response** – Allows you to answer a private call or phone call.

**Channel** – Selects a channel.

**Contacts** – Selects the Contacts menu.

**Dynamic Priority (Conventional Only)** – Allows any channel in a scan list (except for the Priority-One channel) to temporarily replace the Priority-Two channel.

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

**Information** – Displays the basic radio information, IP-related information, and buttons or switches control mapping.

**Intercom** – Enables users of multiple control heads to talk to each other via the control heads in a multi-control head setup.

**Internet Protocol Address** – Displays the Internet Protocol (IP) address, device name, and status of the radio.

**Location** – Determines the current location (latitude, longitude, time and date), and also the distance and bearing to another location. Or, turns the GPS functionality on or off for all locations.

**Message** – Enters the current message list.

**Monitor (Conventional Only)** – Monitors a selected channel for all radio traffic until function is disabled.

**Multiple Private Line (Conventional Only)** – Selects the Multiple Private Line lists.

**Nuisance Delete** – Temporarily removes an unwanted channel, except for priority channels or the designated transmit channel, from the scan list.

**One Touch 1 – 4** – Launches a specific feature with one single button-press. You can setup as much as four separately programmed buttons for four different features.

**Phone** – Allows you to make and receive calls similar to standard phone calls.

**Private Call (Trunking Only)** – Allows a call from an individual radio to another individual radio.

**Radio Profiles** – Allows for easy access to a set of preprogrammed visual and audio settings of the radio.

**Recent Calls** – Allows for easy access to the list of calls recently received or made.

**Rekey Request** – Notifies the dispatcher that you want new encryption keys.

**Repeater Access Button (RAB) (Conventional Only)** – Allows to manually send a repeater access codeword.

**Reprogram Request (Trunking Only)** – Notifies the dispatcher that you want a new dynamic regrouping assignment.

**Request-To-Talk (Conventional Only)** – Notifies the dispatcher that you want to send a voice call.

**Scan** – Toggles scan on or off.

**Secure/Clear** – Toggles secure transmission on or off.

**Selective Call (Conventional Only)** – Calls an assigned radio.

**Site Display (Trunking Only)** – Views the current site or enable a site search for SmartZone operation.

**Site Lock/Unlock (Trunking Only)** – Toggles between lock and unlock mode when using the SmartZone option.

**Status** – Sends data calls to the dispatcher about a predefined status.

**Talkaround/Direct (Conventional Only)** – Toggles between using a repeater and communicating directly with another radio.

**Talkgroup (Conventional Only)** – Allows a call from an individual radio to a group of radios.

**Text Messaging Service (TMS)** – Selects the text messaging menu.

**TMS Quick Text** – Selects a predefined message.

**User** – Automatically registers with the server.

**Zone Down** – Toggles downward through the zones in the radio.

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

**Zone Up** – Toggles upward through the zones in the radio.

## Assignable Settings or Utility Functions

**Dim** – Changes the display brightness.

**Front/Rear** – Switches one of two control heads to be active at one time.

**Horns/Lights** – Toggles horns and lights feature on or off.

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

**Voice Announcement** – Audibly indicates the current feature mode, Zone or Channel the user has just assigned.

**Voice Mute** – Toggles voice mute on or off for the channels which have enabled In-Call User Alert. When Voice Mute is active, the radio remains muted to all conventional dispatch calls and affiliated trunking group calls.

## ■ Accessing the Preprogrammed Functions

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

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

OR

- Use the **Menu Select Button** (  ).

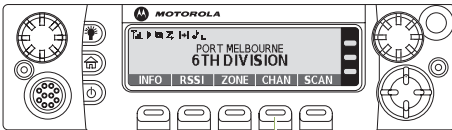
### Using the Menu Select Buttons

The **Menu Select Buttons** allow to access the menu entries of features.

**Note:** Check with your dealer or system administrator for the list of features activated in your radio.

Your radio may be preprogrammed differently from the following example, but the steps for selecting a channel may appear as shown below:

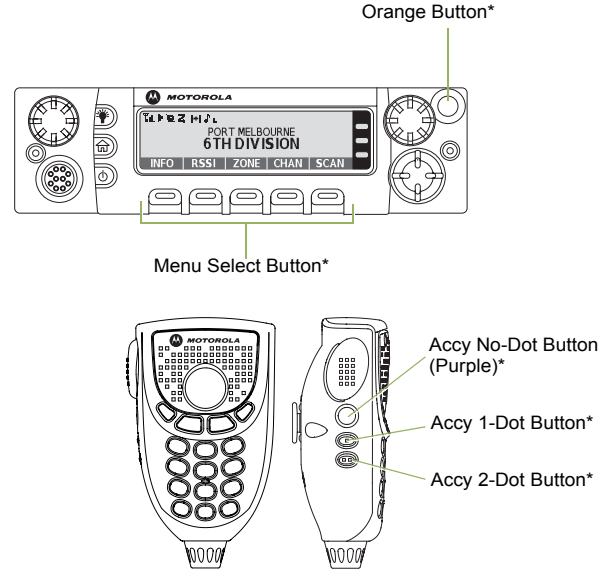
- Press the **Menu Select** button (  ) directly below **CHAN**.



Menu Select Button

### Using the Advance Programmable Buttons

This feature is to help you to shorten the process of applying certain common features.





\* These programmable buttons support the **One Touch Button** feature.


**(Quick Access) One Touch Button** – Enters a menu with a short press on the preprogrammed One Touch button. Features assigned to these buttons are Call, Call Alert, Phone, Repeater Access, MDC RTT Button Access, Status and Message.


## Using the Navigation Buttons

### Home Button

The  button returns you to the home (default) display. In most cases, this is the current mode.

For selected radio features, the  button is also used to save user-edited radio settings or information before returning you to the Home screen.

**Note:** Some features do not require you to press  to go to the Home screen. Refer to the individual feature sections in this manual for further details on saving user-edited radio settings or information.

The  button also can revert to home channel. Check with your dealer or system administrator for more information.

### Data Feature Button

Use this button to access data-related features, such as the Text Messaging Service (TMS) feature screen.

### 4-Way Navigation Button

Use this button to scroll up, down, left or right.

Press and release one of the button to scroll from one entry to the next one. Press and hold one of the button to have the radio toggles through the list automatically (release the button to stop).

### Volume Knob

Use this **Volume Knob** to adjust the volume of the speakers by turning it clockwise or counterclockwise.

### Mode Knob

Use this **Mode Knob** to scroll through the channels by turning it clockwise or counterclockwise.



## ■ Using the Keypad

You can use the 3 x 4 alphanumeric keypad on the keypad microphone (see **Microphones** on page 103) to access your radio's features. The keypad functions in a manner similar to a standard telephone keypad when entering numeric digits. When the keypad is used to edit a list, each key can generate different characters of the alphabet. The tables below show the number of times a key needs to be pressed to generate the required character.

### 📄 Keypad Characters – Uppercase Mode

Key	Number of Times Key is Pressed																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	1	.	,	?	!	;	@	_	-	*	#	&	\$	/	+	=	\	"	'	(	)
2 abc	A	B	C																		
3 def	D	E	F																		
4 ghi	G	H	I																		
5 jkl	J	K	L																		
6 mno	M	N	O																		
7 pqrs	P	Q	R	S																	
8 tuv	T	U	V	8																	
9 wx yz	W	X	Y	Z																	
0	Toggle between mixed case mode, uppercase mode, and lowercase mode.																				
*	Space																				
#	Toggle between numeric and letter mode.																				

## Keypad Characters – Lowercase Mode

Key	Number of Times Key is Pressed																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	1	.	,	?	!	;	@	_	-	*	#	&	\$	/	+	=	\	“	’	(	)
2 abc	a	b	c																		
3 def	d	e	f																		
4 ghi	g	h	i																		
5 jkl	j	k	l																		
6 mno	m	n	o																		
7 pqrs	p	q	r	s																	
8 tuv	t	u	v																		
9 wx yz	w	x	y	z																	
0	Toggle between mixed case mode, uppercase mode, and lowercase mode.																				
*	Space																				
#	Toggle between numeric and letter mode.																				

## Keypad Characters – Numeric Mode

Key	Number of Times Key is Pressed																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	1	.	,	?	!	;	@	_	-	*	#	&	\$	/	+	=	\	"	'	(	)
2 abc	2																				
3 def	3																				
4 ghi	4																				
5 jkl	5																				
6 mno	6																				
7 pqrs	7																				
8 tuv	8																				
9 wx yz	9																				
0	0																				
*	Space																				
#	Toggle between numeric and letter mode.																				

## Keypad Characters – Hexadecimal Mode

Key	Number of Times Key is Pressed																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	1																				
2 abc	2	A	B	C																	
3 def	3	D	E	F																	
4 ghi	4																				
5 jkl	5																				
6 mno	6																				
7 pqrs	7																				
8 tuv	8																				
9 wx yz	9																				
0	0																				
*	Not applicable																				
#	Not applicable																				

## ■ Push-To-Talk (PTT) Button

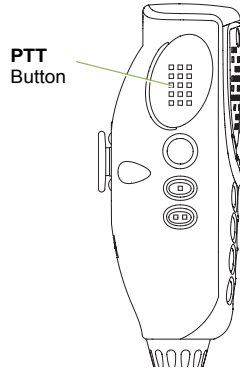
The **PTT** button on the side of the microphone serves two basic purposes:

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

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

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

- While a call is not in progress, the **PTT** button is used to make a new call. See **Making a Radio Call** on page 29 for more information.



## Identifying Status Indicators

Your radio indicates its operational status through the following:

Status Icons . . . . .	page 16
Text Messaging Service (TMS) Icons . . . . .	page 18
Status Icons . . . . .	page 18
TMS Menu Options . . . . .	page 19
LED Indicator . . . . .	page 20
Intelligent Lighting Indicators . . . . .	page 21
Alert Tones . . . . .	page 22

## ■ Status Icons

The liquid crystal display (LCD) of your radio shows the radio status, text entries, and menu entries.

The following are the icons that appear on the radio's display.



### Receiving

Radio is receiving a call or data.



### Transmitting

Radio is transmitting a call or data.



### Call Received

Radio has received an Individual Call.



### Received Signal Strength Indicator (RSSI)

The number of bars displayed represents the received signal strength for the current site, for trunking only. The more stripes in the icon, the stronger the signal.



### Direct

- **On** = Radio is currently configured for direct radio-to-radio communication (during conventional operation only).
- **Off** = Radio is connected with other radios through a repeater.



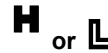
### Monitor (Carrier Squelch)

Selected channel is being monitored (during conventional operation only).



### In-Call User Alert

- **On** = The feature is enabled. Voice muting of the affiliated trunking talkgroup or selected conventional channel is activated.
- **Off** = The feature is disabled. Voice muting of the affiliated trunking talkgroup or selected conventional channel is deactivated.



### Power Level

- **L** = Radio is set at Low power.
- **H** = Radio is set at High power.



### Scan

Radio is scanning a scan list.



### Priority Channel Scan

- **Blinking dot** = Radio detects activity on channel designated as Priority-One.
- **Steady dot** = Radio detects activity on channel designated as Priority-Two.



### View/Program Mode

Radio is in the view or program mode.

- **On steady** = View mode
- **Blinking** = Program mode



### Vote Scan Enabled

The vote scan feature is enabled.



### Secure Operation

- **On** = Secure operation.
- **Off** = Clear operation.
- **Blinking** = Receiving an encrypted voice call.



### AES Secure Operation

- **On** = AES Secure operation.
- **Off** = Clear operation.
- **Blinking** = Receiving an encrypted voice call.



### Location Signal

- **On** = Location feature is enabled, and location signal is available.
- **Off** = Location feature is disabled.
- **Blinking** = Location feature is enabled, but no location signal is available.



### User Login Indicator (IP Packet Data)

- **On** = User is currently associated with the radio.
- **Off** = User is currently not associated with the radio.
- **Blinking** = Device registration or user registration with the server failed due to an invalid username or pin.



### Data Activity

Data activity is present.



### Hexadecimal

Indicates that the text entry is currently in hexadecimal mode.

## ■ Text Messaging Service (TMS) Icons

This feature allows you to send and receive text messages. See *Text Messaging Service (TMS)* on page 62 for more information.

### 📄 Status Icons

The following icons appear on the radio's display for TMS features:



#### **Inbox Full**

The Inbox is full.



#### **Message Sent**

The text message is sent successfully.



#### **Message Unsent**

The text message cannot be sent.



#### **Unread Message**

- User receives a new message.
- The selected text message in the Inbox has not been read.



#### **Read Message**

The selected text message in the Inbox has been read.

3/6

#### **Message Index**

Indicates the index of the current message the user is viewing.

Example: If the user is looking at the third message out of a total of 6 messages in the Inbox folder, the icon is displayed as the icon on the left column.



#### **Priority Status**

- The "Priority" feature is toggled on before the message is sent.
- Messages in the Inbox folder are flagged with "Priority".



#### **Request Reply**

- The "Request Reply" feature is toggled on before the message is sent.
- Messages in the Inbox folder are flagged with "Request Reply".





### Priority Status and Request Reply



- User is composing a message with a priority status and a request for a reply.
- Messages in the Inbox folder are flagged with "Priority" and "Request Reply".

123

#### Numeric

Indicates that the text entry is currently in numeric mode.

Abc

#### Mixed Case

Indicates that the text entry is currently in normal text mode.

ABC

#### Uppercase

Indicates that the text entry is currently in uppercase mode.

abc

#### Lowercase

Indicates that the text entry is currently in lowercase mode.

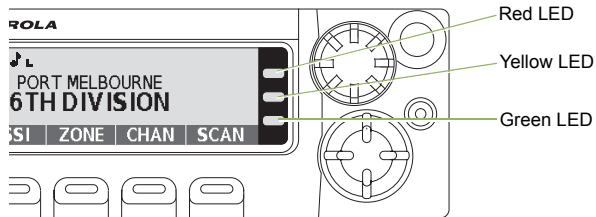
### TMS Menu Options

Menu Option	Description/Function
INBX	Brings you to your incoming messages screen.
COMP	Brings you to the compose screen.
DRFT	Brings you to the saved message screen.
SENT	Brings you to the sent messages screen.
BACK	Brings you back to the previous menu screen.
EDIT	Edits a draft message or key in a target address.
SAVE	Saves the messages you have edited to the Draft folder.
RPLY	Replies to a message.
DEL	Deletes a message or a character text during editing mode.
NEW	Creates a new message.
LIST	Brings you to the predefined messages screen.
IMPT	Toggles the "Priority Status" icon on or off for an outgoing message.
RQRP	Toggles "Request Reply" icon on or off for an outgoing message.

Menu Option	Description/Function
<b>CURR</b>	Deletes the current selected message.
<b>ALL</b>	Selects to delete all the messages in the current folder.
<b>YES</b>	Deletes all the messages in the current folder.
<b>NO</b>	Cancel the delete all messages options.
<b>EXIT</b>	Exits to the Home screen.
<b>OPTN</b>	Brings you to the Options main screen.
<b>SEL</b>	Selects a predefined message or address.
<b>SEND</b>	Sends the message.

## LED Indicator

LED indicator shows the operational status of your radio.



**Solid red** – Radio is transmitting.

**Rapidly blinking red** – Radio has failed the self test upon powering up or encountered a fatal error.

**Solid yellow** – Channel is busy.

**Blinking yellow** – Radio is receiving a secured transmission.

**Solid green** – Radio is powering up, or is on a non-priority channel while in the Scan List Programming mode.

**Blinking green** – Radio is receiving an individual or telephone call, or is on a Priority-Two channel while in the Scan List Programming mode.

**Rapidly blinking green** – Radio is on a Priority-One channel while in the Scan List Programming mode.

## ■ Intelligent Lighting Indicators

This feature temporarily changes the radio's display backlight color and the alert text background color to help signal that a radio event has occurred.

**Note:** This feature must be preprogrammed by a qualified radio technician.

Backlight	Event	When
Orange	Emergency Alerts	The radio initiates an emergency alarm or call.
		The radio receives an emergency alarm or call.
Red	Critical Alerts	The radio is out of range.
		The radio enters failsoft mode.
		The radio is unable to establish a full connection with the system.
Green	Call Alerts	The radio receives a private call.
		The radio receives a phone call.
		The radio receives a call alert.
		The radio receives a selective call.

## ■ Alert Tones

An alert tone is a sound or group of sounds. Your radio uses alert tones to inform you of your radio's conditions. The following table lists these tones and when they occur.

You Hear	Tone Name	Heard
<b>Short, Low-Pitched Tone</b>	Radio Self Test Fail	When radio fails its power-up self test.
	Reject	When an unauthorized request is made.
	Time-Out Timer Warning	Four seconds before time out.
	No ACK Received	When radio fails to receive an acknowledgment.
<b>Long, Low-Pitched Tone</b>	Individual Call Warning Tone	When radio is in an individual call for greater than 6 seconds without any activity.
	Time-Out Timer Timed Out	When the Time-Out Timer has expired.
	Talk Prohibit/ <b>PTT</b> Inhibit	(When <b>PTT</b> button is pressed) transmissions are not allowed.
	Out of Range	(When <b>PTT</b> button is pressed) the radio is out of range of the system.
<b>A Group of Low-Pitched Tones</b>	Invalid Mode	When radio is on an unprogrammed channel.
	Busy	When system is busy.

You Hear	Tone Name	Heard
<b>Short, Medium-Pitched Tone</b>	Valid Key-Press	When correct key is pressed.
	Radio Self Test Pass	When radio passes its power-up self test.
	Clear Voice	At beginning of a non-coded communication.
	Priority Channel Received	When activity on a priority channel is received.
	Emergency Alarm Entry	When entering the emergency state.
	Central Echo	When central controller has received a request from a radio.
<b>Long, Medium-Pitched Tone</b>	Volume Set	When volume is changed on a quiet channel.
	Emergency Exit	When exiting the emergency state.
<b>A Group of Medium-Pitched Tones</b>	Failsoft	When the trunking system fails.
	Automatic Call Back	When voice channel is available from previous request.
	Talk Permit	(When <b>PTT</b> button is pressed) verifying system accepting transmissions.
	Keyfail	When encryption key has been lost.
	Console Acknowledge	When status, emergency alarm, or reprogram request ACK is received.
	Received Individual Call	When Call Alert or Private Call is received.
	Call Alert Sent	When Call Alert is received by the target radio.
Site Trunking	When a SmartZone trunking system fails.	

You Hear	Tone Name	Heard
<b>Ringing</b>	Fast Ringing	When system is searching for target of Private Call.
	Enhanced Call Sent	When waiting for target of Private Call to answer the call.
	Phone Call Received	When a land-to-mobile phone call is received.
<b>Gurgle</b>	Dynamic Regrouping	(When the <b>PTT</b> button is pressed) a dynamic ID has been received.
<b>Unique, Low-Pitched Chirp</b>	New Message	When a new message is received.
<b>Unique, High-Pitched Chirp</b>	Priority Status	When a priority message is received.

## General Radio Operation

Once you understand how your APX 7500 O5 CH Mobile is configured, you are ready to use your radio.

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

Selecting a Zone . . . . .	page 25
Selecting a Radio Channel . . . . .	page 26
Receiving and Responding to a Radio Call . . . . .	page 26
Making a Radio Call . . . . .	page 29
Repeater or Direct Operation . . . . .	page 32
Monitoring Features. . . . .	page 32

## Selecting a Zone

A zone is a group of channels.

**Note:** Your radio must be preprogrammed to allow you to use these features.

### Procedure:

- 1 ▶ or ◀ to **ZONE**.
- 2 Press the **Menu Select** button directly below **ZONE**. The display shows the current zone and channel.
- 3 ▶ or ◀ button until the desired zone is displayed.
- 4 Press **⏏** or the **PTT** button to confirm the selected zone number.
- 5 Press the **PTT** button to begin transmitting on the displayed zone channel.

## ■ Selecting a Radio Channel

A channel is a group of radio characteristics, such as transmit/receive frequency pairs.

Use the following procedure to select a channel.

**Note:** Your radio must be preprogrammed to allow you to use this feature. If you select a channel that is not within the preprogrammed band, the radio indicates that it is on an unsupported frequency with both audio and visual warnings.

Consult a qualified radio technician for the right choice between the following methods.

### Procedure:

Rotate the **Mode** knob until the display shows the desired channel.

### OR

- 1 Press and hold **▶** to scroll to **CHAN** and press the **Menu Select** button directly below **CHAN**. The display shows the current zone and channel.

---

- 2 Rotate the **Mode** knob to the desired channel.

---

- 3 Press **⏠** or the **PTT** button to confirm the channel.

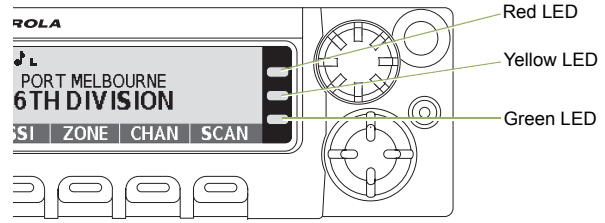
---

- 4 Press the **PTT** button to transmit on the displayed zone channel.

---

## ■ Receiving and Responding to a Radio Call

Once you have selected the required channel and/or zone, you can proceed to receive and respond to calls.



*You see solid red while the radio is transmitting, and solid yellow when the radio is receiving a transmission (conventional mode only). There is no LED indication when the radio receives a transmission in trunking mode.*

*If the radio is receiving a secure transmission, the LED blinks yellow.*



## Receiving and Responding to a Talkgroup Call

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

### Procedure:

When you receive a talkgroup call (while on the Home screen), depending on how your radio is preprogrammed:

#### 1 **ASTRO Conventional Only:**

The LED lights up solid yellow. The display shows the talkgroup alias or ID, and the caller alias or ID.

**OR**

#### **Trunking Only:**

The display shows the caller alias or ID.

---

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

---

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

---

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

---

See **Making a Talkgroup Call** on page 29 for details on making a Talkgroup Call.

## Receiving and Responding to a Private Call (Trunking Only)

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

These one-to-one calls between two radios are not heard by others in the current talkgroup. The calling radio automatically verifies that the receiving radio is active on the system and can display the caller ID.

**Note:** If the feature inactivity timer is enabled, your radio automatically exits the feature when your radio is left idle long enough for the time to expire. You will hear the Menu Inactive Exit Tone upon feature exit.

### Procedure:

When you receive a Private Call:

- 1 You hear two alert tones and the LED blinks green. The display shows **CALL RECEIVED** and the caller alias or ID.


---

- 2 Press the **Menu Select** button directly below **RESP** within 20 seconds after the call indicators begin.

---

- 3 During the call, the display shows the caller alias (name), if it is in the call list.  
**OR**  
During the call, the display shows the caller ID (number), if the caller's name is not in the call list.

---

- 4 Press and hold the **PTT** button to talk. Release the **PTT** button to listen.
- 5 Press  to hang up and return to the Home screen.

**Note:** If you press **PTT** button before pressing the **Menu Select** button directly below **RESP**, your conversation will be heard by all members of the talk group.

If 20 seconds pass before you press the **Menu Select** button directly below the **RESP**, you will not respond privately to the call just received. Instead, you initiate a Private Call.


See *Making a Private Call (Trunking Only)* on page 30 for details on making a Private Call.

## Receiving and Responding to a Telephone Call

This feature allows you to receive calls similar to standard phone calls from a landline phone.

**Note:** If the feature inactivity timer is enabled, your radio automatically exits the feature when your radio is left idle long enough for the time to expire. You will hear the Menu Inactive Exit Tone upon feature exit.

### Procedure:

- 1 You hear a telephone-type ringing and the LED blinks green. The backlight of the screen turns green. The display shows **PHONE CALL** and the call received icon blinks.
- 2 Press the **Menu Select** button directly below **RESP**.
- 3 Press and hold the **PTT** button to talk. Release the **PTT** button to listen.
- 4 Press  or the **Menu Select** button directly below **EXIT** to hang up and return to the **Home** screen.

See *Making a Telephone Call* on page 31 for details.

## ■ Making a Radio Call

---

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

- The preprogrammed Zone menu
- The Mode Knob
- A preprogrammed **One Touch** button
- The Contacts list (see **Contacts** on page 42).

**Note:** If the feature inactivity timer is enabled, your radio automatically exits the feature when your radio is left idle long enough for the time to expire. You will hear the Menu Inactive Exit Tone upon feature exit.

## 📄 Making a Talkgroup Call

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

### Procedure:

- 1 **▶** or **◀** to **TGRP** and press the **Menu Select** button directly below **TGRP**.  
The display shows the last-selected talkgroup.  
Press the **Menu Select** button directly below **SEL**.  
**OR**  
Rotate the **Mode Knob** to select the channel with the desired talkgroup.
- 

- 2 Hold the microphone vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
  - 3 Press the **PTT** button to make the call.
  - 4 **ASTRO Conventional Only:**  
The LED lights up solid red. The display shows the talkgroup alias or ID.  
**OR**  
**Trunking Only:**  
The LED lights up solid red.
  - 5 Speak clearly into the microphone.
  - 6 Release the **PTT** button to listen.
-

## Making a Private Call (Trunking Only)





This feature allows you to send an individual Call Alert or page if there is no answer from the target radio. Your radio must be preprogrammed to allow you to use this feature.


### Procedure:

Press the preprogrammed **Quick Access (One-Touch) Enhanced Private Call** button to dial the preprogrammed ID and proceed to Step 5.

### OR

Follow the procedure below.

- 1  or  to **CALL**.
- 2 Press the **Menu Select** button directly below **CALL**. The display shows the last transmitted or received.
- 3 Press the **Menu Select** button directly below **CNTS** to scroll through and select the required ID.  
**OR**  
Press the **Menu Select** button directly below **LIST** to go to the first number of the call list.  
**OR**  
 or  to the required ID.  
**OR**  
Use the keypad to enter the required ID.
- 4 Press the **PTT** button to start the Private Call.

- 5 A telephone-type ringing sounds if the receiving unit is in service. The display shows **CALLING...<NUMBER>** or **CALLING...<ALIAS>**.
- 6 Hold the microphone vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
- 7 When you are connected, the display shows the ID of the target radio. Press and hold the **PTT** button to talk. Release the **PTT** button to listen.  
**OR**  
If no acknowledgment is received, the display shows **NO ACKNOWLEDGE**.  
**OR**  
If the target radio does not respond before the time out, the display shows **NO ANSWER**.
- 8 Press  to return to the **Home** screen.

See ***Sending a Call Alert Page*** on page 55 for more information.

## Making a Telephone Call



This feature allows you to make calls similar to standard phone calls to a mobile or landline phone.

### Procedure:

Press the preprogrammed **Quick Access (One-Touch) Phone Call** button to dial the preprogrammed phone number and proceed to Step 5.

### OR



Follow the procedure below.

- 1  or  to **PHON**.

---

- 2 Press the **Menu Select** button directly below **PHON**. The display shows the last transmitted phone number.

---

- 3 Press the **Menu Select** button directly below **CNTS** to scroll through and select the required ID.  
**OR**  
Press the **Menu Select** button directly below **LIST** to go to the first number of the call list.  
**OR**  
 or  to the required phone number.  
**OR**  
Use the keypad to enter the required phone number.

---

- 4 Press and release the **PTT** button to dial the phone number.

---

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


---

- 6 When your call is answered, press the **PTT** button to talk.

---

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

---

- 8 Press  to return to the Home screen.

---

See **Alert Tones** on page 22 for more information if your call is **NOT** answered.

## ■ Repeater or Direct Operation

---

The **REPEATER** operation increases the radio's range by connecting with other radios through a repeater. The transmit and receive frequencies are different.

The **DIRECT** or "talkaround operation" allows you to bypass the repeater and connect directly to another radio. The transmit and receive frequencies are the same.

### Procedure:

Press the preprogrammed **Repeater/Direct** switch to toggle between talkaround and repeater modes.

### OR

Follow the procedure below.

- 1 **▶** or **◀** to **DIR**.
- 2 Press the **Menu Select** button directly below **DIR**.
- 3 The display shows **REPEATER MODE** if the radio is currently in Repeater mode.  
**OR**  
The display shows **DIRECT MODE** and the Talkaround icon if the radio is currently in Direct mode (during conventional operation only).

*You can repeat step 2 to toggle between the two modes. Once in Direct Mode, press **PTT** button to start conversation with the radios nearby.*

## ■ Monitoring Features

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Radio users who switch from analog to digital radios often assume that the lack of static on a digital channel is an indication that the radio is not working properly. This is not the case.

Digital technology quiets the transmission by removing the "noise" from the signal and allowing only the clear voice or data information to be heard.

Monitor a channel to ensure the channel is clear before transmitting.

### Monitoring a Channel

#### Procedure:

Lift the microphone off hook.

#### Conventional Modes Only:

- 1 Listen for activity on that channel.
- 2 Adjust the **Volume** knob if necessary.
- 3 If you hear no activity, press and hold the **PTT** button to start your conversation.

### OR

**Trunked Modes Only:**

- 1 Press the **PTT** button.
- 2 If you hear two, short, high-pitched tones, or if you hear no tone and the **Tx** indicator lights steadily, then proceed with your message.
- 3 Release the **PTT** button to receive (listen).

*if you are not in the range of the system, you may hear a continuous low-pitched tone and the display shows **OUT OF RANGE**.*

 **Conventional Mode Operation**

This feature allows you to monitor channel traffic on conventional channels by defeating the coded squelch. Thus you can listen to another user active on the channel. This way, you may be prevented from talking over someone else's conversation.

**Note:** This feature must first be enabled by a qualified radio technician or system administrator.

**Procedure:**

Take the control head off hook. (This is the same as monitor on. You hear all channel traffic.)

**OR**

- 1 At **Home** mode where the default zone and channel are being displayed, **▶** or **◀** button to **MON**.
- 2 Press the **Menu Select** button directly below **MON** momentarily to activate monitoring. The display shows **MONITOR ON**.
- 3 Press the **Menu Select** button to deactivate the monitoring. The display shows **MONITOR OFF**.

***MONITOR ON** shown on the display indicates that the radio is monitoring. Pressing the **Menu Select** button again turns monitor off and you don't hear all channel traffic. If you try to transmit on a receive-only channel, you hear an invalid tone until you release the **PTT** button.*





## Advanced Features

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

Advanced Call Features . . . . .	page 34
Multiple Control Head Features . . . . .	page 39
Contacts . . . . .	page 42
Scan Lists . . . . .	page 48
Scan . . . . .	page 50
Call Alert Paging . . . . .	page 53
Emergency Operation . . . . .	page 56
Automatic Registration Service (ARS) . . . . .	page 59
Text Messaging Service (TMS) . . . . .	page 62
Secure Operations . . . . .	page 72
The Global Positioning System (GPS) . . . . .	page 76
Trunking System Controls . . . . .	page 84
Utilities . . . . .	page 88

## Advanced Call Features

### Calling a Phone Not in the List

- 1  or  to **PHON**.
- 2 Press the **Menu Select** button directly below **PHON**.
- 3 Enter the desired phone number from the optional keypad microphone. The display updates as the numbers are entered.
- 4 Press  button on the keypad microphone to make the call.
- 5 Press and hold the **PTT** button to talk. Release the **PTT** button to listen.
- 6 Press  or **Menu Select** button directly below **PHON** to exit.



## Receiving and Making a Selective Call (Conventional Only)

This feature allows you to receive a call from or to call a specific individual. It is intended to provide privacy and to eliminate the annoyance of having to listen to conversations that are of no interest to you.

### Receiving a Selective Call

#### Procedure:

- 1 When you receive a Selective Call, you hear two alert tones and the LED lights up solid yellow. The call received icons blink and the display alternates between **CALL RECEIVED** and the home display.

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- 2 The speaker unmutes.

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

---

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

---

**Note:** If you press **PTT** button before pressing the **Menu Select** button directly below **CALL**, your conversation will be heard by all members of the talk group.

*If 20 seconds pass before you press the **Menu Select** button directly below the **CALL**, you will not respond privately to the call just received. Instead, you initiate a Selective Call. See **Making a Selective Call** on page 35.*



### Making a Selective Call

#### Procedure:

Press the preprogrammed **Quick Access (One-Touch) Selective Call** button to dial the preprogrammed ID and proceed to Step 4.

#### OR



Follow the procedure below.


- 1  or  to **CALL**.


---

  - 2 Press the **Menu Select** button directly below **CALL**. The display shows the last transmitted or received ID.

---

  - 3 Press the **Menu Select** button directly below **CNTS** to scroll through and select the required ID.
- OR**  
Press the **Menu Select** button directly below **LIST** to go to the last number dialed.
- OR**  
 or  to the required ID.
- OR**  
Use the keypad to enter the required ID.
-

- 4 Hold the microphone vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
- 5 Press and hold the **PTT** button to start the Selective Call. The display shows the ID of the target radio.
- 6 Release the **PTT** button to listen.
- 7 Press  to return to the Home screen.

*If you do not press  button to hang up, your radio will remain in Selective Call state with the other unit. You will miss all subfleet traffic and incoming phone calls.*

### **Using the Talkgroup Call Feature (Conventional Operation Only)**






This feature allows you to define a group of conventional system users so that they can share the use of a conventional channel.

**Note:** Encryption keys are associated to talkgroups. When talkgroups are enabled, encryption keys are changed by changing the active talkgroup. See **Secure Operations** on page 72 for more information.

#### **Selecting a Talkgroup**

**Procedure:**

- 1  or  to **TGRP**.

- 2 Press the **Menu Select** button directly below **TGRP**. The display shows the last talkgroup that was selected and stored.
- 3  or  to **PSET** for the preset preprogrammed talkgroup.  
**OR**  
 or  to the required talkgroup.  
**OR**  
Use the keypad to enter the number of the corresponding talkgroup in the list.
- 4 Press the **Menu Select** button directly below **SEL** to save the currently selected talkgroup and return to the **Home** screen.
- 5 If the encryption key associated to the new talkgroup is erased, a momentary key fail tone sounds and the display shows **KEY FAIL**.  
**OR**  
If the encryption key that is associated to the new talkgroup is not allowed, a momentary key fail tone sounds and the display shows **ILLEGAL KEY**.
- 6 Press  or the **PTT** button to exit.

## Sending a Status Call

This feature allows you to send data calls to the dispatcher about a predefined status.

Each status can have up to a 14-character name. A maximum of eight status conditions is possible.



**Note:** If the feature inactivity timer is enabled, your radio automatically exits the feature when your radio is left idle long enough for the time to expire. You will hear the Menu Inactive Exit Tone upon feature exit.

### Procedure:

Press the preprogrammed **Status** button and proceed to Step 3.

**OR**

Follow the procedure below.

- 1  or  to **STS**.



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- 2 Press the **Menu Select** button directly below **STS**.

---

- 3 The display shows the last acknowledged status call, or the first status in the list.

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- 4  or  to the required status.  
**OR**  
Use the keypad to enter a number corresponding to the location in the status list.

---

5 Press the **PTT** button to send the status. The display shows **PLEASE WAIT**.

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6 When the dispatcher acknowledges, four tones sound and the display shows **ACK RECEIVED**. The radio returns to normal dispatch operation.


**OR**

If no acknowledgment is received, a low-pitched tone sounds and the display shows **NO ACKNOWLEDGE**.

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7 Press  to return to the Home screen.

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*No traffic is heard on trunked channels while Status Calls is selected. If the radio detects no Status Call activity for six seconds, an alert tone sounds until you press  or the **PTT** button.*

## Using the Dynamic Regrouping Feature (Trunking Only)

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 and the display shows the dynamically regrouped channel’s name.
- 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.*

 **Requesting a Reprogram**



This feature lets you notify the dispatcher that you want a new dynamic regrouping assignment.


**Procedure:**

Press the preprogrammed **Reprogram Request** button to send reprogram request to the dispatcher and proceed to Step 3.

**OR**

Follow the procedure below.

- 1  or  to **RPGM**.
- 2 Press the **Menu Select** button directly below **RPGM** to send reprogram request to the dispatcher.

- 3 The display shows **REPROGRAM RQST** and **PLEASE WAIT**.
- 4 If you hear five beeps, the dispatcher has acknowledged the reprogram request. The display shows **ACK RECEIVED** and the radio returns to the Home screen.  
**OR**  
If the dispatcher does not acknowledge the reprogram request within six seconds, a low-pitched alert tone sounds and the display shows **NO ACKNOWLEDGE**.  
Try again or press  to cancel and return to the Home screen.

 **Classifying Regrouped Radios**

The dispatcher can classify regrouped radios into either of two categories: **Select Enabled** or **Select Disabled**.

- Select-enabled radios are free to change to any available channel, including the dynamic-regrouping channel, once the user has selected the dynamic-regrouping position.
- Select-disabled radios cannot change channels while dynamically regrouped. The dispatcher has forced the radio to remain on the dynamic-regrouping channel.

The Scan or Private Call feature cannot be selected while your radio is Select Disabled.

## ■ Multiple Control Head Features

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### 📄 Multiple Control Head Features

This feature allows a transceiver to control as many as four O5 control heads. You can use the CAN cables to connect in any configuration that does not exceed 131 feet (40 meters) in combined length. Refer the O5 Control Head Installation Manual (HLN6947) for further information.

The Multiple Control Head (MCH) feature consists of 2 modes that can be programmed via Customer Programming Software (CPS):

- All Active mode
- One Active mode

**Note:** If two or more control heads are connected to the system before enabling the MCH feature in the CPS, the radio will display **EXTRA CH** or **CH ID # ERR**. Both errors are **FATAL**.

### 📄 Setting the Initial Control Head's ID

This feature allows you to setup the control head in the **Front Panel Programming (FPP)** mode. During the setup, the control heads are defined as Control Head Number 1, Control Head Number 2, Control Head Number 3 and Control Head Number 4.

#### Procedure:

- 1 Press the **Power** button to power off the radio.
- 2 Press and hold the left-most **Menu Select** button and the emergency button simultaneously.
- 3 While continuing to depress these two buttons, press the **Power** button to power on the radio and the control head.
- 4 The radio and the control head will power on into **FPP** mode. The display shows control head's ID number.
- 5 Turn the **Mode** knob to change the control head's ID number.
- 6 Press the **Power** button to power off the radio and exit **FPP** mode.
- 7 Repeat steps 1 to 5 above to set the ID number for the rest of the attached control heads.

## All Active Mode

The All Active mode enables all connected control heads attached to the radio to operate concurrently with each other. When you activate a feature on one control head, the rest of the control heads will have the same activated features and indicators on their respective display.

**Note:** The multiple control head feature allows only control heads of the same type to be connected. Upon power up, if a control head of a different type is connected to the radio, the radio reports the **FATAL** error **CH MISMATCH** on the display of all attached control heads.


## Intercom Feature in All Active Mode

The intercom feature allows one control head user to talk to another control head user in a Multiple Control Head configuration. At any given time, when a control head being operated has priority for the intercom call, all other control heads are blocked until the active control head releases **PTT** button.

This can be made on any attached control head. This feature only applies to control heads in the All Active mode.

### Procedure:

- 1 Press the **Menu Select** button directly below **INTC** to activate the intercom feature of any of the control heads.

- 2 Press the **PTT** button to initiate an intercom transmission. All control heads that are attached will receive the same intercom call.
- 3 The display of the control heads receiving the intercom call shows the alias/ID number of the transmitting control head.
- 4 Press the **Menu Select** button directly below **EXIT** to deactivate the intercom feature.  
**OR**  
Press  to deactivate the intercom feature.

*The intercom feature also deactivates when user initiates a mode change. If the radio is on an emergency channel, pressing of the **EMERGENCY** button or the emergency footswitch button on any control head also deactivates the intercom feature.*

## One Active Mode

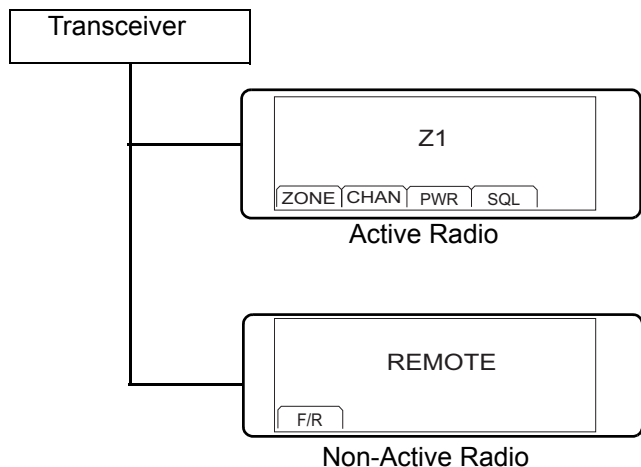
The One Active mode enables only one control head to be visibly active at a time in a **two** control head system.

**Note:** In the One Active mode, if more than two control heads are present upon power up, the radio shows a **FATAL** error **EXTRA CH** on the display of all attached control heads.

The active control head commands the system normally while the inactive control head is in remote mode with its display shows **REMOTE**.

The **Volume** knob, **DIM** button, **Front/Rear (F/R)** softkey and **Emergency** button remain active on the inactive control head, while all other controls are disabled. Emergency footswitch and VIP inputs remain active on the inactive control head. The VIP input control head is configurable in the CPS and VIP should be attached to the control head selected in the CPS.

**Note:** Only two (2) control heads are supported in the one active mode.



Follow the procedure below to change the command between the two control heads.

**Procedure:**

Press the **Menu Select** button directly below **F/R**.

**OR**

Press the **Menu Select** button preprogrammed user button on the keypad microphone.