Operator Guide
for the 4-Channel M1225 Mobile Radio

Radius®

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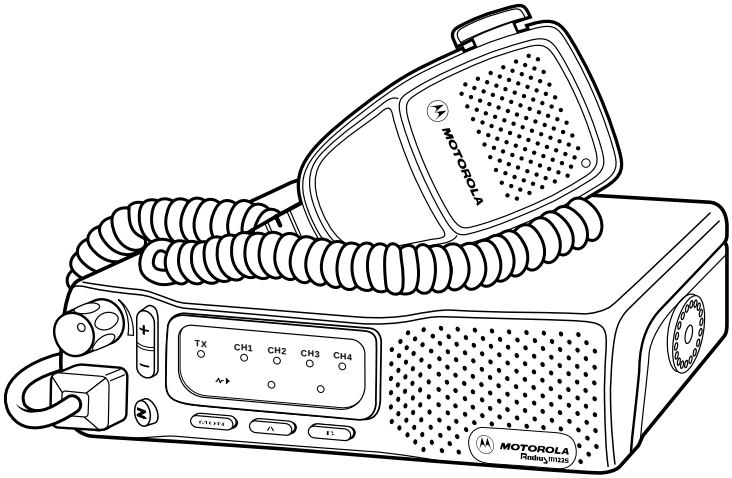

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Introduction

This operator guide contains the information needed to identify the controls and visual indicators, operation, and troubleshooting for the M1225 mobile radio.

Information about the radio's visual and audible indicators is **highlighted** and illustrated with icons.

Information about radio safety, mounting, licensing, and other issues to be considered **before** operating the radio are contained in the M1225 Installation/Licensing Guide (Motorola part number 6880905Z15). The guide should be included in the shipment with your radio. If you need a replacement of the Installation/Licensing Guide or this Operator Guide, please contact your local Motorola Radius dealer.

Read this information before using your mobile radio. For the safe and efficient operation of your mobile radio, observe these guidelines.

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We have organized this manual to help you locate important information. The following icons signal specific types of information:

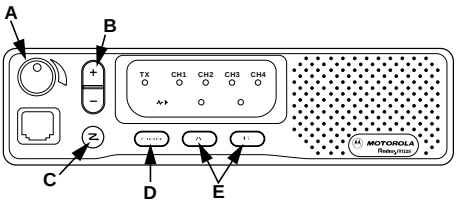
Information about the radio's signalling sounds (tones).

Information about the radio's signalling lights (LEDs).

Safe Mounting of the Radio

CAUTION: The bottom surface of the radio can become hot. Avoid contact during prolonged use. Do not mount where the bottom surface can come in contact with skin.

Controls and Visual Indicators



Controls

A. On/Off/Volume Knob

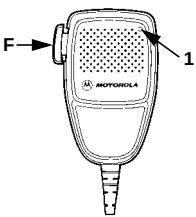
B. Channel Up/Down Button

C. Scan Button

D. Monitor Button

E. Option Buttons (A & B)

F. Microphone Push-To-Talk (PTT) Button



Visual Indicators

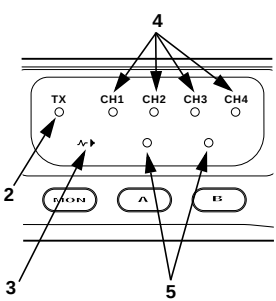
1. Light-Emitting Diode (LED)

2. Transmit / Receive Icon

3. Monitor Icon

4. Channel LEDs

5. Option Icons



Basic Operating Instructions

Turn the Radio On/Off

1 Turn the on/off/volume knob until it clicks.

A short, high-pitched tone sounds, indicator successful start-up. If the radio is not operating properly, a continuous low-pitched alert tone sounds.

Set Volume

1 Turn the On/Off/Volume knob to adjust the volume to a comfortable listening level.

Select a Channel

1 Press + or - to select the desired channel ***or*** press and hold to scroll through the channels.

A short, high-pitched tone ("good key press") sounds each time you press + or -, or when the radio scrolls to the next channel.

A medium-pitched tone sounds upon returning to the first channel.

Receive

1 Press + or - to select the desired channel ***or*** press and hold to scroll through the channels.

Make sure the PTT is released.

2 Listen for voice activity.

The receive icon blinks when the radio is receiving.

Transmit

NOTE:

In the United States, FCC regulations require you to monitor the channel before you transmit. Refer to the Programmable Options section of this manual for Monitor instructions.

1 Press the PTT.

The transmit icon lights on the display during transmission. The LED on the microphone also glows red while you are transmitting.

2 Hold the microphone 2-3 inches (5-8 cm) away from your mouth while speaking clearly into it.

NOTE:

Do not transmit when a person is within 2 feet (0.6 meter) of the antenna unless that person is shielded from the antenna by a metal surface such as the roof of the car.

Monitor On-Off/Volume Set

Monitor/Volume Set allows you to monitor the channel for activity when PL is enabled (same as taking the microphone off hook) or to set the volume.

To Monitor

NOTE:

In the United States, FCC regulations require you to monitor the channel before you transmit. Although all countries do not have a similar requirement, monitoring the channel is proper radio etiquette to provide an orderly approach to using shared frequencies.

1 Press ⬭ the Monitor/Volume Set button to disable PL.

Lights on the display when Monitor Mode is on.

You hear all activity on your current channel. If Busy Channel Lockout is programmed, you will only hear activity within your own PL group.

2 Listen for voice activity.

3 Press ⬭ again to exit Monitor Mode.

Monitor On-Off/Volume Set (Cont'd.)

To Set The Volume

1 Press and hold ⬭ the Monitor/Volume Set button for 1 second.

You will hear "static."

2 Turn the On/Off/Volume knob, adjust the volume to a comfortable listening level.

3 Press ⬭ again to exit Volume Set Mode.

Time-Out Timer (T.O.T.)

Limits the amount of time you have to transmit. Preprogrammed from 1 to 255 seconds or off.

When you reach the time limit, a continuous, low-pitched tone sounds (until you release the PTT) and your transmission is cut off.

Busy Channel Lockout

Several groups of radio users may share a channel. Busy channel lockout monitors channel activity for you (even activity you cannot hear) preventing you from transmitting while other groups are using a channel.

If the channel is busy when you try to transmit, a series of low-pitched tones sound until you release the PTT.

Scan

Your radio is equipped with scan, which allows you to search for activity on multiple channels. When activity is found on a channel, the radio locks on and suspends scanning. Scan will always search for and go directly to a priority channel, even if scan has locked onto another channel.

1 Press Z to activate the Scan Mode.

The channel LEDs light in the order the channels are scanned.

When activity is found during scan, the active channels' LED lights.

2 Press Z again to deactivate the Scan Mode.

NOTE:

Taking the microphone off hook during the scan operation temporarily suspends scanning. For the radio to scan, the microphone must be on hook.

Nuisance Channel Delete

Temporarily deletes an unusually busy channel from the scan list. You can delete channels only while the radio is in channel scan mode and is receiving activity on the nuisance channel.

1 To delete a channel, press and hold Z for 1 second while the undesired channel is active.

A high-pitched tone sounds.

2 To restore deleted channels to the scan list, turn the radio off and on again or press Z twice to restore the channel to the scan list.

A low-pitched tone sounds when pressing Z does not result in a deleted channel.

Option Button Programmable Features

Your dealer can program **each** of the two option buttons ⬭ (A & B) to perform **one** of the following six options.

1. Repeater/Talkaround

Repeater/Talkaround Mode gives you the option of using a repeater system for extended range or talking to other radio users in direct range of your radio without using the repeater. Your radio defaults to Repeater Mode when it is turned on.

2. Local/Distance

Local/Distance gives you the option of protection from interference. When Local Mode is set, you will not hear weak transmissions. When Distance Mode is set you will hear all transmissions including weaker signals. Your radio defaults to Distance Mode when it is turned on.

3. Telephone Access/Deaccess

Telephone Access/Deaccess allows you to automatically access a repeater for a telephone call.

1 Press ⬭ your pre-programmed Telephone Access/Deaccess option button (A or B) to automatically send your preprogrammed access code to the repeater.

2 Press the PTT to initiate your call.

3 Press ⬭ again to automatically send your preprogrammed deaccess code and disconnect the call.

4. Advantage™ Board Enable/Disable

Advantage Board Enable/Disable allows you to turn the features of an Advantage Board on and off. Your radio defaults to Advantage Board Disable Mode when it is turned on.

5. Hi/Low Power

Hi/Low Power allows you to toggle between Hi and Low Power Mode. Your radio defaults to Hi Power when it is turned on.

6. Horn and Lights On/Off

When your radio is equipped with a Quik-Call II™ Advantage Board or other RapidCall™ boards, Horn and Lights Mode allows you to activate your vehicles horn and lights when a call is received. Your radio defaults to Horn and Lights Off Mode when it is turned on.

Troubleshooting

Symptom	Problem	Solution
Radio is “dead.”	No power to radio.	Check vehicle battery and all cable connections. If all are o.k., contact your local dealer for service.
Low-pitched continuous tone when turning the radio on.	Internal defect.	Press and release the PTT to stop tone. Contact your local dealer for service.
Low-pitched short tone when turning the radio on.	Internal defect.	Radio may not function properly. Contact your local dealer for service.
Low-pitched continuous tone while transmitting.	Time-Out-Timer expired.	Retransmit last part of message. Limit transmission time.
Low-pitched continuous tone immediately after pressing the PTT.	Transmission prohibited (i.e. on receive-only channel).	Contact your system administrator to identify channels, or change to a channel with a programmed transmit frequency.
Low-pitched repetitive short tones after pressing the PTT.	Channel busy.	Wait for channel to clear. Try transmitting again later.
Radio will not talk to other radios in system.	Radios may be programmed for different frequencies or groups.	Contact your local dealer to verify frequencies and groups.
Constant static.	Interference from electronic devices (computers, etc.).	Ask your local dealer to enable coded squelch, which screens out this type of interference.
Limited talk range.	Antenna may be placed in or near a steel or concrete structure, heavy foliage, etc.	Check antenna position. Relocate antenna to a higher position away from interfering materials or structures.