MOTOTRBO™ R7 Series

PORTABLE TWO-WAY RADIOS

User Guide

SEPTEMBER 2021

MN007848A01-AA

Introduction

This user guide is explained as per the highest tier model offered to the region.

The following table describes ways to access features for different radio models. You receive different indications depending on the radio model.

Table 1: The Feature Access and Indications of Different Radio Model

	Full Keypad	Non-Keypad
Radio Model	**Figure 1: R7**	**Figure 2: R7, R7a**
Feature Access	• Menu • Programmable Button	Programmable Button
Feature Indication	• Tone • LED indicator • Display • Voice Announcement or Text-to-Speech	• Tone • LED indicator • Voice Announcement or Text-to-Speech

NOTE: To understand which feature is available with the **Programmable Button**, you can refer to the Programmable Buttons on page 11 topic.

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Chapter 1

Radio Care

This section describes the basic handling precaution of the radio.

Table 2: IP Specification

IP Specification	Description
IP66	Allows your radio to withstand high pressure water jets from any direction.
IP68	Allows your radio to withstand two meters of water for two hours, and adverse field conditions such as water drops, snow, dirt, grease, or other surface contaminants.

> ⚠ **CAUTION:** Do not disassemble your radio. This could damage radio seals and result in leak paths into the radio. Radio maintenance should only be done in service depot that is equipped to test and replace the seal on the radio.

- If your radio has been submersed in water, shake your radio well to remove any water that may be trapped inside the speaker grille and microphone port. Trapped water could cause decreased audio performance.

- If your battery contact area has been exposed to water, clean and dry battery contacts on both your radio and the battery before attaching the battery to radio. The residual water could short-circuit the radio.

- If your radio has been submersed in a corrosive substance (for example, saltwater), rinse radio and battery in fresh water then dry radio and battery.

- To clean the exterior surfaces of your radio, use a diluted solution of mild dishwashing detergent and fresh water (for example, one teaspoon of detergent to one gallon of water).

- Never poke the vent (hole) located on the radio chassis below the battery contact. This vent allows for pressure equalization in the radio. Doing so may create a leak path into radio and submersibility may be lost.

- Never obstruct or cover the vent, even with a label.

- Ensure that no oily substances come in contact with the vent.

- Your radio is designed to be submersible to a maximum depth of 2 m and a maximum submersion time of 120 minutes. Exceeding maximum limit may result in damage to your radio.

Chapter 2

Radio Overview

Table 3: Radio Overview

Label	Name	Description
1	Antenna	Provides the needed RF amplification when transmitting or receiving.
2	LED Indicator	Provides operating status.
3	Front Microphone	Allows your voice to be sent when PTT or voice operations are activated.
4	3-Dot Programmable Feature button	Programmable button of an assignable radio function.
5	Push-to-Talk (PTT) button	Allows you to execute voice operations (for example, Group Call and Private Call).
6	1-Dot Programmable Feature button	Programmable button of an assignable radio function.
7	2-Dot Programmable Feature button	Programmable button of an assignable radio function.
8	Emergency button	To turn on and off the Emergency Operations.

Label	Name	Description
9	Display	The radio display screen.
10	Menu Navigation buttons	Five buttons to provide menu navigation and selection interface.
11	Speaker	Outputs all tones and audio that are generated by the radio (for example, features like keypad tones and voice audio).
12	Charging Rail	Provides guideline for the placement during charging.
13	Accessory Connector	Allows you to connect accessories to your radio.
14	On/Off/Volume knob	Allows you to turn the radio on or off and adjust volume.
15	Channel Selector knob	Allows you to select channel.
16	Rear Microphone	Noise Cancellation Microphone.
17	Belt Clip Slot	Allows you to attach belt clip.
18	Charging Contacts	Charging point for the battery.

2.1
Keypad Overview

Figure 3: Keypad Overview
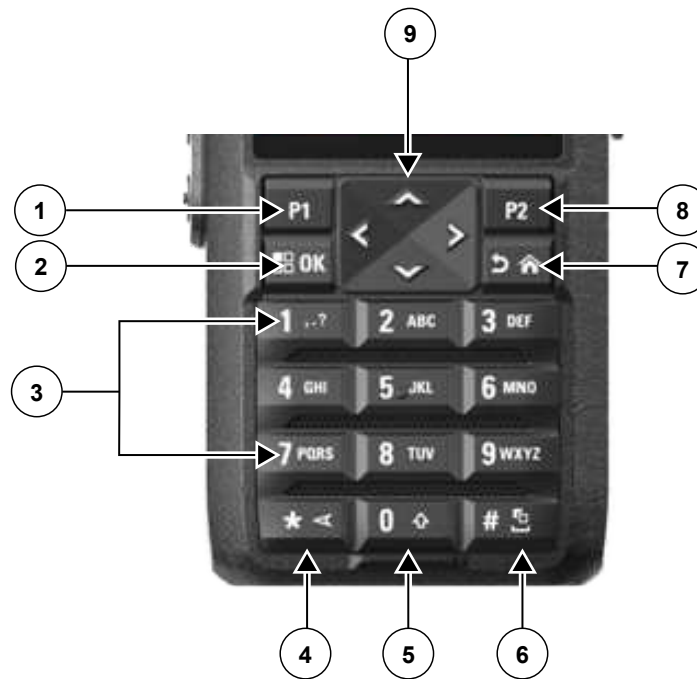
Table 4: Keypad Overview

Label	Button Name	Description
1	Programmable Button 1 (P1)	This button is field programmable using the Customer Programming Software (CPS).
2	Menu/OK button	Press to access Menu feature.
		In the menu, use this key to select.
3	Number keys	Press these keys repeatedly until the desired letter, number, punctuation, or symbol appears.
4	* or delete key	During numeric entry, press this key to enter *.
		During text entry, press this key to delete a character.
5	0 key	Press to enter 0.
		Press and hold to enable or disable Caps Lock.
6	# or space key	During numeric entry, press this key to enter #.
		During text entry, press this key to insert a space.

Label	Button Name	Description
		Press and hold this key to change text entry method.
7	Back/Home button	Press to return to previous screen.
		Press and hold to return to Home screen.
8	Programmable Button 2 (P2)	This button is field programmable using the CPS.
9	4-Way Navigation buttons	Press up, down, left, and right to navigate through your options.

2.2

Programmable Buttons

You can program the programmable buttons as shortcuts to the following radio functions through programming software.

📝 **NOTE:** Contact your dealer for more information.

Table 5: Assignable Radio Functions

Function	Description
Acoustic Feedback (AF) Suppressor	Allows you to toggle the AF Suppressor feature to on or off.
Action List	Allows you to launch the action list and start the feature or function from the action list.
All Alert Tones	Allows you to toggle all tones and alerts to on or off.
Audio Profiles	Allows you to select the preferred audio profiles.
Audio Toggle	Allows you to toggle the audio routing between internal radio speaker and the wired accessory speaker.
Backlight	Allows you to toggle the display backlight to on or off.
Backlight Brightness	Allows you to adjust brightness level.
Battery Indicator	Allows you to check the current status of the battery level.
Call Alert	Allows you to direct access to the contacts list and select the required contact to send call alert.
Call Forwarding	Allows you to toggle the Call Forwarding to on or off.
Call Log	Allows you to select the call log list.
Channel Announcement	Allows you to play zone and channel announcement voice messages in the current channel.

Function	Description
Contacts	Provides direct access to the contacts list.
Emergency Off	Allows you to terminate an outgoing emergency call.
Emergency On	Allows you to set up an emergency call.
Intelligent Audio	Allows you to toggle intelligent audio to on or off.
Mic AGC	Allows you to toggle the internal microphone automatic gain control (AGC) to on or off.
Monitor	Allows you to monitor a channel.
Notifications	Allows you to direct access to the notification list.
Nuisance Delete	Allows you to temporarily remove an unwanted channel from the scan list, except the Selected Channel. The nuisance deleted channel will be restored into the scan list, for instance, when radio is powered off and back on again.
One Touch Access	Allows you to direct access to the predefined call features.
Permanent Monitor	Allows you to monitor a selected channel for all radio traffic until function is disabled.
Phone	Allows you to direct access to the phone contact list.
Power Level	Allows you to toggle the transmit power to high or low.
Privacy	Allows you to toggle the privacy to on or off.
Radio Check	Allows you to check if the radio is active in the system.
Radio Enable or Disable	Allows a target radio to be remotely enabled or disabled.
Repeater or Talkaround	Allows you to toggle between using a repeater and directly communicating with another radio.
Reset Home Channel	Allows you to select a new home channel.
Scan	Allows you to toggle the scan to on or off.
Silence Home Channel Reminder	Allows you to mute the Home Channel Reminder.
Text Message	Allows you to select the text message menu.
TX Interrupt Remote Dekey	Allows you to stop an on-going voice call by dekeying the transmitting radio or terminate the repeater call hang time in order to free up the channel. This button can also be used to end a Remote Monitor session.
Trill Enhancement	Allows you to toggle the trill enhancement to on or off.

Function	Description
Voice Announcement	Allows you to toggle the voice announcement to on or off.
Voice Operating Transmission (VOX)	Allows you to toggle the VOX to on or off.
Zone Selection	Allows you to select from a list of zones.

2.3
Icons

Icons are only available for radio with display.

Your radio display shows the radio status, text entries, and menu entries.
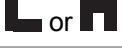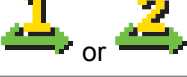
2.3.1
Display Icons

The following icons appear on the status bar at the top of the radio display. The icons are arranged left most in order of appearance or usage, and are channel-specific.

Table 6: Display Icons

Icon	Description
	Battery
	BeiDou Only Available
	Bluetooth Connected
	Bluetooth Not Connected
	Call Log
	Contact
	DGNA
	Emergency
	Flexible Receive List
	GNSS Available

Icon	Description
	GNSS Not Available
	High Volume Data
	Indoor Location Available[1]
	Indoor Location Unavailable[1]
	Message
	Monitor
	Mute Mode[1]
	Notification
	Option Board
	Option Board Non-Function
	Over-the-Air Programming Delay Timer
	Power Level
	Priority Talkgroup 1 or 2
	Received Signal Strength Indicator (RSSI)
	Response Inhibit
	Ring Only
	Scan
	Scan Priority 1 or 2

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[1] Only applicable for models with the latest software and hardware.

Icon	Description
	Shared Frequency
	Sign In to Remote Server
	Sign Out from Remote Server
	Secure
	Silent Ring
	Site Roaming
	Status
	Talkaround
	Tones Disable
	Unsecure
	Vibrate
	Vibrate and Ring
	Wi-Fi

2.3.2
Wave Icons

The following icons appear on the status bar at the top of the radio display if your radio is WAVE enabled.

Table 7: WAVE Display Icons

Icons	Description
	WAVE Connected
	WAVE Disconnected

2.3.3
Advanced Menu Icons

The following icons appear beside menu items that offer a choice between two options or as an indication that there is a sub-menu offering two options.

Table 8: Advanced Menu Icons

Icon	Description
	Checkbox (Checked)
	Checkbox (Empty)
	Solid Black Box

2.3.4
Bluetooth Devices Icons

The following icons appear next to items in the list of Bluetooth-enabled devices available to indicate the device type.

Table 9: Bluetooth Device Icons

Icon	Description
	Bluetooth Audio Device
	Bluetooth Data Device
	Bluetooth PTT Device
	Bluetooth Sensor Device

2.3.5
Call Icons

The following icons appear on the display during a call. These icons also appear in the Contacts list to indicate alias or ID type.

Table 10: Call Icons

Icon	Description
	Bluetooth PC Call
	Call Priority High

Icon	Description
	DGNA Call
	Dispatch Call
	Group Call/All Call
	Non-IP Peripheral Individual call
	Non-IP Peripheral Group call
	Option Board Individual Call
	Option Board Group Call
	Phone Call as Group or All Call
	Phone Call as Private Call
	Private Call

2.3.6
Job Tickets Icons

The following icons appear momentarily on the display in the Job Ticket folder.

Table 11: Job Ticket Icons

Icon	Description
	All Jobs
	New Jobs
	In Progress
	Send Failed

Icon	Description
	Sent Successfully
	Priority 1
	Priority 2
	Priority 3

2.3.7
Mini Notice Icons

The following icons appear momentarily on the display after an action to perform a task is taken.

Table 12: Mini Notice Icons

Icon	Description
	Failed Transmission (Negative)
	Successful Transmission (Positive)
	Transmission in Progress (Transitional)

2.3.8
Sent Items Icons

The following icons appear at the top right corner of the display in the Sent Items folder.

Table 13: Sent Item Icons

Icon	Description
or	In Progress
or	Individual or Group Message Read
or	Individual or Group Message Unread
or	Send Failed

Icon	Description
or	Sent Successfully

2.4
LED Indications

The LED Indicator shows the operational status of your radio.

A qualified technician can permanently disable the LED indication by preprogramming it.

Table 14: LED Indications

Indication	Status
Blinking Red	• The radio is indicating a battery mismatch. • The radio has failed the self-test upon powering up. • The radio is receiving an emergency transmission. • The radio is transmitting in low battery state. • The radio has moved out of range if Auto-Range Transponder System is configured. • Mute Mode is enabled.
Rapidly Blinking Red	• The radio is receiving Over-the-Air file transfer (Option Board firmware file, Network Frequency file, or Option Board Code-plug file) when in Connect Plus. • The radio is upgrading to a new Option Board firmware file when in Connect Plus.
Solid Yellow	• The radio is in Bluetooth Discoverable Mode. • The radio is monitoring a conventional channel.
Blinking Yellow	• The radio has yet to respond to a Call Alert. • The radio is scanning for activity. • All Capacity-Plus–Multi-Site channels are busy.
Double Blinking Yellow	• The radio has Auto Roaming enabled. • The radio is actively searching for a new site. • The radio has yet to respond to a Group Call Alert. • The radio is locked. • The radio is not connected to the repeater while in Capacity Plus. • All Capacity-Plus channels are busy.
Solid Green	• The radio is powering up. • The radio is transmitting. • The radio is sending a Call Alert or an emergency transmission.

Indication	Status
Blinking Green	• The radio is receiving a call or data. • The radio is retrieving the Over-the-Air Programming trans-missions. • The radio is detecting activity over the air.
Double Blinking Green	The radio is receiving a privacy-enabled call or data.

Chapter 3

System Overview

System overview explains what type of systems and modes available in the radio.

3.1
Capacity Max

Capacity Max is MOTOTRBO control channel based trunked radio system.

MOTOTRBO digital radio products are marketed by Motorola Solutions primarily to business and industrial users. MOTOTRBO uses the European Telecommunications Standards Institute (ETSI) Digital Mobile Radio (DMR) standard, that is, two-slot Time Division Multiple Access (TDMA), to pack simultaneous voice or data in a 12.5 kHz channel (6.25 kHz equivalent).

3.2
Conventional Analog and Digital Modes

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

Certain features are unavailable when switching from digital to analog mode, whereas some are available in both.

There are minor differences on how each feature works but they do not affect the performance of your radio.

3.3
IP Site Connect

This feature allows your radio to extend conventional communication beyond the reach of a single site by connecting to different available sites by using an Internet Protocol (IP) network.

When the radio moves out of range from one site and into the range of another, the radio connects to the repeater of the new site to send or receive calls or data transmissions. This is done either automatically or manually depending on your settings.

In an automatic site search, the radio scans through all available sites when the signal from the current site is weak or when the radio is unable to detect any signal from the current site. The radio then locks on to the repeater with the strongest Received Signal Strength Indicator (RSSI) value.

In a manual site search, the radio searches for the next site in the roam list that is currently in range but which may not have the strongest signal and locks on to the repeater.

> **NOTE:** Each channel can only have either Scan or Roam enabled, not both at the same time.

Channels with this feature enabled can be added to a particular roam list. The radio searches the channels in the roam list during the automatic roam operation to locate the best site. A roam list supports a maximum of 16 channels, including the selected channel.

> **NOTE:** You cannot manually add or delete an entry in the roam list. Contact your dealer for more information.

3.4
Capacity Plus

Capacity Plus is a cost effective and entry-level digital trunked system. It expands the capacity and extends the coverage for single and multi-sites. The single and multi-sites dynamic trunking offers better capacity and coverage.

> **NOTE:** If you try to access a feature not applicable to Capacity Plus–Single-Site or Capacity Plus–Multi-Site by using a programmable button, you hear a negative indicator tone.

Capacity Plus–Single-Site

Capacity Plus–Single-Site is a single-site trunking configuration of the MOTOTRBO radio system, which uses a pool of channels to support hundreds of users and up to 254 groups.

This configuration allows your radio to efficiently utilize the number of available programmed channels while in Repeater Mode.

Your radio also has features that are available in conventional digital mode, IP Site Connect, and Capacity Plus.

Capacity Plus–Multi-Site

Capacity Plus–Multi-Site is a multi-channel trunking configuration of the MOTOTRBO radio system, combining the best of both Capacity Plus and IP Site Connect configurations. It is also known as Linked Capacity Plus.

It allows your radio to extend trunking communication beyond the reach of a single site, by connecting to different available sites which are connected with an IP network. It also provides an increase in capacity by efficiently utilizing the combined number of available programmed channels supported by each of the available sites.

When your radio moves out of range of one site and into the range of another, it connects to the repeater of the new site to send or receive calls or data transmissions. Depending on your settings, this is done automatically or manually.

Automatically
Your radio scans through all available sites when the signal from the current site is weak or unable to detect any signal and locks on to the repeater with the strongest RSSI value.

Manually
Your radio searches for the next site in the roam list that is currently in range which may not have the strongest signal, and locks on to it.

Any channel with Capacity Plus Multi-Site enabled can be added to a roam list. Your radio searches these channels during the automatic roam operation to locate the best site.

> **NOTE:** You cannot manually add or delete an entry in the roam list.

Chapter 4

Getting Started

Getting Started provides instructions to prepare your radio for use.

Charging the Battery

Prerequisites: Turn off your radio when charging.

Procedure:

- To comply with warranty terms and avoid damage, charge the battery using a Motorola Solutions authorized charger as described in the charger user guide.

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

  Batteries charge best at room temperature.

Attaching the Battery

Procedure:

1 Align the battery with the rails on the back of the radio.

2 Press the battery firmly, and slide upwards until the latch snaps into place.

3 Slide battery latch into lock position.

Postrequisites:

📝 **NOTE:**
If the radio is attached with the wrong battery, your radio shows the following indications:

- A low pitched warning tone sounds.

- The red LED blinks.

- The display shows `Wrong Battery`

- Voice Announcement or Text-to-Speech sounds "Wrong Battery" if the Voice Announcement or Text-to-Speech is loaded by using CPS.

If the radio is attached with an unsupported battery, your radio shows the following indications:

- An alert tone sounds.

- The display shows `Unknown Battery`.

- Battery icon is disabled.

The certification of the radio is voided if you attach a UL battery to an FM approved radio or vice versa.

If your radio is attached with an unsupported or wrong battery, immediately swap with the correct battery.

4.3
Removing the Battery

Prerequisites: Ensure that your radio is turned off.

Procedure:

Move the battery latch into unlock position and hold, and slide the battery down and off the rails.

4.4
Attaching the Antenna

Procedure:

1 Set the antenna in the receptacle.

2 Turn the antenna clockwise.

> **NOTE:** Fastening the antenna blocks water and dust from entering the radio.

> **CAUTION:** To prevent damages, replace the faulty antenna with only MOTOTRBO antennas.

4.5
Removing the Antenna

Procedure:

1 Turn the antenna counterclockwise.

2 Remove the antenna from the receptacle.

4.6
Attaching the Carry Holster

Procedure:

1 Align the rails on the carry holster with the grooves on the battery.

2 Press downwards until you hear a click.

4.7
Attaching the Universal Connector Cover

Procedure:

1 Insert the slanted end of the cover into the slots above the universal connector.

2 Press downwards on the cover to seat the cover properly on the universal connector.

3 Secure the connector cover to the radio by turning the thumbscrew clockwise.

4.8
Removing the Universal Connector Cover

Procedure:

1 Turn the thumbscrew counterclockwise.

2 Slide the connector cover up and out of the slanted end of the universal connector.

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

4.9
Cleaning the Universal Connector Cover

When and where to use: If the radio is exposed to water, dry the universal connector before attaching an accessory or replacing the dust cover. If the radio is exposed to salt water or contaminants, perform the following cleaning procedure.

Procedure:

1 Mix one tablespoon of mild dishwashing detergent with one gallon of water to produce a 0.5% solution.

2 Clean only the external surfaces of the radio with the solution. Apply the solution sparingly with a stiff, nonmetallic, short-bristled brush.

3 Dry the radio thoroughly with a soft and lint-free cloth. Ensure the contact surface of the universal connector is clean and dry.

4 Apply Deoxit Gold Cleaner or Lubricant Pen (Manufacturer CAIG Labs, Part number G100P) on the contact surface of the universal connector.

5 Attach an accessory to the universal connector to test the connectivity.

Postrequisites:

> **NOTE:** Do not submerge the radio in water. Ensure excess detergent does not get trapped in between the universal connector, controls, or crevices.

Clean the radio once a month for maintenance. For a harsher environment such as in petrochemical plants or in a high salt density marine environment, clean the radio more often.

4.10
Turning the Radio On

Procedure:

Rotate the **On/Off/Volume** knob clockwise until a click sounds.

If your radio is turned on, your radio shows the following indications:

• A tone sounds.

> **NOTE:** If the Tones/Alerts function is disabled, no tone sounds.

• The green LED illuminates.

• The Home screen lights up.

> **NOTE:**
> If your radio fails to turn on although your battery is charged and properly attached, contact your dealer for assistance.

4.11
Turning the Radio Off

Procedure:

Rotate the **On/Off/Volume** knob counterclockwise until a click sounds.

The display shows `Powering Down`.

4.12
Adjusting the Volume

Procedure:

1   Perform one of the following actions:

- To increase the volume, turn the **On/Off/Volume** knob clockwise.

- To decrease the volume, turn the **On/Off/Volume** knob counterclockwise.

   NOTE:
   Your radio can be programmed to have a minimum volume offset where the volume level cannot be lowered past the programmed minimum volume.

Legal and Compliance Statements

Supplier's Declaration of Conformity

Supplier's Declaration of Conformity
Per FCC CFR 47 Part 2 Section 2.1077(a)

Responsible Party

Name: Motorola Solutions, Inc.

Address: 2000 Progress Pkwy, Schaumburg, IL. 60196

Phone Number: 1-800-927-2744

Hereby declares that the product:

Model Name: **R7**

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 or TV technician for help.

For country code selection usage (WLAN devices)

NOTE: The country code selection is for non-US model only and is not available to all US models. Per FCC regulation, all Wi-Fi products marketed in the US must be fixed to US operation channels only.

Industry Canada WLAN Statement

CAUTION:

1 The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

2 The maximum antenna gain permitted for devices in the bands 5250–5350 MHz and 5470–5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit.

3 The maximum antenna gain permitted for devices in the band 5752–5850 MHz shall be such that the equipment still complies with e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate.

4 The worst case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in Section 6.2.2 (3) shall be clearly indicated.

5 User should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250–5350 MHz and 5650–5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Notice to Users (FCC)

This device complies with Part 15 of the FCC rules per the following conditions:

- This device may not cause harmful interference.

- This device must accept any interference received, including interference that may cause undesired operation.

- Changes or modifications made to this device, not expressly approved by Motorola Solutions, could void the authority of the user to operate this equipment.

Notice to Users (Industry Canada)

The operation of your Motorola Solutions radio is subject to the Radiocommunications Act and must comply with rules and regulations of the Federal Government's department of Industry Canada. Industry Canada requires that all operators using Private Land Mobile frequencies obtain a radio license before operating their equipment.

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U.S. Pat. Nos. #5,870,405, #5,826,222, #5,754,974, #5,701,390, #5,715,365, #5,649,050, #5,630,011, #5,581,656, #5,517,511, #5,491,772, #5,247,579, #5,226,084 and #5,195,166.

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European Union (EU) Waste of Electrical and Electronic Equipment (WEEE) Directive

The European Union's WEEE directive requires that products sold into EU countries must have the crossed out trash bin label on the product (or the package in some cases).

As defined by the WEEE directive, this cross-out trash bin label means that customers and end-users in EU countries should not dispose of electronic and electrical equipment or accessories in household waste.

Customers or end-users in EU countries should contact their local equipment supplier representative or service centre for information about the waste collection system in their country.

Disclaimer

Please note that certain features, facilities, and capabilities described in this document may not be applicable to or licensed for use on a specific system, or may be dependent upon the characteristics of a specific mobile subscriber unit or configuration of certain parameters. Please refer to your Motorola Solutions contact for further information.

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Important Safety Information

RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios

⚠️ **CAUTION:**
This radio is restricted to Occupational use only. Before using the radio, read the RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios which contains important operating instructions for safe usage and RF energy awareness and control for Compliance with applicable standards and Regulations.

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

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

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

Maritime Radio Use in the VHF Frequency Range

Special Channel Assignments

Emergency Channel

If you are in imminent and grave danger at sea and require emergency assistance, use VHF Channel 16 to send a distress call to nearby vessels and the United States Coast Guard. Transmit the following information, in this order:

1   "MAYDAY, MAYDAY, MAYDAY."

2   "THIS IS _____, CALL SIGN _____." State the name of the vessel in distress 3 times, followed by the call sign or other identification of the vessel, stated 3 times.

3   Repeat "MAYDAY" and the name of the vessel.

4   "WE ARE LOCATED AT _____." State the position of the vessel in distress, using any information that will help responders to locate you, e.g.:

   • latitude and longitude

   • bearing (state whether you are using true or magnetic north)

   • distance to a well-known landmark

   • vessel course, speed or destination

5   State the nature of the distress.

6   Specify what kind of assistance you need.

7   State the number of persons on board and the number needing medical attention, if any.

8   Mention any other information that would be helpful to responders, such as type of vessel, vessel length and/or tonnage, hull color, etc.

9   "OVER."

10 Wait for a response.

11 If you do not receive an immediate response, remain by the radio and repeat the transmission at intervals until you receive a response. Be prepared to follow any instructions given to you.

Non-Commercial Call Channel

For non-commercial transmissions, such as fishing reports, rendezvous arrangements, repair scheduling, or berthing information, use **VHF Channel 9**.

Operating Frequency Requirements

A radio designated for shipboard use must comply with Federal Communications Commission Rule Part 80 as follows:

•   on ships subject to Part II of Title III of the Communications Act, the radio must be capable of operating on the 156.800 MHz frequency.

•   on ships subject to the Safety Convention, the radio must be capable of operating:

   -   in the simplex mode on the ship station transmitting frequencies specified in the 156.025–157.425 MHz frequency band, and

- in the semiduplex mode on the two frequency channels specified in the table below.

NOTE:
Simplex channels 3, 21, 23, 61, 64, 81, 82, and 83 cannot be lawfully used by the general public in US waters.

Additional information about operating requirements in the Maritime Services can be obtained from the full text of FCC Rule Part 80 and from the US Coast Guard.

Table 15: VHF Marine Channel List

Channel Number	Frequency (MHz)	
	Transmit	Receive
1	156.050	160.650
2	156.100	160.700
*	156.150	160.750
4	156.200	160.800
5	156.250	160.850
6	156.300	–
7	156.350	160.950
8	156.400	–
9	156.450	156.450
10	156.500	156.500
11	156.550	156.550
12	156.600	156.600
13**	156.650	156.650
14	156.700	156.700
15**	156.750	156.750
16	156.800	156.800
17**	156.850	156.850
18	156.900	161.500
19	156.950	161.550
20	157.000	161.600
*	157.050	161.650
22	157.100	161.700
*	157.150	161.750
24	157.200	161.800
25	157.250	161.850
26	157.300	161.900
27	157.350	161.950
28	157.400	162.000
60	156.025	160.625

*	156.075	160.675
62	156.125	160.725
63	156.175	160.775
*	156.225	160.825
65	156.275	160.875
66	156.325	160.925
67**	156.375	156.375
68	156.425	156.425
69	156.475	156.475
71	156.575	156.575
72	156.625	–
73	156.675	156.675
74	156.725	156.725
75	***	***
76	***	***
77**	156.875	–
78	156.925	161.525
79	156.975	161.575
80	157.025	161.625
*	157.075	161.675
*	157.125	161.725
*	157.175	161.775
84	157.225	161.825
85	157.275	161.875
86	157.325	161.925
87	157.375	161.975
88	157.425	162.025

NOTE:
*Simplex channels 3, 21, 23, 61, 64, 81, 82, and 83 cannot be **lawfully used** by the general public in US waters.*

*** Low power (1 W) only.*

**** Guard band.*

NOTE: A – in the Receive column indicates that the channel is transmit only.

Declaration of Compliance for the Use of Distress and Safety Frequencies

The radio equipment does not employ a modulation other than the internationally adopted modulation for maritime use when it operates on the distress and safety frequencies specified in RSS-182 Section 7.3.

Technical Parameters for Interfacing External Data Sources

Table 16: Technical Parameters for Interfacing External Data Sources

	RS232	USB	SB9600
Input Voltage (Volts Peak-to-peak)	18 V	3.6 V	5 V
Max Data Rate	28 kb/s	12 Mb/s	9.6 kb/s
Impedance	5000 ohm	90 ohm	120 ohm

Batteries and Chargers Warranty

The Workmanship Warranty

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

All MOTOTRBO Batteries	Please refer to the warranty statement of your region.
IMPRES Chargers (Single-Unit and Multi-Unit, with Display)	12 Months

The Capacity Warranty

The capacity warranty guarantees 80% of the rated capacity for the warranty duration. Please refer to the warranty statement for your region.

Citizens Band License

The use of the Citizens Band radio service is licensed in Australia by the Australian Communications and Media Authority (ACMA) Radiocommunications (Citizens Band Radio Stations) Class Licence and in New Zealand by the Ministry of Economic Development New Zealand (MED) General User Radio Licence (GURL) for Citizens Band Radio, and operation is subject to the conditions contained in those licences.

In Australia, a Citizens Band transmitter shall not be operated on UHF emergency channels 5 and 35 and no voice transmissions are permitted on data (telemetry/telecommand) channels 22 and 23, except in an emergency. The radio that complies to this Standard will inhibit voice operation on channels 22 and 23. In the event that additional telemetry/telecommand channels are approved by the ACMA, these channels shall be added to those currently listed where voice transmission is inhibited.

Always listen on a channel (or observe a channel-busy indicator) to ensure it is not already being used before transmitting.

Citizens Band Repeater Operation

A repeater is a station established at a fixed location that receives radio signals from one Citizens Band station and automatically retransmits the signal to another station using the corresponding output channel. UHF Citizens Band repeaters can be found in all states and enable the range of vehicle to vehicle communications to be significantly increased. Avoid operating on locally used repeater input channels (which are in the range of channels 31 to 38, and channels 71 to 78 when they are authorized) or locally used repeater receiving channels (which will be in the range channels 1 to 8, and channels 41 to 48 when they are authorized), unless long-distance communication via the repeater facility is specifically required.

> **NOTE:** In Australia, channel 11 is the customary calling channel for establishing communication and channel 40 is the customary road vehicle channel.

25 kHz Land Mobile Band to 12.5 kHz Narrow Band Transition

The existing use of 25 kHz analogue land mobile channels is to cease by 1 November 2015. This period is in accordance with the minimum period (five years) specified in the Radio Regulations for giving notice of revocation of a licence of an undefined duration.

Land mobile frequency bands with an offset channel plan (E, EN, and ENX bands) require a different treatment to manage the introduction of digital land mobile radio (due to potential adjacent channel interference risks). The following items apply to these bands:

- Users of E band (25 kHz channels) wanting to transition to digital prior 1 November 2015, can migrate to the EE band (also in the VHF range) or any other band open for digital land mobile radio licensing.

- E band users wanting to continue operating analogue services after the five year transition period can migrate to 12.5 kHz analogue channels in the EN band (also in the VHF range) or any other band open for narrow band analogue land mobile radio.

- Introduction of digital land mobile radio in the EN and ENX bands prior to 1 November 2015 will be considered on a case by case basis. Licensing of digital land mobile radio in these bands will be possible in areas where E band users have vacated the band, or when rigorous engineering analysis guarantees no risk of interference to other band users.

For the list of currently authorized channels, please refer to the following websites:

- http://www.acma.gov.au/Citizen/Consumer-info/All-about-spectrum/Marine-and-Amateur-Radio/citizen-band-radio-service-cbrs-fact-sheet (Australia)

- http://www.rsm.govt.nz/cms/licensees/types-of-licence/general-user-licences/citizen-band-radio (New Zealand)

Limited Warranty

MOTOROLA SOLUTIONS COMMUNICATION PRODUCTS

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

Motorola Solutions, Inc. ("Motorola Solutions") warrants the Motorola Solutions 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:

Portable Radios	Two (2) Years
Product Accessories	One (1) Year

Motorola Solutions, 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 Solutions.

This express limited warranty is extended by Motorola Solutions 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 Solutions. Motorola Solutions assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of Motorola Solutions.

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

Motorola Solutions cannot be responsible in any way for any ancillary equipment not furnished by Motorola Solutions 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 Solutions 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 Solutions responsibilities regarding the Product. Repair, replacement or refund of the purchase price, at Motorola Solutions 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 SOLUTIONS 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 Solutions through one of its authorized warranty service locations. If you first contact the company which sold you the Product (for example, dealer or communication service provider), it can facilitate your obtaining warranty service. You can also call Motorola Solutions at 1-800-927-2744.

V. WHAT THIS WARRANTY DOES NOT COVER

1 Defects or damage resulting from use of the Product in other than its normal and customary manner.

2 Defects or damage from misuse, accident, water, or neglect.

3 Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.

4 Breakage or damage to antennas unless caused directly by defects in material workmanship.

5 A Product subjected to unauthorized Product modifications, disassembles or repairs (including, without limitation, the addition to the Product of non-Motorola Solutions supplied equipment) which adversely affect performance of the Product or interfere with Motorola Solutions normal warranty inspection and testing of the Product to verify any warranty claim.

6 Product which has had the serial number removed or made illegible.

7 Rechargeable batteries if:

   • any of the seals on the battery enclosure of cells are broken or show evidence of tampering.

   • 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.

8 Freight costs to the repair depot.

9 A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with Motorola Solutions published specifications or the FCC certification labeling in effect for the Product at the time the Product was initially distributed from Motorola Solutions.

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

11 Normal and customary wear and tear.

VI. PATENT AND SOFTWARE PROVISIONS

Motorola Solutions 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 Solutions 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:

1 Motorola Solutions will be notified promptly in writing by such purchaser of any notice of such claim,

2 Motorola Solutions will have sole control of the defense of such suit and all negotiations for its settlement or compromise, and

3 Should the Product or parts become, or in Motorola Solutions opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit Motorola Solutions, 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 Solutions.

Motorola Solutions 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 Solutions, nor will Motorola Solutions have any liability for the use of ancillary equipment or software not furnished by Motorola Solutions which is attached to or used in connection with the Product. The foregoing states the entire liability of Motorola Solutions with respect to infringement of patents by the Product or any parts thereof.

Laws in the United States and other countries preserve for Motorola Solutions certain exclusive rights for copyrighted Motorola Solutions software such as the exclusive rights to reproduce in copies and distribute copies of such Motorola Solutions software. Motorola Solutions 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 Solutions software or exercise of rights in such Motorola Solutions software is permitted. No license is granted by implication, estoppel or otherwise under Motorola Solutions patent rights or copyrights.

VII. GOVERNING LAW

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

VIII. For Australia Only

This warranty is given by Motorola Solutions Australia Pty Limited (ABN 16 004 742 312) of Tally Ho Business Park, 10 Wesley Court. Burwood East, Victoria.

Our goods come with guarantees that cannot be excluded under the Australia Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Motorola Solutions Australia's limited warranty above is in addition to any rights and remedies you may have under the Australian Consumer Law. If you have any queries, please call Motorola Solutions Australia at 1800 457 439. You may also visit our website: http://www.motorolasolutions.com/XA-EN/Pages/Contact_Us for the most updated warranty terms.

Déclarations juridiques et de conformité

Déclaration de conformité du fournisseur

Déclaration de conformité du fournisseur
Règlement CFR 47, partie 2, section 2.1077(a) de la FCC

FCC

Partie responsable

Nom : Motorola Solutions, Inc.

Adresse : 2000 Progress Pkwy, Schaumburg, IL. 60196

Numéro de téléphone : 1 800 927-2744

Déclare par les présentes que le produit :

Nom du modèle : **R7**

est conforme aux réglementations suivantes :

Partie 15, sous-partie B, section 15.107(a), 15.107(d) et section 15.109(a) des règlements de la FCC

Appareil numérique de classe B
En tant que périphérique d'ordinateur personnel, cet appareil est conforme aux dispositions de la partie 15 des règlements de la FCC. Son utilisation est assujettie aux deux conditions suivantes :

1 Cet appareil ne doit pas causer d'interférence nuisible; et

2 Cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant entraîner un fonctionnement indésirable.

> **REMARQUE :**
> Cet équipement a fait l'objet de tests et a été déclaré conforme aux limites établies pour un appareil numérique de classe B, conformément à la section 15 des règlements de la FCC. Ces limites sont fixées afin d'offrir une protection suffisante contre des interférences nuisibles dans une installation résidentielle. Cet équipement génère, utilise et peut émettre de l'énergie de radiofréquence et, s'il n'est pas installé ou utilisé conformément aux instructions, il peut provoquer des interférences nuisibles aux communications radio. Cependant, il est impossible de garantir qu'il n'y aura aucune interférence dans une installation particulière.
>
> Si cet appareil cause une interférence nuisible à la réception de la radio ou de la télévision, ce qui peut être déterminé en éteignant et en allumant l'appareil, vous êtes encouragé à remédier à la situation en prenant une ou plusieurs des mesures suivantes :
>
> • Réorienter ou déplacer l'antenne réceptrice.
>
> • Augmenter la distance entre l'équipement et le récepteur.
>
> • Brancher l'appareil dans une autre prise sur un circuit différent de celui du récepteur.
>
> • Consulter le distributeur ou un technicien de radio ou de télévision chevronné pour obtenir de l'aide.

Pour un usage en fonction de la sélection du code de pays (appareils WLAN)

REMARQUE :
La sélection du code de pays est pour les modèles non É.-U. seulement et n'est pas disponible sur tous les modèles américains. Conformément à la réglementation de la FCC, tous les produits Wi-Fi commercialisés aux États-Unis doivent être fixés sur des canaux fonctionnant aux États-Unis uniquement.

Énoncés sur le WLAN d'Industrie Canada (IC)

MISE EN GARDE :

1 L'appareil fonctionnant dans la bande 5 150 à 5 250 MHz est uniquement destiné à une utilisation à l'intérieur afin de limiter les risques d'interférences avec les systèmes mobiles satellites dans un canal commun.

2 Pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis pour les dispositifs utilisant les bandes de 5 250 à 5 350 MHz et de 5 470 à 5 725 MHz doit être conforme à la limite de puissance isotrope rayonnée équivalente (p.i.r.e).

3 Pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis pour les dispositifs utilisant la bande de 5 752 à 5 850 MHz doit être conforme à la limite de p.i.r.e spécifiée pour l'exploitation point à point et l'exploitation non point à point, selon le cas.

4 Les angles d'inclinaison nécessaires dans le cas le plus défavorable pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, et énoncée à la section 6.2.2 (3), doivent être clairement indiqués.

5 Les utilisateurs devraient aussi être avisés, d'une part, que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) des bandes de 5 250 à 5 350 MHz et de 5650 à 5 850 MHz et, d'autre part, que ces radars pourraient causer du brouillage ou des dommages aux dispositifs de RL-EL.

Avis aux utilisateurs (FCC)

Cet appareil est conforme à la partie 15 des règlements de la FCC d'après les conditions suivantes :

- Cet appareil ne doit pas causer d'interférence nuisible.

- Cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant entraîner un fonctionnement indésirable.

- Toute modification apportée à cet appareil sans l'autorisation explicite de Motorola Solutions peut annuler l'autorisation d'utiliser cet appareil.

Avis aux utilisateurs (Industrie Canada)

Le fonctionnement de votre radio Motorola Solutions est assujetti à la Loi sur la radiocommunication et doit se conformer aux règles et règlements du ministère Innovation, Sciences et Développement économique Canada du gouvernement fédéral. Industrie Canada exige que les utilisateurs de fréquences mobiles terrestres privées obtiennent une licence avant d'utiliser leur équipement.

Consignes de sécurité importantes

Radios bidirectionnelles portatives : exposition aux radiofréquences et sécurité du produit

⚠️ **MISE EN GARDE :**
Cette radio doit être utilisée à des fins professionnelles uniquement. Avant d'utiliser la radio, lisez le guide Radios bidirectionnelles portatives : exposition aux radiofréquences et sécurité du produit, qui contient d'importantes instructions de fonctionnement pour une utilisation sécuritaire et des informations sur l'exposition aux fréquences radioélectriques, dans le but d'assurer votre conformité aux normes et règlements en vigueur.

Toute modification effectuée à cet appareil sans l'autorisation explicite de Motorola Solutions peut annuler l'autorisation d'utiliser cet appareil.

Selon la réglementation d'Industrie Canada, cet émetteur radio ne peut être utilisé qu'avec une antenne dont le type et le gain maximal (ou minimal) sont approuvés par Industrie Canada pour cet émetteur. Afin de limiter les interférences radio pour les autres utilisateurs, le type et le gain de l'antenne doivent être choisis de façon à ce que la puissance isotrope rayonnée équivalente (P.I.R.E.) ne soit pas plus forte qu'il ne le faut pour établir la communication.

Cet émetteur radio a été approuvé par Industrie Canada pour utilisation avec une antenne approuvée par Motorola Solutions offrant le gain maximal autorisé et l'impédance requise pour le type d'antenne indiqué. Il est strictement interdit d'utiliser avec cet appareil tout type d'antenne ne figurant pas dans cette liste et présentant un gain supérieur au maximum indiqué pour le type.

Utilisation de la radio maritime dans la gamme de fréquence VHF

Affectations de canaux spéciaux

Canal d'urgence

Si vous êtes exposé à un danger grave et imminent en mer et avez besoin d'une aide d'urgence, utilisez le canal VHF 16 pour lancer un appel de détresse aux navires qui se trouvent à proximité et à la Garde côtière des États-Unis. Transmettez les renseignements suivants dans cet ordre :

1 « MAYDAY, MAYDAY, MAYDAY. »

2 « ICI _____, INDICATIF D'APPEL _____. » Dites le nom du navire en

  détresse trois fois, suivi de l'indicatif d'appel ou d'une autre identification du navire, en l'énonçant trois fois.

3 Répétez « MAYDAY » et le nom du navire.

4 « NOTRE POSITION EST _____. » Indiquez la position du navire en détresse en ajoutant tout renseignement pouvant aider les répondants à vous localiser, p. ex :

  • la latitude et la longitude;

  • le relèvement (dites si vous utilisez le nord géographique ou magnétique);

  • votre distance par rapport à un point de repère connu;

  • la route, la vitesse ou la destination du navire.

5 Énoncez la nature de la situation de détresse.

6 Précisez l'aide dont vous avez besoin.

7 Indiquez le nombre de personnes à bord du navire et le nombre de personnes nécessitant une assistance médicale, le cas échéant.

8 Mentionnez toute autre information pouvant être utile aux répondants, comme le type de navire, sa longueur ou son tonnage, la couleur de la coque, etc.

9 « TERMINÉ. »

10 Attendez une réponse.

11 Si vous ne recevez pas de réponse immédiate, restez près de la radio et répétez votre transmission à intervalles jusqu'à ce que l'on vous réponde. Soyez prêt à suivre les instructions qui vous seront données.

Canal d'appel non commercial

Pour transmettre des messages non commerciaux, comme des rapports de pêche, des arrangements de rendez-vous, des planifications de réparation ou des informations d'accostage, utilisez le **canal VHF 9**.

Exigences relatives à la fréquence de fonctionnement

Toute radio conçue pour la navigation doit être conforme à la section 80 des règlements de la Commission fédérale des communications (FCC), comme suit :

• sur les navires soumis à la section II du titre III de la Loi sur les communications (Communications Act) des États-Unis, la radio doit pouvoir fonctionner sur la fréquence 156,800 MHz;

- sur les navires soumis à la Convention de sécurité, la radio doit pouvoir fonctionner :

  - en mode simplex sur le poste du navire qui transmet les fréquences précisées sur la bande de fréquences 156,025 – -157,425 MHz, et

  - en mode semi-duplex sur les deux canaux de fréquence précisés dans le tableau ci-dessous.

> **REMARQUE :**
> Les canaux simplex 3, 21, 23, 61, 64, 81, 82 et 83 ne peuvent être utilisés légalement par le grand public dans les eaux américaines.

Pour obtenir davantage de renseignements sur les exigences de fonctionnement des Services maritimes, consultez la version intégrale de la section 80 des règlements de la FCC ou communiquez avec la Garde côtière américaine.

Tableau 26 :Liste des canaux de la bande maritime VHF

Numéro de canal	Fréquence (MHz)	
	Transmission	Réception
1	156,050	160,650
2	156,100	160,700
*	156,150	160,750
4	156,200	160,800
5	156,250	160,850
6	156,300	–
7	156,350	160,950
8	156,400	–
9	156,450	156,450
10	156,500	156,500
11	156,550	156,550
12	156,600	156,600
13**	156,650	156,650
14	156,700	156,700
15**	156,750	156,750
16	156,800	156,800
17**	156,850	156,850
18	156,900	161,500
19	156,950	161,550
20	157,000	161,600
*	157,050	161,650
22	157,100	161,700
*	157,150	161,750
24	157,200	161,800
25	157,250	161,850
26	157,300	161,900

27	157,350	161,950
28	157,400	162,000
60	156,025	160,625
*	156,075	160,675
62	156,125	160,725
63	156,175	160,775
*	156,225	160,825
65	156,275	160,875
66	156,325	160,925
67**	156,375	156,375
68	156,425	156,425
69	156,475	156,475
71	156,575	156,575
72	156,625	–
73	156,675	156,675
74	156,725	156,725
75	***	***
76	***	***
77**	156,875	–
78	156,925	161,525
79	156,975	161,575
80	157,025	161,625
*	157,075	161,675
*	157,125	161,725
*	157,175	161,775
84	157,225	161,825
85	157,275	161,875
86	157,325	161,925
87	157,375	161,975
88	157,425	162,025

REMARQUE :
*Les canaux simplex 3, 21, 23, 61, 64, 81, 82 et 83 ne peuvent être **utilisés légalement** par le grand public dans les eaux américaines.

**Faible puissance (1 W) seulement.

***Bande de garde.

REMARQUE :
Le symbole – dans la colonne Réception indique qu'il s'agit d'un canal de transmission seulement.

Déclaration de conformité pour l'utilisation des fréquences de détresse et de sécurité

L'équipement radio n'utilise pas de modulation autre que la modulation adoptée à l'échelle internationale pour l'usage en mer sur les fréquences de détresse et de sécurité spécifiées dans la section 7.3 du CNR-182.

Paramètres techniques d'interface avec des sources de données externes

Tableau 27 :Paramètres techniques d'interface avec des sources de données externes

	RS232	USB	SB9600
Tension d'entrée (tension crête à crête)	18 V	3,6 V	5 V
Débit binaire maximum	28 kbit/s	12 Mbit/s	9,6 kbit/s
Impédance	5000 ohms	90 ohms	120 ohms