

TALKABOUT® TWO-WAY RADIO T1XX SERIES



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Safety and General Information

Caution
Before using this radio, read this booklet which contains important operating instructions.

For information on product details, brochures, user manuals and approved accessories, Please refer to www.motorolasolutions.com.

Compliance with RF Exposure Standards

National and international regulations require manufacturers to comply with the RF energy exposure limits for portable two-way radios before they can be marketed. Your Motorola Solutions two-way radio is designed, manufactured, and tested to comply with all applicable national and international regulations for human exposure to radio frequency electromagnetic energy.

RF Energy Exposure Awareness and Control Information and Operational Instructions for General Population and Uncontrolled Environment Use

For more information on what RF energy exposure is, see the following websites:

- <https://www.fcc.gov/>
- <http://www.who.int/peh-emfi/project/en/>

For additional information, see https://www.motorolasolutions.com/en_us/about/company-overview/corporate-responsibility/governance-and-policies/wirelesscommunication-and-health-faqs.html.

FCC Licensing Information

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

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.

Operating Instructions

- Transmit no more than 50% of the time. To transmit (talk), press the Push-To-Talk (PTT) button. To receive calls, release the PTT button.
- Hold the radio in a vertical position in front of the face with the microphone (and other parts of the radio including the antenna) at least 1 in. (2.5 cm) away from the nose or lips. Antenna should be kept away from the eye.
- When worn on the body, always place the radio in a Motorola Solutions-approved clip, holder, holster, case, or body harness for this product.
- DO NOT hold the antenna when the radio is transmitting.
- DO NOT use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.
- To ensure continued compliance with applicable RF exposure limits, use only Motorola Solutions-approved, supplied or replacement antennas, batteries, and accessories.
- For a list of Motorola Solutions-approved accessories please refer to your user manual or visit www.motorolasolutions.com

Acoustic Safety

Exposure to loud noises from any source for extended periods of time may temporarily or permanently affect your hearing. The louder the volume of the radio, the sooner your hearing will be affected. Hearing damage from loud noise is sometimes undetectable at first, and can have a cumulative effect.

To protect your hearing, follow these precautions:

- Use the lowest volume necessary to do your job.
- Turn up the volume only if you are in noisy surroundings.
- Turn down the volume before putting on a headset or headphones.
- Limit the amount of time you use a headset or headphones at high volume.

- When using the radio without a headset or headphones, do not place the speaker of the radio directly against your ear.

Medical Devices

If you use a personal medical device, such as a pacemaker or hearing aid, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

Operational Warnings

The following explains the operational warnings:

For Vehicle With Air Bags

	Warning: • Refer to vehicle manufacturer's manual prior to installation of electronic equipment to avoid interference with air bag wiring. • DO NOT place a portable radio in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio may be propelled with great force and cause serious injury to occupants of the vehicle.
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Potentially Explosive Atmospheres

	Warning: • Use of a radio that is not intrinsically safe in a potentially explosive atmosphere could result in a serious injury, or death. You should only use a certified Intrinsically Safe radio in potentially explosive atmospheres. • Explosive atmospheres refer to hazard classified locations that may contain hazardous gas, vapors, dusts, such as fueling areas below decks on boats, fuel, or chemical transferor storage facilities, and areas where the air contains chemicals or particles such as grain, dust, or metal powders. Areas with potentially explosive atmospheres are often, but not always, posted. • Turn off your radio prior to entering any area with a potentially explosive atmosphere unless it is a radio type specifically certified for use in hazardous location areas. • DO NOT remove, install, or charge batteries in such areas, or remove or install antennas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.
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Blasting Caps and Blasting Areas

	Warning: To avoid possible interference with blasting operations, turn off your radio when you are near electrical blasting caps, in a blasting area, or in areas posted: "Turn off two-way radio." Obey all signs and instructions.
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Batteries

- Charge your battery using the approved Motorola Solutions charger.
- Use the battery in accordance with its water and/or dust Ingress Protection (IP) rating.
- Do not discard your battery into a fire.
- Do not replace the battery in any area labeled "Hazardous Atmosphere".
- Do not disassemble, crush, puncture, shred, or otherwise attempt to change the form of your battery.
- Do not dry a wet or damp battery with an appliance or heat source, such as a hair dryer or microwave oven.
- Do not allow conductive material such as jewelry, keys, or beaded chains to touch exposed battery terminals.

Repair

	Warning: Repairs to a Motorola Solutions intrinsically safe radio product certified by, for example, FM, UL, CSA, CENELEC, should only be done at a location that has been audited under the certifying body's repair and service standard. Contact Motorola Solutions for assistance regarding repairs and service of Motorola Solutions intrinsically safe equipment.
WARNING	A repair constitutes something done internally to the unit that would bring it back to its original condition. Items not considered as repairs are those in which an action is performed on a unit which does not require the outer casing of the unit to be opened in a manner that exposes the internal electrical circuits of the unit.

Do Not Substitute Options or Accessories

The Motorola Solutions communications equipment certified as intrinsically safe by the approving agency (FM, UL, CSA, CENELEC) is tested as a complete system which consists of the listed agency approved portable, approved battery, and approved accessories or options, or both. This approved portable and battery combination must be strictly observed. There must be no substitution of items, even if the substitute has been previously approved with a different Motorola Solutions communications equipment unit. approved configurations are listed by the approving agency (FM, UL, CSA, CENELEC).

The Intrinsically Safe Approval Label affixed to radio refers to the intrinsically safe classification of that radio product, and the approved batteries that can be used with that system.

The manual PN referenced on the Intrinsically Safe Approval Label identifies the approved accessories and or options that can be used with that portable radio unit.

Using a non-Motorola Solutions-intrinsically safe battery and/or accessory with the Motorola Solutions-approved radio unit will void the intrinsically safe approval of that radio unit.

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.
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Electromagnetic Interference/Compatibility

Note: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.

This device complies with part 15 of the FCC Rules and Industry Canada License-exempt RSS standard(s).

Operation is subject to the following two conditions:

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

Licensing Information

USA

Use of GMRS frequencies is subject to the Rules and Regulations of the Federal Communications Commission (FCC). The FCC requires that all operators using GMRS frequencies obtain a radio license before operating their equipment. To obtain the FCC forms, please visit the FCC website at wireless.fcc.gov/uls/index.htm?job=home to source form 605 and 159, which includes all the instructions you will need.

If you wish to have the document faxed or mailed, or if you have questions, please use the following contact information:

For a fax: Contact the Fax-On-Demand system	For mail service: Call the FCC Forms Hotline	If you have questions about the FCC License: Call the FCC
1-202-418-0177	1-800-418-FORM (3676)	1-888-CALL-FCC (225-5322)

Canada

Use of Motorola Solutions radio in Canada is subject to the rules & regulations of Industry Canada (IC). IC requires no license when operated in Canada. Changes or modifications not expressly approved by Motorola Solutions may void your user authority granted by the IC/FCC to operate this radio and should not be made. To comply with IC/FCC requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services. Replacement of any transmitter component (crystal, semiconductor, etc) not authorized by the IC/FCC equipment authorization for this radio could violate IC/ FCC rules.

Note: Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.

Mexico

Use of GMRS frequencies is subject to the Rules and Regulations of the Federal Communications Institute (IFT) requires that all operators using GMRS frequencies obtain a permit before operating their equipment. To obtain a permit from the IFT, you must proceed in accordance with Articles 14 and 15 of the Federal Telecommunications Law. Consult your local IFT office for more information: www.ift.org.mx

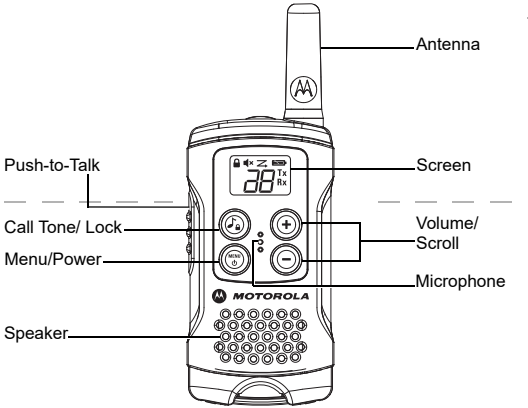
Uruguay

Use of GMRS frequencies is subject to the Rules and Regulations of the Regulatory Unit Communications Services (URSEC). URSEC requires that all operators using GMRS frequencies obtain a permit before operating their equipment. The authorization shall depend on the channel availability at the time the authorization is requested. To obtain a permit from URSEC, consult your local URSEC office for more information: www.ursec.gub.uy.

Panama

The Republic of Panama does not require authorization to use FRS/ GMRS radio equipment frequencies.

Control Buttons



Display Screen Guide

	— Keypad Lock		— Battery (2 Battery Levels)
	— Mute		— Status (transmit/ receive)
	— Scan		

Getting Started

Installing the Batteries

1. Make sure your radio is OFF.
2. To remove the battery compartment door, by pressing the tab at the bottom of the compartment door. Remove the door. Insert three AAA batteries into the battery compartment.
3. Replace the battery compartment door.

Battery Level and Low Battery Alert

This icon will show when battery is low and will blink when battery is extremely low. Replace the batteries immediately.

Removing the Alkaline Batteries

1. Turn the radio off.
2. With the back of the radio facing you, lift the battery cover latch up and remove the cover.
3. Gently remove each alkaline battery.
4. Close the battery cover firmly.

Note:

- Exercise care when removing AAA batteries. Do not use sharp or conductive tools to remove either of these batteries.
- Remove the batteries before storing your radio for extended periods of time. Batteries corrode over time and may cause permanent damage to your radio.

Attaching and Removing the Belt Clip

1. Attach the belt clip to the back of the radio until the clip clicks in place.
2. Attach the belt clip to pocket or belt strap until the clip clicks in place.

To Remove

1. Push the release tab on top of the belt clip to release the latch.
2. Pull the belt clip away from the back of the radio.

Basic Radio Operations

Read this reference guide completely before attempting to operate the unit.

Turning Your Radio On/Off

Press and hold the **MENU**/ button to turn your radio ON/OFF.

Adjusting the Volume

1. Adjust the volume by pressing the and buttons.
2. When the volume reached level 0, the mute icon appears permanently on screen.

Adjusting the Sound (Key Beeps)

Your radio emits a beep each time one of the buttons is pressed (except the **PTT** button).

Press and hold the button while turning the radio ON to switch the sound OFF.

To turn this sound ON, turn the radio OFF and ON again without pressing the button.

Selecting a Channel

In order to speak to someone, both your radios must be set to the same channel.

To select a channel:

1. Press **MENU**/ one time to enter Menu.
2. Press or to the required channel. An extended press of or allows you to scroll through the channel.
3. Press **PTT** button to confirm the selection or **MENU**/ to continue setup.

Talking and Listening

To communicate, all radios in your group must be set to the same channel.

1. To talk, press and hold the **PTT** button. When transmitting, the **Tx** is shown.
2. When you are finished talking, release the **PTT** button.
3. When receiving, the **Rx** is shown.

For maximum clarity, hold the radio 1 in. away from your mouth and speak directly into the microphone. Do not cover the microphone while talking.

Talk Range

Your radio is designed to maximize performance and improve transmission range. Do not use the radios closer than 5 ft apart.

Push-to-Talk Timeout Timer

To prevent accidental transmissions and save battery life, the radio emits a continuous warning tone and stops transmitting if you press the **PTT** button for 60 s continuously.

Channel Scan Mode

Channel Scan Mode enables your radio to scan for active channels. When activity is detected, your radio lands (stays) on that channel (for two seconds). To transmit on that channel, press the PTT button. When activity on the landed channel ends, your radio continues scanning other channels.

To turn the channel scan ON:

1. Press **MENU**/ two times until appears.
2. Press or to start scanning. Press **MENU**/ or **PTT** to turn OFF Scan mode.

Key Lock

1. Press and hold until appears to lock the keypad.
2. When in lock mode, you can turn the radio on and off, adjust the volume, send a call tone, receive, and transmit. All other functions are locked.
3. Press and hold until disappears to unlock the keypad.

Monitor Mode

Your radio enables you to listen for weak signals on the current channel.

To turn the Monitor Mode ON:

1. Press **MENU**/ three times until the Channel Monitor setting flashes and the **Rx** appears.
2. Press the button for continuous listening. The **Rx** icon continues to appear.

To turn the Monitor Mode OFF:

1. Press the **MENU**/ button to return to “Normal” mode. The **Rx** icon stops appearing.

Roger Beep

Roger beep sounds to indicate the end of a **PTT** transmission. It can be heard through the speaker when Key Beep is on. It cannot be heard through the speaker if Key Beep is turned off.

Press and hold the button while turning the radio ON to turn the Roger Beep ON. Repeat the step to turn Roger Beep OFF.

Automatic Power Save

For better battery life, your radio is designed to switch to Power Save mode when there has been no transmissions after 3 s. The radio can receive transmissions in this mode.

Channels and Frequencies

USA, Canada, Mexico, Panama, Uruguay

Channel	Frequency	Description	Channel	Frequency	Description
1	462.5625 MHz	GMRS/FRS	12	467.6625 MHz	FRS
2	462.5875 MHz	GMRS/FRS	13	467.6875 MHz	FRS
3	462.6125 MHz	GMRS/FRS	14	467.7125 MHz	FRS
4	462.6375 MHz	GMRS/FRS	15	462.5500 MHz	GMRS
5	462.6625 MHz	GMRS/FRS	16	462.5750 MHz	GMRS
6	462.6875 MHz	GMRS/FRS	17	462.6000 MHz	GMRS
7	462.7125 MHz	GMRS/FRS	18	462.6250 MHz	GMRS
8	467.5625 MHz	FRS	19	462.6500 MHz	GMRS
9	467.5875 MHz	FRS	20	462.6750 MHz	GMRS
10	467.6125 MHz	FRS	21	462.7000 MHz	GMRS
11	467.6375 MHz	FRS	22	462.7250 MHz	GMRS

Patent and Copyright Information

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Warranty

Consumer Two-Way Radio Products and Accessories purchased in the USA, Canada, Mexico, Uruguay, and Panama

What Does this Warranty Cover?

Subject to the exclusions contained below, Motorola Solutions, Inc. (“Motorola”) warrants the Motorola branded consumer

two-way radios that operate through Family Radio Service or General Mobile Radio Service (“Products”), the Motorola branded or certified accessories sold for use with these Products (“Accessories”) to be free from defects in materials and workmanship under normal consumer usage for the period(s) outlined below. This limited warranty is the exclusive remedy of a consumer, and applies as follows to new Products and Accessories and purchased by consumers in the United States or Canada, which are accompanied by this written warranty:

Who is Covered?

This warranty extends only to the first consumer purchaser, and is not transferable.

What will MOTOROLA SOLUTIONS, INC. do?

Motorola Solutions, Inc., at its option, will at no charge repair, replace or refund the purchase price of any Products or Accessories that do not conform to this warranty. We may use functionally equivalent reconditioned/refurbished/pre-owned or new Products or Accessories.

What Other Limitations Are There?

Any Implied Warranties, Including Without Limitation

The implied warranties of merchantability and fitness for a particular purpose, shall be limited to the duration of this limited warranty, otherwise the repair, replacement, or refund as provided under this express limited warranty is the exclusive remedy of the consumers, and is provided in lieu of all other warranties, express or implied. In no event shall Motorola Solutions be liable, whether in contract or tort (including negligence) for damages in excess of the purchase price of the product or accessory, or for any indirect, incidental, special or consequential damages of any kind, or loss of revenue or profits, loss of business, loss of information or other financial loss arising out of or in connection with the ability or inability to use the products or accessories to the full extent these damages may be disclaimed by law.

Some states and jurisdictions do not allow the limitation or exclusion of incidental or consequential damages, or limitation on the length of an implied warranty, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state or from one jurisdiction to another.

Products Covered	Length Of Coverage
Products and Accessories as defined above, unless otherwise provided for below:	One year from the date of purchase by the first consumer purchaser of the product unless otherwise provided for below.
Products and Accessories that are repaired or replaced	The balance of the original warranty or for 90 days from the date returned to the consumer, whichever is longer.

Exclusions From Warranty Coverage

Normal Wear and Tear:

Periodic maintenance, repair, and replacement of products or accessories due to normal wear and tear.

Abuse and Misuse:

Defects or damage that result from: (a) improper operation, storage, misuse or abuse, accident, or neglect, such as physical damage (cracks, scratches, etc.) to the surface of the Products and Accessories resulting from misuse; (b) contact with liquid, water, rain, extreme humidity or heavy perspiration, sand, dirt, or the like, extreme heat, or food; (c) use of the Products or Accessories for commercial purposes or subjecting the Product or Accessory to abnormal usage or conditions; or (d) other acts which are not the fault of Motorola Solutions.

Use of Non-Motorola Solutions branded Products and Accessories:

Defects or damage that result from the use of Non-Motorola Solutions branded or certified products, accessories, software, or other peripheral equipment.

Unauthorized Service or Modification:

Defects or damages resulting from service, testing, adjustment, installation, maintenance, alteration, or modification in any way by someone other than Motorola Solutions, or its authorized service centers.

Altered Products:

Products or Accessories with (a) serial numbers or date tags that have been removed, altered, or obliterated; (b) broken seals or that show evidence of tampering; (c) mismatched board serial numbers; or (d) non-conforming or non-Motorola Solutions branded housings, or parts.