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Safety and General Information

Important Information on Safe and Efficient Operation

Read This Information Before Using Your Radio

The information provided in this document supersedes the general safety information contained in user guides published prior to July 2000.

Transmit and Receive Procedure

Your two-way radio contains a transmitter and a receiver. To control your exposure and ensure compliance with the general population/uncontrolled environment exposure limits, always adhere to the following procedure:

- 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.

Transmitting 50% of the time, or less, is important because the radio generates measurable RF energy exposure only when transmitting (in terms of measuring standards compliance).

Exposure To Radio Frequency Energy

Your Motorola radio is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy:

- United States Federal Communications Commission, Code of Federal Regulations; 47 CFR part 2 sub-part J



- American National Standards Institute (ANSI) / Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998
- Ministry of Health (Canada) Safety Code 6. Limits of Human Exposure to Radio Frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, 1999
- Australian Communications Authority Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2001 (applicable to wireless phones only)
- ANATEL, Brasil Regulatory Authority, Resolution 256 (April 11, 2002) "additional requirements for SMR, cellular, and PCS product certification."

To assure optimal radio performance and make sure human exposure to radio frequency electromagnetic energy is within the guidelines set forth in the above standards, always adhere to the following procedures.

Portable Radio Operation and EME Exposure

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the radio and may violate FCC regulations.

DO NOT hold the antenna when the radio is "IN USE." Holding the antenna affects the effective range.





Two-way Radio Operation

When using your radio as a traditional two-way radio, hold the radio in a vertical position with the microphone 1 to 2 inches (2.5 to 5 cm) away from the lips.

Body-Worn Operation

To maintain compliance with FCC/Health Canada RF exposure guidelines, if you wear a radio on your body when transmitting, always place the radio in a Motorola-supplied or approved clip, holder, holster, case, or body harness for this product. Use of non-Motorola-approved accessories may exceed FCC/Health Canada RF exposure guidelines. If you do not use one of the Motorola-supplied or approved body-worn accessories, and are not using the radio held in the normal use position, ensure the radio and its antenna are at least 1 inch (2.5 cm) from your body when transmitting *

Data Operation

If applicable, when using any data feature of the radio with or without an accessory cable, position the radio and its antenna at least 1 inch (2.5 cm) from the body.

Approved Accessories

For a list of approved Motorola accessories, please contact place of purchase.

Electromagnetic Interference/Compatibility

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

Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your radio in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Aircraft

When instructed to do so, turn off your radio when on board an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.

Medical Devices - Pacemakers

The Advanced Medical Technology Association recommends that a minimum separation of 6 inches (15 cm) be maintained between a handheld wireless radio and a pacemaker. These recommendations are consistent with the independent research by, and recommendations of the U.S. Food and Drug Administration.

Persons with pacemakers should:

- ALWAYS keep the radio more than 6 inches (15 cm) from their pacemaker when the radio is turned ON.
- Not carry the radio in the breast pocket.
- Use the ear opposite the pacemaker to minimize the potential for interference.
- Turn the radio OFF immediately if you have any reason to suspect that interference is taking place.



Medical Devices - Hearing Aids

Some digital wireless radios may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical device, 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.

Safety and General Use While Driving

Check the laws and regulations on the use of radios in the area where you drive. Always obey them. When using your radio while driving, please:

- Give full attention to driving and to the road.
- Use hands-free operation, if available.
- Pull off the road and park before making or answering a call if driving conditions so require.

Operational Warnings

For Vehicles with an Air Bag

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.



Potentially Explosive Atmospheres

Turn off your radio prior to entering any area with a potentially explosive atmosphere, unless it is a radio type especially qualified for use in such areas as "Intrinsically Safe." Do not remove, install, or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

Note: The areas with potentially explosive atmospheres referred to above include fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often but not always posted.

Blasting Caps and Areas

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.

Operational Cautions

Antennas

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.





Batteries

All batteries can cause property damage and/or bodily injury such as burns if a conductive material such as jewelry, keys, or beaded chains touch exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

Battery Charger Safety Instructions

Save these Instructions

1. Do not expose the charger to rain or snow.
2. Do not operate or disassemble the charger if it has received a sharp blow, or has been dropped or damaged in any way.
3. Never alter the AC cord or plug provided with the unit. If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician. An improper condition can result in a risk of electric shock.
4. To reduce the risk of damage to the cord or plug, pull the plug rather than the cord when disconnecting the charger from the AC receptacle.
5. To reduce the risk of electric shock, unplug the charger from the outlet before attempting any maintenance or cleaning.
6. Use of an attachment not recommended or sold by Motorola may result in a risk of fire, electric shock, or personal injury.



7. Make sure the cord is located so it will not be stepped on, tripped over, or subjected to damage or stress.
8. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and/or electric shock. If an extension cord must be used, make sure that:
 - The pins on the plug of the extension cord are the same number, size and shape as those on the plug of the charger.
 - The extension cord is properly wired and in good electrical condition.
 - The cord size is 18 AWG for lengths up to 100 feet, and 16 AWG for lengths up to 150 feet.
9. The supply cord of this charger cannot be replaced. If the cord is damaged, please contact place of purchase.



FCC Licensing Information

Your Motorola radio operates on General Mobile Radio Service (GMRS) frequencies and 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 request Form 605 and 159, which includes all forms and instructions. If you wish to have the document faxed or mailed, or have questions, please use the following contact

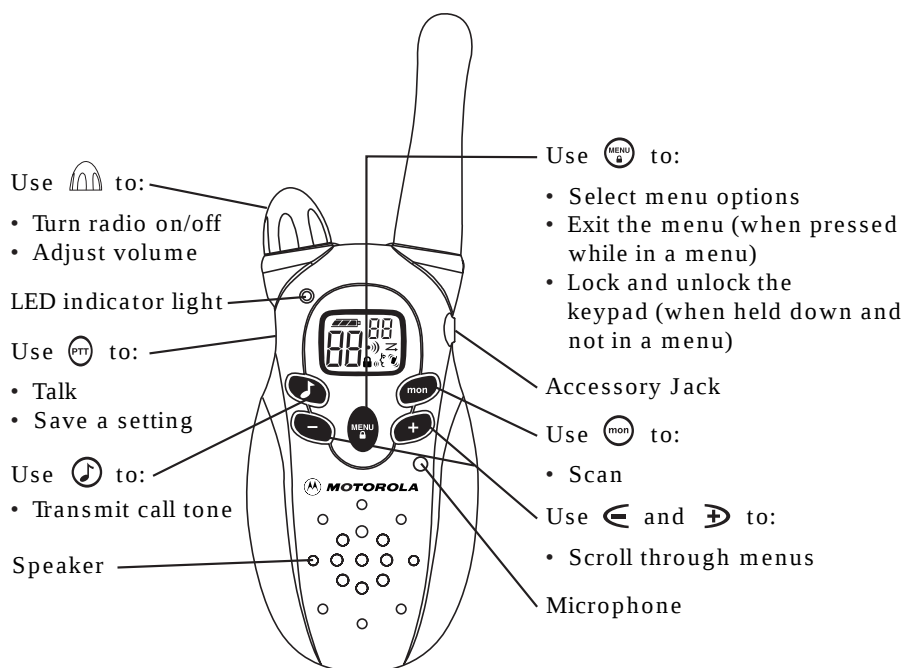
Faxed Contact the Fax-On- Demand system at:	Mailed Call the FCC forms hotline at:	Questions Regarding FCC license Contact the FCC at:
1-202-418-0177	1-800-418-FORM 1-800-418-3676	1-888-CALL-FCC 1-888-225-5322 Or: http://www.fcc.gov

Changes or modifications not expressly approved by Motorola may void the user's authority granted by the FCC to operate this radio and should not be made. To comply with 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 FCC equipment authorization for this radio could violate 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.

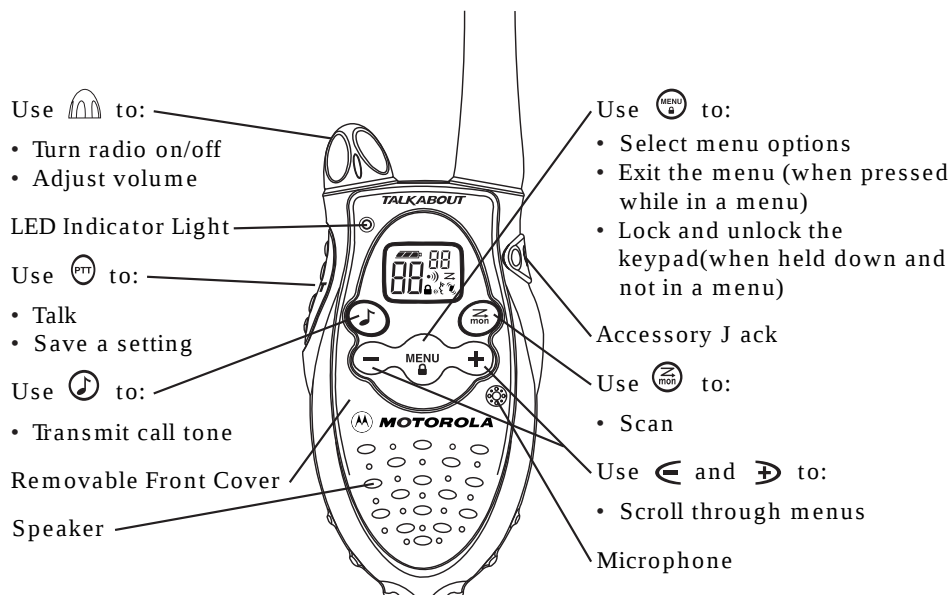


Control Buttons - Models T5000





Control Buttons - Models T5500



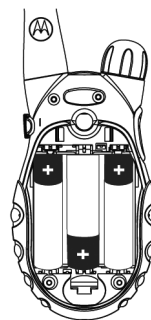
Getting Started

Installing the AA Batteries

Your radio uses 3 AA Alkaline batteries.

1. With the back of the radio facing you, lift the battery latch up to release the battery cover and remove the cover.
2. Insert 3 AA Alkaline batteries as shown on the inside of the battery compartment.
3. Reposition the battery cover and press down to secure.

Note: The T5000 and T5500 model radios can use a NiCd rechargeable battery instead of 3 AA Alkaline batteries. A rechargeable battery upgrade kit, is available for these radios.



Installing the NiCd Battery Pack

1. Follow step 1 above to remove the battery cover.
2. Remove the battery pack from the clear plastic bag. Do not disassemble or unwrap the battery pack.
3. Insert the NiCd battery pack so the metal contacts on the side of the battery are facing outward from the radio to connect with the contacts on the battery door.
4. Reposition the battery cover and press down to secure.





Battery Meter

The battery icon shows the battery charge level, from full  to empty . When the battery is empty, the radio chirps periodically after releasing . The radio powers off when the voltage drops below a predetermined level to protect the rechargeable battery.

Note: Remove the batteries before storing your radio for extended periods of time.
Batteries corrode over time and may cause permanent damage to your radio.

Using the Desk Stand Charger (Optional Accessory)

The desk stand charger provides drop-in charging convenience for NiCd batteries and can be placed on any flat surface, such as a desk or workbench. Charge the NiCd battery overnight (at least 16 hours) before using it for the first time. After the initial charge, an empty battery is fully charged within 14 hours.

1. Turn the radio off and remove the battery cover.
2. Remove the battery pack from the clear plastic bag.
Do not disassemble or unwrap the battery pack.
3. Insert the NiCd battery pack so the metal contacts on the side of the battery are facing outward from the radio to connect with the contacts on the battery door.
4. Reposition the battery cover and press down to secure.
5. Plug the AC power supply into the plug on the desk stand.
6. Plug the AC power supply into a standard wall outlet.
7. Slide the radio into one of the charging pockets facing forward.



To charge the battery pack separately from the radio:

1. Remove the battery pack from the clear plastic bag.
Do not disassemble or unwrap the battery pack.
2. Insert the battery pack into the charging pocket. Make sure the metal contacts on the side of the battery are making contact with the contacts inside the charger.
3. Plug the AC power supply into the plug on the desk stand.
4. Plug the AC power supply into a standard wall outlet.

Notes

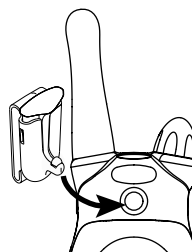
- When moving between hot and cold temperatures, do not charge the battery until the battery temperature acclimates (usually about 20 minutes).
- For optimal battery life, remove the radio or battery from the charger within 16 hours. Do not store the radio in the charger.

Attaching the Belt Clip

1. Align the belt clip post with the hole in the back of the radio.
2. Gently push until the clip clicks into place.

Removing the Belt Clip

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





Turning Your Radio On and Off

Turn clockwise to turn the radio on and counterclockwise to turn the radio off. The radio chirps and the display briefly shows all feature icons available on your radio. The display then scrolls through the available channels and Interference Eliminator Codes.

Setting the Volume

Rotate while holding down or until you reach a comfortable listening level. Rotate clockwise to increase the volume or counterclockwise to decrease the volume.

Setting a Channel

Your radio has 22 channels. Channels 1-7 and 15-22 are 1 watt. Channels 8-14 are 0.5 watt. When the radio is on a 1 watt channel, displays. When the radio is on a 0.5 watt channel, displays.

1. With the radio on, press . The current channel flashes.
2. Press or to set the channel.
3. Press to save the channel setting.



Channels and Frequencies

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





Talking and Listening

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

To talk, press and hold . Hold the radio 2 to 3 inches away from your mouth when talking.

When you finish talking, release (press to talk, release to listen).

Talk Range

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

Checking the Channel Before Transmitting

Your radio has multiple channels shared on a "take turns" basis. For uninterrupted communication, do not talk on a channel is someone else is currently talking on it. To check for activity on a channel before you talk, press and hold or . If you hear static, the channel is clear to use.



Special Features

Interference Eliminator Code

Interference Eliminator Codes help minimize interference by providing you with a choice of code combinations.

To set the code for a channel:

1. Press until the code starts to flash.
2. Press or to select the code.
3. Press to save the code setting.

You can set a different code for each channel using this procedure.

Note: You must set the Interference Eliminator Code to on an FRS radio that uses Interference Eliminator Codes to communicate with other FRS radios that do not have Interference Eliminator Codes.

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 for 60 continuous seconds.

Locking the Keypad

To avoid accidentally changing your radio settings, press and hold for 3 seconds or until displays. You can turn the radio on and off, adjust the volume, receive, transmit, send a call tone, and monitor channels. All other functions are locked.

To unlock the radio, press and hold for 3 seconds or until is no longer displayed.





Scanning Channels (Model T5500 Only)

Use scanning to monitor channels and codes for transmissions or to find someone in your group who has accidentally changed channels.

To start scanning, briefly press and release or . The scan indicator displays.

When the radio detects channel activity, it stops scanning and you can hear the transmission. To respond to the transmitting, press within 5 seconds.

Note: If your radio's Interference Eliminator Code is set to while scanning, the radio checks for activity on each channel regardless of the code used on the channel. If your radio's Interference Eliminator Code is set to -, the radio checks for activity only on channels using codes - and ignores channels using code .

Scan Advance

If the radio stops scanning on a channel you do not want to listen to, briefly press and release or to resume scanning for the next active channel.

Removing Channels from the Scan List (Nuisance Delete Feature)

To remove a channel so the radio does not stop on it while scanning, press and hold or for at least 3 seconds, then release. This temporarily removes the channel from the scan list.

To restore the channel, turn the radio off and then back on.

Note: You cannot remove the channel your radio was set to when you started the scan (called your home channel).



Alerts

Channel Busy Indicator

When a channel is busy, the LED flashes twice per second.

Setting and Transmitting Call Tones

Your radio can transmit different call tones to other radios in your group so you can alert them that you want to talk.

To set a call tone:

1. With the radio on, press 3 times. The current call tone setting flashes and displays.
2. Press or to change and hear the call tone.
3. Press or to set the new call tone.

To transmit your call tone to other radios set to the same channel and Interference Eliminator Code as your radio, press .

Notes

- The T5000 model have 5 call tones. The T5500 model have 10 call tones.
- Setting the call tone to disables the call tone feature.





Transmitting a Talk Confirmation Tone

You can set your radio to transmit a unique tone when you finish transmitting. It's like saying Roger or Over to let others know you are finished talking.

- To turn talk confirmation on, press and hold while you turn the radio on. When you release after transmitting, your call tone transmits and displays.
- To turn talk confirmation off, turn your radio off and then back on while pressing and holding .

QT Noise Filtering (Models T5500 Only)

The QT noise filtering feature helps ensure uninterrupted communication with other Motorola T5000 Series radios that have this feature. This feature filters out unwanted transmissions from other radios. It is useful in places where there is heavy radio traffic, such as at an amusement park or ski resort.

Note: QT noise filtering is not available while the radio is scanning.

To turn QT noise filtering on or off:

1. Press until displays.
2. Press or until displays to turn noise filtering on, or until displays to turn noise filtering off.
3. Press to confirm your selection.



To transmit to a radio that has QT noise filtering turned on:

1. Select the same channel and Interference Eliminator Code as the other radio.
2. Press to send a call tone. This allows your voice to pass through the QT noise filter on the receiving radio.
3. Press and speak normally.

Note: If you skip step 2, the beginning of your message may not be heard on the receiving radio.

For a 30-second period, starting after the last transmission, all transmissions received on the selected channel and code will pass through the QT noise filter.





Accessories

There are many accessories (sold separately) available for your radio. For more information, refer to the brochure included with your radio, contact the place of purchase.

Using Audio Accessories

1. Turn the radio off. Plug the accessory connector into the jack. See page 12 and 13 for the location of the accessory jack on your radio.
2. Turn the radio on. Lower the volume before placing the accessory on your head or in your ear.
3. Press or while rotating to adjust the volume to a comfortable level.
4. To transmit, press and speak into the accessory microphone, if any.
5. To receive, release .

Voice Activation (VOX) Accessories (Model T5500 Only)

Voice activation (VOX) allow you to talk handsfree when used with optional accessories connected to the radio. See the Motorola Talkabout accessory brochure for available VOX accessories.

1. Turn the radio off.
2. Insert the plug of the audio accessory firmly into the accessory jack (see page 13).
3. Turn the radio on. displays.
4. Lower the radio volume before placing the accessory on your head or in your ear.



5. To transmit, speak into accessory microphone. There is a short delay between the time you start talking and when the radio transmits.
6. To receive, stop talking.

To turn VOX off, press or remove the audio accessory.

Setting the Sensitivity Level (Model T5500 Only)

Adjusting the radio's sensitivity level helps minimize the possibility of unintended noises triggering a transmission and helps the radio pick up soft voices.

1. Press until displays.
2. Press or to select the sensitivity level:

= High Sensitivity
for quiet environments

= Medium Sensitivity
for most environments

= Low Sensitivity
for noisy environments

Note: When you connect a VOX accessory, the radio is automatically set to the last chosen sensitivity level.





Patent Information

This product is manufactured under one or more of the following United States patents.

5896277 5894292 5864752 5699006 5742484 D408396 D399821 D387758 D389158
5894592 5893027 5789098 5734975 5861850 D395882 D383745 D389827 D389139
5929825 5926514 5953640 6071640 D413022 D416252 D416893 D433001

Export Law Assurances

This product is controlled under the export regulations of the United States of America and Canada. The Governments of the United States of America and Canada may restrict the exportation or re-exportation of this product to certain destinations. For further information contact the U.S. Department of Commerce or the Canadian Department of Foreign Affairs and International Trade.



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MOTOROLA
TALKABOUT®

User's Guide

UNF-CB RECREATIONAL TWO-WAY RADIOS

Helen haven't any good
pics / finished model
dummy for this cover

Model T5000,T5500

- **22 Channels (8 GMRS, 7 GMRS/FRS, 7 FRS) with 38 Interference Eliminator Codes**
GMRS channels feature increased power for longer range. 14 channels ensure backward compatibility with FRS two-way radios. Eliminator Codes minimize interference from other groups.
- **Scanning**
Easily finds channel and code by searching all combinations (Models T5500 only).
- **QT Noise Filter**
Filters out unwanted transmissions in heavy radio traffic areas (Models T5500 only).
- **Audible Call Tones**
5 call tones (Model T5000)
10 call tones (Model T5500).
- **Talk Handsfree**
With Voice Activation (VOX) when used with optional accessories (Models T5500 only)
- **Motorola Quality**
Shock, drop, and temperature tested to meet Motorola's high quality standards.
- **Talk Confirmation Tones**
Signals others you are finished talking.
- **Durable, Fixed Antenna**
Maximizes talk range.
- **Weather-resistant**
Helps protect radios against the elements.
- **1 Year Limited Warranty**
For warranty details, please ask your retailer.
- **Low Battery Alert**
Audible tone and visual display tell you when the battery is running down.
- **Illuminated Display**
Easy to read your settings in dark places.
- **Quick Release Swivel Belt Clip Included**
- **User's Guide Included**

FCC GMRS LICENSE REQUIRED



**WARNING CHOKING HAZARD
SMALL PARTS**
Not for children under 3 years.
This product is not intended to be used
as a toy or plaything.

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