## Contents



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## Safety and General Infomation

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 in user guides published prior to December 1, 2002.
Transmit and Receive Procedure
Bour 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


Facilities
To avoid electromagnetic interference andior 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 $(15 \mathrm{~cm})$ be maintained between a handheld wireless madio 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 twoway 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 hof. 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 nor 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, call Motorola Product Services at 1-800-353-2729 in USA or 1-888-390-6456 TTY (Text Telephone).

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 Commumications Commission (FCC. The FCC requires that all operators using GMRS frequencies obtain a radio locense before operating their equipment. To obsain the FCC forms, please request Form 606 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 information.

| Faxed <br> Contact the Fax-On <br> Demand system at | Mailed <br> Call the FCC forms hotline at: | Questions <br> Ragarding FCC Ilcense Contact the FOC at: |
| :---: | :---: | :---: |
| 1-202-418-0177 | 1.800-418.FORM <br> $1.800-418.3676$ | $\begin{gathered} \text { 1-888-CALL-FCC } \\ \text { 1-888-225-5322 } \\ \text { Or: htp://www:fcc.gow } \end{gathered}$ |

## CAUTION:

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 T6500 and T6550


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## 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 cover and remove.
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: A NiCd rechargeable battery can be used instead of 3 AA Alkaline batteries. A rechargeable battery upgrade kit is available.
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 matel 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.



## Notes

- The light on charging base will glow continuously when radiobbattery is inserted.
- 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.


Channels and Frequencies

| Channel | Frecuency | 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 |

Weather Channels and Frequencies

| Weather <br> Channel |  | Frequency | Weather <br> Channel |  | Frequency |
| :---: | :---: | :---: | :---: | :---: | :---: |
| WX1 | 162.550 MHz | WX5 | 162.450 MHz |  |  |
| WX2 | 162.400 MHz | WX6 | 162.500 MHz |  |  |
| WX3 | 162.475 MHz | WX7 | 162.525 MHz |  |  |
| WX4 | 163.425 MHz | WX8 | 162.275 MHz |  |  |



## Locking the Keypad

To avoid accidentally changing your radio settings, press and hold 9 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 -3 for 3 seconds or until $\boldsymbol{Q}$ is no longer displayed.
Enhanced Scanning
Scanning is used to:

- Monitor Channels and codes for transmissions and lock in on one that interests you.
- Find someone in your group who has accidentally changed channels and is talking during your scan.
With enhanced scanning, your home channel is scanned more frequently than any other channel. The home channel is the channel your radio was set to when you started to scan. If you activate scan while your radio's Interference Eliminator Code is set to a number between 1 and 99, the radio checks for activity on each channel, but only in the specific code selected. All transmissions using code 0 or any other code are ignored.
To start scanning, briefly press and release (2). The scan indicator $\boldsymbol{z}$ displays and the radio begins to scroll through the channel and Interference Eliminator Code combinations


When the radio detects activity, it stops scanning and you can hear the transmission on that channel. To respond and talk to the person transmitting. press within 5 seconds.
To stop scanning, briefly press and release (2).
Note: If you press while the radio is scanning, the radio transmit on the channel you selected before you activated scan. If no transmission occurs within 5 seconds, scanning will resume.
Advanced Scan
If the radio stops scanning on a channel you do not want to listen to, briefly press and release $\oplus$ or $\Theta$ to resume scanning for the next active channel.
Removing Channels from the Scan List (Nuisance Delete Feature)
To prevent the radio from scanning a channel, press and hold $\oplus$ or $\Theta$ for at least 3 seconds, then release, when the scan first stops on that channel. This temporarily removes the channel from the scan list. Press (3) to exit scan mode. Press (3) a second time to activate scan again. To restore a previously deleted channel, turn the radio off and then back on. The channel is now restored.
Note: You cannot remove your home channel from the scan list. The home channel is the channel your radio was set to when you started the scanning.

## Handsfree Use Without Accessories (iVox)

You can use the iVox feature to transmit handsfree withour the need for any voice activation (VOX) accessories. Once IVOX is turned on. the radio detects your voice and transmits when you speak.

1. Turn the radio off.
2. Turn the radio on while pressing $\theta$ displays.
3. To temporarily disable iVox, press . flashes intermittently.
4. To turn off $i$ Vox, turn the radio off.

Handsfree Use With Accessories (VOX)
You can transmit handsfree with the use of optional accessories. Once VOX is turned on, the radio detects your voice and transmits when you speak.

1. Turn the radio off and plug the VOX accessory into the accessory port (see page 11 for accessory port location).
2. Turn the volume down, then turn the radio on. flashes on the display.
3. Adjust the volume appropriately by rotating (D)

Note: There is a short delay between the time you start talking and when the radio transmits. There is a short delay before the transmission is completed.
To turn VOX off, press or remove the audio accessory.


## Weather

Your radio can tune in to broadcasts by the United States National Oceanic and Atmospheric Administration (NOAA) Weather Radio and Environment Canada Weatheradio.
You can listen to a weather channel or set your radio to alert you to emergency weather broadcasts that interrupt routine broadcasts.
When you listen to weather channel, you cannot use your radio in scan mode or for two-way communications.
Both NOAA and Environment Canada have transmitters located throughout the United
States and Canada, respectively. These transmitters broadcast watches, forecasts, and other information 24 hours a day.
Note: NOAA weather radio stations are assigned to cover specific areas and service may be limited. Please check with your local weather office for frequency and details, or visit uww.mes nowa gowimur in the US or wow.ms-smicec gc.cabdartsheetsiwarado in Canada to view the appropriate transmitter for your area. The use of the NOAA logo does not provide an endorsement or implied endorsement by NOAA's National Weather Service, nor does the use of the Weatheradio logo provide an endorsement or implied endorsement by Environment Canada.
Turning Weather Channel Reception On and Off
To turn weather reception on, press and hold $\oplus$ for 3 seconds. To tum off, press $\oplus$ or turn the radio off and then back on.


Setting the Weather Channel
Your radio recelves 8 weather frequencies (see page 16).

1. After turning weather reception on, press 8 . The current channel flashes.
2. Press $(4)$ or $\Theta$ to select the channel.
3. Press $\theta$ to save the weather channel setting.

Setting the Weather Alert

1. After turning weather reception on. Press $\Theta$ twice $Y$ or - displays
2. Press $\oplus$ or $\Theta$ to select $y(O N)$.

If you activate Weather Alert and return to two - way mode. T will display.
3. Press of to save the weather alert setting

As with two-way radio reception, weather channel reception depends on how close you are to a transmitter and whether you are indoors or outdoors. Because weather channels are transmitted without codes, they may contain static or noise.

## Alerts

Channel Busy Indicator
When a channel is busy, the LED flashes twice per second.
Setting and Transmitting Call Tones
Your radio has 10 different call tones that you can transmit to other radios in your group to alert them that you want to talk.
To set a call tone:

1. With the radio on, press $\Theta 3$ times. The current call tone setting flashes and [A displays.
2. Press $\oplus$ or $\Theta$ to change and hear the call tone.
3. Press 9 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 (d).
Note: 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 is like saying Roger or Over to let others know you are finished talking.

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


## VibraCallo Alert

VibraCall is a vibrating alert that notifies you that your radio is receiving a message. This is useful in noisy environments. When the alert is on, the radio vibrates once every 30 seconds when you receive a message on the channel and code you set.

- To turn vibrating alerts on, press $\odot$ until is displayed, then press $\oplus$ to display $y$.
- To turn vibrating alerts off, press $\Theta$ until $\boldsymbol{-}$ is displayed in the same menu.


## Accessories

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

1. Turn the radio off, lift the accessory jack cover, then plug the audio accessory into the accessory port (see page 11 for accessory port location).
2. Turn the radio on. Lower the volume before placing the accessory on your head or in your ear.
3. Press (2) 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 $\Theta$.

Setting the Sensitivity Level
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. Make sure the radio is on.
2. Press $\odot$ until of displays.
3. Press $\bigodot$ ) or $\bigodot$ to select the sensitivity level:

J-High Sensitivity $\quad \vec{Z}$ - Medium Sensitivity $\quad$ - Low Sensitivity for quiet environments for most environments for noisy environments

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When you connect a VOX accessory, the radio is automatically set to the last chosen sensitivity level.
Note: If iVox is activated while setting the sensitivity level, at is displayed above of. If VOX is activated while setting the sensitivity level, an E is displayed above of.


## Patent Information

This product is manufactured under one or more of the following United States patents 58962775894292586475256990065742484 D408396 D399821 D387758 D389158 58945925893027578909857349755861850 D395882 D383745 D389827 D389139 5929825592651459536406071640 D413022 D416252 D416893 D433001

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How to Obtain Warranty Service or Other Information? To obtain service or information, please call:

| USA | Canada |
| :--- | :--- |

Two-Way Radios 1-800-638-5119 $\quad$ Two-Way radio 1-800-638-5119
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- 22 Channels 18 GMRS 7 GMSR/FRS, 7 FRS) GMISS chanerls feasete iacreased power for loniger range. 14 chsmmebs enowe badward compability wh ERS Iwo-way ratios
* 99 Interference Eliminator Codes
38 shatidand coder phea 61 exthsive tighal codes for superios inderlerence protection.
- QT Noise Filter Faers onf arwanted It ieventitstions in howy rame trofic areas
- VibraCall ${ }^{6}$ Alert Privascly alens you of an iscombig cal
- Handsfree Use (iVOX/VOX)
 will os mithout optibend accosororios.
- 8 Weather Channels kecelve NOAA weather bulctana Weation radio service hay not be
 or viag wow mus ncas huwirin tel US ur wownac way er peras altactibetsow marso in Carada. Use of tie NOAS ow Weatherodo bogo does not peribibe endorsemei! re impled endorserent by NOAN: Nationd Woather Service of Eevircensent Camada.
- Enhanced Scanning Easdy fouls your group's ilanuiel
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Malkyle destinct ringing options se your group cau idemify whis calling

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* Low Battery Alert Makthe tore and visuad dayday tellyon whem the bairery is reining doun.
* Illuminated Display Esoy to roud yoar setareb in dark places.
- Motorola Quality

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- I Year Limited Warranty For a cogy of this waramel pior so purcluse, plewe ast your rotabict.
- User's Guide Incluxded
- Batteries (not included) Bequires 3 M allaline batteries of one NiCd reclurgestibe batiery
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