



# MOTOROLA

## TALKABOUT®

### User's Guide

FRS

RECREATIONAL TWO-WAY RADIOS



**Models T6525**

- **14 Channels**

14 channels ensure backward compatibility with FRS two-way radios.

- **99 Interference Eliminator Codes**

38 standard codes plus 61 exclusive digital codes for superior interference protection.

- **QT Noise Filter**

Filters out unwanted transmissions in heavy radio traffic areas.

- **VibraCall® Alert**

Privately alerts you of an incoming call.

- **Handsfree Use (iVOX/VOX)**

Voice activation lets you talk handsfree with or without optional accessories.

- **Enhanced Scanning**

Easily finds your group's channel and code by searching all possible combinations while your home channel is scanned most frequently.

- **Audible Call Tones**

Multiple distinct ringing options so your group can identify who's calling.

- **Keypad Lock**

Prevents your settings from being accidentally changed.

- **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.

- **Motorola Quality**

Shock, drop, and temperature tested to meet Motorola's high quality standards.

- **1 Year Limited Warranty**

For a copy of this warranty prior to purchase, please ask your retailer.

- **User's Guide Included**

- **Batteries (not included)**

Requires 3 AA alkaline batteries or one NiMH rechargeable battery.



#### **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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# 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 in user guides published prior to December 1, 2002.

## 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, visit our website at [www.Motorola.com](http://www.Motorola.com).

## 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, call Motorola Product Services at 1-800-353-2729 in USA or 1-888-390-6456 TTY (Text Telephone).

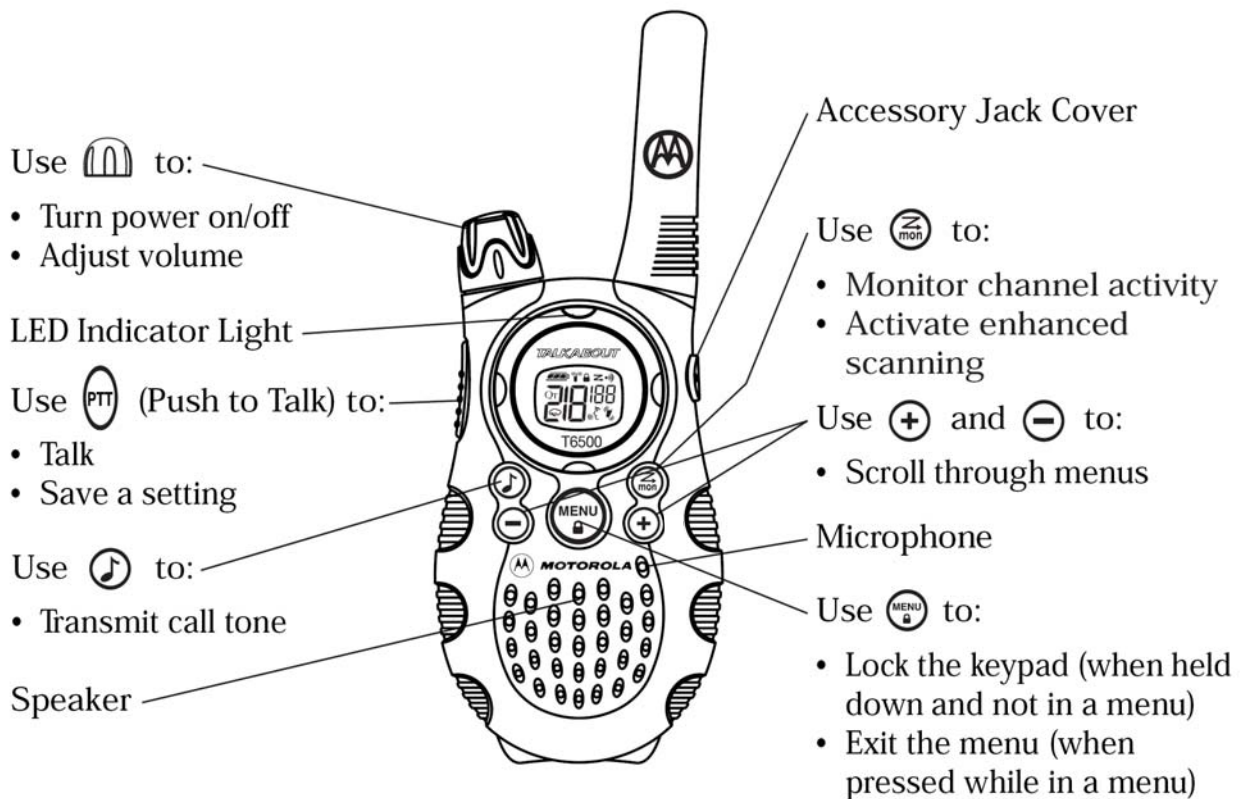
Changes or modifications not expressly approved by Motorola may void the user's authority granted by the FCC to operate this radio and should not be made. To comply with FCC requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified 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.

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.



## Control Buttons --- Models T6525



## Getting Started

### Installing the AA Batteries

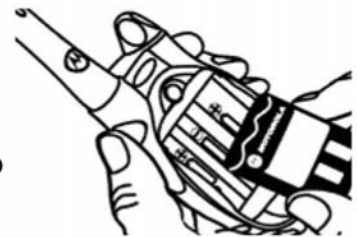
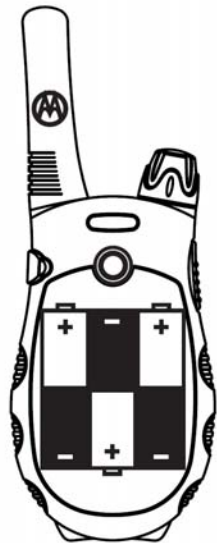
Your radio uses 3 AA Alkaline batteries.

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: **NiMH** rechargeable battery can be used instead of 3 AA Alkaline batteries. A rechargeable battery upgrade kit is available.

### Installing the **NiMH** 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 **NiMH** 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 NiMH batteries and can be placed on any flat surface, such as a desk or workbench. Charge the NiMH 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 NiMH 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. Remove the battery pocket inserts from the charger pockets.
8. With a radio facing forward, slide it into one of the charging pockets.

### Note

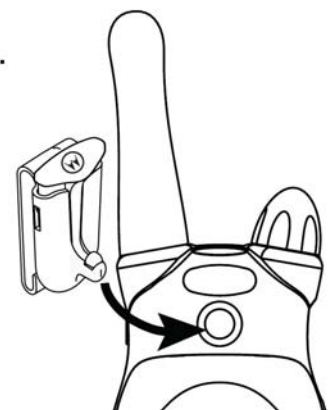
- The light on charging base will glow continuously when radio/battery is inserted.
- When moving between hot and cold temperature, do not charge the battery until the battery temperature acclimates (usually about 20 minutes).
- For optimal battery life, remove the radio or battery from the charger within 16 hours. Do not store the radio in the charger.
- Turn off the radio while in the charging tray.

## 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 InterferenceEliminator Codes.

Setting the Volume

Press and hold  while rotating  until you reach a comfortable listening level. Rotate  clockwise to increase or counterclockwise to decrease the volume. Do not hold the radio close to your ear. If the volume is set to an uncomfortable level, it could hurt you ear.

Setting a Channel


Your radio has 14 channels. And all are FRS. When the radio is on the transmitting, the display have .

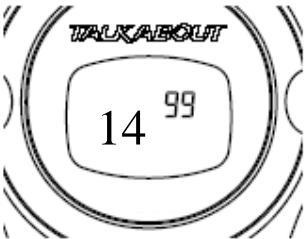
- 1. With the radio on, press . The current channel flashes.
- 2. Press  or  to set the channel.
- 3. Press  to save the channel setting.

Talking and Listening

To communicate, all radios in your group must be set to the same channel (1-14) and Interference Eliminator Code (0-99).

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.

Monitor Button

Pressing and holding  for 3 seconds allows you to listen to the volume level of the radio when you are not receiving. This allow you to adjust the volume, if necessary. You can also use  to check for activity on the current channel before you transmit (talk).

Channel	Frequency	Channel	Frequency
1	462.5625 MHz	8	467.5625 MHz
2	462.5875 MHz	9	467.5875 MHz
3	462.6125 MHz	10	467.6125 MHz
4	462.6375 MHz	11	467.6375 MHz
5	462.6625 MHz	12	467.6625 MHz
6	462.6875 MHz	13	467.6875 MHz
7	462.7125 MHz	14	467.7125 MHz









# Special Features


## Interference Eliminator Codes

Interference Eliminator Codes help minimize interference by providing a choice of code combinations. Your radio has 99 Interference Eliminator Codes. Codes 1-38 are the standard codes that appear on other FRS radios. Codes 39-99 are additional digital codes added for superior interference protection.


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. An extended press of  or  allow you to scroll through the Interference Eliminator Codes rapidly so you can quickly reach the code you want.

Note: You must set the Interference Eliminator Code to  on a radio that uses Interference Eliminator Codes to communicate with 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.


## 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 . The scan indicator  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 .

Note: If you press  while the radio is scanning, the radio transmits 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  or  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  or  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  to exit scan mode. Press  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 without 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 .  displays.
3. To temporarily disable iVox, press .  flashes intermittently.
4. To turn off iVox, 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 .

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.

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 .

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

### QT Noise Filtering




The QT noise filtering feature helps ensure uninterrupted communication with other Motorola 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  or  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  or  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 or have your call tone set to 0, 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.



## VibraCall® 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  until  is displayed, then press  to display .
- To turn vibrating alerts off, press  until  is displayed in the same menu.

## 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, 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  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 .


### 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  until  displays.
3. Press  or  to select the sensitivity level:

 = High Sensitivity  
for quiet environments

 = Medium Sensitivity  
for most environments

 = Low Sensitivity  
for noisy environments

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, a  is displayed above . If VOX is activated while setting the sensitivity level, an  is displayed above .



## Technical Specification

Channel	14
Cub-code	38 CTCSS Codes 83 CDCSS Codes
Frequency	462.5625MHz – 467.7125MHz
Channel Spacing	12.5 / 25 KHz
Transmit Power	<500mW
Talk Range	Over 3Km
Modulation	FM
Maximum Deviation	2.5KHz
Receiver Sensitivity	<0.5uV
Audio Maximum o/p	>150mW
Battery	3xAA Alkaline or NiMH Rechargeable
Battery Life Time	12hr. 5%(talk) +5%(receiving)+90(stand by)