

**MOTOROLA**  
**TALKABOUT®**

**Two-Way Radio**  
**User's Guide**

**KEM-PK14190-81**  
**Models T9580RSAME/T9680RSAME**

**For More Information**  
For further information, you may call Motorola at 1-800-638-5119 (U.S. and Canada), email us at [giantintl@callcenter.com](mailto:giantintl@callcenter.com), or visit us on the Internet at [www.motorola.com](http://www.motorola.com).

## 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 receive calls, release the PTT button.
- To transmit (talk), press the Push to Talk (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 two-way radio complies with the following RF energy exposure standards and guidelines:

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J.
- American National Standards Institute (ANSI)/Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992.
- Institute of Electrical and Electronics 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 Radiofrequency Electromagnetic Fields in the Frequency Range from 3 KHz to 300 GHz, 1999.
- Australian Communications Authority Radiocommunications (Electromagnetic Radiation—Human Exposure) Standard, 2003.
- ANATEL ANNEX to Resolution No. 303 of July 2, 2002 "Regulation of limitation of exposure to electrical, magnetic and electromagnetic fields in the radio frequency range between 9 KHz and 300GHz" and "Attachment to resolution #303 from July 2, 2002".

To ensure 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 its effective range.

*Body-Worn Operation*  
To maintain compliances 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 one inch (2.5 cm) from the body.

*Approved Accessories*  
For a list of approved Motorola accessories, visit our Web site 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. 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.

*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 onboard 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.

- People 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 there is 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.

*Medical Devices – Other*  
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 regarding the use of radios in the area where you drive, and always obey them. If you do use 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.

The use of a two-way radio while engaged in activities requiring concentration may cause distraction or otherwise impair your ability to safely participate in such activities. Always use technology safely. 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. Only radio types that are especially qualified should be used 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 radios." 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—like 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. Exercise care when removing NiMH or AA batteries. Do not use sharp or conductive tools to remove either of these batteries.

*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 a 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 extension 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 the AC adaptor cannot be replaced. If the cord is damaged, call customer service at 1-800-638-5119 (U.S. and Canada).

## 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 of the forms and 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:

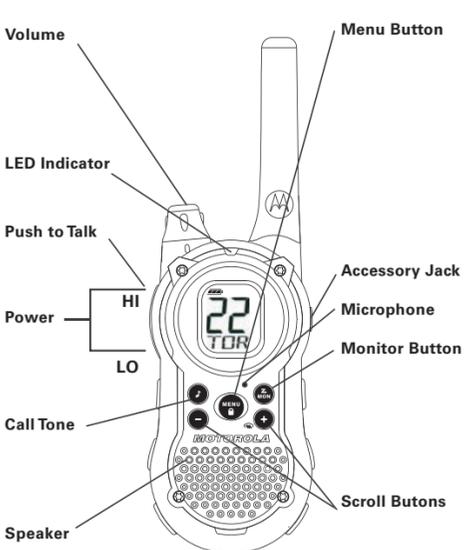
For a fax: Contact the Fax-On Demand system	For mail service: Call the FCC Forms Hotline	If you have questions about the FCC License: Call the FCC
1-202-418-0177	1-800-418-FORM (3676)	1-888-CALL-FCC (225-5322)

You may also visit the FCC's Web site at [www.fcc.gov](http://www.fcc.gov).

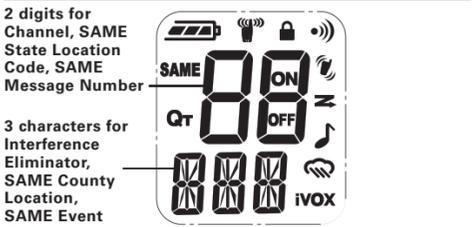
Changes or modifications not expressly approved by Motorola may void the user's authority granted by the FCC to operate this radio and should not be made. To comply with FCC requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified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



## Display Screen Guide



- Battery Meter
- Channel Power Indicator
- Lock
- Talk Confirmation Tone (Roger Beep)
- Noise Filtering
- Specific Area Message Encoding
- ON/Off for each feature
- Vibrate
- Scan
- Call Tone, Keypad Tone
- Weather Alert
- Hands-Free Use Without Accessories
- Hands-Free Use With Accessories

## Getting Started

**Installing the Batteries**  
Each radio uses 1 NiMH rechargeable battery pack or 3 AA alkaline batteries and beeps when the batteries are low.

- Installing NiMH Rechargeable Battery Pack**
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. Remove the battery pack from the clear plastic bag (Do not disassemble or unwrap the battery pack).
  4. Insert the NiMH battery pack with the diagram facing you. (The ribbon should be underneath the battery pack and should wrap around the right side of the pack for easy removal.)
  5. Reposition the battery cover and press down to secure.

- Installing the Three AA 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. Insert the three AA alkaline batteries with + and - polarity as shown inside. (The ribbon should be underneath the AA alkaline batteries and should wrap around the right side of the batteries.)
  4. Reposition the battery cover and press down to secure.

**Radio Battery Meter**  
The radio battery icon shows the battery charge level, from full to empty . When the radio has one segment left, the radio chirps periodically or after releasing (Low Battery Alert).

- Removing the NiMH Battery Pack**
1. Turn the radio off.
  2. With the back of the radio facing you, lift the battery latch up to release the battery cover and remove the cover.
  3. Pull the ribbon towards you. Carefully and slowly, lift the ribbon to remove the NiMH battery pack.
  4. Reposition the battery cover and press down to secure.

- Removing the Three AA Batteries**
1. Turn the radio off.
  2. With the back of the radio facing you, lift the battery latch up to release the battery cover and remove the cover.
  3. Pull the ribbon towards you. Carefully and slowly, lift the ribbon to remove the AA alkaline batteries.
  4. Reposition the battery cover and press down to secure.

**Notes**

- Exercise care when removing NiMH or AA 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.

**Using the Battery Charger**  
The battery 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. Follow the steps above to install a NiMH Battery Pack.
2. Plug the AC power supply cord into the jack on the desk stand.
3. Plug the AC power supply into a standard wall outlet.
4. With a radio facing forward, slide it into one of the charging pockets.

**Using the Car Charger (Optional accessory)**

1. Plug DC cord into car's 13.8V DC outlet or cigarette lighter socket.
2. Snap charger to rear of radio over charging contacts. Charger fits in one direction only.
3. An empty battery is fully charged in 14 hours.

**Notes**

- The red light will glow continuously to indicate the radio is correctly connected and charging. The light will remain red after the battery pack is fully charged.

- 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 from the charger within 16 hours. Do not store the radio while connected to the charger.
- Turn radio off while charging.

**Attaching and Removing the Belt Clip**

1. Attach belt clip to pocket or belt strap.
2. Align the belt clip post with the hole in the back of the radio.
3. Gently push until the clip clicks in place.

*To Remove*

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.

1. In the ON position, the radio chirps and briefly shows all feature icons available on the radio.
2. The display screen then shows the current channel, code and all features that are enabled.

**Setting the Volume**  
Press and hold for three seconds while rotating until you reach a comfortable listening level.

1. Rotate clockwise to increase the volume.
2. Rotate 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 your ear.

## Talking and Listening

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

1. To talk, press and hold .
  2. When you are finished talking, release .
- For maximum clarity, hold the radio two to three inches 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 five feet apart.

**Power Boost**  
To boost your radio's power up to high power, press the top portion of the button when talking. If you know your party is close by, you can conserve your battery's energy by pushing the lower part of the button to use less power.

**Note:** If you are on an FRS only channel (see channel and frequencies chart) the radio will only use low power when either portion of the is pressed.

**Monitor Button**  
Pressing and holding for three seconds allows you to listen to the volume level of the radio when you are not receiving. This allows you to adjust the volume, if necessary. You can also press to check for activity on the current channel before you talk.

**Push to Talk (PTT) 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.

## Menu Options

**Selecting the Channel**  
Your radio has 22 channels. Channels 8-14 are FRS low power only and all other channels are GMRS (See the "Channels and Frequencies" table on overleaf for details).

When you press the bottom portion of the all channels are low power . If you press the top portion of the to boost the power GMRS channels will be high power .

- Note:** When on FRS only channel top or bottom press of will only be lower power .
1. With the radio on, press . The current channel flashes.
  2. Press or and select an unused or quiet channel.
  3. Press to save the channel setting or to continue set up.

**Selecting The Interference Eliminator Code**  
Interference Eliminator Codes help minimize interference by blocking transmissions from unknown sources. Your radio has 121 Interference Eliminator Codes. Codes 1 – 38 are the standard analog codes that appear on other FRS/GMRS radios. Codes 39 – 121 are additional digital codes added for superior interference protection. 0 is the off position, no analog or digital codes are enabled.

*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 or to continue set up.

You can set a different code for each channel using this procedure. An extended press of or allows you to scroll through the Interference Code rapidly so you can quickly reach the code you want.

**Note:** You must set the Interference Eliminator Code to 0 on a radio that does use Interference Eliminator Codes to communicate with radios that do not have Interference Eliminator Codes. Select 0 for "no tone, no code" and OFF will flash on your radio's display.

**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. You have 10 call tones from which to choose.

- To set a call tone:*
1. With the radio on, press three times until the current call tone setting (0 - 10) flashes and appears.
  2. Press or to change and hear the call tone.
  3. Press to set the new call tone or to continue set up.

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 to 0 disables the call tone feature.

**Hands-Free Use Without Accessories (iVOX)**  
You can use the iVOX feature to transmit hands-free without the need for any headset accessories. Once iVOX is turned on, the radio detects your voice and transmits when you speak into the internal microphone.

1. Press until iVOX appears on the display. The current setting On/Off will flash.
2. Press or to select On or Off.
3. Press to set or to continue set up.

**Hands-Free Use With Accessories (VOX)**  
You can transmit hands-free more reliably with the use of optional headset accessories. Once VOX is turned on, the radio detects your voice and transmits when you speak.

Many accessories (sold separately) are available for your radio. For more information, visit our Web site at [www.motorola.com](http://www.motorola.com) or [shop.giantintl.com](http://shop.giantintl.com).

1. Turn the radio off and plug the VOX accessory into the accessory port.
2. Turn the radio on. VOX shows on the display.
3. Adjust the volume appropriately by rotating . Lower the volume before placing the accessory on your head or in your ear.
4. To turn off, simply remove accessory.

**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.

**Setting the Sensitivity Level When in VOX or iVOX Mode**  
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 VOX/iVOX and the level setting (1-3) appear on the display.
2. Press or to select the sensitivity level.
3. Press to set or to continue set up.

3 = High Sensitivity for quiet environments
2 = Medium Sensitivity for most environments
1 = Low Sensitivity for noisy environments

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

**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.

1. To turn vibrating alerts on, press until is displayed. The current setting will flash.
2. Press or to change the setting to On/Off.
3. Press to set or to continue set up.

**QT Noise Filtering**  
The QT noise-filtering feature helps to ensure uninterrupted communication with other Motorola radios that have this feature. This feature also filters out unwanted transmissions from other radios. This is useful in places where there is heavy radio traffic, such as amusement parks or ski resorts.

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

To turn QT noise filtering on or off:

1. Press until QT displays. The current setting On/Off will flash.
2. Press or to turn noise filtering On or Off.
3. Press to confirm your selection or to continue set up.

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.

**Keypad Tones**  
You may enable or disable the speaker key tones. You will hear the key tone each time a button is pushed.

1. Press until appears. The current setting On/Off will flash.
2. Press either or to turn On or Off.
3. Press to confirm or to continue set up.

- Note:** When the key tone feature is off, the following are not disabled:
- Transmit timeout alert tone
  - Call tone
  - Low battery alert tone or
  - The transmitted talk confirmation tone

**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.

1. With the radio on, press until the appears. The current setting On/Off flashes.
2. Press or to turn On or Off.
3. Press to set or to quit menu mode.

**Continued on back**

**T9580RSAME/T9680RSAME**

## Special Features

### Keypad Lock

*To avoid accidentally changing your radio settings:*

- Press  and hold until  displays.
- When in lock mode, 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  until  is no longer displayed.

### Scanning Channels

Use scan to search the 22 channels for transmissions from unknown parties, to find someone in your group who has accidentally changed channels, or to quickly find unused channels for your own use.

There is a priority feature and 2 modes of scanning (basic and advanced) to make your search more effective. The basic scan mode uses the channel and code combinations for each of the 22 channels as you have set them (or with the default code value of 1). The "Advanced Scan" mode will scan all channels for any and all codes, detect any code in use, and use that code value temporarily for that channel.

Priority is given to the "home channel," that is, the channel (and Interference Eliminator Code) your radio was set to when you start the scan. This means the initial channel (and code setting) is scanned more often than the other 21 channels, and your radio will respond quickly to any activity occurring on the home channel as a priority.

*To start Scanning:*

- Briefly press the  key. The scan  will appear in the display, and the radio will begin to scroll through the channel and code combinations.
- When the radio detects channel activity matching the channel and code combination, it stops scrolling and you can hear the transmission.
- To respond and talk to the person transmitting, press  within five seconds after the end of the transmission.
- The radio will resume scrolling through the channels five seconds after the end of any received activity.
- To stop scanning, briefly press the  key.

*To start Advanced Scanning:*

- Set the Interference Eliminator Code to "zero" or OFF.
- Briefly press the  key. The scan  will appear in the display, and the radio will begin to scroll through the channels. No Interference Eliminator Codes will filter what is heard.
- When the radio detects channel activity with ANY code (or NO code), it stops scrolling and you can hear the transmission. Any Interference Eliminator Code that may be in use by that party will be detected and displayed.
- To respond and talk to the person transmitting, press  within five seconds of the end of the transmission. The radio will transmit using the newly detected Interference Eliminator Code.
- The radio will resume scrolling through the channels five seconds after the end of any received activity.
- To stop scanning, briefly press the  key.

### Scanning Notes:

- If you press  while the radio is scrolling through inactive channels, the transmission will be on the "home channel". Scanning will resume five seconds after the end of your transmission. You may press the  key to stop scanning at any time.
- If the radio stops on an undesired transmission, you may immediately resume the scan by briefly pressing  or .
- If the radio repeatedly stops on an undesired transmission, you may temporarily remove that channel from the scan list by pressing and holding  or  for three seconds. You may remove more than one channel in this way.
- To restore the removed channel(s) to the scan list, turn the radio off and then back on, or exit and re-enter the scanning mode by pressing .
- You cannot remove the home channel from the scan list.
- In Advanced Scan, the detected code will only be used for one transmission. You must note the code, exit scan, and set that detected code on that channel to permanently use the detected code.

**Faceplate Removal** *(relevant only for models that this applies to)*
The faceplates snap on. They are not screwed on.

To remove the faceplate, lift at the indentation located at the center of the bottom section of the faceplate. Do not use screwdriver.

## 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

## Weather Receiver

Your radio can tune in to broadcasts by the United States National Oceanic and Atmospheric Administration (NOAA) National Weather Radio (NWR) and Environment Canada Weatheradio.

You can listen to a weather channel (see "Weather Channels and Frequencies") or set your radio to alert you to emergency weather broadcasts that interrupt routine broadcasts. When you listen to a weather channel, you cannot use your radio in scan mode or for two-way communications.

Your radio Weather Alert uses Specific Area Message Encoding (SAME) data transmitted by the National Weather Service (NWS) and Environment Canada (EC). SAME data codes and displays digital location specifications of timely warnings and alerts on hazards and weather related events and information.

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 www.weather.gov/nwr in the US or www.msc.ec.gc.ca/msb/weatheradio in Canada to view the appropriate transmitter for your area.

NWR/EC Broadcast Service Area coverage can be found at www.nws.noaa.gov/nwr/ustrames.html in the USA or www.msc.ec.gc.ca/msb/weatheradio/transmitter/index\_e.cfm in Canada.

Listeners who need to program NWR SAME receivers with the proper county and/or marine area of their choice ("CLC" in Canada) can obtain the information by telephone at 1-888-NWRSAME (1-888-697-7263) in the USA or 1-416-739-4369 in Canada.

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  for three seconds.
- To turn off, press and hold  or turn the radio off and then back on.

### Setting the Weather Channel

- After turning weather reception on, press . The current channel flashes.
- Press  or  to select the appropriate channel with good reception in your area.
- Press  to save the weather channel setting or  to continue set up.

### Setting the Weather Alert

Your radio can be set to respond to NOAA Weather Radio emergency messages when in two-way standby. On reception of an alert signal the receiver automatically switches to weather reception and a special alarm tone sounds. An audio broadcast of weather or emergency information will follow. If the SAME Location Code is set to the value for your area, the display screen will indicate the 3 letter SAME Event Code and can display the date, time of alert, and duration of the alert period. Up to 5 active SAME Event Codes are stored.

- After turning weather reception on, press  twice. On/Off displays.
- Press  or  to select On/Off. If you activate Weather Alert and return to two-way mode,  will display.
- Press  to save the weather channel setting or  to continue set up.

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. Weather channels may contain static or noise.

### Enabling Weather Alert

To enable the Weather Alert mode, return to 2-way mode after programming. Press and hold  for three seconds. The radio is now able to function in two-way weather alert mode. When not transmitting or receiving a two-way signal, the radio will monitor the selected weather channel for alerts for the user's location code.

Weather Alert will not function while actively transmitting or receiving in two-way mode. To avoid missing a Weather Alert message, the 2-way channel should be changed to a relatively quiet channel and use an Interference Eliminator Code other than the default Channel 1 Code 1 setting.

### Setting the SAME Location Code

The NWS/EC has assigned a 6 digit value for each area, typically by State and County. The radio uses only the second through sixth digits of the location code and will respond to any event regardless of the first digit. The second and third digits are the 2-digit state/equivalent territory identifier SS; the last three digits are the county or equivalent area identifier CCC. Omit the leading digit (usually zero) and use only the last 5 digits when programming the receiver.

- After turning weather reception on, press  three times. 00 and 000 display. The flashing digit will be selected to match the location code desired.
- Press  or  to select the appropriate value, then  to advance to the next digit. Continue until all 5 digits SS and CCC are programmed. The first digit (usually 0) in the SAME Location Code is not used by the radio.
- Press  or  to save the SAME location code setting and exit weather set up.

### Viewing SAME Event Codes

When your receiver has decoded an alert, a three letter code representing the alert type is displayed at the bottom of the screen. See the SAME Event Codes table for codes and meanings.

The SAME Location Code must be a non-zero value (default setting) to view Event Codes. If no Location Code is entered, the receiver will alert for all events, regardless of location or type, and the Weather Receiver will not mute at the end of the emergency voice announcement.

## Weather Receiver (continued)

Press and hold  for 3 seconds to exit weather reception mode at any time.

If the SAME Location Code has been set, the display backlight will flash for the duration of the voice announcement. At the end of the announcement, the radio returns to the FRS/GMRS channel and resumes monitoring the weather channel for additional alerts.

Up to 5 active event codes are stored. The SAME display icon will flash as a reminder when an event code has not been reviewed. Press  once to review these events. The  and  will scroll through the event codes (if active) and will be labeled 1-5 in order of reception.

Press  repeatedly on any event to display the Julian Date (1-366,) GMT time of alert (HH and MM,) and time of effectivity (HH and MM) for each event code. The Julian Date and GMT are displayed as broadcast by NOAA/EC, and would be converted to the local date and time according to the user's location and time zone.

When viewing the event code, 2-way PTT will function normally. You can display the event code and easily relay the information to other 2-way users.

## SAME Event Codes

### NWR-SAME / EAS Weather Related Events

Blizzard Warning.....	BZW
Coastal Flood Watch.....	CFA
Coastal Flood Warning.....	CFW
Dust Storm Warning.....	DSW
Flash Flood Watch.....	FFA
Flash Flood Warning.....	FFW
Flash Flood Statement.....	FFS
Flood Watch.....	FLA
Flood Warning.....	FLW
Flood Statement.....	FLS
High Wind Watch.....	HWA
High Wind Warning.....	HWW
Hurricane Watch.....	HUA
Hurricane Warning.....	HUW
Hurricane Statement.....	HLS
Severe Thunderstorm Watch.....	SVA
Severe Thunderstorm Warning.....	SVR
Severe Weather Statement.....	SVS
Special Marine Warning.....	SMW
Special Weather Statement.....	SPS
Tornado Watch.....	TOA
Tornado Warning.....	TOR
Tropical Storm Watch.....	TRA
Tropical Storm Warning.....	TRW
Tsunami Watch.....	TSA
Tsunami Warning.....	TSW
Winter Storm Watch.....	WSA
Winter Storm Warning.....	WSW

### NWR SAME / EAS Non-Weather Related Events

Emergency Action Notification.....	EAN
Emergency Action Termination.....	EAT
National Information Center.....	NIC
National Periodic Test.....	NPT
Required Monthly Test.....	RMT
Required Weekly Test.....	RWT

### NWR SAME / EAS State and Local Events

Administrative Message.....	ADR
Avalanche Watch.....	AVA
Avalanche Warning.....	AVW
Child Abduction Emergency.....	CAE
Civil Danger Warning.....	CDW
Civil Emergency Message.....	CEM
Earthquake Warning.....	EQW
Evacuation Immediate.....	EVI
Fire Warning.....	FRW
Hazardous Materials Warning.....	HMW
Law Enforcement Warning.....	LEW
Local Area Emergency.....	LAE
911 Telephone Outage Emergency.....	TOE
Nuclear Power Plant Warning.....	NUW
Radiological Hazard Warning.....	RHW
Shelter In Place Warning.....	SPW
Volcano Warning.....	VOW

### Administrative Events

Network Message Notification.....	NMN
Practice/Demo Warning.....	DMO

### Weather Channels and Frequencies

Weather Channel	Frequency	Weather Channel	Frequency
WX1	162.550 MHz	WX7	162.525 MHz
WX2	162.400 MHz	WX8	161.650 MHz
WX3	162.475 MHz	WX9	161.775 MHz
WX4	162.425 MHz	WX10	161.750 MHz
WX5	162.450 MHz	WX11	162.000 MHz
WX6	162.500 MHz		
		WX1-7	NOAA/EC (SAME)
		WX8-11	MARINE/CANADA/FR

## Warranty

**Consumer Two-Way Radio Products and Accessories purchased in the United States or Canada.**

### What Does this Warranty Cover?

Subject to the exclusions contained to the right, Giant International Ltd. warrants the Motorola branded consumer two-way radios that operate via Family Radio Service or General Mobile Radio Service that it manufactures ("Products"), the Motorola branded or certified accessories sold for use with these Products that it manufactures ("Accessories") to be free from defects in materials and workmanship under normal consumer usage for the period(s) outlined below. This limited warranty is a consumer's exclusive remedy, and applies as follows to new Motorola branded Products and Accessories manufactured by Giant International Ltd., and purchased by consumers in the United States or Canada, which are accompanied by this written warranty:

<p><b>Products Covered</b></p> <p><b>Products and Accessories</b> as defined above, unless otherwise provided for below.</p>	<p><b>Length of Coverage</b></p> <p><b>One (1) year</b> from the date of purchase by the first consumer purchaser of the product unless otherwise provided for below.</p>	<p><b>Exclusions</b></p> <p><b>Normal Wear and Tear.</b> Periodic maintenance, repair and replacement of parts due to normal wear and tear are excluded from coverage.</p> <p><b>Batteries.</b> Only batteries whose fully charged capacity falls below 80% of their rated capacity and batteries that leak are covered by this limited warranty.</p> <p><b>Abuse &amp; Misuse.</b> 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 product 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 or Giant International Ltd., are excluded from coverage.</p> <p><b>Use of Non-Motorola branded Products and Accessories.</b> Defects or damage that result from the use of Non-Motorola branded or certified Products, Accessories, Software or other peripheral equipment are excluded from coverage.</p> <p><b>Unauthorized Service or Modification.</b> Defects or damages resulting from service, testing, adjustment, installation, maintenance, alteration, or modification in any way by someone other than Motorola, Giant International Ltd. or its authorized service centers, are excluded from coverage.</p> <p><b>Altered Products.</b> 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) nonconforming or non-Motorola branded housings, or parts, are excluded from coverage.</p> <p><b>Communication Services.</b> Defects, damages, or the failure of Products or Accessories due to any communication service or signal you may subscribe to or use with the Products or Accessories is excluded from coverage.</p>
<p><b>1. <u>Decorative Accessories and Cases.</u></b> Decorative covers and cases.</p>	<p><b>1. Limited lifetime warranty</b> for the lifetime of ownership by the first consumer purchaser of the product.</p>	
<p><b>2. <u>Monaural Headsets.</u></b> Ear buds and boom headsets that transmit mono sound through a wired connection.</p>	<p><b>2. Limited lifetime warranty</b> for the lifetime of ownership by the first consumer purchaser of the product.</p>	
<p><b>3. <u>Consumer Two-Way Radio Accessories.</u></b></p>	<p><b>3. Ninety (90) days</b> from the date of purchase by the first consumer purchaser of the product.</p>	
<p><b>4. <u>Products and Accessories that are Repaired or Replaced.</u></b></p>	<p><b>4. The balance of the original warranty or for ninety (90) days</b> from the date returned to the consumer, whichever is longer.</p>	

#### Who is covered?

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

#### What will GIANT INTERNATIONAL LTD. do?

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

#### How to Obtain Warranty Service or Other Information?

To obtain service or information, please call:

USA Two-Way Radios	Canada Two-Way Radios
<b>1-800-638-5119</b>	<b>1-800-638-5119</b>
<b>giantintl@callcenter.com</b>	<b>giantintl@callcenter.com</b>

**For Accessories,** please call the telephone number designated above for the product with which they are used.

You will receive instructions on how to ship the Products or Accessories at your expense, to a GIANT INTERNATIONAL LTD. Authorized Repair Center. To obtain service, you must include: (a) a copy of your receipt, bill of sale or other comparable proof of purchase; (b) a written description of the problem; (c) the name of your service provider, if applicable; (d) the name and location of the installation facility (if applicable) and, most importantly; (e) your address and telephone number.

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Please contact customer service at 1-800-638-5119 or e-mail us at giantintl@callcenter.com for questions/comments, warranty, support or service related to this product.

#### What Other Limitations Are There?

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