

KEM-ML36100-15

The MS350R is approved for use in the US only.

For More Information

For further information, you may call Motorola at 1-800-638-5119, e-mail us at giantintl@callcenter.com or visit us on the Internet at 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

• ANATEL ANNEX to Resolution No. 533 of September 10, 2009.

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 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 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

53724: Remote Speaker with Push-to-Talk Microphone 53725: Headset with Swivel Boom Microphone

- 53727: Ear bud with Push-to-Talk Microphone
- 53728: Flexible Ear Receiver 56320: Earpiece with Boom Microphone

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

- 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 Cans 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 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 or e-mail us at giantintl@callcenter.com.

FCC Licensing Information

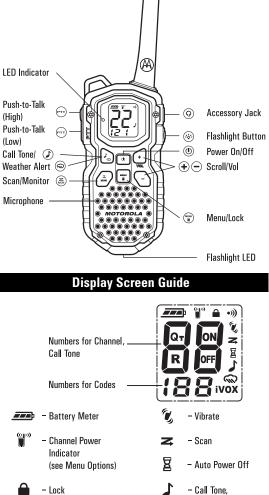
Your Motorola radio operates on General Mobile Radio Service (GMRS) frequencies and is subject to the Rules and Regulations of the Federal Communications Commission (FCC). The FCC requires that all operators using GMRS frequencies obtain a radio license before operating their equipment. To obtain the FCC forms, please visit the FCC's Web site at wireless.fcc.gov/uls/index.htm?iob=home to source form 605 and 159. which includes all the instructions you will need.

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

Changes or modifications not expressly approved by Motorola may void the user's authority granted by the FCC to operate this radio and should

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)

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

Getting Started

Waterproof

Installing the Batteries

1. Turn the radio off.

attery door

1. Turn the radio off

Lock

Talk Confirmation

QT - Noise Filtering

R – Repeater Channel

ON - On/Off for each

feature

Tone (Roger Beep)

•)))

OFF

Your radio is waterproof to IP-67 standards. It will withstand submersion under up to 1 meter of water for up to 30 minutes. The radio is resistant to water, rain, and splashes only when the battery cover and headset accessory port are sealed. Open the battery compartment door or headset port cover only when the radio is dry. Use of a headset accessory should be in dry environments only

The charging base and AC adaptor are not waterproof. Do not expose

Each radio can use either 1 NiMH rechargeable battery pack or 3 AA

Installing NiMH Rechargeable Battery Pack (Optional Accessory)

2. With the back of the radio facing you, loosen the retaining screw on

3. Remove the NiMH battery pack from the clear plastic bag (do not

4. Insert the NiMH battery pack with the diagram facing you. (The

5. Close the battery cover and tighten the retaining screw on the

around the right side of the pack for easy removal.)

ribbon should be underneath the battery pack and should wrap

2. With the back of the radio facing you, loosen the retaining screw on

alkaline batteries and beeps when the batteries are low.

not place wet radios into the charging base.

the battery door and open the cover.

Installing the Three AA Alkaline Batteries

the battery door and open the cover.

disassemble or unwrap the battery pack).

the charger to rain or snow. Charge the radios only in a dry location. Do

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. Close the battery cover and tighten the retaining screw on the

Radio Battery Meter

3.

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 (mr) (Low Battery Alert).

Removing the NiMH Battery Pack (Optional Accessory) 1 Turn the radio off

2. With the back of the radio facing you, loosen the retaining screw on the battery door to release the battery cover and open the cover. 3. Remove the NiMH battery pack by pulling the ribbon attached to the radio

4. Close the battery cover and tighten the retaining screw on the battery door

Removing the Three AA Alkaline Batteries

1. Turn the radio off

2. With the back of the radio facing you, loosen the retaining screw on the battery door, release the battery cover and open the cover. 3. Gently remove each alkaline battery by easing each battery out

individually

4. Close the battery cover and tighten the retaining screw on the battery door

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.

• The battery door must be tightly closed with the screw to maintain the waterproof seal of the radio

Using the Battery Charger (Optional Accessory)

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 Batterv Pack.

- 2. Plug the AC power supply cord into the lack 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. 5. When charging in the battery charger, the red light on the charger base will glow continuously.

Notes

– Call Tone,

iVOX - Hands-Free Use

VOX - Hands-Free Use

Without

Accessories

With Accessories

Keypad Tone

– Weather Alert

• The light will remain red after the NiMH battery pack is fully charged. When moving between hot and cold temperatures, do not charge the NiMH battery pack until the battery temperature acclimates (usually about 20 minutes).

When the radio is wet from rain or snow, thoroughly dry the surface before charging or removing the batteries.

• For optimal battery life, remove the radio from the charger within 16 hours. Do not store the radio while connected to the charger

• If the radio is kept on while charging, the charging time will be extended.

Even though the charger is connected, you may not be able to transmit a message if the battery is completely empty _____ Allow time for the battery to charge to 1 bar 🖅 before attempting to transmit a message

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.

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

Press and hold () for 3 seconds to turn the radio on or 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

3. Press and hold (1) for 3 seconds to turn the radio on. 4. Press and hold (1) for 3 seconds to turn the radio off.

Setting the Volume

Press and hold 🙈 for three seconds, then press the 📀 or 🗢 keys until 🛛 Interference Eliminator Code as your radio, press 🕖. you reach a comfortable listening level

The MS350 has 16 volume levels controlled by the \oplus \bigcirc keys

1. Press (+) to increase volume

2. Press 🕞 to decrease volume.

3. Hold 📀 or 🗢 to rapidly increase 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 (m)

2. When you are finished talking, release (PT).

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 (PTT) 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 $\overline{}$ button to use less power

Note: If you are on an FRS only channel (see "Channels and Frequencies" tables on overleaf for details) the radio will only use low power when either portion of the (m) is pressed.

Monitor Butto

Press and hold location for three seconds to latch on the MONITOR function. Tap the 📾 a second time (while in the latched monitor condition) to close or turn off the MON function. 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 (err) for 60 continuous seconds.

Menu Options

Selecting the Channel

Your radio has 22 channels plus 8 repeater channels. The channel is the frequency the radio uses to transmit. Channels 8-14 are FRS 0.5 watt only and all other channels are GMRS (See the "Channels and Frequencies" tables on overleaf for details)

- 1. With the radio on, press (). When the radio is on a 0.5
- watt channel. \vec{f} displays. When the radio is on a 1.5 watts
- channel. "" displays. The current channel flashes
- 2. Press \oplus or \bigcirc and select an unused or quiet channel.
- 3. Press (m) to save the channel setting or (m) to continue set up.
- The 8 repeater channels are disabled by default. See "Enabling

Repeater Channels" on overleaf for information on setting the radio to a reneater channel

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 analog tones, Codes 39 – 121 are digital codes. 0 is the off position, no analog or digital codes are enabled (see interference eliminator tone and code values table on overleaf)

To set the code for a channel:

- 1. Press muntil the code starts to flash.
- 2. Press (+) or (-) to select the code.

3. Press (\overline{rr}) to save the code setting or (\overline{a}) 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.

When setting codes for repeater channels 15R-22R, this code value is only used for receiving. The transmitted code can be set separately for repeater access. See "Selecting the Repeater Access (TX) Code" on overleaf for additional information.

Note: You must set the Interference Eliminator Code to 0 to communicate with radios that do not have Interference Eliminator Codes.

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. Your radio has 10 call tones from which to choose, including 5 animal sounds and 5 regular call tones.

To set a call tone:

- 1. Press $\binom{1}{1}$ three times until the current call tone setting flashes and appears.
- 2. Press 🕂 or 😑 to change and hear the call tone.
- 3. Press en 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

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 T 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 or 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.
- Adjust the volume appropriately by pressing ⊕ or ⊖. Lower the volume before placing the accessory on your head or in your ear.
 To turn off. simply remove accessory.

Notes:

- 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.
- Accessory port cover must be tightly in place to maintain the water tight seal of the radio.

Setting the Sensitivity Level When in $\vee O \times$ 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.

- Press (**) until VOX and the level setting (1 3) appear on the display.
- 2. Press $\textcircled{\bullet}$ or \bigcirc to select the sensitivity level.

3. Press e^{prr} to set or e^{prr} 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.

Q_T Noise Filtering

The Ω_T 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: Ω_T noise filtering is not available when the radio is scanning. To turn Ω_T noise filtering on or off:

To turn u_T noise intering on of on.

- Press () until Q_r displays. The current setting On/Off will flash.
 Press (+) or (−) to turn noise filtering On or Off.
- 3. Press \bigcirc to confirm your selection or a to continue set up. To transmit to a radio that has Q_T noise filtering turned on:
- 1. Select the same channel and Interference $\ensuremath{\mathsf{Eliminator}}$ Code as the other radio.
- 2. Press ${\cal D}$ to send a call tone. This allows your voice to pass through the Q_T 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 Q_T noise filter.

VibraCall™ Alert

VibraCallTM 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 a until b is displayed. The current setting will flash.

2. Press (-) or (-) to change the setting to 0n/Off.

3. Press \bigcirc to set or \bigcirc to continue set up.

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 Dappears. The current setting On/Off will flash.
- 2. Press either $\textcircled{\bullet}$ or \bigcirc to turn On or Off.
- 3. Press \overline{PT} to confirm or \overline{P} 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. Talk Confirmation Tone is disabled in repeater mode on channels 15R-22R.

- With the radio on, press (iii) until the •)) appears. The current setting On/Off flashes.
- 2. Press 🛨 or 😑 to turn On or Off.
- 3. Press 🖭 to set or 🐨 to continue setup.

Enabling Repeater Channels

Use of a repeater can greatly increase the radio range and coverage area. Repeater use must be coordinated with the owner of the repeate Be sure to understand and follow the sharing and usage rules for each repeater system.

- With the radio on, press (a) until the R appears. The current setting ON/OFF will flash.
- 2. Press 🕂 or 🖃 to select ON or OFF.
- 3. Press (PTT) to save the setting or (TB) to continue set up.

After enabling the repeater channels, you will be able to select channels 15R-22R. Refer to the "Selecting the Channel" section on page one.

Selecting the Repeater Access (TX) Code

When a repeater channel is selected, an additional menu option is available for setting the transmitted Interference Eliminator Code. Many repeaters will require a specific value setting to activate the repeater or your transmissions. See the table "INTERFERENCE ELIMINATOR TONE / CODE VALUES" for detailed information.

- 1. With the radio on, press () repeatedly until the (), the R, and the current setting flash.
- 2. Press 🕂 or 🖃 to select the code.
- 3. Press 🖭 or 🗃 to exit menu mode.

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. 0 is the off position.

Special Features

Built-in Flashlight

Press and hold the flashlight button to turn and keep the light on. The switch functions as a momentary control for the light.

Note: Turn off the flashlight when not in use to conserve battery power Keypad Lock

- To avoid accidentally changing your radio settings:
- 1. Press and hold 🕋 until 🔒 displays.
- When in lock mode, you cannot turn the radio on or off, adjust the volume, receive, transmit, send a call tone, or monitor channels. All functions are locked.
- To unlock the radio, press and hold $\widehat{\ensuremath{\mathbb{G}}}$ until $\begin{tabular}{ll} \widehat{\ensuremath{\mathbb{G}}}\ensuremath{\mathbb{G}}$ 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 is 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 Z 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.
- 3. To respond and talk to the person transmitting, press m within five seconds after the end of the transmission.
- 4. The radio will resume scrolling through the channels five seconds after the end of any received activity.
- 5. To stop scanning, briefly press the 🗟 key.
- To start Advanced Scanning:
- 1. Set the Interference Eliminator Code to "zero" or OFF.

- 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 (m) within five seconds of the end of the transmission. The radio will transmit using the newly detected Interference Eliminator Code.
- 5. The radio will resume scrolling through the channels five seconds after the end of any received activity.
- 6. To stop scanning, briefly press the $\overline{\mathbb{R}}$ key.

Scanning Notes:

communications.

appropriate transmitter for your area.

Setting the Weather Channel

reception in your area.

Setting the Weather Alert

information

channel flashes

Your radio receives weather frequencies

endorsement by NOAA's National Weather Service

Turning Weather Channel Reception On and Off

3. Press (PTT) to save the weather channel setting.

return to two-way mode, 📿 will display.

3. Press 🖭 to save the Weather Alert setting.

4. Press (+) to return to two-way mode.

transmitting or receiving in two-way mode.

- If you press for 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 stop scanning at any time.
- 2. If the radio stops on an undesired transmission, you may immediately resume the scan by briefly pressing or .
- 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 (a).
- 5. 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.

Weather Receiver

Your radio can tune in to broadcasts by the United States National Oceanic and Atmospheric Administration (NOAA) Weather Radio. You can listen to a weather channel (see "Weather Channels and

Frequencies" table for details) 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

transmitters broadcast watches, forecasts, and other information 24 hours

service may be limited. Please check with your local weather office for

The use of the NOAA logo does not provide an endorsement or implied

1. To turn weather reception on, press (+) and hold for 3 seconds.

2. To turn off, press (+) or turn the radio off and then back on.

1. After turning weather reception on, press 🗊 . The current

2. Press \bigoplus or \bigoplus to select the appropriate channel with good

Your radio can be set to respond to NOAA Weather Radio emergency

1. After turning weather reception on, press () twice, On/Off displays.

2. Press (+) or (-) to select On/Off. If you activate Weather Alert and

As with two-way radio reception, weather channel reception depends on

outdoors. Because weather channels are transmitted without codes, they

may contain static or noise. Weather Alert will not function while actively

how close you are to a transmitter and whether you are indoors or

messages. A special alarm tone sounds an alert and turns on the

weather receiver to give you immediate weather and emergency

frequency and details, or visit www.weather.gov/nwr in the US to view the

Note: NOAA weather radio stations are assigned to cover specific areas and

NOAA has transmitters located throughout the United States. These

Warranty

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

What Does this Warranty Cover?

FRS / GMRS SIMPLEX CHANNELS AND FREQUENCIES

GMRS/FR

GMRS/FRS

GMRS/FR

FRS

FRS

FRS

FRS

467 5500

467 5750

467.6000

467.6250

WX5

WX6

WX7

WX8

CODE

39

41

40

42

43

44

45

46

47

48

49

50

52

53

54

55

57

58

59

60

61

62

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GMRS DUPLEX REPEATER CHANNEL FREQUENCIES

CHANNEL RX (MHz) TX (MHz) CHANNEL RX (MHz) TX (MHz)

WEATHER CHANNELS AND FREQUENCIES

BX (MHz) CHANNEL BX (MHz) CHANNEL

INTERFERENCE ELIMINATOR TONE / CODE VALUES

462.6125 GMRS/FRS

462.6375 GMRS/FRS

462.6625 GMRS/FRS

462 6875 GMBS/EBS

CHANNEL FREQ (MHz)

2

3

4

5

6

8

9

10

11

15R

16R

17R

18R

CHANNEL

WX1

WX2

WX3

WX4

CODE

1

2

3

4

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

462.5625

462.5875

462.7125

467.5625

467.5875

467.6125

467.6375

462 5500

462 5750

462.6000

462.6250

162,550

162.400

162.475

162.425

(Hz)

67.0

71.9

74.4

77.0

797

82 5

85.4

88.5

91.5

94.8

974

100.0

103.5

107.2

110.9

114.8

118.8

123.0

127.3

131.8

136.5

141.3

146 2

151 4

156.7

162.2

167.9

173.8

179.9

186.2

192.8

203.5

210 7

218 1

225.7

233.6

241.8

250.3

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TYPE CHANNEL FREQ (MHz)

12

13

14

15

16

17

18

19

20

21

19R

20R

21R

22R

162.450

162.500

162.525

161.650

(OCTAL)

023

025

031

032

043

047

051

054

065

071

072

074

114

115

116

131

132

134

143

155

156

162

165

172

174

205

223

226

243

244

245

251

261

263

265

271

306

311

152

125

073

026

22

467.6625

467.6875

467.7125

462.5500

462 6000

462.6250

462.6500

462.6750

462 6500

462 6750

462,7000

462.7250

WX9

WX10

WX11

CODE

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

462.5750 GMRS

462.7000 GMRS

462.7250 GMRS

TYPE

FRS

FRS

FRS

GMRS

GMBS

GMRS

GMRS

GMRS

467 6500

467 6750

467 7000

467.7250

RX (MHz)

161.775

161.750

162.000

(OCTAL)

315

331

343

346

351

364

365

371

411

412

413

423

431

432

445

464

465

466

503

506

516

532

546

565

606

612

624

627

631

632

654

662

664

703

712

723

731

732

734

743

754

Pro

de

oth

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