

# SAFETY AND GENERAL INFORMATION

Important Information for Safe and Efficient Operation Please read this information before using your radio.

#### 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, do not transmit more than 50% of the time. Transmitting a maximum of 50% of the time, is important as the radio generates measurable RF energy exposure only when transmitting (in terms of measuring standards compliance).

## Antenna Care

Do not try to modify the antenna. Unauthorized antennas, modifications, or attachments could damage the radio and may violate FCC regulations.

### Two-way Radio Operation

When using your radio as a traditional two-way radio, hold the radio in a vertical position with the mirrorphone 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 an approved clip, holder, holster, ease, or

body harness for this product. Use of non-approved accessories may exceed FCC/Health Canada RF exposure guidelines. Keep at least 1 inch (2.5 cm) from your body when transmitting if you do not use one of the supplied or approved body-worn accessories.

## Approved Accessories

For a list of approved RCA accessories, visit our Web site at www.RCA.com.

# **OPERATIONAL CAUTIONS**

#### 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.

Note: 1. Turn radio off while in charging tray.

2. When your radio is plugged into the AC power adapter, your radio will not work.

# FCC LICENSING INFORMATION

Your radio operates on General Mobile Radio Service (GMRS) frequencies and is subject to the Rules and Regulations of the Federal Communications Commission (FCC). The FCC requires that all operators using GMRS frequencies obtain a radio license before operating their equipment. To obtain the FCC forms, please request Form 605 and 159, which includes all forms and instructions.

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

For a Fax:	For Mail Service:	If You Have Questions	
Contact the Fax-On-	Call the FCC Forms	about the FCC License:	
Demand system	Hotline	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 http://www.lcc.gov.

Changes or modifications not expressly approved 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.

FCC Statements:

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.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the

interference by one or more of the following measures:

\*\* Reorient or relocate the receiving antenna.

\*\* Increase the separation between the equipment and receiver.

\* Connect the equipment into an outlet on a circuit different from that to which the

Consult the dealer or an experienced radio/TV technician for help.

# CONTROL BUTTONS AND DISPLAY ICONS-MODEL R1070 SERIES

- Antenna
- LED The red light stays on when transmitting
- 3. PTT Boost
- 4. PTT
- Vol+
  - MUN

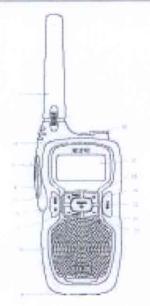
Monitor/ Scan channels

- Vol-
- 8. Loud speaker
- 9. Plug-in charge jack
- 10. Mic
- 11.

6.

- 12. MENU
- 13. CALL
- 14.
- LCD screen Displays selected channel and other settings
- 16. Headset Jack port

17.





Battery meter - Shows the battery level

Channel display digit

Interference Eliminator Code display digit

CA - Shows the call melody

VOX - Appears when the VOX function is turned on for hands-free use

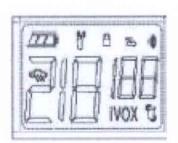
IVOX - Appears when the baby monitor function is turned on



Keypad locked



Talk confirmation tone



## **GETTING STARTED**

Congratulations on your purchase of this state-of-the-art RCA two-way radio!

Please read this operation manual carefully before using your new radio to ensure that you operate it both correctly and safely.

Installing the Batteries

Your radio uses four AA alkaline batteries and beeps when the batteries are low,

- 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. Insert four AA alkaline batteries as shown on the inside of the battery compartment.
- 4. Reposition the battery cover and press down to secure.



NOTE: The R1070 model radio can use a NiMH rechargeable battery instead of four AA batteries. A rechargeable battery upgrade kit is available.

#### Installing the NiMH Battery Pack:

- 1. Follow step 2 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 you release the PTT button. 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.

## Turning Your Radio On and Off

To turn on, press and hold the. button until the radio chirps and briefly shows icons of all of your radio's available features for a brief period. The display then scrolls through the available channels (1-22) and Interference Eliminator Codes (0-99).

To turn off the radio, press and hold the button until the display becomes blank.

## **INITIAL SETUP**

## Selecting a Channel

The channel is the frequency that your radio uses to transmit. Your radio has multiple channels that can be shared on a "take turns" basis. For uninterrupted communication, do not talk on a channel if someone else if using it.

Your radio has 22 channels. Channels 1-7 and 15-22 are one watt (two watts if you press PTT Boost). Channels 8-14 are 0.5 watt (one watt if using power boost).

To check for activity on a channel before you talk, press and hold MON Z. If you hear static, the channel is clear to use.

- 1. In standby mode, the channel number displays on the LCD
- 2. Press + or to set the channel
- Press or PTT Boost to save the channel setting or MENU to continue set up.

### 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

Interference Eliminator Code

Interference Eliminator Codes help minimize interference by providing you with a choice of code combinations. Your radio has 99 Interference Eliminator Codes. Codes 1 – 99 are the standard codes that appear on other FRS/GMRS radios.

To set the code for a channel:

- 1. Press MENU until the code starts to flash.
- Press + or to select the code.
- 3. Press PTT to save the code setting or MENU to continue set up.

You can set a different code for each channel using this procedure. Press and hold + or - 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 uses Interference Eliminator Codes to communicate with radios that do not have Interference Eliminator Codes. Select 0 for "no tone, no code"

Scanning Channels

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

To start scanning, briefly press and release MON Z, The scan indicator displays "Z" and the radio begins to scroll through the channel and Interference Eliminator Code combinations. When the radio detects channel activity, it stops scanning and you can hear the transmission. To respond to

the transmission, press or PTT Boost within five seconds.

To stop scanning, briefly press and release MON Z.

Note: If your radio's interference Eliminator Code is set to while scanning, the radio checks for activity on each channel regardless of the code used on the channel. If your radio's Interference

Eliminator Code is set to 1-99, the radio checks for activity only on channels using codes 1-99 and ignores channels using code  $\square$ .

### 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

## Channel Busy Indicator

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

## 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 or PTT Boost. Hold the radio 2 to 3 inches away from your mouth when talking.
- 2. When you finished talking, release or PTT Boost.

  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, press PTT Boost (at 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 PTT button to use less power.

Note: If you are on a FRS only channel (see channel and frequencies chart) the radio will only use low power when either PTT Boost or PTT is pressed.

### Setting the Volume

When powered up, simply press vol + or vol - button to adjust your volume to a comfortable listening level. When you are setting the volume, you will see a "V" on the screen.

Be sure not to hold the radio too close to your ear. If the volume is set too high, it could hurt your ear.

#### Monitor Button

Pressing and holding MON Z for three seconds allows you to check for activity on the current channel before you talk.

### Call Tones

Setting and Transmitting Call Tones

Your radio can transmit different call tones to other radios in your group to 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 MENU until the current call tone setting flashes and CA appears.
- 2. Press + or to change and hear the call tone.
- 3. Press MENU or Or PTT Boost 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 CALL.

Note: Setting the call to 0 disables the call tone feature.

### Transmitting a Talk Confirmation Tone

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

To turn talk confirmation on, press and hold + while you turn the radio on. When you release or PTT Boost after transmitting, your confirmation tone transmits and displays.

To turn the talk confirmation tone off, turn your radio off and then turn it back on while pressing and holding +.

### SPECIAL FEATURES

### Push to Talk (PTT) Timeout Timer

To prevent accidental transmissions and to save battery life, the radio emits a continuous warning tone and stops transmitting if you press PTT for 60 continuous seconds.

#### Keypad Lock

To avoid accidentally changing your radio settings:

- Press and hold MENU for three seconds of until displays.
- 2. Press + or to select "y" or "-" to set key lock on or off.
- When in lock mode, you can turn the radio on and off, receive, transmit, send a call tone, and monitor channels. All other functions are locked.

To unlock the radio, press and hold MENU for three seconds until a is no longer displayed.

#### Removing Channels from the Scan List (Nuisance Delete Feature)

To prevent the radio from scanning a channel, press and hold + or - for at least three seconds, then release. This temporarily removes the channel from the scan list.

To restore the channels, 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.

## Baby Monitor Feature

Your radios may be used as a baby monitor. To use this feature:

- 1. Turn off your radio.
- Turn your radio on with button pressed.
   The "IVOX" icon will appear in the display to indicate that the baby monitor feature is active.
   To transmit, speak into the radio microphone. To receive, simply stop talking.
- Pressing or PTT Boost to transmit will disable the baby monitor feature.
- Press or PTT Boost button for a very short time to activate the baby monitor again.
   IVOX will appear on the screen again.

Note: When using the baby monitor feature, there is a short delay after you start talking, before the radio transmits.

### Hands-Free Use with Accessories (VOX)

You can transmit hands-free 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 firmly plug the VOX accessory into the accessory port.
- 2. Turn the radio on, and then turn the volume down. VOX will flash on the display.
- 3. Adjust the volume appropriately by pressing Vol + or Vol -.
- To transmit, speak into the accessory microphone. There is a short delay between the time you start talking and when the radio transmits.
- 5. To receive, simply stop talking.
- 6. To turn VOX off, press or PTT Boost and then remove the audio accessory.

#### Stopwatch

You can use your radio as a stopwatch. To use this feature:

- 1. With the radio on, press MENU until "0" "00" appears in the display.
- 2. Press + and the stopwatch will begin to run. Minutes and seconds will be shown.
- 3. While the stopwatch is running, pressing + will pause it and display the time that has passed. Note that the stopwatch doesn't quit working; it still runs in the background. If + is pressed again, the stopwatch will continue running based on the time from the start of the stopwatch, rather than the time that is shown in the pause state.

- 4. To reset the stopwatch, press while in the pause state.
- Pressing , PTT Boost or CALL will end the stopwatch feature and allow the radio to begin transmitting again. If you press and hold the MON Z key, the watch will stop and the radio will enter the monitor state. Release MON Z to quit to standby state.

Note: This timer is for your reference only. When your radio is being used as a stopwatch, you will not be able to use VOX or the baby monitor feature.

#### Auto Power Off

Your radio has an auto power off feature. To use this:

- 1. Press MENU button until displays "P" in LCD channel position.
- Use the + or button to select 0, 30, 60 or 90 minutes. If you select 0, the auto power feature is disabled. If you select 30, 60 or 90 minutes, the radio will automatically turn off when that amount of time has passed.
- In this mode, pressing any button or receiving a valid signal will reset the auto power off timer to the original setting value.

### ACCESSORIES

Many accessories (sold separately) are available for your radio. For more information, please refer to the brochure included with your radio.

#### Using Audio Accessories

- Turn the radio off. Lift the accessory jack cover and plug the audio accessory into the accessory port.
- 2. Turn the radio on, VOX will appear.
- 3. Lower the volume before placing the accessory on your head or in your ear.
- 4. Adjust the volume to a comfortable level using Vol + or Vol -.
- 5. To transmit, speak into the accessory microphone, if any.
- 6. To receive, stop talking.

## Setting the Sensitivity Level When in VOX 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. When the baby monitor feature is active, you will set its sensitivity level. Otherwise, you will set the sensitivity level of VOX.

- 1. Press MENU until VOX or IVOX displays.
- Press + or select the sensitivity level:
  - 3 = High Sensitivity for quiet environments
  - 2 = Medium Sensitivity for most environments
  - 1 = Low Sensitivity for noisy environments

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

### WARRANTY

#### What your warranty covers:

· Defects in materials or workmanship.

### For how long after your purchase:

 One year, from date of purchase. (The warranty period for rental units begins with the first rental or 45 days from date of shipment to the rental firm, whichever comes first.)

#### What we will do:

 Provide you with a new or, at our option, a refurbished unit. The exchange unit is under warranty for the remainder of the original product's warranty period.

### How you get service:

- Properly pack your unit. Include any cables, etc., which were originally provided with the product. We recommend using the original carton and packing materials.
- "Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the
  product is within the warranty period, must be presented to obtain warranty service." For rental

firms, proof of first rental is also required. Also print your name and address and a description of the defect. Send via standard UPS or its equivalent to:

Giant International Ltd. 3500 Lenox Road, Suite 630 Atlanta, GA 30326

- · Pay any charges billed to you by the Exchange Center for service not covered by the warranty.
- Insure your shipment for loss or damage. Giant International Ltd. accepts no liability in case of damage or loss.
- · A new or refurbished unit will be shipped to you freight prepaid.

## What your warranty does not cover:

- Customer instruction. (Your Owner's Manual provides information regarding operating instructions and user controls. Any additional information, should be obtained from your dealer.)
- · Installation and setup service adjustments.
- · Batteries.
- · Damage from misuse or neglect.
- · Products which have been modified or incorporated into other products.
- · Products purchased or serviced outside the USA.
- · Acts of nature, such as but not limited to lightning damage.

Product Registration:

Please complete and mail the Product Registration Card packed with your unit. It will make it
easier to contact you should it ever be necessary. The return of the card is not required for
warranty coverage.

Limitation of Warranty:

- THE WARRANTY STATED ABOVE IS THE ONLY WARRANTY APPLICABLE TO THIS PRODUCT. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED (INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) ARE HEREBY DISCLAIMED. NO VERBAL OR WRITTEN INFORMATION GIVEN BY GIANT INTERNATIONAL LTD., ITS AGENTS, OR EMPLOYEES SHALL CREATE A GUARANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY.
- \* REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. GIANT INTERNATIONAL LTD. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT OR ARISING OUT OF ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. THIS DISCLAIMER OF WARRANTIES AND LIMITED WARRANTY ARE GOVERNED BY THE LAWS OF THE STATE OF INDIANA. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A

PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

### How state law relates to this warranty:

- Some states do not allow the exclusion nor limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts so the above limitations or exclusions may not apply to you.
- This warranty gives you specific legal rights, and you also may have other rights that vary from state to state.

If you purchased your product outside the USA:

· This warranty does not apply. Contact your dealer for warranty information.

### FOR MORE INFORMATION

For further information, you may call RCA at 1-800-638-5243 (U.S. and Canada) or visit us on the Internet at <a href="http://www.RCA.com">http://www.RCA.com</a>.