Two-Way Radio
User Guide

For More Information
for further information, you may call Motorola solutions, Inc. at 1-800-418-0177 or visit us on the Internet at motorolasolutions.com or visit us at the address below:

Read This Information Before Using Your Radios.
The information provided in this document augments 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/contributed environment exposure limits, always adhere to the following procedures:

- Transmit no more than 50% of the time.
- To receive calls, release the Push-to-Talk (PTT) button.
- To transmit (talk), press the PTT button.
- Transmitting 50% of the time, or less, is important because the radio generates measurable RF energy exposure only when transmitting (in terms of measuring standards completed).

Exposure to Radio Frequency Energy
Your Motorola two-way radio complies with the following RF energy exposure standards:


- American National Standards Institute (ANSI) Institute of Electrical and Electronic Engineers (IEEE) C95.1-1992

- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition

- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998


- ANATEL: ANATEL to Resolution No. 350 of July 2, 2002

- ANATEL: ANATEL to Resolution No. 530 of September 13, 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
Artefact Care
Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the radio and violate FCC regulations.

Do Not hold the antenna when the radio is "IN USE." Holding the antenna affects the effective range.

Body-Worn Operation
To maintain compliance with FCC/Health Canada RF exposure guidelines, if you wear a radio on your body when transmitting, always place the radio in a Motorola-supplied or approved clip, holder, case, or belt harness for this product. Use of non-Motorola-supplied or 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 attached accessory, position the radio and its antenna at least one inch (2.5 cm) from the body.

Approved Accessories
Two-Way Radio Inter-Operability
The information provided in this document supersedes the general regulations; 47 CFR part 2 sub-part J.

Important Information on Safe and Efficient Operation
Population/Uncontrolled Environment Limits, Always Adhere to

To reduce the risk of damage to the radio or personal injury, always keep the radio at least one inch (2.5 cm) from your body when transmitting.

All batteries can cause property damage and/or bodily injury such as burns if a conductive material—like jewelry, keys or bashed conductors—are exposed herein. The conductive material can 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 Charging Safety Instructions:

- Do not expose the charger to rain or snow.
- Do not operate or disassemble the charger if it has received a sharp blow, or has been dropped or damaged in any way.
- Do not use the charger with batteries other than the ones specified.
- Do not attempt to recharge batteries that are damaged or swollen.
- Do not recharge the batteries at temperatures lower than 0 °C or higher than 40 °C.

Installation of the Batteries
Each radios uses 1 NiMH rechargeable battery pack or 3 AA alkaline batteries and beeps when the batteries are low.

Motorola recommends the following 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. Remove the NiMH battery pack from the clear plastic bag before disassembling or replacing the battery pack.
4. Insert the NiMH battery pack with the snap facing you.
5. Reassemble the battery cover and press down to secure.

Installing the Three AA Alkaline Batteries (Optional Accessory)

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. Insert three AA alkaline batteries with + end + polarities as shown inside.
4. Reassemble the battery cover and press down to secure.

Radio Battery Meter
The radio battery meter shows the radio battery charge level, from full to empty. When the radio enters battery save mode, the radio charged symbol may flash or remain lit (Low Battery Alert).

Transmission

To communicate, all radios in your group must be set to the same frequency in the same channel in your group.

1. To talk, press and hold the PTT button.
2. When you are finished talking, release the PTT button.
3. To receive, release the PTT button.

Talking and Listening
Your radio is designed to maximize performance and transmission range. Do not use the radios closer than five feet apart.

Notes:

- This radio does not have interference Eliminator Codes. To communicate with radios that use Interference Eliminator Codes, the Interference Eliminator Code must be set to "0.

Monitor Button
Pressing and holding the 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 check battery level by pressing the monitor button and pressing the talk button while the radio is on.

Push-to-Talk Timed Timer
To set a timed timer for communications and save battery life, the radio sends a continuous warning tone and stops transmitting if you press for 88 continuous seconds.

Display Screen Guide

Numbers For Channel, Call Tone

- Transmitting
- Receiving
- + AUTO POWER OFF
- Talk Confirmation Tone(Rope,Beep)
- V-Volume
- T-Timer

Getting Started

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Special Features

Keypad Lock

To avoid accidentally changing your radio settings you can lock your keypad:
1. Press and hold until the are displayed.
2. When the lock mode, you can turn the radio on and off, receive, transmit, send a call tone, and monitor channels. All other functions are locked.

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.
1. Start a scan.
   a. Briefly press the . The scan will begin to scroll through the channel.
   b. When the radio detects a channel activity the channel it stops and you can hear the transmission.
2. To reprogram and talk to the person transmitting, press within five seconds after the end of the transmission.
3. The radio will resume scanning through the channels five seconds after the end of any received activity.
4. To stop scanning, briefly press the .

Scanning Notes

If you press and hold the radio is scanning 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.
1. If the radio stops on an undesired transmission, you may immediately resume the scan by briefly pressing or .
2. 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.
3. 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 .
4. You can remove the home channel from the scan list.

Use With Accessories

You can transmit more reliably with the use of optional PTT headset accessories. A PTT headset allows privacy to others around you while you are transmitting.

Many accessories (sold separately) are available for your radio. For more information, visit our Web site at www.motorolasolutions.com or shop.giantintl.com.

1. Turn the radio off and plug the PTT accessory into the accessory (4).
2. Turn the radio on. You may now press the PTT on the accessory microphone instead of the radio key.
3. Adjust the volume appropriately by pressing or .

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 replacement products or accessories to replace the Products or Accessories due to any communication service or otherw is otherwise provided for below.

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

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You will receive instructions on how to ship the Products or Accessories at your expense, to 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; (d) applicable; (e) the name and location of the installation facility (if applicable) and, most importantly, (f) your address and telephone number.

MD Series

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