

# **Owner's Manual**

For Models GXT-250 GMRS/FRS Radio

#### **FEATURING**

- 22 Channels
- 38 CTCSS codes
- VOX
- Monitor function
- Call Alert
- Back-Lit LCD
- Scan
- Roger Beep Tone



This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device does not cause harmful interference, and (2) this radio must accept any interference received, including interference that may cause undesired operation.

To maintain compliance with FCC's RF exposure guidelines, For body-worn operation, this radio has been tested and meets the FCC RF exposure guidelines when used with Midland Radio Corp. accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines. (Tested with Headset Model: AVP-1.)

#### **Use and Care**

- 1. Do not use alcohol or cleaning solutions to clean the radio.
- 2. Do not immerse the radio in water.
- 3. Use a soft damp cloth to clean the radio
- 4. Dry the radio with dry lint-free cloth should it get wet.
- 5. Turn off the radio and remove the batteries during long-term storage.

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 $\frac{\textbf{Accessories -}}{\textbf{In the form on the following page and mail it to our address.}} \text{ or fill }$ 

#### AVP- 1



- 2 Over the ear Mic.
- Headsets w/ PTT.

\$19.95

#### AVP-2



- One Dual Desk Charger 2 Rechargeable battery packs 1 AC Adapter
- \$39.95

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#### ACCESSORIES ORDER FORM

Please send Money Order or fill in Visa/Master Card information and mail to the address below. Please DO NOT sent cash or checks. Make Money Order to Midland Radio Corporation.

Addres City: Tel:		email	State Zip Code ail:				
CC#			Type:	Exp			
Qty	Item	Price	Total	Mail To:			
•	AVP-1	\$19.95		Midland Radio Corporation			
	AVP-2	\$39.95		Consumer. Dept. 1120 Clay St.			
Sub-Total Tax (MO, CO, IL, FL only) S&H (U.S. only) Total		\$8.95	N. Kansas City MO 64116 Or Call 816.241.8500 To order online go to www.midlandradio.com				



#### Introduction

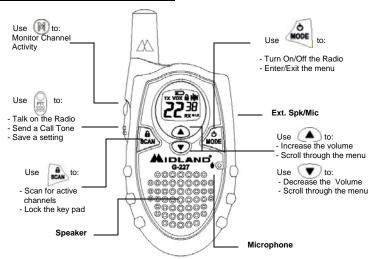
Your GXT-250 represents the state-of-the-art in high-tech engineering. Designed for General Mobile Radio Service operation, this compact package is big in performance. It is a quality piece of electronic equipment, skillfully constructed with the finest components. The circuitry is all solid-state and mounted on a rugged printed circuit board. Your GXT-250 is designed for reliable and trouble-free performance.

#### **FCC Licensing Information**

Your GXT-250 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 General Mobile Radio Service (GMRS) frequencies obtain a radio license before operating their equipment for business, personal or recreational use. A GMRS license held by an individual may be shared by immediate family members. To obtain the application form, call the FCC forms hotline at 1-800-418-3676 or go to <a href="https://www.fcc.gov">https://www.fcc.gov</a>. Please request forms 605 and 159 which include all necessary forms and instructions. For questions concerning licensing, please contact the FCC at 1-888-CALL-FCC (1-888-225-5322), or go to <a href="https://www.fcc.gov/wtb/prs/genmbl.html">https://www.fcc.gov/wtb/prs/genmbl.html</a>.



#### **Control Buttons & Indicators**

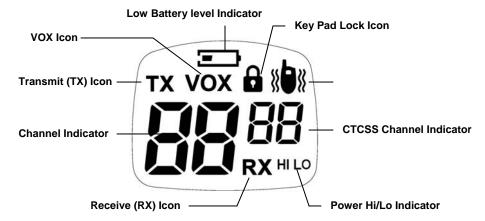


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#### **LCD Display**



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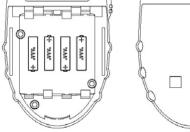


#### **Installing Batteries**

Your GXT-250 radio operates with either 4 AAA Alkaline Batteries or optional NiMH battery Pack. The belt clip should be removed (Page 18) to ease installation or removal. To install the batteries:

- 1. With the back of the radio facing you, remove the Battery Cover by sliding it down from the unit.
- 2. Insert 4 AAA batteries observing the polarity as shown. Installing the batteries incorrectly will prevent the unit from operating or can damage the unit.
- 3. Return the Battery Cover by sliding it up from the unit.

Note: Batteries are not included







#### Charging the batteries

Your GXT-250 is equipped to allow using a rechargeable NiMH battery pack (not included) which can be recharged by an A/C Charger/Adaptor (not included) through the MIC Jack of the radio, or using a Desktop Charger (not included). Batteries must be charged when the low battery icon flashes on the display. Do not charge alkaline batteries of any kind in the unit.

#### To charge through the MIC Jack:

- Connect the AC Adaptor/Charger into an A/C Wall Outlet
- Insert the Adaptor/Charger jack into the MIC Jack of the radio found at the side of the unit.

#### To charge through a Desktop Charger:

- Connect the AC Adaptor into an A/C Wall outlet
- Insert the Adaptor Jack into the Desktop charger jack
- Place the units into the Desktop Charger slot and note that the LED indicator of the Desktop Charger will light up to indicate charging function.

#### Note:

- 1. Only use batteries indicated in the manual, or our NiMH battery pack. (see page 4)
- Do not attempt to charge Alkaline batteries or any batteries or battery packs other than the one indicated in the manual. This may cause leakage and damage the unit.
- For long term storage of the radio, turn the unit OFF and remove the batteries from the radio.



#### **Operation**

**Power On/Off:** Press the button for more than 1 second to turn the radio on. Press the button for over 3 seconds to turn the radio off.

**Volume :** Press the button to increase the volume, and press the button to decrease the volume during normal operation.

**Talking and Listening :** To communicate, all radios in your group must be set to the same channel and CTCSS Code.

- For maximum clarity, hold the radio 2 to 3 inches from your mouth.
- Press and hold PTT button and speak in a normal voice into the microphone.
   The TX icon will appear continuously on the LCD Display when transmitting.
- To receive messages, release the PTT button. The RX icon will appear on the display when your radio is receiving a transmission.

Monitor button: Pressing and holding the 🕚 button for 2 seconds will let you
hear noise so you can adjust the volume level of the radio when not receiving a
signal. The M should be used to check activity on current channel before
transmitting. Press and hold the 🔞 for 2 seconds to return to normal operation.



**Call Tone:** Your GXT-250 can transmit a call tone for a fixed length of time. To send a call tone, press the **PTT** twice rapidly. The TX icon will appear during transmitting a call tone and tone can be heard on the speaker for confirmation.

**Scan :** Your GXT-250 can scan all of the 22 channels to observe for any activity. To enter the scan mode, press the button for one second. Press button again for one second to exit the scan mode.

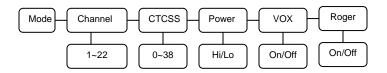
**Keypad Lock**: To avoid accidentally changing the radio operation, press the button for 5 seconds. The button will appear on the display after the second beep. When the button the button the button will be disabled. When locked, you will be able to turn the radio off and on, monitor, transmit/receive, and send a call tone. To unlock, press the for 5 seconds.

**Backlit LCD**: Your GXT-250 comes with a backlit LCD Display to enable you to view the setting in a dark environment. The backlighting can be turned on/off by pressing the M button and releasing. The backlighting will turn on for 5 seconds.



#### **User Interface**

To access the advanced features of your GXT-250, your radio has the following menu functions:



Note: The unit will automatically go to normal mode after 5 seconds of no button activity during menu setting.

Channel Selection: Your GXT-250 has 22 channels available. To change channels:

- With the radio on, press until the current channel segment flashes.
- Use the or buttons to change the channel.
- Press the PTT button to save the new channel.



**CTCSS Selection :** Your GXT-250 has 38 CTCSS codes available. The selected CTCSS code may be different for each channel. To select a CTCSS code for the current channel:

- With the desired channel selected, repeatedly press until the current CTCSS Code number or "oF" flashes.
- Use the or button to change the CTCSS code number.
- Press the PTT button to save the new CTCSS Code or press the repeatedly until you exit the menu.

**Note**: Selecting a CTCSS code of "**oF**" will disable the the CTCSS feature. To communicate between two , both the channel and CTCSS code selections must be the same. To communicate with other models and brands of radios the actual radio frequency and CTCSS frequency must be matched. The frequency chart at the back of this book are included to help with this selection. In general, the first fourteen channel selections may be used to communicate with most FRS radios.



**Power Selection :** Your GXT-250 has two transmit power levels. To select the power level on channels  $1\sim7$  and  $15\sim22$ :

- Press until the "Pr" appears on the display.
- Press or to select between high and low power levels. The Hi/Lo icon will alternately appear during setting.
- Press the PTT button to save and exit.

The HI or LO icon will appear on the display depending on your setting.

Note: On channel 8~14 no power level selection is possible

**VOX**: VOX (voice operated transmit) operation allows you to transmit without using the PTT button when using a headset. To enable VOX operation:

- Insert the headset plug(s) into the SPK/MIC jacks.
- Set the radio into VOX mode.

To set the radio to VOX Mode, repeatedly press the button until the VOX icon flashes on the LCD display. Press the or button to turn the VOX on or off, an "on" or "oF" will appear on the display during setting. The VOX icon will appear on the LCD display if the radio is set into VOX mode.

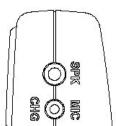


Roger Beep Tone: Whenever you release the PTT button, a "Roger Beep" tone may be transmitted to let your friends know you are finished talking. To enable the Roger Beep, press the button repeatedly until the "rb" appears on the display. Press the and to set the Roger Beep tone on or off. An "on" or "oF" will appear on the display during setting.



**External Speaker/Microphone Jack:** Your GXT-250 can be used with an optional external speaker/microphone or headset, freeing your hands for other tasks. To use an optional / speaker / microphone or headset:

- Insert the plug(s) into the SPK/MIC jacks
- Place the earbud into your ear, and adjust the mic into your desired position.





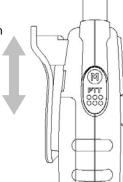
#### Belt Clip:

#### To install the belt clip:

Slide the clip up into the slot on the back of the radio until the latching mechanism clicks.

#### To remove the belt clip:

 Pull the latching tab outward, then gently slide the belt clip down toward the bottom of the radio.





#### PROBLEM

#### SOLUTION

No Power	- Check battery installation and/or replace batteries				
Cannot Receive Messages	<ul> <li>Confirm the radios have the same channel settings.</li> <li>Make sure the you are with in range of the other transceivers.</li> <li>Buildings and other obstructions may interfere with your communication.</li> </ul>				
Radio is not responding to button presses	- Make sure key lock is not on. See "Keypad Lock" (Page 12).  - Radio might need to be reset. Turn radio off then on.  - Ensure accessory microphone is set properly				
Display is dim	- Reposition or replace batteries.				
Charger not functioning	- Contacts on the back of the radio they may require cleaning Ensure the outlet the charger is plugged into is functioning properly Check that the batteries are installed in the radio properly.				

If you have a problem which you believe requires service, please call first and speak with a service technician. Many problems can be remedied over the phone without returning the unit for service.

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#### **Technical Specification**

#### A. Specification

Channels 22 Channels

Operating Frequency UHF 462.5500 ~ 467.7125 MHz

Power Source 4 AAA Alkaline or rechargeable Ni-MH Batteries

Output Power Typically 2 Watts HI, 0.5 Watts LO

#### **B.** Current Drain:

Receive : 150mA maxTransmit : 900mA max

• Standby : Average 14mA max

C. Operating Time: Based on 900mAH (Alkaline battery) capacity

Talk Time: 1~1.5 hours
Receive Time: 12 hours
Standby Time: 60 hours

• Combined (5-5-90 duty) Time: 15 hours



## **Channel Frequency Chart**

CH. No	CH. Freq.	CH. No	CH. Freq.	CH. No	CH. Freq.
1	462.5625	9	467.5875	17	462.6000
2	462.5875	10	467.6125	18	462.6250
3	462.6125	11	467.6375	19	462.6500
4	462.6375	12	467.6625	20	462.6750
5	462.6625	13	467.6875	21	462.7000
6	462.6875	14	467.7125	22	462.7250
7	462.7125	15	462.5500		
8	467.5625	16	462.5750		

## CTCSS Code Chart

Code	Freq. (Hz)								
1	67.0	9	91.5	17	118.8	25	156.7	33	210.7
2	71.9	10	94.8	18	123.0	26	162.2	34	218.1
3	74.4	11	97.4	19	127.3	27	167.9	35	225.7
4	77.0	12	100.0	20	131.8	28	173.8	36	233.6
5	79.7	13	103.5	21	136.5	29	179.9	37	241.8
6	82.5	14	107.2	22	141.3	30	186.2	38	250.3
7	85.4	15	110.9	23	146.2	31	192.8		
8	88.5	16	114.8	24	151.4	32	203.5		



#### **Limited Warranty**

Midland Radio Corporation will repair or replace, at its option without charge, any Midland FRS/GMRS transceiver which fails due to a defect in material or workmanship within One Year following the initial consumer purchase. This warranty does not apply to water damage, battery leak or abuse.

This warranty does not include any carrying cases, earphones, or antennas, which may be a part of or included with the warranted product, or the cost of labor for removal or re-installation of the product in a vehicle or other mounting.

Performance of any obligation under this warranty may be obtained by returning the warranted product, freight prepaid, along with proof of purchase to:

Midland Radio Corporation Warranty Service Department 1120 Clay Street

North Kansas City, Missouri 64116

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to

Note: The above warranty applies only to merchandise purchased in the United States of America or any of the territories or possessions thereof, or from a U.S. Military exchange.

Midland Radio Corporation

1120 Clay Street

North Kansas City, MO 64116 Tel: (816) 241-8500

E-mail: mail@midlandradio.com
URL: www.midlandradio.com

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CB Radios w/ESP

2-Way Radios

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S.A.M.E. (Specific Area Message Encoding) allows this rodio to be programmed to sound an alert only when weather and other emergencies threaten the selected county (or counties). This technology eliminates all other alerts which are only intended for locations outside the selected area. Weather and other emergencies can occur at any time, day or night. Without S.A.M.E., you could be unnecessarily alerted at any hour for an emergency as far as 100 miles away.





Midland Radio Corporation 1120 Clay St. N. Kansas City MO 64116 Call 816.241.8500

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