



Owner's Manual

For Models G-225 & G-227
GMRS/FRS Radio

FEATURING

- 22 Channels
- 38 CTCSS codes
- VOX
- Monitor function
- Call Alert
- Back-Lit LCD
- Vibrate Alert (G-227 Only)
- Scan
- Roger Beep Tone

<http://www.midlandradio.com>



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:22540 and Earpiece/Lapel-Mic Model: 22405.)

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.



Index

Accessories	4
Accessories order form	5
Introduction	6
FCC Licensing Information	6
Controls and Buttons	7
LCD Display	8
Installing Batteries	9
Charging the Batteries	10
Operation	11-18
Problems & Solution	19-20
Frequency and CTCSS Charts	21
Technical Specification	22
Warranty Information	23
MIDLAND Family Products	24



Accessories - Accessories can be purchased at www.midlandradio.com or fill in the form on the following page and mail it to our address.

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



ACCESSORIES ORDER FORM

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

Name: _____

Address: _____

City: _____ State _____ Zip Code _____

Tel: _____ email: _____

CC# _____ Type: _____ Exp. _____

Qty	Item	Price	Total
	AVP-1	\$19.95	
	AVP-2	\$39.95	

Sub-Total _____

Tax (MO, CO, IL, FL only) _____

S&H (U.S. only) _____

Total _____

_____ \$8.95
\$ _____

Mail To:

Midland Radio Corporation
Consumer. Dept.
1120 Clay St.
N. Kansas City MO 64116

Or Call 816.241.8500.

To order online go to
www.midlandradio.com

<http://www.midlandradio.com>



Introduction

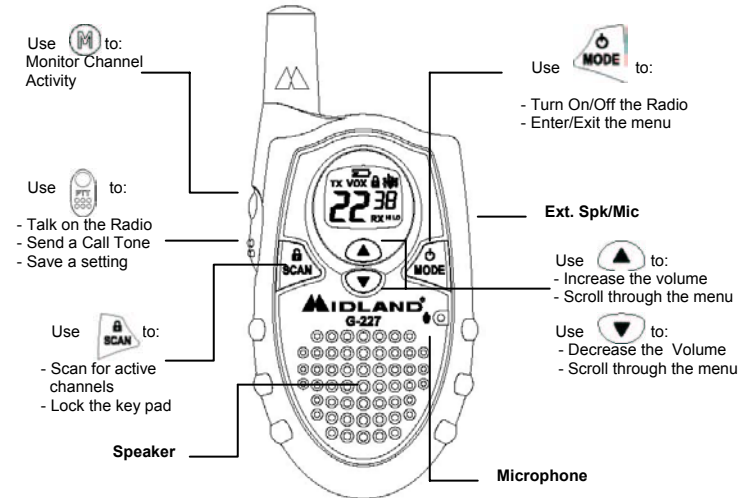
Your G-225/227 represents the state-of-the-art in high-tech engineering. Designed for General Mobile Radio Service operation, this compact package is big in performance. It is a quality piece of electronic equipment, skillfully constructed with the finest components. The circuitry is all solid-state and mounted on a rugged printed circuit board. Your G-225/227 is designed for reliable and trouble-free performance.

FCC Licensing Information

Your G-225/227 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 <http://www.fcc.gov>. 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 <http://www.fcc.gov/wtb/prs/genmbl.html>.

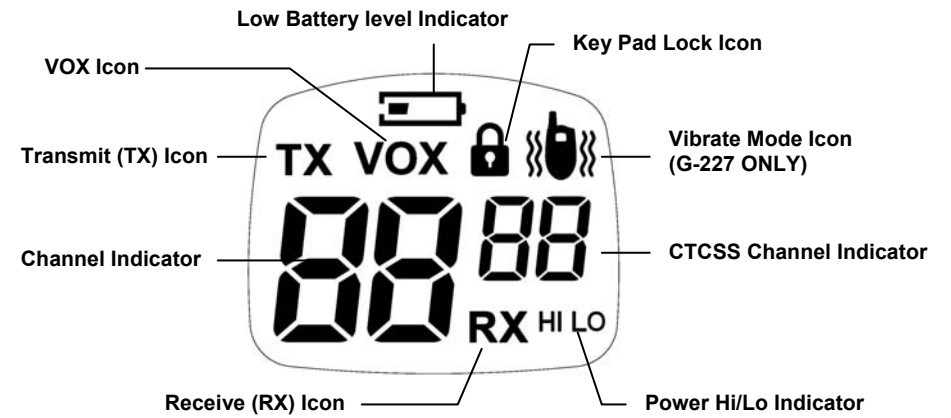


Control Buttons & Indicators





LCD Display



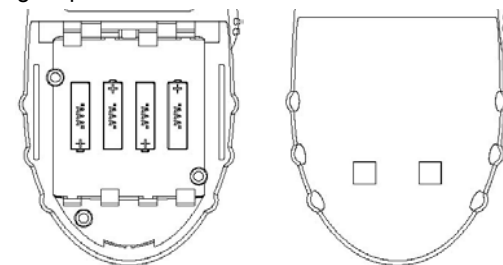


Installing Batteries

Your G-225/227 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 G-225/227 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)
2. 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.
3. 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  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 G-225/227 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 G-225/227 can scan all of the 22 channel 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. Your radio will rapidly scan each of the 22 channels and stop on any active channel. When you press the PTT button to transmit on an active channel, the scanning function will stop. To resume scanning Press and hold the  button for one second.

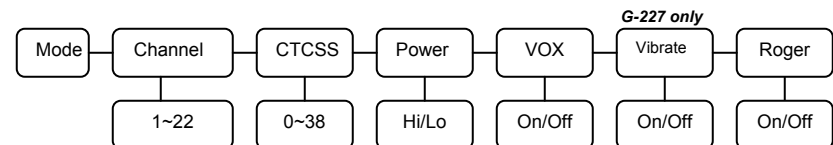
Keypad Lock : To avoid accidentally changing the radio operation, press the  button for 5 seconds . The  icon will appear on the display after the second beep. When the  is on the menu function the  and  button will be disabled. When locked, you will be able to turn the radio off and on, monitor, transmit/receive,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

Backlit LCD : Your G-225/227 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  button and releasing. The backlighting will turn on for 5 seconds.



User Interface

To access the advanced features of your G-225/227, 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 G-225/227 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 G-225/227 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 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 G-225/227 has two transmit power levels. To select the power level on channels 1~7 and 15~22:

- 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.



Vibrate Alert (G-227 only): Your G-227 is equipped with a Vibrate alert for silent operation of the radio. The radio will vibrate when receiving a call tone transmission instead of emitting a call tone sound. To set the unit at Vibrate alert mode:

- Press the  button repeatedly until the Vibrate icon flashes on the display.
- Press the  or  button to set the Vibrate alert on or off, an “on” or “oF” will appear on the display during setting.
- Press the **PTT** button to save and exit.

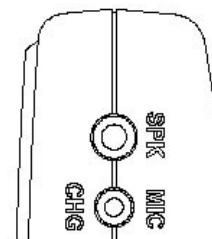
The Vibrate alert icon will appear on the display when unit is in vibrate mode.

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 G-225/227 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.





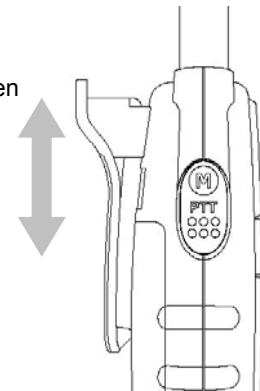
Belt Clip :

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	- Confirm the radios have the same channel settings. - Make sure the you are with in range of the other transceivers. - Buildings and other may interfere with your communication.
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.



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 max
- Transmit : 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)	Code	Freq. (Hz)	Code	Freq. (Hz)	Code	Freq. (Hz)	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 state.

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



Come see our COMPLETE PRODUCT line at www.midlandradio.com



S.A.M.E. Weather
Alert Radios



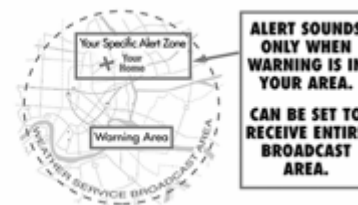
CB Radios w/ESP



2-Way Radios

What is S.A.M.E.?

S.A.M.E. (Specific Area Message Encoding) allows this radio 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

visit us at <http://www.midlandradio.com>

Note: Features & Specifications are subject to Change without notice. MIDLAND is not responsible for unintentional errors or omissions on its packaging.

<http://www.midlandradio.com>

- 24 -