

MIDLAND®
X-TRA TALK
LXT500/535/591/XT29/ALR5MOI
ALR5R/GX20/22/25/27 Series
GMRS/FRS Radio
OWNER'S MANUAL



midlandusa.com

MIDLAND RADIO CORPORATION
5900 Parretta Drive
Kansas City, MO 64120
Call 816.241.8500

We'd love to hear from you! Let us know what you think of your new Midland product on



or by visiting us at
midlandusa.com

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

Rev G

Welcome to the world of Midland electronics

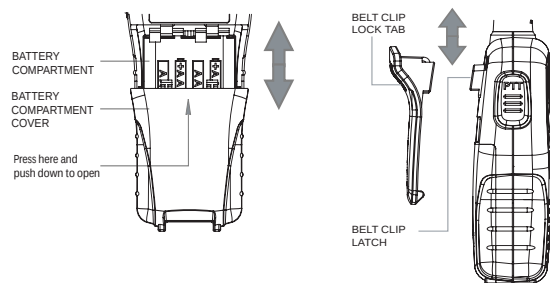
Congratulations on your purchase of a high quality MIDLAND product. Your 2-way radio represents state-of-the-art high-tech engineering. Designed for GMRS (General Mobile Radio Service) operation, this compact package is big on performance. It is a quality piece of electronic equipment, skillfully constructed with the finest components. The circuitry is all solid-state and mounted on a rugged printed circuit board. Your two-way radio is designed for reliable and trouble-free performance for years to come.

Features

- 22 GMRS/FRS Channel
- Call Alert
- Scan Function
- Roger Beep Tone
- Silent Operation
- Keypad Lock
- Power HI/LO Settings
- Auto Squelch
- Speaker / Microphone Jacks
- Battery Life Extender
- Battery Low Indicator

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 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.



INSTALLING THE BELT CLIP

To install the **BELT CLIP**, slide the clip up into the slot on the back of the radio until the **BELT CLIP LATCH** clicks. To remove the **BELT CLIP**, press the **LOCK TAB** up, then gently pull the belt clip down toward the bottom of the radio.

CHARGING THE BATTERY PACK

Your radio is equipped to use a rechargeable NiMH battery pack which can be recharged with the optional desktop charger (as described below). The radio can also be charged by inserting the AC adapter into the radio charge jack. Initial charge time is 24 hours. Charge time is about 12 hours thereafter. For maximum battery life, we recommend charging the battery pack when the low battery icon comes on. Remove the radios from the charger when the charge time expires.

To charge using a Desktop Charger:

1. Place the rechargeable battery packs in the radios.
2. Connect the AC adapter into an AC wall outlet.
3. Insert the AC adapter plug (or DC Cigarette Lighter adapter if charging in vehicle) into the desktop charger jack.
4. Place the units into the desktop charger slot and note that the LED indicator with **RED** color will light up, indicating charging function.

IMPORTANT NOTICE, FCC LICENSE REQUIRED FOR GMRS OPERATION (Only Applicable for GMRS Radio Use in the United States)

The radios operates on GMRS (General Mobile Radio Service) frequencies which require an FCC (Federal Communications Commission) license. You must be licensed prior to operating on channels 1 - 7 or 15 - 22, which comprise the GMRS channels of the radios. Serious penalties could result from unlicensed use of GMRS channels, in violation of FCC rules, as stipulated in the Communications Acts Sections 501 and 502 (amended).

You will be issued a call sign by the FCC which should be used for station identification when operating the radio on GMRS channels. You should also cooperate by engaging in permissible transmissions only, avoiding channel interference with other GMRS users, and being prudent with the length of your transmission time.

To obtain a license or ask questions about the license application, contact the FCC at 1-888-CALL FCC or go to the FCC's website: <http://www.fcc.gov> and request form 605.

Exposure To Radio Frequency Energy

Your Midland radio is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy:

- United States Federal Communications Commission, Code of Federal Regulations: 47 CFR part 2 sub-part J
- American National Standards Institute (ANSI)/Institute of Electrical & Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1999 Edition
- National Council on Radiation Protection and Measurements (NCRP) of the United States, Report 86, 1986
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998

To control your exposure and ensure compliance with the general population or uncontrolled environment exposure limits, transmit no more than 50% of the time. The radio generates measurable RF energy exposure only when transmitting.

IMPORTANT: Changes or modifications to this unit not expressly approved by **MIDLAND RADIO CORP.** could void your right to operate this unit. Your radio is set up to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the COMMUNICATOR to exceed those limitations. Any adjustment to your radio must be made by qualified technicians.

In order to ensure that the battery pack is fully charged, it is recommended that the battery pack be charged for at least 12 hours with the radio turned OFF.

1. Only use our NiMH battery pack and AC adapter.
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 to the radio.
3. For long term storage of the radio, turn the radio OFF and remove the batteries from the radio.

LOW BATTERY LEVEL INDICATOR

Your radio has a **LOW BATTERY ICON** which will only appear on the LCD display if the battery voltage level is low. At this point, the battery needs to be charged for at least 12 hrs.

OPERATING YOUR RADIO

POWER ON/OFF AND VOLUME

Press the **POWER/MENU** button for at least 3 seconds to turn the radio on/off. During Power On, the radio will beep 3 times with different tones, the LCD will display all icons for 1 second and the LCD display will indicate the last channel selected.

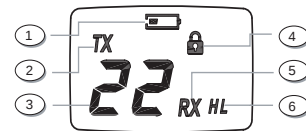
To increase/decrease the volume level, press the **▲▼** buttons during **RX** or **STANDBY** mode.

TRANSMITTING AND RECEIVING A CALL

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

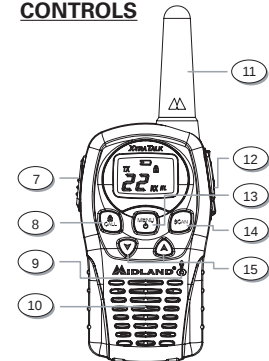
1. For maximum clarity, hold the radio 2 to 3 inches from your mouth.
2. Press and hold the **PTT** button and speak in a normal voice into the **microphone**. The **TX** icon will appear continuously on the LCD display while transmitting.
3. To receive a call, release the **PTT** button. The **RX**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

LCD DISPLAY



1. **LOW BATTERY ICON** – Indicates the battery level is low.
2. **TRANSMIT (TX) ICON** – Indicates radio is transmitting a signal.
3. **CHANNEL NUMBER** – Changes from 1-22 on GMRS/FRS band.
4. **KEY LOCK ICON** – Indicates KEY LOCK mode is on.
5. **RECEIVE (RX) ICON** – Indicates radio is receiving a transmission.
6. **TRANSMIT POWER LEVEL ICON** – Indicates TX Power setting (H/L)

CONTROLS



7. **PTT Button** – Press and hold to transmit voice communication.
8. **CALL/LOCK Button** – Press to send a CALL Alert signal. Press and hold to turn KEY LOCK on/off.
9. **MIC** – Built-in microphone.
10. **SPEAKER** – Built-in speaker.
11. **ANTENNA**
12. **EXTERNAL SPEAKER/MIC/CHG. JACK**
13. **POWER / MENU Button** – Press and hold for at least 3 seconds to turn the radio on/off. Press momentarily to access Menu mode.
14. **SCAN Button** – Press to enter SCAN mode.
15. **UP ▲ and DOWN ▼ Buttons** – Make adjustments in MENU mode.

BATTERY INSTALLATION

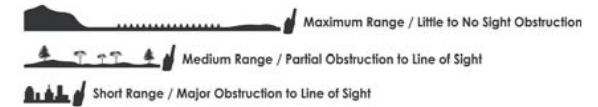
Your radio operates with either a NiMH battery pack or optional 4 AAA alkaline batteries. The belt clip should be removed to ease installation or removal of the batteries.

To install the batteries:

1. With the back of the radio facing you, remove the belt clip (see diagram on the next page) for easy access, then remove the Battery Cover by pressing down on the top center and sliding it down from the radio.
2. Insert 4 AAA batteries observing the polarity as shown. Installing the batteries incorrectly will prevent the unit from operating or may damage the unit.
3. Return the Battery Cover by sliding it up on the radio. Replace the belt clip, making sure it locks into place.

ABOUT RANGE

Your LXT Series radios are designed to give you maximum range under optimum conditions.



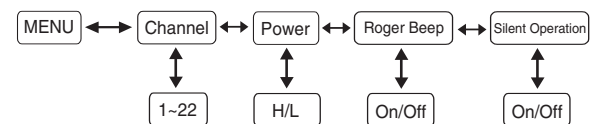
Optimum Conditions are:

- Over water
- Open rural areas without obstructions
- Flat areas where you can see the other person

To ensure you get maximum range:

- Be sure to use fresh or fully charged batteries - low batteries will cause low power conditions.
- Be sure you are on a GMRS channel - FRS channels are restricted by the FCC to low power.
- Be sure to set your radio to use Hi power.

LXT Series QUICK REFERENCE CHART



SCAN

Your radios can scan all 22 channels for activity. To enter, quickly press the **SCAN** button. Repeat the same procedure to exit. Your radio will rapidly scan each of the 22 channels and stop on any active channel for 4 seconds before resuming scan.

When you press the **PTT** button to transmit on an active channel, the scanning function will stop and remain on the active channel. To resume scanning, quickly press the **SCAN** button.

CALL ALERT

Your radios can transmit a call alert for a fixed length of time. To send a call alert, press the **CALL** button. The **TX** icon will appear while transmitting a call alert and a tone can be heard on the speaker for confirmation.

KEYPAD LOCK

To avoid accidentally changing the radio setting, press the **LOCK** button for 4 seconds. The **KEY LOCK** icon will appear on the display. **PTT** and **CALL** will still be active. Repeat the same procedure to unlock the keypad.

CHANNEL SELECTION (GMRS/FRS BAND)

Press the **MENU** button once, and then the **▲▼** buttons to select one of the 22 GMRS/FRS channels. To confirm the selection, press the **PTT** button or press the **MENU** button again to move to the next feature setting.

Note : *To communicate between two radios, all radios in your group must be set to the same channel.*

TRANSMIT (TX) POWER LEVEL SELECTION

Your radio has 2 power level settings. To select the power level on channels 1~7 and 15~22, press the **MENU** button until a **“Pr”** icon appears blinking on the display. Then press the **▲▼** buttons to select **TRANSMIT POWER LEVEL** icon (**H**: Hi/L: Lo). To confirm, press the **PTT** button or press the **MENU** button again to move to the next feature setting.

Note : *You cannot adjust the power setting on the FRS channels (8~14). They are set to Lo power per FCC regulations.*

ROGER BEEP (end of transmission) TONE

When the **PTT** button is released, the radio will beep to confirm to other users that your transmission has finished.

To turn the **ROGER BEEP** tone on, press the **MENU** button until the display shows a **“rb”** icon while on the right of the **“rb”** display, an **“oF”** icon appears. Select **“on”** by pressing the **▲▼** buttons and push the **PTT** key, or press the **MENU** button to move to the next feature setting.

To turn the **ROGER BEEP** tone off, press the **MENU** button until the display shows a **“rb”** icon while on the right of the **“rb”** display, an **“on”** icon appears. Select **“oF”** by pressing the **▲▼** buttons and push the **PTT** key, or press the **MENU** button to move to the next feature setting.

SILENT OPERATION

Your radio has a **SILENT OPERATION** mode. In this mode, all “beeps” and “tones” are disabled.

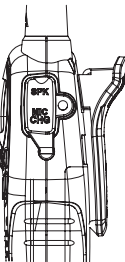
To turn the **SILENT OPERATION** mode on, press the **MENU** button until the display shows a **“bP”** icon while on the right of the **“bP”** display, an **“oF”** icon appears. Select **“on”** by pressing the **▲▼** buttons and push the **PTT** key or the **MENU** button.

To turn the **SILENT OPERATION** mode off, press the **MENU** button until the display shows a **“bP”** icon while on the right of the **“bP”** display, an **“oF”** icon appears. Select **“on”** by pressing the **▲▼** buttons and push the **PTT** key or the **MENU** button.

EXTERNAL SPEAKER/MICROPHONE JACK

Your radio 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.



Note : *You can charge a rechargeable NiMH battery pack thru the CHG Jack*

TROUBLESHOOTING GUIDE

PROBLEM	SOLUTION
No Power	- Check battery installation and/or replace batteries
Cannot Receive Messages	- Confirm the radios have the same channel settings. - Make sure that you are within range of the other transceivers. - Buildings and other structures may interfere with your communication.
Radio is not responding to button presses	- Make sure key lock is not on (See Keypad Lock). - Radio might need to be reset. Turn radio off then on.
Display is dim	- Recharge or replace batteries.
Charger not functioning	- Contacts on the bottom of the radio may require cleaning. - Ensure the outlet where the charger is plugged in is functioning properly. - Check that the battery pack is installed in the radio properly.

USE AND CARE

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

If you have a problem which you believe requires service, please call first and speak with a service technician at 816-241-8500. Many problems can be remedied over the phone without returning the unit for service.

SPECIFICATIONS

Channels 22 GMRS/FRS Channels
Operating Frequency UHF 462.5500 ~ 467.7125 MHz
Power Source 4 AAA Alkaline or 4.8V Rechargeable NiMH battery pack

GMRS/FRS FREQUENCY CHART (MHz)

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		

* Channels 8~14 are low-power FRS license free channels



ACCESSORIES ORDER FORM

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

Name: _____

Address: _____

City: _____ **State:** _____ **Zip Code:** _____

Tel: _____ **Email:** _____

CC#: _____ **Type:** _____ **Exp.:** _____

Qty	Item	Price	Total	Mail To: Midland Radio Corporation Consumer Dept. 5900 Parretta Drive Kansas City, MO 64120 ----- Or Call 816.241.8500. ----- To order online go to midlandusa.com
	AVP-1	\$19.99		
	AVP-H1	\$49.99		
	AVP-H2	\$49.99		
	AVP-H3	\$39.99		
	AVP-H4	\$39.99		
	AVP-H5	\$39.99		
	AVP-H7	\$39.99		
	AVP-H8	\$39.99		
	AVP-6	\$39.99		
	TH1	\$39.99		
	TH2	\$99.99		
	TH3	\$29.99		
	TH4	\$109.99		

Sub-Total _____

Tax (MO, FL, WA only) _____

S & H _____ **\$14.95**

(Applies to Domestic U.S. only.
For Hawaii, Alaska, and Puerto Rico S&H will be \$36.25 for 1lb and \$64.25 for 2lbs or more).

Total \$ _____

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 three years following the initial consumer purchase.

This warranty does not apply to water damage, battery leak or abuse. Accessories have a 90 day warranty from date of purchase, including any antennas, chargers, or earphones.

This warranty does not include the cost of labor for removal or re-installation of the product in a vehicle or other mounting.

For Product Purchased in the USA:

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

Midland Radio Corporation
Warranty Service Department
5900 Parretta Drive
Kansas City, MO 64120

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.

For Product Purchased in Canada:

Performance of any obligation under this warranty may be obtained by returning the warranted product, along with proof of purchase, to your dealer in Canada.

This warranty gives you specified legal rights. Additional warranty rights may be provided by law in some areas.

ACCESSORIES

Accessories can be purchased at midlandusa.com or by filling in the form on the following page and mailing it to the address on the form.

AVP-1



- 2 Over the Ear Mic. Headsets w/ PTT
- **\$19.99**

AVP-H4



- 2 Ear Wrap Headsets
- **\$39.99**

AVP-H1



- 1 Open Face Helmet Microphone Kit
- **\$49.99**

AVP-H5



- 2 Behind the Head Headsets
- **\$39.99**

AVP-H2



- 1 Closed Face Helmet Microphone Kit
- **\$49.99**

AVP-H7



- 2 Mossy Oak Around the Ear Headsets with Boom Mic
- **\$39.99**

AVP-H3



- 2 Surveillance Headsets
- **\$39.99**

AVP-H8



- 1 Action Throat Mic with Acoustic Ear Tube
- **\$39.99**

TACTICAL HEADSETS

TH1



- Earphone Mic with Boom
- **\$39.99**

TH2



- Tactical Action Boom Mic with Tactical PTT
- **\$99.99**

TH3



- Earphone Mic with PTT
- **\$29.99**

TH4



- Action Throat Mic with Tactical PTT and Pneumatic Earphone
- **\$109.99**

AVP-6



- 1 Dual Desk Charger
- 2 Rechargeable Battery Packs
- 1 AC Adapter
- 1 DC Cigarette Lighter Adapter
- **\$39.99**

IMPORTANT: This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT: Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi même si le brouillage est susceptible d'en compromettre le fonctionnement.