

MIDLAND® X-TRA TALK LXT500/535/591/XT29/ALR5MO/ ALR5R/GX20/22/25/27 Series Two-Way 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

Welcome to the world of Midland electronics

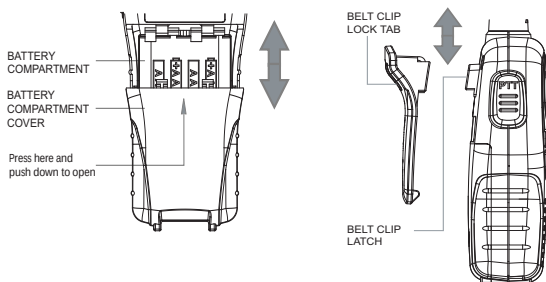
Congratulations on your purchase of a high quality MIDLAND product. Your 2-way radio represents state-of-the-art high-tech engineering. Designed for FRS (Family Radio Service) operation, this compact package is big on performance. It is a quality piece of electronic equipment, skillfully constructed 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 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

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.

Body-Worn Operation

If you wear the radio on your body when transmitting always use Midland-supplied or approved belt clip, holster, case, or body harness for this product. Use of any accessories not supplied or approved by Midland may exceed FCC/Health Canada RF exposure guidelines. If you do not use any accessories supplied or approved by Midland, **ensure the radio and its antenna are at least 1 inch (2.5cm) from your body when transmitting.**

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

When the battery voltage gets low, the **LOW BATTERY ICON**  will blink along with the message "**bt Lo**" on the display. When using the rechargeable battery pack, the low battery icon will indicate that you are very close to the batteries being exhausted. When using AAA Alkaline batteries, the low battery icon means you have about 50% of battery life remaining.

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.

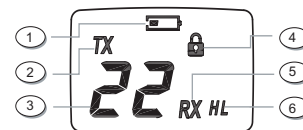
To increase/decrease the volume level, press the **▲/▼** buttons during **RX** or **STANDBY** mode.

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 at least 1 inch (2.5 cm) 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 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

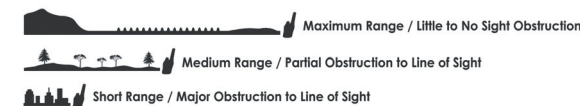
Your radio operates with either a NiMH battery pack or optional 4 AAA alkaline batteries. The belt clip should be removed to ease installation or removal of the batteries.

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.



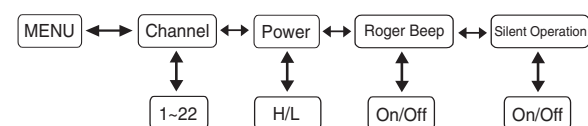
Optimum Conditions are:

- 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 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 (FRS BAND)

Press the **MENU** button once, and then the **▲▼** buttons to select one of the 22 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 channels 8~14. They are set to Lo power per FCC regulations.*

LIMITED WARRANTY (United States and Canada)

Subject to the exclusions set forth below, Midland Radio Corporation will repair or replace, at its option without charge, any Midland FRS 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, abuse or misuse of unauthorized accessories, unauthorized service or modification or altered products. Accessories have a 90 day warranty from date of purchase, including any chargers, microphones, and cables.

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

ANY IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED AS SET FORTH HEREIN AND TO THE DURATION OF THE LIMITED WARRANTY. OTHERWISE THE REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS EXPRESS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER AND IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. IN NO EVENT SHALL MIDLAND BE LIABLE, WHETHER IN CONTRACT OR TORT (INCLUDING BUT NOT LIMITED TO NEGLIGENCE, GROSS NEGLIGENCE, BODILY INJURY, PROPERTY DAMAGE AND DEATH) FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT OR ACCESSORY, OR FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE ABILITY OR INABILITY TO USE THE PRODUCTS OR ACCESSORIES TO THE FULL EXTENT THESE DAMAGES MAY BE DISCLAIMED BY LAW.

For Product Purchased in the USA:

Performance of any obligation under this warranty may be obtained by returning the warranted 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 place of purchase in Canada.

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

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 “**on**” icon appears. Select “**oF**” by pressing the **▲▼** buttons and push the **PTT** key or the **MENU** button.

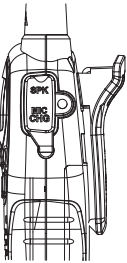
To turn the **SILENT OPERATION** mode off, press the **MENU** button until the display shows a “**bp**” icon while on the right of the “**bp**” display, an “**oF**” icon appears. Select “**on**” by pressing the **▲▼** buttons and push the **PTT** key or the **MENU** button.

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*

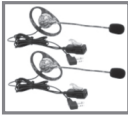


ACCESSORIES

Accessories can be purchased at midlandusa.com.



AVP1
- Over the Ear Headsets



AVPH7
- Camo Headsets with Boom Mic



AVPH2
- Closed Face Helmet Headset Kit



AVP-H8
- Acoustic Throat Mic



AVPH3
- Surveillance Headsets



AVP6
- Chargers and Batteries



AVPH4
- Wrap Around the Ear Headsets



AVPH5
- Behind the Head Headsets

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

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 channels

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.



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.