



MIDLAND® X-TRA TALK

LXT490 Series GMRS/FRS Radio

OWNER'S MANUAL



www.midlandradio.com

Welcome to the world of Midland Electronics

Congratulations on your purchase of a high quality MIDLAND product. Your 2-way radio represents the state-of-the-art in high-tech engineering. Designed for GMRS (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 two-way radio is designed for reliable and trouble-free performance for years to come.

Features

- 36 GMRS/FRS Channel
- 121 Privacy Codes (38 CTCSS / 83 DCS)
- VOX
- Selectable CALL ALERT
- NOAA Weather Scan
- NOAA Weather Radio
- NOAA Weather Alert
- SCAN Function
- MONITOR Function
- Roger Beep Tone
- Silent Operation
- Key Pad Lock
- Power High / Low Settings
- Speaker / Microphone Jacks
- Battery Meter / 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.

CHARGING THE OPTIONAL BATTERY PACK



Your LXT490 Series is equipped for using an optional rechargeable NiMH battery pack which can be recharged by inserting the AC adapter into the radio charge jack, or with optional desktop charger (as described below). 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. **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 tuned OFF.**

1. Only use our NiMH battery pack.
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.

BATTERY LEVEL INDICATOR

Your LXT490 Series has a BATTERY LEVEL METER  that shows the battery power level. The greater the number of bars visible, the stronger the battery level. When the battery level is low, the **Battery Shell**  icon will flash in the display indicating your batteries should be replaced or recharged if using a rechargeable battery pack.

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

IMPORTANT: FCC LICENSE REQUIRED FOR GMRS OPERATION (Only Applicable to GMRS Radio Use in the United States)

The LXT490 Series 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 LXT490 Series. Serious penalties could result for unlicensed use of GMRS channels, in violation of FCC rules, as stipulated in the Communications Act's Sections 501 & 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 their 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 being 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 Engineer (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.

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 2 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 **▲▼** button during RX or STANDBY mode.

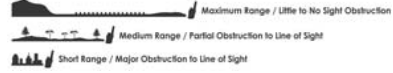
TRANSMITTING AND RECEIVING A CALL

To communicate, all radios in your group must be set to the same channel and/or Privacy Code.

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.

ABOUT RANGE

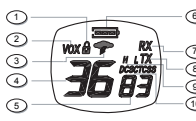
Your LXT Series radios are designed to give you maximum range under optimum conditions.



- 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.

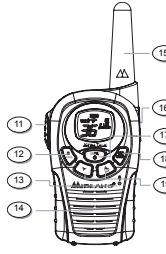
LCD DISPLAY



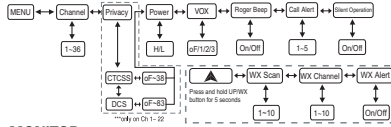
1. CHANNEL NUMBER
2. VOX ICON
3. NOAA WEATHER (WX) BAND ICON
4. CHANNEL NUMBER
5. PRIVACY CODE
6. BATTERY METER
7. RECEIVE (RX) ICON
8. TRANSMIT (TX) ICON
9. TRANSMIT POWER LEVEL ICON
10. PRIVACY CODE ICON

11. PTT Button
12. CALL LOCK Button
13. MIC
14. SPEAKER
15. ANTENNA
16. EXTERNAL SPEAKER/MIC/CHG. JACK
17. POWER / MENU Button
18. MONITOR/SCAN Button
19. UP/WX SCAN ▲ and DOWN ▼ Button

CONTROLS



LXT490 SERIES QUICK REFERENCE CHART



MONITOR

Pressing and holding the **MONITOR** button for 3 seconds will let you hear noise so you can adjust the volume level of the radio when not receiving a signal. This could also be used to check any activity on your current channel before transmitting.

Press and hold the **MONITOR** button for 3 seconds again to get out of **MONITOR** mode.

SCAN

Your LXT490 Series can scan all 36 channels for activity. To enter, quickly press the **SCAN** button. Repeat the same procedure to exit. Your radio will rapidly scan each of the 36 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 LXT490 Series 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)

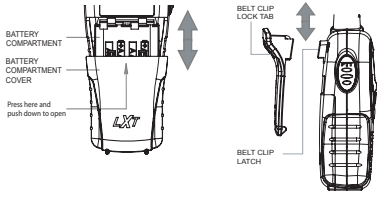
Press the **MENU** button once, and then the **▲▼** buttons to select one of the 36 GMRS/FRS channels. To confirm the selection, press the **PTT** button or press the **MENU** button again to move to the next feature setting.

BATTERY INSTALLATION

Your LXT490 Series radio operates with either 4 AAA alkaline batteries or an optional NiMH battery pack. The belt clip should be removed (see below) 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 below) 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.



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.

SETTING PRIVACY CODES

Your LXT490 Series has 121 Privacy Codes available to use in channels 1-22. The selected **Privacy Code** may be different for each channel. To select a **Privacy Code** for the current channel press the **MENU** button twice, and then the **▲▼** buttons to select one of the 38 **CTCSS** Privacy Code. Press again the **MENU** button and the **▲▼** button to select one of the 83 **DCS** Privacy Code. The **Privacy Code** icon on the display will indicate whether you set your **Privacy Code** in **CTCSS** or **DCS** mode. To confirm the selection, press the **PTT** button or press **MENU** button again to move to the next feature setting.

Note: If you select any **CTCSS** Privacy Code, any pre-selected **DCS** Privacy Code will be cancelled and vice-versa. Selecting a Privacy Code of "off" will disable the Privacy feature. To communicate between two LXT490 Series radios, all radios in your group must be set to the same channel and/or Privacy Code selections. The **Privacy Code** can only be set in channels 1-22.

TRANSMIT (TX) POWER LEVEL SELECTION

Your LXT490 has 2 power level settings. To select the power level on channels 1-7 and 15-36, press the **MENU** button until a "Pr" icon will appear 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 **MENU** button again to move to the next feature setting. When the **PTT** button is pressed during Low Battery level condition, the TX Power will automatically switch from H(H) to Lo(L) level.

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

VOX

Your LXT490 Series has 3 VOX level settings: (oF1/2/3). To set VOX, press the **MENU** button until the display shows "VOX" blinking while on the right of the **CHANNEL NUMBER** display, an "oF" icon appears. Select "1", "2" or "3" by pressing the **▲▼** buttons and push the **PTT** key, or press **MENU** button again to move to the next feature setting.

