

# **OWNER'S MANUAL**



# www.midlandradio.com

#### MIDLAND RADIO CORPORATION 5900 Parretta Drive

Kansas City, MO 64120 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.

## Welcome to the world of Midland electronics

Congratulations on your purchase of a high guality 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) VOY
- 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 ECC Rules. Operation is ubject to the following two conditions : (1) this device does not cause harmful interference, and (2) this radio must accept any interference hat may cause undesired operation.

To maintain compliance with FCC's RF exposure guidelines, fo 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 turned 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 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.

#### IMPORTANT NOTICE, FCC LICENSE REQUIRED FOR GMRS OPERATION (Only Applicable for 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 and 502 (amended).

You will be issued a call sign by the ECC 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 transmis-

## ABOUT RANGE

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



A T TT A Medium Range / Partial Obstruction to Line of Sight

1. 1. Short Range / Major Obstruction to Line of Sight

### 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.



RX

172

vox A 💎

(2)

3

(4)

(5)

(12)

(13)

(14)

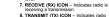
#### 1. KEY LOCK ICON - Indicates KEY OCK mode is on

2. VOX ICON - Indicates when VOX mode ie active

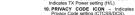
(6) 3. NOAA WEATHER (WX) BAND ICON-Indicates when the radio is in Weather Band mode.

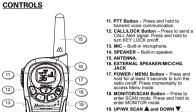
 CHANNEL NUMBER – Changes from 1~36 on GMRS/FRS band (1~10 on WX band).
 5. PRIVACY CODE - Indicates Privacy Code selected by user (of~38/oF~83). It can only be set in Ch1~22.

(10) 6. BATTERY METER - Indicates the battery



is transmitting a signa 9. TRANSMIT POWER LEVEL ICON -



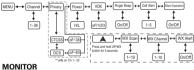


14. SPEAKER - Built-in speaker 16. EXTERNAL SPEAKER/MIC/CHG. 17. POWER / MENU Button – Press and

18. MONITOR/SCAN Button - Press to enter SCAN mode. Press and hold to enter MONITOR mode

enter MUNI OK mode 19. UP/WX SCAN ▲ and DOWN ▼ Button – Make adjustments in MENU mode. Press and hold the UP button for 5 seconds to activate the NOAA Meather Scan function

## LXT490 SERIES QUICK REFERENCE CHART



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)

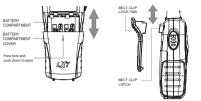
Press the MENU button once, and then the AV buttons to select Download from WRAS Boundant Han Common Schannel The channel are the selection, press the MENU button once, and then the AIV buttons to select the PTT button or press the MENU button again to move to the next feature setting.

## 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 nevt festure 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 "oF" 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 Hi(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.

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

#### VOX Your LXT490 Series has 3 VOX level settings: (oF/1/2/3).

next feature setting.

VOX will be more sensitive on the "1" setting than on the "3" setting. To turn VOX off, press the MENU button until the display shows "VOX" blinking while on the right of the CHANNEL NUMBER display a "1", "2" or "3" icon appears. Select "oF" by pressing the buttons and push the PTT key, or press MENU button again to move to the next feature setting.

#### **ROGER BEEP (end of transmission) TONE**

When the PTT button is released, the radio will been 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 an "rb" icon while on the right of the "rb" display, an "oF" icon appears. Select "on" by pressing the AV buttons and push the PTT key, or press MENU button to move to the next feature setting

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

#### CALL ALERT SELECTION

#### Your LXT490 Series has 5 selectable CALL ALERTS.

To select, press the MENU button until a "CA" icon appears and to the right of the "CA" icon the current CALL ALERT setting is displayed. Then press the AV buttons to make the CALL ALERT selections - the radio will emit a corresponding tone for each selection. To confirm, press the PTT button or press MENU button to move to the next feature setting.

#### SILENT OPERATION

Your LXT490 Series 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 an "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 MENU button.

To turn the SILENT OPERATION mode off, press the MENU button until the display shows an "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 MENU button.

#### DCS PRIVACY CODE CHART

No.	CODE	No.	CODE	No.	CODE
1	023	29	174	57	445
2	025	30	205	58	464
3	026	31	223	59	465
4	031	32	226	60	466
5	032	33	243	61	503
6	043	34	244	62	506
7	047	35	245	63	516
8	051	36	251	64	532
9	054	37	261	65	546
10	065	38	263	66	565
11	071	39	265	67	606
12	072	40	271	68	612
13	073	41	306	69	624
14	074	42	311	70	627
15	114	43	315	71	631
16	115	44	331	72	632
17	116	45	343	73	654
18	125	46	346	74	662
19	131	47	351	75	664
20	132	48	364	76	703
21	134	49	365	77	712
22	143	50	371	78	723
23	152	51	411	79	731
24	155	52	412	80	732
25	156	53	413	81	734
26	162	54	423	82	743
27	165	55	431	83	754
28	172	56	432	-	-

Note: Privacy codes can be programmed for use on Channels 1~22 only



#### NOAA WEATHER BADIO/SCAN

Your LXT490 Series has a NOAA WEATHER RADIO function, to enable user to receive weather reports from designated NOAA stations

Your LXT490 Series also has a NOAA WEATHER SCAN function, to enable user to scan all the 10 channels of the NOAA WEATHER RADIO. To turn the NOAA WEATHER SCAN on, press and hold the UP/WX A button for 5 seconds while in GMRS mode. The radio will go to WX Band mode and start scanning all the 10 channels and stop on any active channel. When the channel becomes inactive for 10 seconds, the radio will resume scanning.

To stop the NOAA WEATHER (WX) SCAN and set the channel manually on the WX Band, press the MENU button during NOAA WEATHER (WX) SCAN. The radio will stop scanning and the display will show the current WX Band channel setting and the WX Band icon. While on WX Band mode press the AV buttons to select one of the 10 NOAA WEATHER (WX) BAND channels. To confirm, press the PTT button or press MENU button to move to the next feature sotting

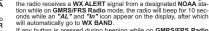
To turn the NOAA WEATHER RADIO off, press the PTT button. The current GMRS/FRS radio setting will be displayed and the WX BAND icon will go off

#### NOAA WEATHER ALERT

▲\▼ buttons.

Your LXT490 has a NOAA WEATHER ALERT function, to enable you to automatically receive weather alert from designated NOAA stations The NOAA WEATHER (WX) ALERT is automatically on during

NOAA WEATHER SCAN mode To turn the NOAA WEATHER (WX) ALERT on during normal NOAA WEATHER RADIO mode, press the MENU button twice while in NOAA WEATHER SCAN mode. The display shows "AL", while on the right an "oF" icon appears blinking. Select "on" by pressing the



If any button is pressed during beeping while on GMRS/FRS Radio mode, the radio will automatically go to WX BAND.

To confirm, press the PTT button or press MENU. The radio will

return to WX BAND and the WX BAND icon will continue blinking. If

To turn the NOAA WEATHER (WX) ALERT off, press the MENU button twice while in WX Band. The display shows "AL", while on the right an "on" icon appears blinking. Select "oF" by pressing the ▲ W buttons. To confirm, press the PTT button or press MENU.

Note : The WX Alert is automatically ON during WX SCAN

## EXTERNAL SPEAKER/MICROPHONE JACK

Your LXT490 Series 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.



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 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

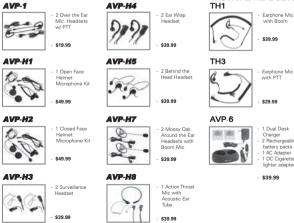
#### For Product Purchased in Canada:

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

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



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



#### TROUBLESHOOTING GUIDE

----

-------

PROBLEM S	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 that you are within range of the other transceivers.</li> <li>Buildings and other structures may interfere with your communication.</li> </ul>			
Radio is not responding to button presses	<ul> <li>Make sure key lock is not on. See "Keypad Lock"</li> <li>Radio might need to be reset. Turn radio off then on.</li> </ul>			
Display is dim	- Recharge or replace batteries.			
Charger not functioning	<ul> <li>Contacts on the bottom of the radio may require cleaning.</li> <li>Ensure the outlet where the charger is plugged into is functioning property.</li> <li>Check that the battery pack is installed in the radio property.</li> </ul>			

## USE AND CARE

1. Use a soft damp cloth to clean the radio

Earphone Mid

with Boom

\$39.99

with PTT

\$29.99

- 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 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 servic echnician. Many problems can be remedied over the none without returning the unit for service.

TH2

## SPECIFICATIONS

36 GMRS/ERS Channels +121 Privacy Codes Channels 10 NOAA Weather (WX) Band Channels Operating Frequency UHF 462.5500 ~ 467.7125 MHz

Power Source 4 AAA Alkaline or 4.8V Rechargeable Ni-MH battery pack

#### GMRS/FRS FREQUENCY CHART (MHz)

CH. No	CH. Freq.	CH. No	CH. Freq.	CH. No	CH. Freq.
1	462.5625	13	467.6875	25	
2	462.5875	14	467.7125	26	
3	462.6125	15	462.5500	27	
4	462.6375	16	462.5750	28	
5	462.6625	17	462.6000	29	
6	462.6875	18	462.6250	30	
7	462.7125	19	462.6500	31	
8	467.5625	20	462.6750	32	
9	467.5875	21	462.7000	33	
10	467.6125	22	462.7250	34	
11	467.6375	23		35	
12	467.6625	24		36	

#### NOAA WEATHER (WX) RADIO FREQUENCY CHART (MHz)

CH. No	CH. Freq.	CH. No	CH. Freq.
1	162.550	6	162.500
2	162.400	7	162.525
3	162.475	8	161.650
4	162.425	9	161.775
5	162.450	10	163.275

\* Channel 8.9 and 10 are designated Canadian Marine Frequencies

#### PRIVACY CODES FREQUENCY CHART (Hz)

Code	Freq.								
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		

Note: Privacy codes can be programmed for use on Channels 1~22 only

#### 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 to Midland Radio Corporation.

City: Tel:						
CC#			Type: _	Exp		
Qty	Item	Price	Total	Mail To:		
	AVP-1	\$19.99		Midland Radio Corporatio		
	AVP-H1	\$49.99		Consumer Dept. 5900 Parretta Drive		
	AVP-H2	\$49.99		Kansas City, MO 64120		
	AVP-H3	\$39.99				
	AVP-H4	\$39.99		Or Call 816.241.8500.		
	AVP-H5	\$39.99				
	AVP-H7	\$39.99		To order online go to www.midlandradio.com		
	AVP-H8	\$39.99				
	AVP-6	\$39.99				
	TH1	\$39.99				
	TH2	\$99.99				
	TH3	\$29.99				
	TH4	\$199.99				
S & H (Applies t For Hawa Rico S&H	al o, CO, IL, F o Domestic iii, Alaska, ai I will be \$36. 25 for 21bs o	U.S. only. nd Puerto 25 for 1lb		\$14.95		

Download from Www.Somanuals.com. All Manuals Search And Download.

TACTICAL HEADSETS

\$39.99

1 Dual Desk Charger 2 Rechargeable

battery packs

1 AC Adapter 1 DC Cigarette lighter adapte

\$99.99 TH4 Action Throa Mic with Tactical PTT

Tactical Action

Tactical PTT

and Pneumatic

Total

Earphone

\$199.90

Boom Mic with

Free Manuals Download Website <u>http://myh66.com</u> <u>http://usermanuals.us</u> <u>http://www.somanuals.com</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.com</u> <u>http://www.404manual.com</u> <u>http://www.luxmanual.com</u> <u>http://aubethermostatmanual.com</u> Golf course search by state

http://golfingnear.com Email search by domain

http://emailbydomain.com Auto manuals search

http://auto.somanuals.com TV manuals search

http://tv.somanuals.com