MIDLAND®

X-TALKER®
TWO-WAY RADIOS

OWNER'S MANUAL

T50 SERIES

midlandusa.com

THIS PAGE IS
INTENTIONALLY
LEFT BLANK

MIDLAND

Welcome to the world of Midland electronics

Congratulations on the purchase of your high quality MIDLAND product. Your two-way radio represents state-of-the-art high-tech engineering and is designed for FRS (Family Radio Service) operation. 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 Channels
- 38 Privacy Codes (CTCSS)
- VOX
- Call Alert
- NOAA Weather Radio
- NOAA Weather Alert
- Scan Function
- Monitor Function
- Roger Beep Tone
- Silent Operation
- Key Pad Lock
- Speaker / Microphone Jacks
- Battery Meter / Battery Low Indicator
- USB-C Jack Charging

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.**

MIDLAND

LCD DISPLAY
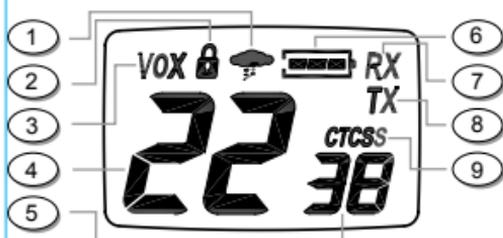
1. **NOAA WEATHER (WX) BAND ICON** – Indicates when the radio is in Weather Band mode.
2. **KEY LOCK ICON** – Indicates KEY LOCK mode is on.
3. **VOX ICON** – Indicates when VOX mode is active.
4. **CHANNEL NUMBER** – Changes from 1~22 on FRS band (1~10 on WX band).
5. **PRIVACY CODE** – Indicates Privacy Code selected by user (oF~38).
6. **BATTERY METER** – Indicates the battery level.
7. **RECEIVE (RX) ICON** – Indicates radio is receiving a transmission.
8. **TRANSMIT (TX) ICON** – Indicates radio is transmitting a signal.
9. **PRIVACY CODE ICON** – Indicates Privacy Code is on.

CONTROLS
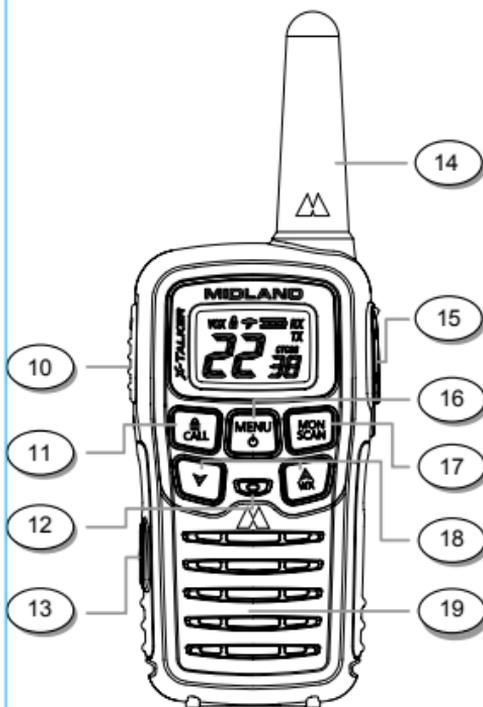
10. **PTT Button** – Press and hold to transmit voice communication.
11. **CALL/LOCK Button** – Press to send a CALL ALERT signal. Press and hold to turn KEY LOCK on/off.
12. **MIC** – Built-in microphone.
13. **USB-C CHARGING JACK**
14. **ANTENNA**
15. **EXTERNAL SPEAKER/MIC JACK**
16. **MENU Button** – Press momentarily to access Menu mode.
17. **MONITOR/SCAN Button** – Press to enter SCAN mode. Press and hold to enter MONITOR mode.
18. **UP/WX ▲ and DOWN ▼ Buttons** – Make adjustments in MENU mode. Press and hold the UP button for 3 seconds to activate the NOAA Weather Radio function.
19. **SPEAKER** – Built-in speaker.

BATTERY INSTALLATION

Your radio operates with either 3 AAA NiMH batteries or optional 3 AAA alkaline batteries. 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 NiMH battery pack or 3 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.

BATTERY COMPARTMENT

BATTERY COMPARTMENT COVER

Press here and push down to open

XT

BELT CLIP LOCK TAB
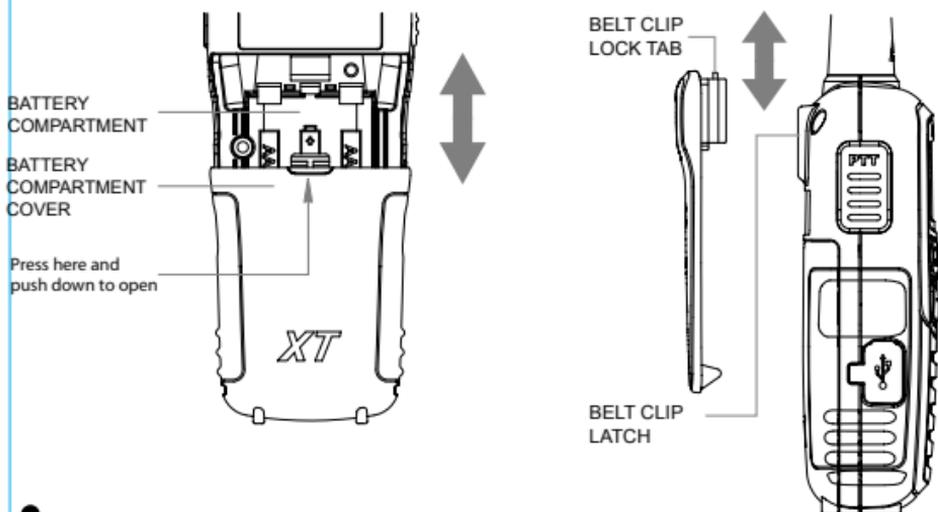
BELT CLIP LATCH

! Note: Do Not Mix Old and New Batteries.
Note: Do Not Mix Alkaline, Standard, or Rechargeable Batteries.

INSTALLING THE BELT CLIP

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

CHARGING THE BATTERIES

Your radios are equipped for using a rechargeable NiMH battery pack (BATT3R) which can be recharged by inserting one end of the USB-C Cable into a USB-C power source, and the other end into the radio USB-C charging jack, or with the optional desktop charger (as described below). While charging, the Battery Meter will flash from 1 to 3 bars. The LCD display will show **FULL** when charging is complete. For maximum battery life, Midland recommends charging the battery pack when the low battery icon comes on. Remove the radios from the charger when the charging is finished.

To charge using the Desktop Charger:
1. Place the BATT3R rechargeable battery packs in the radios.
2. Connect one end of the USB-C Cable into a USB-C power source.
3. Insert the other end of the USB-C Cable into the desktop charger USB-C jack.
4. Place the radios into the desktop charger slot. While charging, the Battery Meter will flash from 1 to 3 bars, and stop when charging is finished. The LCD display will show **FULL.**

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

> 1. Only use the Midland 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 radio 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 and *"bt Lo"* will flash in the display indicating your batteries should be replaced or recharged if using a rechargeable battery pack.

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 several icons for 1 second and then the LCD display will indicate the last channel selected.

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

RESTORING YOUR RADIO TO THE ORIGINAL SETTING

To reset your radio to the original (default) setting, turn on the radio while pressing and holding the ▲ button. The LCD display will reset to standby mode on channel 1 with no Privacy Code.

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 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.

ABOUT RANGE

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

Maximum Range / Little to No Sight Obstruction

Medium Range / Partial Obstruction to Line of Sight

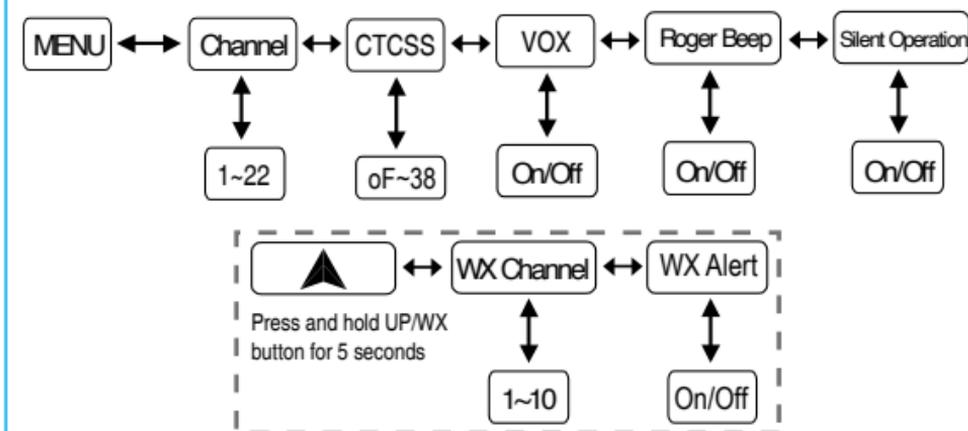Short Range / Major Obstruction to Line of Sight

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.

T50 SERIES QUICK REFERENCE CHART

MENU	↔	Channel	↔	CTCSS	↔	VOX	↔	Roger Beep	↔	Silent Operation
		↕		↕		↕		↕		↕
		1~22		oF~38		On/Off		On/Off		On/Off

▲	↔	WX Channel	↔	WX Alert
Press and hold UP/WX button for 5 seconds		↕		↕
		1~10		On/Off

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 radio 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 6 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 radio can transmit a call alert. 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 3 seconds. The 🔒 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.

SETTING PRIVACY CODES

Your radio has 38 **Privacy Codes** available. 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 Codes**. The **Privacy Code** icon on the display will indicate **CTCSS** mode. To confirm the selection, press the **PTT** button or press the **MENU** button again to move to the next feature setting.

> **Note** : Selecting a Privacy Code of *"oF"* will disable the Privacy feature. To communicate between two radios, all radios in your group must be set to the same channel and/or Privacy Code selections.

VOX (Hands-Free Transmission)

Your radio has 3 VOX level settings: *(oF/1~3)*.

To set VOX, press the **MENU** button until the display shows "**VOX**". On the right of the **CHANNEL NUMBER** display, an *"oF"* icon appears. Select *"1" ~ "3"* by pressing the ▲\▼ buttons and push the **PTT** key, or press the **MENU** button again to move to the next feature setting. **VOX** will be more sensitive on the lower setting than on the higher setting.

To turn VOX off, press the **MENU** button until the display shows "**VOX**". On the right of the **CHANNEL NUMBER** display, a *"1" ~ "3"* icon appears. Select *"oF"* by pressing the ▲\▼ buttons and push the **PTT** key, or press the **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 beep to confirm to other users that your transmission has finished.

To set the **ROGER BEEP** tone, press the **MENU** button until the display shows an *"rb"* icon. Select *"on"* or *"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 set the SILENT OPERATION, press the **MENU** button until the display shows a *"bP"* icon. Select *"on"* or *"oF"* by pressing the ▲\▼ buttons and push the **PTT** key or **MENU** button.

NOAA WEATHER RADIO

Your radio has a **NOAA WEATHER RADIO** function to enable the user to receive weather reports from designated **NOAA** stations.

To turn the **NOAA WEATHER RADIO** on, press and hold the **WX/▲** button for 5 seconds while in FRS mode. The radio will go to **WX Band** mode.

To set the channel on the **WX Band**, press the **MENU** button and the display will show the current **WX Band** channel setting. While on **WX Band** mode press the ▲\▼ buttons to select one of the 10 **NOAA WEATHER (WX) BAND** channels.

To confirm, press the **PTT** button or press the **MENU** button to move to the next feature setting.

To turn the **NOAA WEATHER RADIO** off, press the **PTT** button. The current **FRS** radio setting will be displayed and the 📡 icon will go off.

NOAA WEATHER ALERT

Your radio has a **NOAA WEATHER ALERT** function, to enable you to automatically receive weather alerts from designated **NOAA** stations.

To turn the **NOAA WEATHER (WX) ALERT** on during normal **NOAA WEATHER RADIO** mode, press the **MENU** button twice while in **NOAA WEATHER RADIO** mode. The display shows *"AL,"* while on the right an *"oF"* icon appears blinking. Select *"on"* by pressing the ▲\▼ buttons. To confirm, press the **PTT** button or press **MENU**. The radio will return to **WX BAND** and the 📡 icon will continue blinking. If the radio receives a **WX ALERT** signal from a designated **NOAA** station while on **FRS Radio** mode, the radio will beep for 20 seconds while the display will automatically go to **WX BAND**.

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 ▲\▼ buttons. To confirm, press the **PTT** button or press **MENU**.

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.

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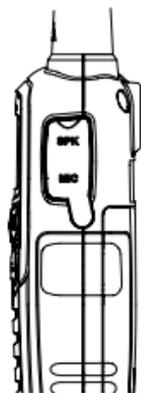
IMPORTANT: This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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.

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.

MIDLAND

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. *(See ABOUT RANGE on Page 7)*
Radio is not responding to button presses	- Make sure key lock is not on *(See KEYPAD LOCK on Page 9)*. - Radio might need to be reset. Turn radio off then on.
Display is dim	- Recharge or replace batteries.
Charging not functioning	- Ensure the USB-C Jack where the USB-C Cable is plugged in is functioning properly. - Check that the batteries are 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 +38 Privacy Codes
                  10 NOAA Weather (WX) Band Channels

Operating Frequency UHF 462.5500 ~ 467.7125 MHz

Power Source 3 AAA Rechargeable NiMH batteries or 3 AAA
                      Alkaline batteries

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	

* Channels 8~14 are low-power FRS channels

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.	Code	Freq.	Code	Freq.	Code	Freq.	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

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.

MIDLAND

ACCESSORIES

Accessories can be purchased at midlandusa.com.
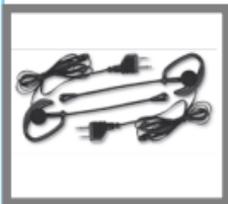
AVP1
- Over the Ear Headsets

AVPH5
- Behind the Head Headsets

BATT3R
- Rechargeable Battery Pack

AVPH7
- Camo Headsets with Boom Mic

AVPH2
- Closed Face Helmet Headset Kit

AVP-H8
- Acoustic Throat Mic

AVPH3
- Surveillance Headsets

AVPH10
- Shoulder Speaker Mic

AVPH4
- Wrap Around the Ear Headsets

MIDLAND®

X-TALKER

Two-Way Radios

Weather Radios

Business Radios

LXT / GXT

Two-Way Radios

Emergency Crank Radios

MicroMobile Radios

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

or by visiting us at
midlandusa.com