

# XT·50

WALKIE-TALKIE PMR446

› Instruction Guide



\* Depending on terrain



**MIDLAND**<sup>®</sup>  
PUT YOURSELF IN ACTION



## Main functions

- Frequency: 446.00625 – 446.09375
- Channels: 24 (8+16 pre-programmed)
- 38 CTCSS tones
- Power: 500mW ERP
- Side Tone: end transmission noise muffler
- Vox with sensitivity adjustable in 3 levels
- Alphanumeric LCD Display
- CALL function
- Scan function
- Battery life up to 12 hours
- Operating temperature -20° to +55°
- Weight: 93 gr (w/out batteries)
- Dimensions: 54x103x33mm
- MIC/SPK accessory jack 2pin
- Recharge jack: micro USB
- Category: B

## What's in the box

- 2 x XT50 transceivers with belt clip
- 2 x 700mAh rechargeable battery packs
- 1 x double desktop charger
- 1 x USB/micro USB cable

## Coverage

The maximum range depends on terrain condition and is obtained during use in an open space.

The only limitation to maximum possible range are environmental factors such as blockage caused by trees, buildings, or other obstructions. Inside a car or a metallic constructions, the range can be reduced. Normally the coverage in the city, with buildings or other obstructions is about **1 or 2 Km**. In open space but with obstructions like trees, leaves or houses the maximum possible range is about **4-6 Km**. In open space, without obstructions and in sight, like for example in mountain, the coverage can be **8 Km**.

# Above all....Safety!

## Warnings

*! Do not open the radio for any reason! The radio's precision mechanics and electronics require experience and specialized equipment; for the same reason, the radio should under no circumstances be realigned as it has already been calibrated for maximum performance. Unauthorized opening of the transceiver will void the warranty.*

*! Do not use detergents, alcohol, solvents, or abrasives to clean the equipment. Just use a soft, clean cloth. If the radio is very dirty, slightly dampen the cloth with a mixture of water and a neutral soap.*

## Batteries

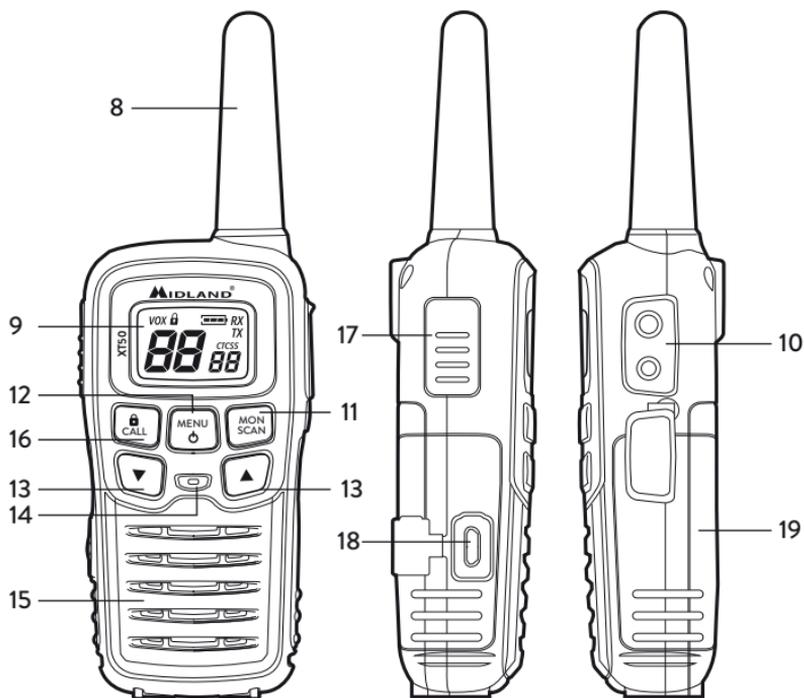
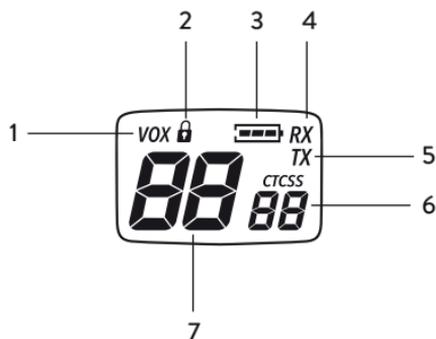
*! Do not try to charge alkaline batteries or non rechargeable batteries. Make sure that when you charge the radio, only rechargeable NI-MH batteries should be contained in the battery compartment! It is very dangerous attempting to recharge other types of batteries (for example alkaline or manganese batteries). Batteries which are not suitable to be recharged may leak, explode or even burn and cause damage!*

*! Using a different battery charger other than the one specified can cause damage to your device or may even cause explosions and personal injuries.*

*! Do not throw batteries into fire or place them near heat as this may cause explosions or personal injuries. Dispose of the batteries according to procedures set out by local regulations.*

*! Do not mix old and new batteries or batteries of different types or batteries which have been used in different manners.*

# Description of the controls and functions



1. **VOX function activated**
2. **Appears when the keypad lock is activated**
3. **Battery level**
4. **It is displayed when the radio is receiving a signal**
5. **Appears when the radio is transmitting (PTT pressed)**
6. **Indicates the selected CTCSS tone**
7. **Indicates the selected channel**
8. **Antenna**
9. **LCD Display**
10. **SPK/MIC jack.** Jack for the connection to external accessories such as microphones, headsets, etc
11. **MON/SCAN.** With this button you can enable/disable the Scan and Monitor functions
12. **MENU/ⓘ:** Press this control to turn on/off the unit and to enter the radio's menu.
13. **▲/▼:** use these buttons to adjust the volume, select the channels and functions
14. **Microphone**
15. **Speaker**
16. **📞/CALL.** Press this button to lock the keypad and to send out a call signal.
17. **PTT button**
18. **USB port** for the recharge of the radio
19. **Battery and battery compartment.** The transceiver accepts the supplied rechargeable battery pack or 3 x AAA alkaline/ rechargeable batteries. To open the battery compartment, hold the unit face down and slide the cover.

***Attention: The supplied battery packs must be recharged before the first use (see the section "Recharge" for more info).***

# Let's communicate!

## To turn on/off the radio

Hold down **MENU/⊕** for 3 seconds.

## Channel selection

Press once the **Menu** button and then select the desired channel by the **▲/▼** buttons. Press **PTT** to confirm the selection. Remember that both radios must be set on the same channel.

## Transmission

Keep pressed the **PTT** button. The display will show "**Tx**" and "**to**". Release the **PTT** and the radio beeps to confirm to other users that your transmission has finished ('Roger Beep', see paragraph).

## Reception

Simply release the **PTT** button. When you receive a signal "**Rx**" is displayed..

## Volume adjustment

Press the **▲/▼** to adjust the volume at the desired level.

## 🔒 button / CALL function

This feature is very useful to avoid accidental pressure of the buttons. Press and hold the "**🔒/CALL**" button for more than 3 seconds. The icon confirms that the keypad lock is activated. Only **PTT** and **🔒/CALL** will still be active. Repeat the same procedure to unlock the keypad.

## Sending an audio signal (CALL)

By pressing quickly **🔒/CALL**, you will send an audio signal to other users on the same channel.

## Menu button

The following functions can be selected by pressing the **Menu** button:

- VOX
- Roger Beep on/off
- Channel setting
- CTCSS tone setting
- Keypad Beep

## VOX function and its sensitivity

The VOX function lets you open the transmission by voice without the use of the **PTT** button. To get the most use from the VOX feature you must first determine what sensitivity (noise level) is needed to activate the VOX.

Push the **Menu** button for three times; “**VOX**” blinks on the display. Select the desired VOX level by means of the ▲/▼ buttons and wait 3 seconds as confirmation.

VOX can be adjusted in 3 positions:

1. **High sensitivity** (normal voice with no background noise)
2. **Middle sensitivity**
3. **Low sensitivity** (useful in very noisy areas or if you talk loudly)

### To disable the VOX mode

Press the **Menu** button for three times. Select “**OF**” by means of the ▲/▼ buttons and then push **PTT** to confirm.

**Attention:** To use the VOX with the optional headset, move the small switch of the headset to the VOX position. Move it back to PTT position if you don't use the VOX function.

## Roger Beep: End transmission tone

When the **PTT** is released the radio will beep to confirm to other users that your transmission is finished. This feature is enabled by default.

**To disable it:**

1. Press the **Menu** button till the display shows “**rb**”
2. Select “**oF**” by means of the ▲/▼ buttons.
3. Confirm your selection by pushing the **PTT** button.

## Channel setting

Press once the **Menu** button and then select the desired channel by the ▲/▼ buttons. Press **PTT** to confirm the selection.

## CTCSS sub-audio tone setting

The CTCSS sub-tones, are code numbers (from 1 to 38) that can be added to the first 8 channels in order to create a new private channel. You can add up to 38 codes to the channels named from P1 to P8. For example if you add the CTCSS sub-tone “27” to the channel “P3” you will obtain the new channel “P327” that will be able to communicate to other transceivers only if they will be set on the same channel and sub tone.

**To activate 38 different CTCSS sub-tones follow these steps:**

1. Turn on the radio.
2. Press the **Menu** button and select with the ▲/▼ buttons one of the 8 channels (from P1 to P8).
3. Press twice the **Menu** button until the display shows the selected channel with the flashing two CTCSS sub-tone digits (on the right of the channel)
4. Select with the ▲/▼ buttons the desired CTCSS tone (from 1 to 38).
5. To confirm the setting press **PTT**.

Now the radio transmits and receives using the programmed CTCSS sub-tone. If you don't want to use any CTCSS tone, select “**oF**”.

## CTCSS tones displayed on the LCD

When you activate a CTCSS sub-tone, from P1 to P8, you can see the tone on the right side of the channel. For the other channels (from 9 onwards) the CTCSS sub-code is pre-programmed and then “hidden”.

## Keypad beep off

Everytime you press any button, you will hear a beep sound. To deactivate it press **Menu** 4 times. Then select “**oF**” with the ▲/▼ controls and confirm your selection by pushing **PTT**. To enable the beep again, repeat the same procedure and select “**ON**”.

# MON/SCAN

## Monitor function

When this feature is activated, the radio can receive very low and weak signals. This is very useful when you need to talk but the distance is as far as the maximum range possible; with the monitor feature you can extend the coverage of the radio.

The disadvantage is the reception of loud background noises.

**Activation/Deactivation:** Keep pressed **MON/SCAN** till the display shows “Rx”.

## SCAN function

The SCAN mode monitors the busy channels.

It is used to check the traffic radio on all the channels before transmitting and allows the unit to stop on a channel that someone is talking on. When the radio stops on a busy channel, the scan will resume after about 5 seconds.

### To activate the SCAN function

1. Push **MON/SCAN**.
2. While the scan mode is operating, if you push the ▲/▼ controls you can choose the scanning direction.

### To deactivate it:

Press **MON/SCAN** or **PTT**.

## Recharge

When the battery pack or the batteries are discharged, the icon  starts blinking; it is necessary to start the recharge as soon as possible. The icon blinks only if the radio is turned on.

### ATTENTION

***Alkaline batteries cannot be recharged.***

***Do not recharge the radio without the rechargeable batteries or without the battery pack.***

***For the very first time, we recommend to recharge the radio for 8/10 hours.***

Insert the battery pack into the radio. Plug the USB supplied in the package into the USB port of the radio or of the desktop charger. The icon with its bars will be displayed to indicate that the radio is being charged. Once the batteries are fully charged the bars of the icon  will be steady. We recommend to disconnect the power supply (disconnect the USB cable).

**Note: the USB cable must be connected to devices with a charge current of 500mAh at least.**

## Auto power save

XT50 is supplied with an automatic current economy circuit. If the transceiver receives no signal for more than 10 seconds, the “power save function” automatically activates. The battery life may increase by up to 50 %.

## Accessories

XT50 is provided with a MIC/SPK jack for the connection of external accessories such as mikes or headsets. This plug is 2-pin type and is compatible with all Midland accessories.

# Troubleshooting and radio reset

XT50 is designed to provide you with years of optimal performance. If for some reason problems arise, refer to this chapter before contacting a service centre in your region.

## Reset

If your transceiver experiences a logical malfunction (improper symbols on the display, blocking of functions, etc.), it may not be experiencing a true failure, but rather a problem caused by external factors. For example, it may have an incorrect setting brought on by a noise or spikes in the electrical system during battery recharging. In such cases, you can reset the transceiver to its factory-programmed settings, by resetting all parameters:

- Turn off the transceiver
- Keep pressed the ▲ button and turn on the radio at the same time. All the functions will be reset ex-factory.

Before you go ahead with the reset, we recommend that you take note of all the settings you have carried out as they will be deleted.

# Technical specifications

Channels.....	24 PMR446 (8 + 16 pre-programmed)
Frequency.....	446.00625 - 446.09375MHz
Channel spacing.....	12.5 KHz
Power supply.....	700mAh battery pack
.....	3x AAA type 4.5V(Alkaline)
.....	3.6V(Rechargeable) batteries +/- 10% VDC
Operating temperature.....	-20° to +55°
Dimensions (w/out antenna).....	54x33x103mm
Weight (w/out batteries).....	93g
Duty cycle.....	TX 5%, RX 5%, stand-by 90%
Category.....	B

## Transmitter

Output power.....	500 mW ERP
Modulation.....	FM
Spurious rejection.....	within ETSI regulations

## Receiver

Sensitivity @ 12dB Sinad.....	<0,30 $\mu$ V
Adjacent channel rejection.....	70dB
Audio output power.....	~250mW @ 10% THD
Jack for external mike.....	stereo 2,5 mm
Jack for external speaker.....	mono 3.5 mm

Specifications are subject to change without notice.

## ATTENTION

***Direct plug-in ac/dc power supply must be used for disconnecting the transceiver from the mains; the desktop charger must be positioned close to the unit and easily accessible.***

Prodotto o importato da:

**CTE INTERNATIONAL s.r.l.**

Via. R.Sevardi 7 - 42124 Reggio Emilia Italia

[www.midlandeurope.com](http://www.midlandeurope.com)

L'uso di questo apparato può essere soggetto a restrizioni nazionali (per l'uso in Italia, è richiesta una dichiarazione di possesso) . Prima dell'uso leggere attentamente le istruzioni.

Produced or imported by:

**CTE INTERNATIONAL s.r.l.**

Via. R.Sevardi 7 42124 Mancasale Reggio Emilia Italy

Imported by:

**ALAN - NEVADA UK**

Unit 1 Fitzherbert Spur Farlington Portsmouth Hants.

PO6 1TT - United Kingdom

[www.nevada.co.uk](http://www.nevada.co.uk)

The use of this transceiver can be subject to national restrictions. Read the instructions carefully before installation and use.

Importado por:

**ALAN COMMUNICATIONS, SA**

C/Cobalt, 48 - 08940 Cornellà de Llobregat (Barcelona - España)

[www.midland.es](http://www.midland.es)

El uso de este equipo puede estar sujeto a la obtención de la correspondiente autorización administrativa. Lea atentamente las instrucciones antes de usar el equipo.

Vertrieb durch:

**ALAN ELECTRONICS GmbH**

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