

PMR446 Transceiver

# G11

► INSTRUCTION GUIDE



MIDLAND | PMR446 TRANSCEIVER



## MIDLAND G11

### PMR446 Transceiver

*Thanks for choosing Midland! G11 is a portable transceiver that is free use in almost all European countries. For further information, we suggest you to look at the "Restrictions on the use" chart.*

#### Midland G11 is a multi-task PMR446 transceiver.

Combining the latest technology in radio communication along with a sturdy mechanical frame, **G11** is the ideal and effective solution for the professionals who need to stay in touch with the working team (in construction sites, buildings, shows, trade fairs or hotels) or for leisure users that just want to keep up with friends and family.

#### Programming software (optional)

Thanks to Midland Programming software specifically made for **G11**, it is possible to increase the performance of your radio or to reduce its functionality by disabling some of the default features (CTCSS, TOT...)

For further information, please consult the Programming software manual.

#### Content

- › 1 G11 transceiver
- › 1 belt clip
- › 1 wall adaptor
- › 1 1600mAh Li-ion rechargeable battery pack
- › 1 desktop charger

#### Main characteristics

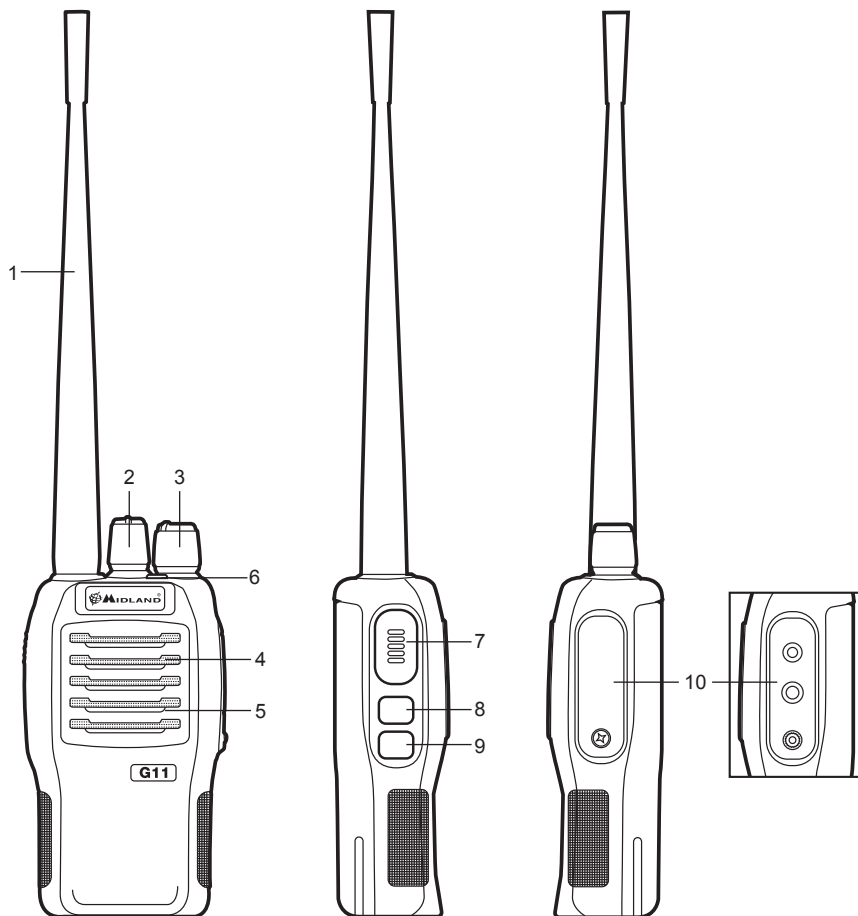
- › PMR446 Transceiver
- › Output power: 500mW
- › Channel spacing: 12.5KHz
- › Built-in VOX function (vocal-activated communication)
- › Scan
- › Beep keypad
- › Roger Beep
- › Battery save
- › Monitor
- › Squelch

#### COVERAGE/RANGE

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 more than **12 Km**.

## MAIN CONTROLS AND PARTS OF THE RADIO



1. **Antenna**
2. **Encoder:** rotate clockwise or counter-clockwise to select the desired channel
3. **Power/volume knob-** turn clockwise to power on and increase the volume level. Turn counter-clockwise to decrease the volume level and power off.
4. **Speaker**
5. **Built-in microphone**
6. **Led indicator:**  
RED: TX;  
GREEN: RX.
7. **PTT:** push this button to transmit, release it to receive.
8. **Function key 1:** Briefly press this button to activate the Monitor function; keep pressed this button for about 4 sec. to enable the **VOX** feature. The radio will emit an acoustic sound each time you press the button to confirm that the desired function has been activated/deactivated.
9. **Function key 2:** keep pressed this button for about 4 sec. to activate the **SCAN** function. The radio will emit an acoustic sound each time you press the button to confirm you that the function has been activated/deactivated.
10. **External Speaker/Mic Jack-** allows the connection with external devices such as headsets, microphones.

## OPERATIONS

### Power on/off and volume adjustment

Rotate the **Power/Volume knob** clockwise to turn the radio on.

Rotate the control clockwise /counter-clockwise to adjust the volume level as you prefer.

Rotate the control counter-clockwise till hearing a mechanical “click”, to turn the radio off.

### Transmission

To communicate, all radios in your group must be set to the same channel.

Briefly press the **Function key 1** to enable the Monitor feature in order to make sure that the frequency is not busy, then press the **PTT** button.

For a maximum clarity, hold the device at a distance of about 4/10 cm.

Release the **PTT** key to receive.

*Only one user at a time can talk during radio communications. Therefore, it is important not to transmit when you are receiving a communication and use the transmission mode sparingly to allow other users to use the feature.*

*Transmission consumes a significant amount of energy and should therefore be used sparingly to prolong the battery life.*

*If you are unable to contact a station that you have no problems in receiving, the station may be using CTCSS tones or DCS codes.*

### Monitor

The Monitor feature is for temporarily excluding (opening) the Squelch, in order to listen to signals that are too weak to keep the Squelch permanently opened.

Briefly press the **Function key 1** to enable such function.

### Scan

Keep pressed the **Function key 2** for about 4 sec. to enable the **SCAN** function: the radio will scan all channels from the channel in use.

Whenever any signal is detected, the radio will suspend the Scan; to resume scanning, press again the **PTT button**.

### Vox

**G11** enables hands free conversations through the VOX function: just speak in the direction of the microphone and the communication will be automatically activated.

The VOX sensitivity can be adjusted in 10 different levels (**0,1,2,3...9**) through the programming software:

0 means that the VOX is turned off, 1 is the lowest VOX sensitivity level and 9 is the highest one.

By default, the VOX sensitivity of **G11** is set on level 5.

To activate the VOX feature, keep pressed for about 4 sec. the **Function key1**.

### Squelch

The Squelch function suppresses noises on free channels and allows to receive even weak signals.

**G11** has 10 different Squelch levels settable by programming software: 0 means that the Squelch is turned off; from level 1 to level 9 you will have different levels of noise reduction. The higher is the level, the louder will be the Squelch.

By default, the Squelch level of **G11** is set on level 5.

*Make sure you do not set an excessively high squelch level because in this case you may not be able to receive weaker signals. On the other hand an excessively low Squelch value could enable the Squelch even when no signals are present.*

*Squelch must always be adjusted when no signals are present.*

The Time Out timer is settable from 30 sec to 270 sec. only through the programming software.

This feature is disabled by default.

### Roger Beep (end of transmission tone)

When the **PTT** button is released, the radio will beep to confirm to other users that you've finished your transmission and that they can begin to speak.

### Beep Tone

This function permit you to produce a beep tone every time you press a button.

## BATTERY RECHARGE

**G11** is equipped for using a 7,4V Li-ion rechargeable battery pack which can be recharged connecting the socket of the AC/DC wall adaptor to a mains power socket and inserting the jack of the wall adaptor into the desktop charger plug.

It takes 4-5 hours to fully recharge the radio.

For maximum battery life, we recommend charging the battery pack when the **G11** is off and the battery pack is fully discharged.

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

The **Battery power saving** feature enables a reduction in consumption of up to 50%. If it has been set, it comes on automatically when the transceiver does not receive any signal for more than 7 seconds in order to save the battery life. Power saving can be set only through Programming software.

## MAINTENANCE

Your **G11** was designed to fulfill any warranty obligations and to enjoy this product for many years.

As for all the electronically devices, we recommend you to follow this few suggestions:

- › Do not attempt to open the unit. Non-expert handling of the unit may damage it and/or annul the warranty.
- › When using regulated power supply, take notice of power voltage, that must be between 6V and 8V to avoid damages.
- › High temperatures can shorten the life of electronic devices, and warp or melt certain plastics. Do not store the radio in dusty or dirty areas.
- › Keep the Radio dry. Rainwater or damp will corrode electronic circuits.
- › If it appears that the Radio diffuses peculiar smell or smoke, please shut off its power immediately and take off the charger or battery from the Radio.
- › Do not transmit without antenna.

## WARRANTY

The Warranty does not limit the user's (statutory) rights under applicable National laws relating to the sale of consumer products.

During the Warranty period, the Manufacturer or the authorized customers service will, in accordance with this Limited Warranty , remedy defects by repair or replace the product.

This Limited Warranty is only valid and enforceable in the country where the user has purchased the product.

### Warranty period

The warranty period starts at the time of Product's original purchase by the first end-user. The product may consist of several different parts and these parts are covered by different warranty periods:

- › 24 month for the device
- › 6 month for these following parts: battery, chargers, headset , antennas..

### How to get the Warranty service

In the event of a product defect, please return it to the authorized customer service or to the Manufacturer himself. To make use of this warranty, it is necessary to return to the authorized service centre:

- › The affected product (or accessory)
- › The original proof of purchase, which clearly indicates the name and address of the seller and the date and place of purchase.

### What the Warranty does not cover

The warranty does not cover:

- › Normal wear and tear of the product
- › Defects caused by rough handling (defects caused by sharp items, by bending, compressing or dropping ...)
- › Defects or damage caused by misuse of the product, including use that is contrary to instructions provided by manufacturer
- › Defects caused by other factors/acts beyond the reasonable control of the manufacturer.

The warranty does not cover defects or damage caused to the Product by misuse with, or connection to, any product, accessory software and/or services not produced or supplied by the manufacturer or by use of the product for any other use than for intended use of the product.

The warranty is not enforceable if the product has been opened, modified or repaired by anyone other than the authorized service centre; if it is repaired using unauthorized spare parts or if the serial number has been removed, erased, defaced, altered or is illegible.

The warranty is not enforceable if the product has been exposed to moisture, to dampness or to extreme thermal or environmental conditions or to corrosion, to oxidation, to spillage of food or liquid or to influence from chemical products.

## TECHNICAL SPECIFICATIONS

<b>General</b>	
Frequency range	446.00625- 446.09375 MHz (PMR446)
Working temperature	-20°+50°
Operating voltage	7.4V
Operate mode	Simplex
Dimensions	100mm×58mm×33mm (without Antenna)
Weight	203g (Battery pack included)
Antenna impedance	50Ω
Duty cycle	5/5/90%
<b>Transmitter</b>	
Frequency stability	±2.5PPM
Output power	≤500mWERD
Max frequency deviation	≤2,5KHz
Audio distortion	≤3%
Adjacent channel power	< 60 dB
Spurious radiation	Within European legal terms
Occupied bandwidth	Within European legal terms
<b>Receiver</b>	
RF sensibility	<0.2UV@20 dB SINAD
Audio distortion	≤3%
Audio response	300Hz ÷ 3KHz
Adjacent channel selectivity	Within European legal terms
Intermodulation rejection	Within European legal terms
Spurious response	Within European legal terms
Blocking	Within European legal terms

Hereby, CTE International declares that this **G11** is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of Declaration of Conformity can be found at: [www.midlandradio.eu](http://www.midlandradio.eu)

## PROBLEM SOLVING

Problem	Possible Cause	Solution
The radio doesn't switch on	The battery pack is discharged and/or has not been installed correctly.	Verify that the battery pack is charged and that it has been correctly installed.
The radio switches off shortly after it has been switched on	Discharged battery pack.	Recharge the battery pack.
The battery pack does not recharge	The battery-charger has not been connected or installed correctly.	Inspect the connections of the battery-charger and the installation of the batteries.
The radio switches on but is unable to receive signals	The site of installation is too shielded.	Move to an another area.
	The volume is too low	Adjust the volume level.
	Incorrect CTCSS or DCS	Check that the CTCSS tone or DCS code corresponds to the one set by the parties you are communicating with.
Noise is always present in reception mode	The Monitor function is enabled.	Disable the Monitor function.
It is not possible to communicate with other parties	An incorrect radio channel has been selected.	Select the same radio channel used by the parties you are communicating with.
	The radio is installed in a shielded area or is too far from the party you are communicating with	Move to another area.
	Incorrect CTCSS or DCS	Check that the CTCSS tone or DCS code corresponds to the one set by the parties you are communicating with.
Reception is fragmented and/or disturbed	The signal is very weak.	Try temporarily disabling the Squelch by means of the Monitor feature.
	The transmission distance is excessive and/or there are obstacles in the transmission path	Move closer to the party you are communicating with or to another area.
	Other parties are using the same channel	Check the traffic on the radio channel by means of the Monitorfeature and select another channel if required.
	The radio has been installed too close to equipment that causes interference (televisions, computers, etc.)	Increase the distance between the radio and this equipment.
Transmission is not always possible	The channel is used by an excessive number of parties or the transmission has been barred due to a busy channel.	Select another channel. Ask the radio link provider to disable the block due to busy channel.
VOX causes the radio to accidentally enable transmission	The sensitivity and/or environmental noise is too high.	Reduce the VOX sensitivity.
The VOX feature requires speaking in a loud voice	The sensitivity is too low.	If the environmental noise is not high, increase the sensitivity or use an optional microphone.
The autonomy of the battery pack is limited	Commission time is too high.	Try reducing the transmission time and/or using a low power.
Logic related faults (unreadable displayed symbols, functions blocked, etc.)	Incorrect setting caused by a problem with the power supply.	Recharge the battery pack