

# G11 PRO

PMR446 TRANSCEIVER

>> INSTRUCTION GUIDE



Coverage\*



\* Depending on terrain

**MIDLAND**<sup>®</sup>



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Thanks for choosing Midland! **G11 PRO** 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.

**G11** evolves and becomes **PRO**.

**G11 PRO**, multi-task transceiver, introduces 16 new PMR446 channels, which are useful to improve the conversations and prevent the many interferences and congestions currently present on the standard channels.

**G11 PRO** is given the utmost attention to the smallest details to guarantee high performances. The supreme audio quality and its robust metal chassis make this radio an extremely reliable equipment.

## Programming software (optional)

Thanks to Midland Programming software specifically made for **G11 PRO**, it is possible to increase the performance of your radio or to reduce its functionality by disabling some of the default features (CTCSS, TOT, SOS Emergency, Roger Beep, Vox levels and Squelch adjustment,...)

For further information, please consult the Programming software manual.

Any attempt to change frequencies or output power of the radio invalidates the approval.

## Content

- › 1 G11 PRO transceiver
- › 1 belt clip
- › 1 wall adaptor
- › 1 11600mAh Li-ion rechargeable battery pack
- › 1 desktop charger

## Main characteristics

- › Supreme audio quality
- › 16 new PMR446 channels
- › 32 PMR446 channels (16+16 pre-programmed)
- › Extended frequency band: from 446.00625 to 446.19375MHz
- › Fast switch from 16 to 32 channels
- › Output power: 500mW
- › Channel spacing: 12.5KHz
- › Vocal announcement
- › Built-in VOX function (vocal-activated communication)
- › Scan
- › Beep keypad
- › Battery save
- › Monitor, Squelch

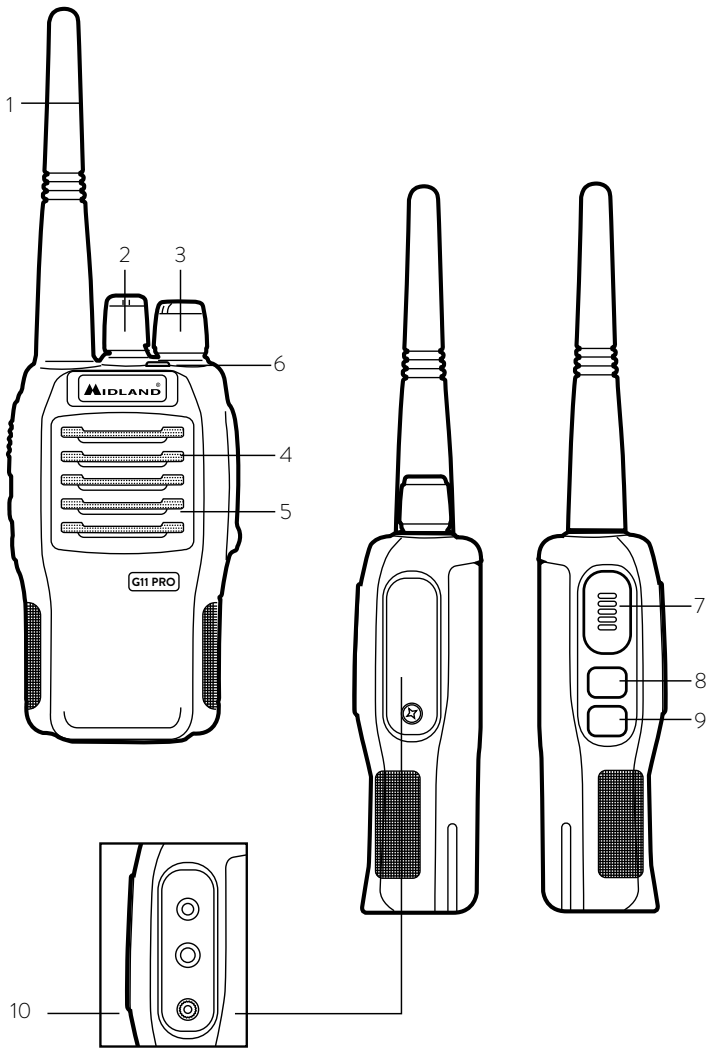
## Coverage/Range

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. When you select the desired channel you will hear a vocal announcement indicating the channel number (ex. Channel 1, etc..).
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 2 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:** Press briefly this control to switch to the next 16 channels (from CH 17 to CH 32) or to return to the previous 16 (from CH 1 to CH 16). Keep pressed this button for about 2 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.

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 2 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**.

The scanning will be done on the frequency band in use, so either channels 1-16 or 17-32.



## Vox

**G11 PRO** 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 PRO** is set on level 7.

To activate the VOX feature, keep pressed for about 2 sec. the **Function key1**.

## Squelch

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

**G11 PRO** 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 PRO** 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.

## Selecting 16 or 32 channels

G11 PRO can operate not only on 16 PMR446 channels, but if you press briefly the Function Key2, you can switch to the next 16 PMR446 channels (CH17-32) and viceversa.

The voice announcement will advise you about the band you are working on. In case you disabled the voice announcement through the optional programming software, the blinking led will help you to realize what band you selected:

- › **five green flashes** indicate that you are operating on the first band (CH1 - CH16);
- › **five red flashes** indicate that you are operating on the second band (CH17 - CH32).

### CH 1- CH16

- › 1 - 8 : standard PMR446 channels
- › 9 - 16: PMR446 channels of the new band (446.0 - 446.2 MHz)

## CH17 - CH32

- › 17 - 24: standard pre-set PMR446 channels
- › 25 - 32 : pre-set PMR446 channels of the new band

The first 8 channels of the traditional band 446.0 - 446.1 allow you to communicate with all PMR446 radios on the market.

## 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.

This feature is disabled by default. It can be activated through the programming software PRG10 (optional).

## Beep Tone

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

## Programmable functions (PRG10 optional).

Thanks to the optional programming software, it is possible to enable the activation, from the radio, of further functions which are disabled by default.

## Emergency SOS

With this function you can send out an emergency alert on the channel in use.

The emergency can be activated by pressing one the two Function keys.

For further details about this feature, read the user manual of PRG10 programming software.

## Battery capacity

Once enabled this feature through the PRG10 programming software, it can be activated by pressing one of the two Function keys on the radio: you will hear a voice tone indicating the battery level from 5 to 1 (5 = battery fully charged; 1 = low battery).

For further info, read the PRG10 user manual.

## Battery recharge

**G11 PRO** 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 PRO** 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 PRO** 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.

# Technical specifications

## General

Channels	32 (16+16 pre-programmed)
Frequency range	New band: 446.00625- 446.19375 MHz Traditional band: 446.00625- 446.09375 MHz
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%
Category	B

## Transmitter

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

## Receiver

RF sensibility	< 0.2UUV@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

**WARNING:** 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.

# 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.

	The signal is very weak.	Try temporarily to disable 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.
Reception is fragmented and/or disturbed	Other parties are using the same channel	Check the traffic on the radio channel by means of the Monitor feature 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



Prodotto o importato da:

**CTE INTERNATIONAL srl**

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 srl**

Via. R.Sevardi 7 - 42124 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.

Vertrieb durch:

**ALAN ELECTRONICS GmbH**

Daimlerstraße 1K - D-63303 Dreieich Deutschland

[www.alan-electronics.de](http://www.alan-electronics.de)

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Importado por:

**MIDLAND IBERIA, 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. Antes de utilizar, lea atentamente el manual de uso.

Importé par:

**ALAN FRANCE S.A.R.L.**

5, Rue Ferrie, Zac les Portes du Vexin 95300 Ennery - France

[www.alan-midland.fr](http://www.alan-midland.fr)

L'utilisation de cet appareil peut être sujet à des restrictions nationales. Avant l'utilisation, lire les instructions.



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