G10

- Instruction guide

PMR446 TRANSCEIVER |

MIDLAND®

Index

Thanks for choosing Midland! ***G10*** *is a portable transceiver that is free use in almost all European countries. For further information, we suggest you look at the "Restrictions on the use" chart.*

Midland G10 is a multi-task PMR446 transceiver.
Combining the latest technology in radio communication along with a sturdy mechanical frame, **G10** 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 **PRG10**, 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.
Any attempt to change frequencies or output power of the radio invalidates the approval.

Content

- 1 G10 transceiver
- 1 belt clip
- 1 wall adaptor
- 1 1200mAh Li-ion rechargeable battery pack
- 1 desktop charger

Main characteristics

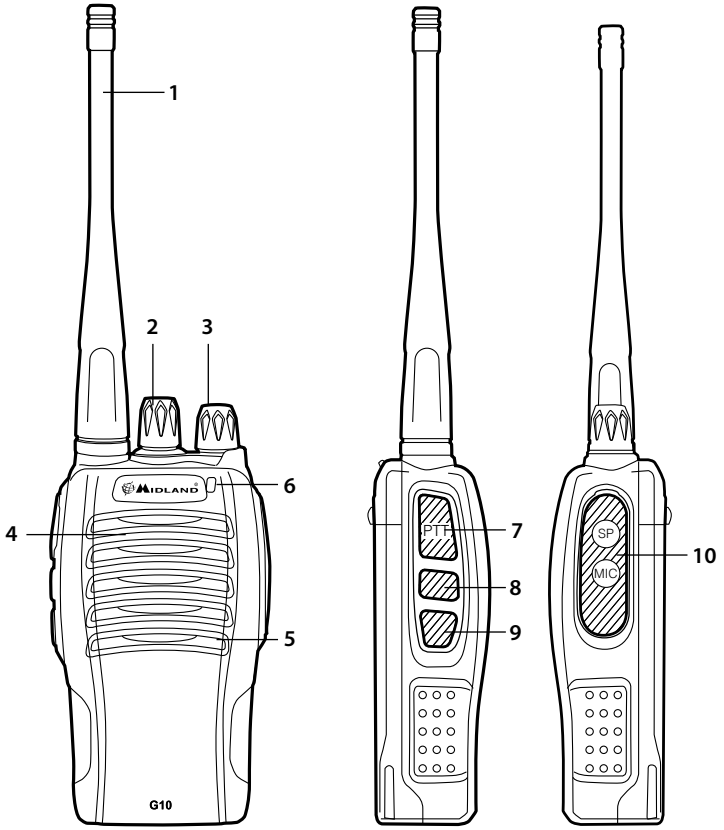
- PMR446 Transceiver
- Output power: ≤ 500mW ERP
- Channel spacing: 12.5KHz
- Scan
- Vocal tuning
- Battery save
- Monitor
- Squelch

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**: hold down this button to activate the Monitor function.
9. **Function key 2:** not programmed by default
10. **External Speaker/Mic Jack**- allows the connection with external devices such as headsets, microphones.


1
2
3
4
5
6
MIDLAND
G10
PTT
7
8
9
SP
MIC
10

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.
To turn the radio off, rotate the control counter-clockwise till hearing a mechanical "click".

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 talk.
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 excluding (opening) the Squelch, in order to listen to signals that are too weak to keep the Squelch permanently opened.
Hold down the **Function key 1** to enable such function.

Scan

This function can be activated only by means of the optional program-

ming software.
To enable the Scan function, all 16 channels must be programmed.
If you turn on the radio on channel 16, the scanning will automatically start.
Whenever any signal is detected, the scanning will stop on a busy channel.
If the **PTT** is pressed, you will transmit on the latest busy channel.
Channel 16 is the priority channel, therefore if you don't pick up any signal when you press **PTT**, the radio will transmit on channel 16.

Squelch

The Squelch function suppresses noises on free channels and allows to receive even weak signals.
G10 has 10 different Squelch levels that can be set 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 **G10** is set on level 4.
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.

Battery recharge

G10 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 **G10** 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 automatically activates when the transceiver does not receive any signal for more than 5 seconds in order to save the battery life. Power saving can be disabled only through Programming software.

Maintenance

Your **G10** 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	
Frequency range	446.00625- 446.09375 MHz (PMR446)
Working temperature	-20°/+55° C
Operating voltage	7.4V
Operate mode	Simplex
Dimensions	100mm×58mm×33mm (without Antenna)
Weight	192g (Battery pack included)
Antenna impedance	50Ω
Duty cycle	5/5/90%
Transmitter	
Frequency stability	±2.5PPM
Output power	≤500mW ERP
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	<0.2UV@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 **G10** is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
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.

Troubleshooting

Problem	Possible Cause
The radio doesn't switch on	The battery pack is discharged a installed correctly.
The radio switches off shortly after it has been switched on	Discharged battery pack.
The battery pack does not recharge	The battery-charger has not bee correctly.
The radio switches on but is unable to receive signals	The site of installation is too shie
	The volume is too low
	Incorrect CTCSS or DCS
It is not possible to communicate with other parties	An incorrect radio channel has b
	The radio is installed in a shielde the party you are communicatin
	Incorrect CTCSS or DCS
Reception is fragmented and/or disturbed	The signal is very weak.
	The transmission distance is exc obstacles in the transmission pa
	Other parties are using the same
	The radio has been installed too causes interference (televisions,
The autonomy of the battery pack is limited	Commission time is too high.

	Solution
nd/or has not been	Verify that the battery pack is charged and that it has been correctly installed.
	Recharge the battery pack.
n connected or installed	Inspect the connections of the battery-charger and the installation of the batteries.
lded.	Move to an another area.
	Adjust the volume level.
	Check that the CTCSS tone or DCS code corresponds to the one set by the parties you are communicating with.
een selected.	Select the same radio channel used by the parties you are communicating with.
d area or is too far from g with	Move to another area.
	Check that the CTCSS tone or DCS code corresponds to the one set by the parties you are communicating with.
	Try temporarily disabling the Squelch by means of the Monitor feature.
essive and/or there are th	Move closer to the party you are communicating with or to another area.
e channel	Check the traffic on the radio channel by means of the Monitor feature and select another channel if required.
close to equipment that computers, etc.)	Increase the distance between the radio and this equipment.
	Try reducing the transmission time and/or using a low power.

Prodotto o importato da:
CTE INTERNATIONAL s.r.l.
Via. R.Sevardi 7- 42124 Reggio Emilia Italia
www.cte.it - www.midlandradio.eu
L'uso di questo apparato può essere soggetto a restrizioni nazionali . Prima dell'uso leggere attentamente le istruzioni. Se il prodotto contiene batterie: non gettare nel fuoco, non disperdere nell'ambiente dopo l'uso, usare gli appositi contenitori per la raccolta.

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 Fitzerhert Spur Farlington Portsmouth Hampshire P06 1TT United Kingdom
www.alan-uk.com - www.midland-uk.com
The use of this transceiver can be subject to national restrictions. Read the instructions carefully before installation and use. If the product contains batteries: do not throw the battery into fire. To disperse after use, throw into the appropriate containers.

Importado por:
ALAN COMMUNICATIONS, SA
C/Cobalt, 48 - 08940 Cornellà de Llobregat (Barcelona - España)
Tel: +34 902 384878 Fax: +34 933 779155
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. si el producto contiene pilas o baterías no las tire al fuego ni las disperse en el ambiente después de su uso, utilice los contenedores apropiados para su reciclaje.

Vertrieb durch:
ALAN ELECTRONICS GmbH
Daimlerstraße 1K - D-63303 Dreieich Deutschland
www.alan-electronics.de
Die Benutzung dieses Handfunkgerätes ist von den landesspezifischen Bestimmungen abhängig. Vor Benutzung Bedienungsanleitung beachten. Bei Verwendung von Batterien beachten Sie bitte die Umweltbestimmungen. Batterien niemals ins offene Feuer werfen, und nur in dafür vorgesehene Sammelbehälter entsorgen.