

Midland G7

Two-colour and dual band PMR/LPD transceiver



1. INTRODUCTION

Combining the latest technology in radio communication along with a sturdy mechanical frame, the **MIDLAND G7** makes the ideal and effective solution for both the professionals who need to stay in touch with colleagues (construction sites, buildings, hotels, trade fairs, shows) or with leisure users that just want to keep up with friends and family. Its robust frame, ease of use and simple design mean that it is ideal for use in any activity. The **MIDLAND G7** is extremely practical and operates on both PMR446 and LPD bands (please see chart in user guide for restrictions on use).

The **MIDLAND G7** incorporates all the functions that you would expect to see on the latest and most advanced two way radio transceivers and guarantees reliability and maximum efficiency. Other key features include an LCD backlit display, a Vibrating call alert feature for use in high-noise areas and an auto power save function which reduces battery consumption by up to 50%. All of the features on this outstanding radio are easily accessible thanks to the centrally mounted controls.

Coverage (referred to PMR frequency band)

The maximum range 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.

Main functions

- **Dual Band LPD/PMR transceiver**
- **VIBRACALL** function
- LCD display with backlight
- Low battery indicator
- **Auto power save:** automatic current economy circuit
- **38 CTCSS tones in TX and RX**
- **CALL button** with 5 tones selectable
- Automatic squelch adjustment
- Buttons for the channel selection
- **SCAN function**
- Keypad lock
- **Hi/low power selection (PMR band)**
- Roger Beep on/off
- **VOX** for hands-free communications
- Jack for ext. mike / ext. speaker / battery (AA type) recharge

NOTE: The manufacturer, with its effort to constantly improve product quality, reserves the right to change characteristics and features without prior notice.

2. ABOVE ALL.....SAFETY!

2.1 Symbols used

For ease and convenience of use, this manual uses symbols to highlight urgent situations, practical advice, and general information.

! *Exclamation marks such as this one indicate a crucial description regarding technical repairs, dangerous conditions, safety warnings, advice, and/or other important information. Ignoring these symbols may result in serious problems and/or damage and/or personal injury.*

▣ *Notes such as this one indicate practical advice that we suggest be followed for the optimal performance of the equipment*

2.2 Warnings

! **BATTERIES - Strictly follow all the directions and warnings on the batteries stated at chapter 4.1**

! **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.**

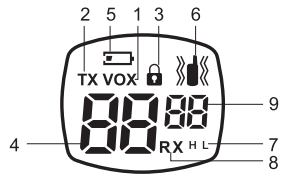
! **Do not use detergents, alcohol, solvents, or abrasives to clean the equipment. Just use a soft, clean cloth. If the radio is very dirty, slightly dampen the cloth with a mixture of water and a neutral soap.**

3. IDENTIFYING THE PARTS

3.1 Display

Your **MIDLAND G7** keeps you constantly updated about its operational status through a Liquid Crystal Display (LCD). The symbols and their corresponding parameters that may appear, according to the operational status of the device, are described as follows:

- VOX** - Activation of VOX function.
- TX** - during transmission (PTT pressed).
- 🔒** This symbol appears when the keypad lock is activated.
- CHANNEL** - These two large digits indicate the channel selected (P1-P8 PMR, 1-69 LPD).
- 🔋** It warns you of the battery pack / AA batteries low charge.
- 📞** Vibra-Call function activated.



- H (High) / L (Low)** - shows the high or low power selection (PMR band).
- RX** - (busy channel): appears on the display when the transceiver is receiving a signal.
- CTCSS tones** - these 2 small digits indicate the selected CTCSS tone (1 - 38).

3.2 Radio

Refer to this picture to identify the various parts of the device:

- VOLUME knob** - On/off switch for the device and adjusts volume of reception.

PTT button (push to talk) - Press this button to transmit.

CALL button - to send a call on the selected channel.

If you keep it pressed for about 5 seconds, the keypad lock is activated.

Built-in MICROPHONE - Here is where sound is picked up by the microphone.

Built-in SPEAKER - Here is where the speaker is housed.

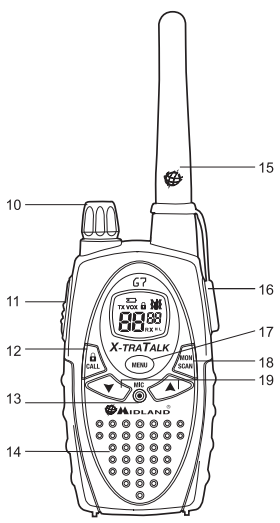
ANTENNA - Receives and transmits radio signals.

SPK/MIC socket (under protective cover) - To connect to external audio devices (headphones, microphone etc.) and to the battery charger.

MENU button - Press this button to display the device's menu.

MONITOR/SCAN button - Press this button once to activate SCAN (scanning of channels). Keep the same button pressed for about 2 seconds to activate MON function. This function temporarily cuts off Squelch (for weak signals).

Scroll buttons ▲▼ - Press these buttons to change setting within the MENU.



- **2**: 2nd Level (high sensitivity);

Press **PTT [11]** to confirm or wait for 5 seconds.

To disable the **VOX** function follow the instructions above and select option **oF**.

6.5 Vibra-Call function

MIDLAND G7 is equipped with the "Vibra-Call" feature, which provides a silent alert for incoming calls.

To activate it, follow these steps:

- In the PMR band, press the **MENU [17]** button for 5 times, until the display shows **📞 [6]**;
- Use the **▲▼ [19]** buttons to disable or enable this feature (**on**: enables, **oF**:disables);
- Push **PTT [11]** to confirm or wait for 5 seconds.

▣ *Everytime MIDLAND G7 receives a call, it will vibrate.*

▣ *When the Vibracall function is enabled, the call tone won't be heard.*

6.6 ROGER BEEP (End transmission tone)

Every time you end transmission (**PTT [11]** released), **MIDLAND G7** gives out a sound that indicates to the other party that s/he can start talking. This function is factory disabled. To activate it:

- Press six times the **MENU [17]** button in the PMR band until the display shows "rb **oF**";

2) Using the scroll buttons **▲▼ [19]** select "on" and "rb on" will be displayed;

3) To confirm the roger beep activation, press **PTT [11]** button or wait for 5 seconds.

6.7 CALL function

MIDLAND G7 can send 5 different call tones. To send this audio signal to other users, press the **CALL [12]** key.

To select the call tones:

- Push the **MENU [17]** button 7 times in the PMR band, until the display shows "CA 1".
- By pushing **▲▼ [19]** you will hear the 5 pre-set melodies.
- Confirm by pressing the **PTT [11]** key or wait for 5 seconds.

Now, each time your **MIDLAND G7** sends out a tone call, it will beep with the selected melody.

▣ *If the Vibracall function is activated (See par. 6.5), the call tone won't be heard.*

6.8 Dual Watch function

This function allows the monitoring of 2 channels of your choice. Procedure:

- Select one of the 2 channels you want to monitor.
- Press 9 times the **MENU [17]** button in the PMR band until the display shows "TX **oF** RX".
- With the **▲▼ [19]** button select the second channel to monitor.
- Push the **PTT [11]** key or wait for 5 seconds for confirmation.

4. PREPARING THE TRANSCIEVER

Make sure the following items are supplied in the package before you start using your transceiver:

2 transceivers; double desktop charger; wall adaptor; 2 battery packs, 800m Ah NiMH; belt clip; operational manual.

If any of the above is missing or damaged contact your supplier immediately.

4.1 Battery pack recharge

The supplied battery pack is 6V NiMH type and must be recharged without taking it out of the transceiver; it takes 12-14 hours to fully recharge.

To recharge the battery pack:

- Connect the socket of the wall adaptor to a mains power socket and insert the jack of the wall adaptor into the desktop charger plug.
- Place your transceiver into the cradle of the desktop charger.

3) When charging is complete take the transceiver out of the cradle and detach the socket of the wall adaptor from the mains.

! **Do not overcharge the batteries! When these are fully charged the charging process does not stop automatically. Do not forget therefore, to remove the transceiver from the charger as soon as the batteries are charged.**

! **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.**

4.2 Memory effect of rechargeable batteries

Rechargeable NiMH (Nickel-Metal-Hydrate) batteries are affected by what is known as the "memory effect". This phenomenon is associated with a drastic reduction of battery autonomy and is triggered if the batteries are regularly charged before being fully discharged and/or are not completely recharged. To avoid the memory effect:

- When possible, recharge the batteries only when they are completely discharged (until the

To disable the function, press the **MONSCAN [18]** button.

6.9 Keypad beep

To deactivate the keypad beep, follow these steps:

- Press for 8 times the **MENU [17]** button in the PMR band, until "bP on" is displayed.
- Use the **▲▼ [19]** buttons until the display shows "bP **oF**".
- Confirm by pushing the **PTT [11]** or wait for 5 seconds.

Now you won't hear any beep at the pressure of any button.

7. TROUBLESHOOTING

Your **MIDLAND G7** 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.

7.1 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

2) Remove the batteries for about 60 seconds (Par.4.4)

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

device turns itself off during normal use)

- Do not disconnect the battery charger before the time indicated for a full battery charge.

• Discharge and recharge your batteries completely at least twice a month. In any case, the best solution for avoiding the memory effect is to use in turn two battery sets: one in use, and the other as a spare set. The memory effect can be easily eliminated by completely discharging/charging the batteries 3 or 4 times.

▣ *The memory effect should not be confused with the normal battery life, which is 300-400 cycles of charge/discharge on average. It is completely normal for operating duty to decrease when the batteries have reached the end of their life, at this point, you will need to substitute the batteries.*

4.3 Installing and removing the belt clip

With the belt clip you can easily attach the transceiver to your belt. The clip however, must be removed in order to install or change the batteries. To remove the belt clip follow the indication of picture 1. To fix the clip back to the device slot it in the guides at the back of the transceiver until it clicks into place.

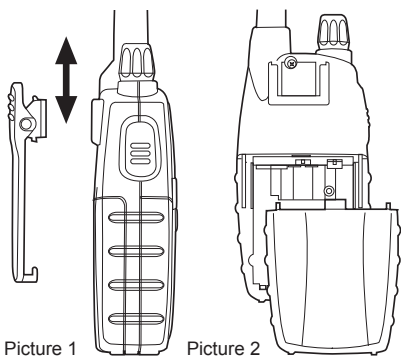
4.4 Installing/removing the battery pack

4.4.a Removal

- Remove the belt clip as explained in paragraph 4.3;
- Open the battery compartment as shown in picture 2;
- Remove the battery pack;
- Replace the battery cover and fix the belt clip.

4.4.b Installation

- Remove the belt clip as explained in paragraph 4.3;
- Insert the battery pack into the battery compartment;
- Replace the battery cover and fix the belt clip.



8 TECHNICAL SPECIFICATIONS

Channels	1-8 PMR, 1-69 LPD
Frequency range	446.00625 + 446.09375MHz (PMR)
Channel spacing	433.075 + 434.775MHz (LPD)
Power supply	12.5 KHz (PMR); 25 KHz (LPD)
Temperature	6+/- 10% Vdc
Dimensions (w/o batteries)	from -20° to +55°C
Weight (w/o batteries)	58 (L)x 122 (H)x34 (D) mm
Duty cycle	123gr
	TX 5%, RX 5%, stand-by 90%

8.1 Transmitter

Output power..... 10 or 500 mW (Selectable)
Modulation..... FM
Spurious rejection..... within European legal terms

8.2 Receiver

Sensitivity @ 12dB Sina..... 0,35µV
Adjacent channel rejection 70dB
Audio output power..... 300mW @ 10% THD
Intermediate frequencies..... 1st :21.4 MHz ; 2nd:450 KHz
Jack for ext.mike and recharge stereo 2,5 mm
Jack for ext. speaker mono 3,5 mm

Specifications are subject to change without notice.

9 FREQUENCY CHART

Channel	Frequency RX/TX (MHz)	Channel	Frequency RX/TX (MHz)
P1	446.00625	P5	446.05625
P2	446.01875	P6	446.06875
P3	446.03125	P7	446.08125
P4	446.04375	P8	446.09375

5.BASIC OPERATION

5.1 Turning on/off

To turn on the transceiver, turn the **VOLUME [10]** knob clockwise until you hear it clicks; the LCD display will light up and do an Auto-Test. Subsequently you will hear 3 beeps of different tones. To turn off the transceiver, turn the knob counter-clockwise until you hear another click. The LCD display will turn off and subsequently you will hear 3 beeps of different tones.

5.2 Volume control

Turn the knob **VOLUME[10]** to about half way and adjust it to a comfortable level as soon as you receive a signal. If you do not receive a signal you can use the button **MON/SCAN [18]** described at par. 5.4.

5.3 Transmission and reception

The button **PTT [11]** is located on the top left side of the device. To transmit:

- Make sure that no one else is currently talking on the selected channel;
- Keep button **PTT [11]** firmly pressed: **TX [2]** will appear on the display;
- Before you start talking wait for a fraction of a second then speak normally, in the direction of the microphone, and hold the device at a distance of about 5 cm.

4) When you have finished, release the **PTT [11]**: **TX [2]** will disappear from the display;

5) When the radio is in reception mode (**PTT [11]** not pressed) you will automatically receive any communication (**RX [8]** displayed).

▣ *During transmission and reception try, as far as possible, to keep the antenna in vertical position and to avoid obstacles towards the direction of the other party.*

5.4 MON button (Monitor)

The Monitor button is for temporarily excluding (opening) the squelch, in order to listen to signals that are too weak to keep the squelch permanently opened. By excluding the squelch you will avoid listening the communication "chopped" by the squelch. In order to activate the Monitor function, so as to listen to all traffic on the selected channel, keep pressed the **MON/SCAN [18]** button for about 2 seconds. Keep pressed the button **MON/SCAN [18]** for about 2 seconds to disable this function.

5.5 Scanning all channels

MIDLAND G7 can automatically search for signals throughout the PMR/LPD bands by scanning, i.e. selecting the channels in rapid sequence. When a signal is detected, the scanning pauses on that channel and you can transmit by pushing **PTT [11]**. If you press **PTT [11]** during scanning you can transmit on the channel from which the scanning started. The scroll buttons **▲▼ [19]** allow you to change the direction of scanning (from lower

LPD channels

Channel	Frequency RX/TX (MHz)	Channel	Frequency RX/TX (MHz)
1	433.0750	36	433.9500
2	433.1000	37	433.9750
3	433.1250	38	434.0000
4	433.1500	39	434.0250
5	433.1750	40	434.0500
6	433.2000	41	434.0750
7	433.2250	42	434.1000
8	433.2500	43	434.1250
9	433.2750	44	434.1500
10	433.3000	45	434.1750
11	433.3250	46	434.2000
12	433.3500	47	434.2250
13	433.3750	48	434.2500
14	433.4000	49	434.2750
15	433.4250	50	434.3000
16	433.4500	51	434.3250
17	433.4750	52	434.3500
18	433.5000	53	434.3750
19	433.5250	54	434.4000
20	433.5500	55	434.4250
21	433.5750	56	434.4500
22	433.6000	57	434.4750
23	433.6250	58	434.5000
24	433.6500	59	434.5250
25	433.6750	60	434.5500
26	433.7000	61	434.5750
27	433.7250	62	434.6000
28	433.7500	63	434.6250
29	433.7750	64	434.6500
30	433.8000	65	434.6750
31	433.8250	66	434.7000
32	433.8500	67	434.7250
33	433.8750	68	434.7500
34	433.9000	69	434.7750
35	433.9250		

Accessori originali - Original accessories Accessoires originals - Originalzubehör Accesorios originales - Acessórios

Consultate il nostro sito www.cte.it per l'elenco aggiornato degli accessori compatibili.

For a detailed and updated list of suitable accessories, please go to www.cte.it

Eine ständig aktualisierte Übersicht für passendes Zubehör können Sie auf unserer website www.alan-germany.com abrufen oder Sie informieren sich über Neuerungen bei Ihrem Fachhändler.

Pour voir la liste de nôtres accessoires compatibles, vous pouvez consulter notre website www.cte.it

Consulte nuestra web www.alan.es para una lista actualizada de los accesorios compatibles

Consulte o nosso website www.cte.it para uma lista atualizada de acessórios

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