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Owner's Manual
PMR 446 Handheld transceiver
G5

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Featuring

- **8 Channels**
- **38 CTCSS codes**
- **VOX/Babymonitoring**
- **Display illumination**
- **Scan function**
- **Roger Beep Tone**

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Accessories – Accessories can be purchased at
www.alan-germany.com or ask your dealer.

AE740

Over the ear Mic. Headsets with PTT

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Introduction
Congratulations on your purchase! MIDLAND G5 is a new generation PMR 446 transceiver which may be used, without license, in all the countries in which Pan-European PMR446 frequencies are authorised (446.00625 – 446.09375 MHz).
As of date of printing this manual in following countries your G5 may be used without license:
Austria, Belgium, Denmark, Germany, Finland, France, Greece, Hugary, Iceland, Ireland, Liechtenstein, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland, Spain, United Kingdom.
For Italian inhabitants a licence is requested while for travellers the use without licence is allowed for short time. Please ask the local authorities before using the radio, because only few countries apply already the european R&TTE directive.
You can download the latest versions any time from our server under
http://www.hobbyradio.de
This unit fully complies to the following European standards EN300 296-2, EN 301489-1 / -5 and EN 50 950.

Control

Buttons & Indicators

Display
Illumination
ON / OFF

- Talk on the Radio
- Send a Call Tone
- Save a setting

SCAN

Scan for active
Channels and
keylock

Speaker

MODE

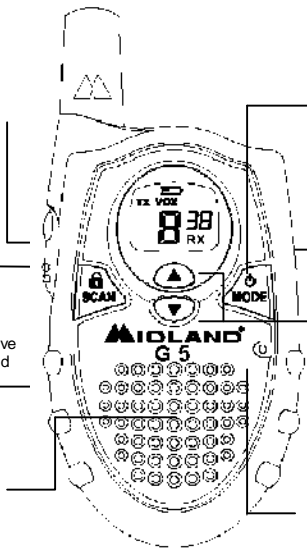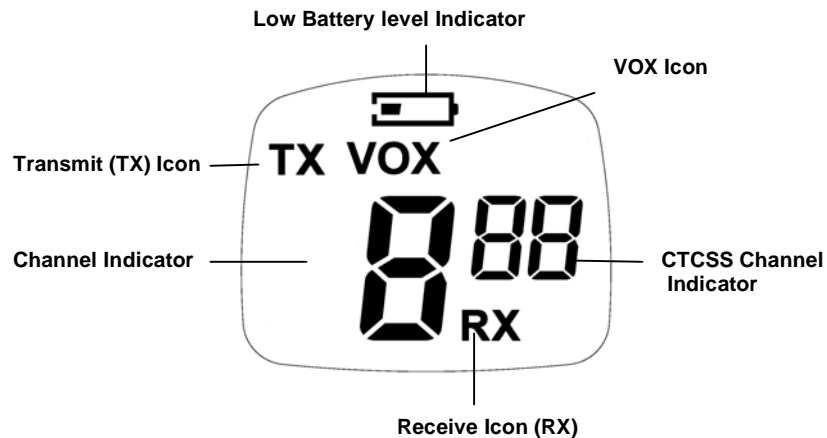Turn On/Off the Radio
- Enter/Exit the menu

Ext. Spk/Mic

- Increase the volume
 - Scroll through the menu
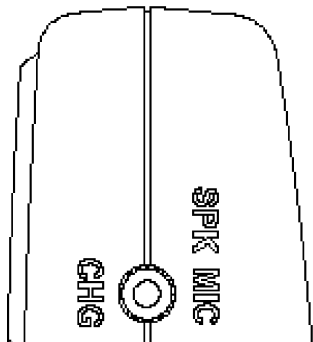
- Decrease the Volume
 - Scroll through the menu

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G 5

Microphone

LCD

Display

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Low Battery level Indicator

VOX Icon

Transmit (TX) Icon ——— **TX VOX**

Channel Indicator ——— **8**

CTCSS Channel Indicator

RX

Receive Icon (RX)

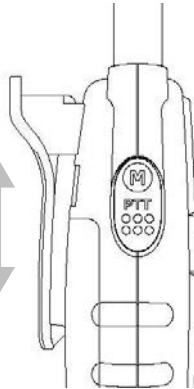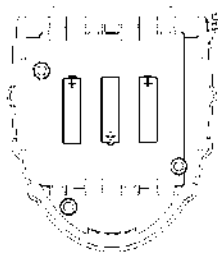**External Speaker/Microphone Jack :**

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Your G5 can be used with an optional external speaker/microphone or headset, for example AE740.

CHG SPK MIC

Remove Battery Cover and Installing Batteries:

1. Pull the latching tab outward, then gently slide the belt clip down toward the bottom of the radio.
2. With the back of the radio facing you, remove the Battery Cover by sliding it down from the unit.
3. Insert 3 1,5 V AAA batteries or rechargeable NiMH-batteries observing the polarity as shown.
4. Return the Battery Cover by sliding it up from the unit.

Battery level indicator and charging batteries

Battery level indicator
The battery level is indicated by the number of squares present inside
the battery icon ▭ on the LCD Screen. When the battery level is
low, the battery icon will flash to indicate that the batteries need to be
replaced.

To charge batteries in the radio
For recharging NiMH batteries (not included) you will be required to use
an AC/DC wall charger 230 V A/C (our order No. 7360, not included).
Only use charger/adadpters indicated in the manual.

1. Turn the unit off.
2. Insert 3 rechargeable NiMH-batteries observing the polarity.
3. Connect the AC Adaptor/Charger into an A/C Wall Outlet and insert
    the Adaptor/Charger jack into the MIC Jack of the radio found at the
    side of the unit.

Note: It takes approximately 6 hours to charge partly discharged batteries. If they are at their lowest level it will take around 10 up to 14 hours to fully charge new batteries or fully discharged batteries.

Automatic energy saving circuit
The radio transceiver has a built in POWER SAVER feature for maximum battery life. It switches automatically to power save mode during longer receiving periods without incoming signals.

Warning
1. Do not mix old and new batteries. Do not mix alkaline, standard (carbon-zinc) or rechargeable (Ni-MH) batteries. Rechargeable batteries are most time partly discharged and must be fully charged min. one time.

2. Do not replace or charge batteries in a potentially explosive atmosphere. Contact sparking may occur while installing or removing batteries and cause an explosion.

3.   Never attempt to charge alkaline or other "normal" dry cell batteries. When recharging, use only approved and recommended rechargeable NiMH batteries and chargers. Use of the charger with other batteries can cause damage to your PMR unit. Other types of batteries may burst and cause personal injury.

4.   If the unit is not to be used for an extended period of time, remove the batteries. Old or leaking batteries can cause damage to the unit and will void the warranty.

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Operation

Power On

Press the 🔘 button for more than 3 second to turn the radio on. Three beeps will sound and the standby screen with all available icons will appear on the LCD.

Power Off

Press the button 🔘 for over 3 seconds to turn the radio off.

Volume

Press the 🔼 button to increase the volume, and press the 🔽 button to decrease the volume during normal operation.
The volume level „U$_L$" is indicated by the number 1 to 7 on the LCD screen. 7 shows the highest volume level.

Reception
Simply release the PTT button. When you receive a signal, the RX icon
is displayed on the LCD screen.

Transmit

1. Do not transmit when You hear any activity on current channel. You
    may disturb a conversation between other parties.

2. Press and hold PTT button and speak in a normal voice into the
    microphone. The TX icon will appear continuously on the LCD
    Display when transmitting.

3. To receive messages, release the PTT button. The RX icon will
    appear on the display when your radio is receiving a transmission.

Call Tone
Your G5 can transmit a call tone for a fixed length of time. To send a call tone, press the **PTT** twice rapidly. The **TX** icon will appear during transmitting a call tone and tone can be heard on the speaker for confirmation.

Scan
Your G5 can scan all of the 8 channel to observe for any activity. To enter the scan mode, press the [SCAN] button for one second. Press [SCAN] button again to exit the scan mode.
Your radio will rapidly scan each of the 8 channels and stop on any active channel.
When you press the PTT button to transmit on an active channel, the scanning function will stop. To resume scanning Press and hold the [SCAN] button for one second.

Key Lock
You may lock the front panel keys against accidental use. To lock ▲
and ▼, press [MODE] key and hold it for about 5 seconds (You will hear a
beep tone and Lc in the display. Monitor and PTT keys can still be
used.

To disable the lock function later again, press [MODE] again for 5 sec, and
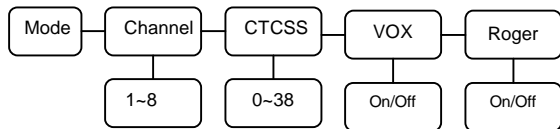hear the beep tone as confirmation.

Backlit LCD
Your G5 comes with a backlit LCD Display to enable you to view the
setting in a dark environment. The backlighting can be turned on/off by
pressing the **L** button above the PTT. The backlighting will turn on for
5 seconds.

User Interface
To access the advanced features of your G5, your radio has the
following menu functions:

```
┌──────┐  ┌─────────┐  ┌────────┐  ┌───────┐  ┌───────┐
│ Mode │──│ Channel │──│ CTCSS  │──│  VOX  │──│ Roger │
└──────┘  └─────────┘  └────────┘  └───────┘  └───────┘
              │             │           │          │
          ┌───────┐    ┌────────┐  ┌────────┐  ┌────────┐
          │  1~8  │    │  0~38  │  │ On/Off │  │ On/Off │
          └───────┘    └────────┘  └────────┘  └────────┘
```

All menue points may be changed by pressing the ⬆ or ⬇
button.

*Note : The unit will automatically go to normal mode after 5 seconds of
no button activity during menu setting.*

Channel Selection
Your G5 has 8 channels available. To change channels:

1. Turn the radio on.
2. Press the [MODE] button until the current channel segment flashes.

3. Use the [▲] button to select a higher channel.
4. Use the [▼] button to select a lower channel.
    All channels will be shown in the display according your selection.
5. Press the PTT button to save the new channel and return to normal
    mode.

CTCSS- (Coded Tone Controlled Squelch System) selection mode
This feature allows you to utilize a less used channel range (00-38) within a main channel. This enables you to communicate with another party on the same main channel using the same subcode. This helps to avoid congestion on the main channel and filters out unwanted noise and static. There are 38 CTCSS subchannels for each main channel.

CTCSS selection
1. Turn the radio on.
2. With the desired channel selected, repeatedly press [MODE] until the current CTCSS Code number flashes.
3. Use the ▲ or ▼ button to change the CTCSS code number. Your G5 has 38 CTCSS codes available (see CTCSS-frequency-chart).
4. Press the PTT button to save the new CTCSS Code or press [MODE] repeatedly until you exit the menu.

At this point you will receive all signals with same selected CTCSS-code. In transmitting mode the code will be send automatically. Selecting a CTCSS code of **"oF"** will disable the the CTCSS feature.

Note: To communicate with other PMR units, they must be switched to the same channel and CTCSS subcode.

Automatic speech transmission (VOX control function)
On VOX mode, the radio can automatically switch between receive and transmit mode by voice control without pressing any button.

To enable VOX-Operation

1. Repeatedly press the button until the VOX icon flashes on the LCD display.
2. Press to turn the VOX on. „**on**" will appear on the display during the setting. um die VOX zu aktivieren. Im Display erscheint VOX „**on**".
3. Press to turn the VOX off. „**oF**" will appear on the display during the setting.
4. Press PTT-Button to confirm selected VOX-Mode.

Note: By using the unit as babysitter, the monitoring station must be indicated with enabled VOX, while the control station must be indicated with normal receiption mode (VOX disabled). Both units must be indicated with the same frequency and same CTCSS-code setting.

To use an external MIC / headphone for VOX operation
First set the radio to VOX mode.
After that insert the connector of the headset (e.g. AE 740, not included) into SPK/MIC jacks of the radio.

Note: If You use an external MIC/Phone set like AE 740, make sure that the AE 740 is switched to "VOX".

Switching back to PTT operation
If you switch back to PTT operation, you should first switch the AE 740 back to PTT and after this disable VOX-function on the radio.

Roger Beep Tone : Whenever you release the PTT button, a "Roger Beep" tone may be transmitted to let your friends know you are finished talking.

To enable the Roger Beep:

1. Press the [MODE] button repeatedly until the "**rb**" appears on the display.
2. Press [▲] to set the Roger Beep tone „**on**".
3. To disable the Roger Beep tone, press [▼] to set the funktion off.
4. An "**on**" or "**oF**" will appear on the display during the setting.

Use and Care

1. Use a soft damp cloth to clean the radio. Do not use alcohol or cleaning solutions to clean the radio.

2. Turn off the radio and remove the batteries during long-term storage.

3. Do not open the radio for any reason. The opening of the transceiver by un-authorized personnel will automatically invalidate the guarantee.

Technical Specification

Installed channels	8 in European PMR 446 frequency range
TX output power	max. 0,5 W ERP
Audio output power	ca. 200 mW / 8 Ohms
Modulation	FM / 2,2 kHz nominal deviation
Power source	3 AAA Alkaline or rechargeable Ni-MH Batteries
Current Drain	Transmit approx. 300 mA
	Receive: approx. 130 mA
	Power Save:. Approx. 17 mA
	Operating time 30 hours (using Alkaline-Batteries) with NiMH-Batteries approx. 15 hours
	(80 % Standby, 10 % TX, 10 % RX)

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Channel chart

Channel	Frequency (MHZ)
1	446.00625 MHz
2	446.01875 MHz
3	446.03125 MHz
4	446.04375 MHz
5	446.05625 MHz
6	446.06875 MHz
7	446.08125 MHz
8	446.09375 MHz

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CTCSS-Subchannel-Chart

No.	FREQ (HZ)	No.	FREQ (HZ)	No.	FREQ (HZ)
01	67,0	14	107,2	27	167,9
02	71,9	15	110,9	28	173,8
03	74,4	16	114,8	29	179,9
04	77,0	17	118,8	30	186,2
05	79,7	18	123,0	31	192,8
06	82,5	19	127,3	32	203,5
07	85,4	20	131,8	33	210,7
08	88,5	21	136,5	34	218,1
09	91,5	22	141,3	35	225,7
10	94,8	23	146,2	36	233,6
11	97,4	24	151,4	37	241,8
12	100,0	25	156,7	38	250,3
13	103,5	26	162,2		

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European Warranty Note

If you should have purchased the radio in a country of the European Union, Your distributor will repair or replace, at its option without charge, any transceiver which fails due to a defect in material or workmanship within 2 years following the initial consumer purchase. This warranty does not apply to water damage, battery leak damage or abuse.

This warranty does not include any carrying cases, headsets or batteries, which may be a part of or included with the warranted product, or the cost of labor for removal or re-installation of the product in a vehicle or other mounting.
Performance of any obligation under this warranty may be obtained by returning the warranted product, freight prepaid, along with proof of purchase date to the distributor, where you have purchased the radio. The distributor may also propose You to send the radio to a specialized repair center. This warranty gives you specific legal rights, and you may also have other rights, which vary in countries outside the EU.