

G18

► Instruction Manual



IP67
WATER
PROOF

UHF PORTABLE RADIO | 5W Power

MIDLAND®
PUT YOURSELF IN ACTION

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Thanks for choosing Midland! The G18 is a UHF portable transceiver that has many uses in hospitality, recreation and most workplace situations.

Combining the latest technology in radio communication along with a sturdy mechanical frame, the G18 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.

What's in the box

- G18 Transceiver • Antenna • Rechargeable Li-ion 1600mAh Battery Pack
- Desktop AC charger • AC Wall Adaptor • Belt Clip • Instruction Manual

Optional Accessories

- MA-25M - Waterproof Speaker Microphone
- MA-27M - Earpiece Speaker Microphone
- MA-31M - Clear Eartube Speaker
- ANT-15 - Replacement Antenna
- BC-G15 - Replacement Belt Clip
- AC-G15 - AC Adaptor to Suit Charger Cradle
- PB15 - Replacement Battery Pack
- CA15 - Desktop Charger Cradle
- AL15 - Car Charger
- PRG15 - Programming Kit

Main characteristics

- **IP67 certified:** the watertight housing protects the device from dust and from water infiltration up to a depth of 1 metre for 30 minutes.
 - Output power: ≤ 5 Watts • Channel spacing: 12.5KHz • Scan
 - Roger Beep • Battery save • Monitor • Squelch • VOX

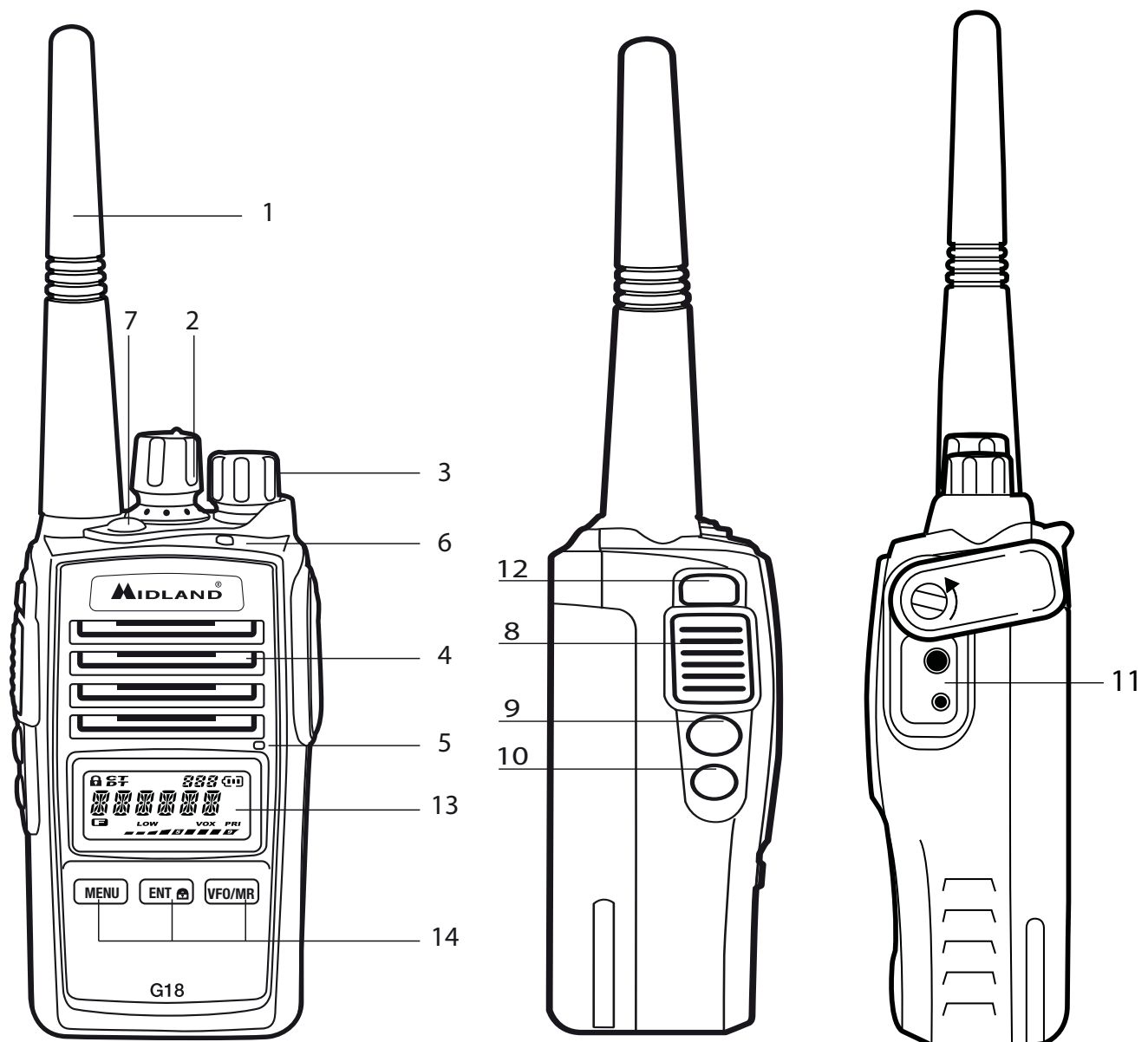
Coverage and Range

The maximum range depends on terrain and is obtained during use in an open space with clear line of sight.

The limitations to maximum range are environmental factors such as blockage caused by trees, buildings, or other obstructions. Inside a car or metallic constructions, the range can be reduced. Normally the coverage in the city, with buildings or other obstructions is about **3 Km**. In open space without obstructions, the coverage can be more than **15 Km**.

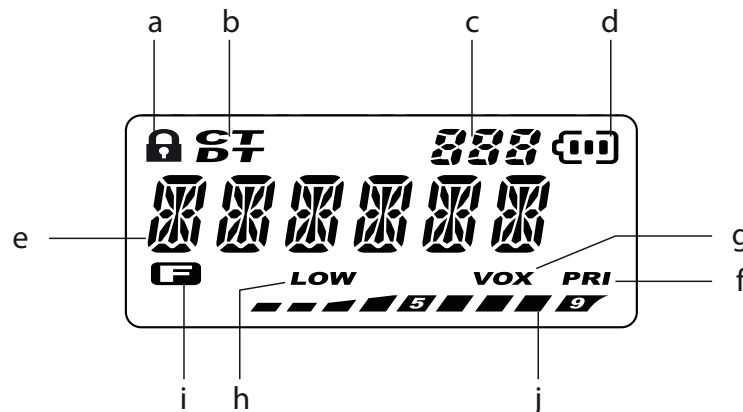
Main controls and parts of the radio

1. **Antenna**
2. **Channel Selector:** 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. **Emergency button** (it can be activated through the programming software).
8. **PTT:** Push this button to transmit, release to receive.
9. **Function key 1:** Short press: Monitor function activation.
Long press: VOX function activation.
10. **Function key 2:** Long press: SCAN function activation.
11. **External Speaker/Mic Jack-** Allows the connection with external devices such as headsets, microphones.
Note: Dust cover must be securely fitted to maintain the radio's waterproof rating.
12. **Multi-function key 'FUN':** Allows activation of secondary functions.
13. **LCD Display**
14. **Multi-function keys MENU - ENT - VFO/MR**



Main controls and parts of the radio

LCD Display



- a. Keypad lock
- b. Selected CTCSS tone or DCS code
- c. Number of the menu/channel indicator
- d. Battery status indicator
- e. Channel in use
- f. Priority scan mode
- g. VOX function activated
- h. Low power indicator
- i. Function key activated
- j. Indicator of RX and TX signal strength

Menu functions / Operations

Below is a list of the default functions of this radio.

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

Menu functions / Operations

Transmission and Reception

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 and make sure that the frequency is not busy, then press the **PTT** button. For 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, to listen to signals that are too weak to keep the Squelch permanently open. Press briefly the **Function key 1** to enable this function

Scan

This function is enabled by pushing **Function key 2** for 3 seconds; The LED will alternately blink green.

Whenever any signal is detected, scanning will stop on a busy channel. If no functions are selected, scan will start after 5 seconds.

If you press the **PTT**, the radio will transmit on the latest busy channel. After 10 seconds from releasing the **PTT**, G18 will return to the default channel and scanning will be active again.

Squelch

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

G18 has 10 (0-9) different Squelch levels that can be set by programming software or the Menu:

0 means that the Squelch is turned off. Level 1 to level 9 will have different levels of noise reduction. The higher the level, the louder the Squelch will be.

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

To select the Squelch level:

1. Press the **MENU** button;
2. Turn the Encoder knob until **"SQL"** is displayed;
3. Press the **ENT** button;
4. Turn the Encoder knob and select the desired Squelch level (the levels available are 10);
5. Confirm your selection with **ENT**.

Make sure you do not set an excessively high squelch level as 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.

Battery recharge

G18 is equipped for using a 7.4V Li-ion rechargeable battery pack which can be charged by the charger supplied.

It takes approximately 4 hours to fully recharge the radio. The LED of the desktop charger indicates the charge status:

Red = charging, **Green** = full charge

For maximum battery life, we recommend charging the battery pack when the **G18** 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 signals for more than 5 seconds. Power save can be disabled.

Roger Beep (End transmission tone)

When the **PTT** button is released, the radio will beep to confirm to other users that your transmission has ended and speech can begin.

The Roger Beep can be enabled through the programming software.

Alarm function (Emergency)

*Enabled via Programmable Software

By pressing the **Emergency** button, the radio will switch to Alarm Emergency mode.

G18 will switch to transmission for 30 seconds by generating a sound alarm, then for further 30 seconds will remain in TX to allow the user to communicate his status.

At the end, the radio will switch to receive. If needed, the Emergency call can be repeated.

VOX

The **VOX** feature enables hands free conversations without using **PTT**. Just speak in the direction of the microphone and the communication will automatically activate.

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

OFF means that the **VOX** is turned off. Level 1 is set by default and has the lowest **VOX** sensitivity. 9 is the highest one.

To activate the **VOX** levels, follow these steps:

1. Press the **MENU** button;
2. Turn the Encoder knob until the display shows "**VOX**";
3. Press the **ENT** key;
4. Turn the Encoder knob again and select the desired **VOX** level:
1= low sensitivity; 9= highest sensitivity.
5. Confirm your selection with the **ENT** key.

Maintenance

Your **G18** is designed to fulfill any statutory warranty obligations and to provide many years of service.

As is true for all electronic devices, we recommend following these few suggestions:

- Do not attempt to open the unit. Non-expert handling of the unit may damage it and annul the warranty.
- High temperatures can shorten the life of electronic devices and warp or melt certain plastics.
- If it appears that the radio emits a peculiar smell or smoke, please shut off its power immediately and remove the charger or battery from the Radio.
- Do not transmit without an antenna.

LED - Backlight

To enable/disable the LCD backlight:

1. Press the **MENU** button;
2. Turn the Encoder knob until **"LED"** is displayed;
3. Push **ENT** to enter the function;
4. Turn the Encoder knob to activate/deactivate the backlight.
There are 3 available options: **"ON"**, **"OFF"** and **"AUTO"**.
AUTO: the display backlight activates when any key is pressed and lasts a few seconds.
OFF: back light off.
ON: backlight always on. Attention: in this mode the power save is off, therefore the battery consumption will increase.
5. Confirm your selection with **ENT**.

Keypad Beep on/off

Every time a button is pressed, you will hear a Beep tone. The keypad beep tone is activated by default.

To disable the beeps, follow this procedure:

1. Press the **MENU** button;
2. Turn the Encoder knob until **"BEEP"** is displayed;
3. Push **ENT** to enter the function;
4. Turn the Encoder knob to activate/deactivate the Beep tones: **"ON"** (to activate it), or **"OFF"** (to deactivate it);
5. Confirm your selection with **ENT**.

Keypad lock (KEYBO)

It is possible to choose between two types of Lock Mode:

1. Press the **MENU** button;
2. Turn the Encoder knob until **"KEYBO"** is displayed;
3. Push **ENT** to enter the function;
4. Turn the Encoder knob and choose between **"MANUAL"** or **"AUTO"**.
5. Confirm your selection with **ENT**.

As previously mentioned, there are two ways to lock the keypad:

"MANUAL": to lock the keypad, simply press **FUN** and **ENT** keys for 3 seconds.  will be displayed.

"AUTO": the keypad will be automatically locked after 20 seconds.

To unlock the radio, press **FUN** and **ENT** keys.

TOT- TX timeout timer

G18 can be programmed with a transmission timer that temporarily blocks transmissions if the radio has been used beyond the maximum time permitted.

The radio is forced to reception mode if it continues transmitting after the preset timer threshold has been reached.

To restart the transmission, release the **PTT** key.

To enable this function:

1. Press the **MENU** button;
2. Turn the Encoder knob until "**TOT**" is displayed;
3. Push **ENT** to enter the function;
4. Turn the Encoder knob and set a timer from 30 to 270 seconds.
5. Confirm selection with **ENT**.

SCAN mode settings

Press **MENU** and then rotate the Encoder knob. The display will show "**SCANS**".

Press **ENTER** and then rotate the Encoder knob to choose the type of Scan (TO/CO/SE).

Confirm your selection with **ENT**.

TO - Time-operated Scan

Whenever a signal is detected, the radio will suspend the scan for 5 seconds, and then will continue to scan even if the signal is still present.

CO: Carrier-operated Scan

Whenever a signal is detected, the radio will stop scanning. It will resume scanning once the signal is no longer detected.

SE: Search Scan

The radio will stop scanning and exit the Scan mode once a signal is detected.

VOICE function

With this function, a voice can be activated to inform of current operation/selection.

To activate, follow these steps:

1. Press the **MENU** button;
2. Turn the Encoder knob until **"VOICE"** is displayed;
3. Push **ENT** to enter the function;
4. Turn the Encoder knob to activate/deactivate the function: **"ON"** (to activate it), or **"OFF"** (to deactivate it);
5. Confirm your selection with **ENT**.

C-CDC / R-CDC / T-CDC

The CTCSS tones can be added to the channels for creating new private channels. They are similar to access codes and enable the radio to communicate only with the users that are tuned on the same channel and have set the same code. For each channel you can set up to 50 CTCSS tones and 105 DCS codes.

To select a CTCSS tone:

1. Press the **MENU** button;
2. Turn the Encoder knob until **"C-CDC"** (in TX and RX); **"R-CDC"** (only in RX) or **"T-CDC"** (only in TX) appears on the display;
3. Push **ENT** to enter the function;
4. Turn the Encoder knob and select the desired CTCSS tone;
5. To confirm, press the **ENT** button.

The setting of a CTCSS tone disables all DCS codes, because these functions cannot be used simultaneously.

To use and select a DCS code, instead of a CTCSS tone, follow these steps:

1. Press the **MENU** button;
2. Turn the Encoder knob until: **"C-CDC"** (in TX and RX); **"R-CDC"** (only in RX) or **"T-CDC"** (only in TX) appears on the display;
3. Push **ENT** to enter the function;
4. Press the **Function key 1**;
5. Turn the Encoder knob and select the desired DCS code;
6. Confirm the selection by pressing the **ENT** button.

The setting of a DCS code disables all CTCSS tones, because these functions cannot be used simultaneously.

PRI (Priority Scan)

When activating this function, the radio will alternately scan the standard channels and the priority one. The priority channel can be selected only with the programming software. The default priority channel is **CH1**.

POW – Setting the transmission power

G18 has 2 power levels.

To select the desired level:

1. Press the **MENU** button;
2. Rotate the Encoder knob till the display shows "**POW**";
3. Press **ENT**;
4. Rotate the encoder knob and select the desired power level;
5. Press **ENT** to confirm. If low power is selected, the display will show "**LOW**"

Name

It is possible to choose and set a name that will appear on the display instead of the channel number.

Dealer Programming software (not applicable to UHF/CB model)

Thanks to Midland Programming software PRG-G15, it is possible for a dealer to increase the performance of your radio or to reduce its functionality by enabling or disabling some features (CTCSS, TOT, VOX, ROGER BEEP, SQUELCH, VOICE, etc) For further information, please consult the Programming software manual. Any attempt to change frequencies or output power of the radio invalidates the approval

Troubleshooting

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 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.
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 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.
	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 (tv's, computers, etc.)	Increase the distance between the radio and this equipment.
The autonomy of the battery pack is limited	Transmission time is too long.	Try to reduce the transmission time and/or use a low power.

NOTE: This radio is certified to meet standards AS/NZ 4365: 2011 and AS/NZ 4295: 2004

Technical specifications

General	
Output Power	1/5 Watts (Selectable)
Channels	G18: 256 (Dealer Programmable), G18XT: 80 (UHF/CB)
Frequency Range	G18: 450MHz ~ 520MHz, G18XT: 476.425MHz ~ 477.4125MHz
Channel Width	12.5kHz (Narrowband + Wideband)
Operation Mode	Simplex
Antenna Impedance	50Ω - SMA Connector
Input Power	DC 7.4V
Water/Dust Protection	IP67
Scan/Priority Scan	Yes
Battery Save	Yes
Emergency Button	Yes
Function Keys	3
Backlit LCD Display	Yes
Robust Aluminium Chassis	Yes
Simple Keypad	Yes
Monitor	Yes
Key Lock	Yes
Roger Beep	Yes
Squelch	Yes
VOX	Yes
Working Temperature	-20° ~ +55° C
Dimensions (excl Antenna)	113H x 56W x 38D mm
Typical Range	15 Km Line of Sight

Specifications subject to change without notice.

WARRANTY

Congratulations on your purchase of a quality **MIDLAND**® Radio! You're joining thousands of satisfied customers who enjoy & experience the benefits of the products we distribute. In the unlikely event that some technical difficulty arises with your purchase, be assured that we are most anxious to see that the problem is quickly rectified to your satisfaction. Please familiarise yourself with the following simple conditions of our warranty.

This warranty covers faults through component failure or failure of the product to operate in accordance with published specifications. Product failure as a result of unreasonable environmental conditions, accident, misuse, improper installation, unauthorised repair, vehicle electrical or wiring faults or neglect etc, will not be covered by this warranty. Removal and installation costs, if any, would be paid by the owner as well as any freight or postage costs of transporting the product to AudioXtra. AudioXtra shall not be liable or responsible for any loss of use of this product or any form of consequential loss.

CONSUMER WARRANTY

This product is warranted by AudioXtra International Pty Ltd to be free from defects in materials and workmanship under **NORMAL USE** for a period of **TWENTY FOUR MONTHS** from the date of purchase.

WITHIN 30 DAYS OF PURCHASE DATE: Please return the unit for replacement to our National Service Centre or the Retailer from where you made the purchase. All accessories must be included. Proof of purchase date **must** accompany the products.

AFTER 30 DAYS OF PURCHASE DATE: Warranty repair and service is carried out by our National Service Centre. Repair and service will be carried out at no cost to the owner if proof of ownership and the date of purchase can be verified to the satisfaction of the authorised centre concerned with this repair. This proof should take the form of either:

- a) The warranty card accompanying this product, stamped and dated by the dealer.
- b) A Tax Invoice or Receipt showing full details of original vendor, purchaser, model number and serial number.

COMMERCIAL WARRANTY: A product used in or associated with a commercial application will carry a limited **SIX MONTH** warranty. An abnormal commercial application is one where usage, dust, vibration, heat/cold and other environmental conditions exist at an extreme level.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Please complete details below in the event of warranty service being required.

Purchaser's Name: _____

Purchaser's Address: _____

Model Number: G18 Serial Number: _____

Dealer Name: _____ Date of Purchase: / /

Dealer Address: _____

Invoice/Sales Docket no: _____

General Hints: To expedite service and prompt return of the equipment, please:

- | | |
|--|---|
| a) Clearly describe the fault in detail | c) Include your return address |
| b) Safety and security pack the unit for transport | d) Provide proof of purchase date as outlined above |

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