

# M-Mini USB

AM/FM CB MOBILE TRANSCEIVER



MULTIBAND - MULTISTANDARD CB |

**MIDLAND**<sup>®</sup>

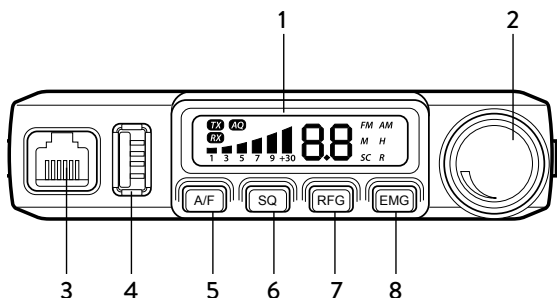
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## Features

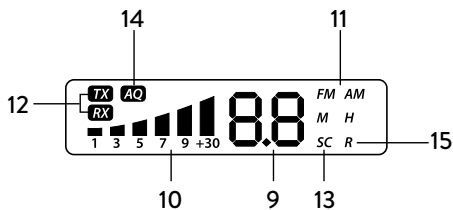
- Multi-standard device
- USB port to recharge your devices
- Power cord with cigarette lighter plug included
- Removable microphone with RJ45 connector and Up/Down controls
- Channel Scan
- LCD display, S-Meter
- Double squelch mode
- (9 and 28 levels)
- RF Gain
- Emergency channel 9/19
- Socket for external loudspeaker
- Dimensions: 110x120x25mm

## Descriptions and commands



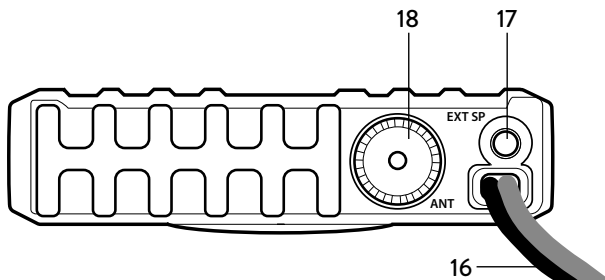
1. **LCD display**
2. **Power On/Off Volume**
3. **Microphone jack**
4. **USB charging jack.** If the device that must be recharged requires a high current, the sensitivity of the radio could decrease.
5. **A/F switch: Short press** AM/FM selection - **Long press** enables SCAN function
6. **Squelch control SQ and DS: Short press** to display and adjust the manual squelch - **Long press** to display and adjust the DS (digital squelch)
7. **RF Gain: Short press** enables/disables RF GAIN and controls its level
8. **Emergency key Ch9/Ch19 keylock: Short press** switches continually amongst ch9/ch19/channel in use

## Display



9. **Selected channel**
10. **Received signal** strength indicator and trasmission power signal
11. **AM/FM mode**
12. **RX/TX:** reception (RX) and trasmission (TX) indicator
13. **SC:** SCAN function activated
14. **AQ:** Digital squelch activated
15. **R:** RFGAIN activated

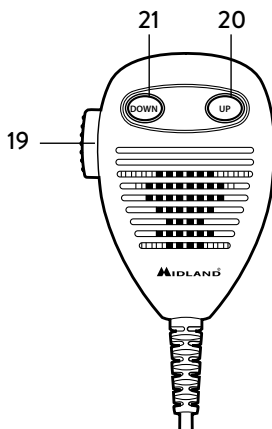
## Back panel



16. **Power supply cable**
17. **External speaker**
18. **Antenna connector**

## Microphone

- 19. PTT key: trasmission button
- 20. UP key
- 21. DOWN key



## Installation

Select the mounting location so that road safety is not affected by the device, or additional risk of injury in an accident arises. Check that the display can be seen, and the controls can easily accessed.

## Power supply

Connect the cigarette lighter power cable to the proper plug of your vehicle. Be sure your car has a power supply of 12V and not 24V.

## Antenna connection

Connect the CB antenna to the ANT socket on the back of your **M-MINI**. The antenna must be tuned to the CB radio band. For this use a SWR meter. For a good radio range, the SWR should not exceed a value of 2. A high SWR also points to defects in antenna, cable, or a short circuit in the antenna line. Never transmit without connected antenna!

**Note:** *The radio antenna is to be mounted from other antennas and interference sources as much as possible. CB antennas must be mounted usually in the vehicule highest part on a metal surfaces. A sufficiently large metal surface is essential for the function of the antenna. For installation on a fiberglass cabs or plastic wind deflectors, special ground less antennas can be used.*

# Operation

## Power On/Off the radio

Turn **VOL** switch clockwise to power on the radio, the LCD displays the CB standard followed by the channel number.

Turn the **VOL** knob counterclockwise, until it clicks. The radio is powered off.

## Volume control

Turn clockwise to increase volume and turn counterclockwise to decrease volume.

## Channel Selection

Shortly press microphone **UP** or **DOWN** to change working channel.

Hold microphone **UP** or **DOWN** to change the working channel fast.

## Squelch level control (28 level and off)

Shortly press **SQ**, until LCD shortly displays “**SQ**” and then displays current level squelch;

<b>0.F</b>	<b>Squelch off</b>
<b>0.1</b>	<b>Lowest Squelch level</b>
<b>2.8</b>	<b>highest Squelch level</b>

While display shows current level, press microphone **UP** or **DOWN** shortly to change **SQ** level; hold microphone **UP** or **DOWN** to change the **SQ** level fast. Hold **SQ** or wait for 3 seconds to store and exit.

**Note:** Higher **SQ** level require a stronger signal to open the speaker and hear the spokesman.

## DS control (9 levels)

Hold **SQ** key, until LCD displays **AQ**, the DS function is turned on. The LCD will display the DS level.

<b>A.1</b>	<b>lowest DS level</b>
<b>A.9</b>	<b>highest DS level</b>

Shortly press microphone **UP** or **DOWN** to change **DS** level, hold microphone **UP** or **DOWN** to change the DS level fast fast. Hold **SQ** or wait for 3 seconds to store and exit.

**Note:** Higher DS level require a stronger signal to open the speaker and hear the spokesman.

## Modulation Type

Shortly press **A/F** key to switch between AM /FM mode.  
The LCD displays the selected mode.

## RF Gain control

Shortly press **RFG** key, LCD displays **R** and the present RF gain level flashes.  
Shortly press microphone **UP** or **DOWN** to change the level of attenuation.  
Shortly press **RFG** key to exit RF gain level control.  
When **RFG** function is on, your radio attenuatly receives anche the low signal could be not received.  
If **RFG** level 6 is selected it means the attenuation is 6 dB.

## Emergency Channel

Shortly press **EMG** key to choose CH9, the channel number flashes.  
Shortly press **EMG** key again to choose CH19, the channel number flashes.  
Shortly press **EMG** key third time to return to last normal channel.

## Key Lock

Hold **EMG** key for over 2 seconds to lock the keys, LCD displays **"LC"**.  
Hold **EMG** key for over 2 seconds again to unlock the keys, LCD displays **OF**.

**Note:** In lock mode, all keys except PTT are invalid.

## Scan function

Hold **A/F** to start scan function, **"SC"** flashes in the LCD; press microphone **UP** or **DOWN** to change scan direction during scan. Press **A/F** or **PTT** key to exit scan function.

## Changing the CB-Standard

Switch off the radio, press **A/F** and then switch on your radio. Display shows the current frequencies.

Press microphone **UP** or **DOWN** to choose wanted norms.

Power off and power on again.

## Frequency band chart

Digits displayed	Country
I	Italy 40 CH AM/FM 4 Watt
I2	Italy 34 CH AM/FM 4 Watt
de	Germany 80 CH FM 4 Watt / 40 CH AM 4 Watt
EU	Europe 40 CH FM 4 Watt / 40 CH AM 1 Watt
CE	CEPT 40 CH FM 4 Watt
PL	Poland 40 CH AM/FM 4 Watt
UK	England 40 CH FM 4 Watt English frequencies + I (Italy) 40 CH FM 4 Watt CEPT frequencies
In	International 27 CH AM/FM 4 Watt

**Note: The frequency band allowed all over Europe is 40 CH FM 4W (CE).**

## External Speaker

An external speaker (8 Ohm) can be connected to the 3.5mm mono socket on the back of the radio. The built-in speaker automatically turns off when a plug is inserted into this jack.

## Restore factory default

Switch off the radio, hold **SQ** key and then powering the radio on, until the LCD displays **"RT"**.

All channel and function setting will resume factory default after above operation.

## Specifications

Frequency band*	26.565-27.99125
Dimensions	110 x 120 x 25 mm <sup>3</sup>
Weight	450 gr
Supply Voltage	13,2 V
Current Consumption	2 A max
Operating Temperature Range	-20 to +50 °C
Antenna Socket	UHF, SO-239
Frequency Error	< +/- 300 Hz
TX Power	4 Watt
Spurious Transmissions	< 4 nW (-54 dBm)
Adjacent Channel Power	< 20 $\mu$ W
FM Deviation	1.9 kHz
AM Modulation Index	85-90%
RX Sensitivity better than	1 $\mu$ V
Image Rejection	70dB
Adjacent Channel Rejection	60dB
Audio Output	1 Watt into 8 Ohm
Frequency Response	300-3000Hz

\*covering all approved EU frequency band

Specifications are subject to change without notice.

A readily accessible disconnect device shall be incorporated in the installation wiring.

The disconnect device shall disconnect both poles simultaneously.