



# MIDLAND<sup>®</sup>

## 75-785

### HANDHELD CB RADIO



OWNER'S MANUAL

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MIDLAND<sup>®</sup>  
40 CHANNEL CB TRANSCEIVER

# Midland 75-785

## 40 CH AM HANDHELD CB TRANSCEIVER

78-785 represents state-of-the-art high-tech engineering. Designed for 40 channel Citizen Band Mobile operation, this transceiver is big on performance. The unit, usable both in professional and private situations, is a quality piece of electronic equipment, skillfully constructed from the finest components. The circuitry is all solid-state, mounted on rugged printed circuit boards. It is designed for many years of reliable, trouble-free performance. Your mobile CB has a 40 channel Phase Locked Loop synthesizer circuit. The PLL circuit incorporates technique for generating all required frequencies with few crystals, resulting in much tighter frequency control and superior reliability.

### MAIN FEATURES

- Condenser microphone.
- Ceramic filter: Delivers greater selectivity and reduces adjacent channel interference.
- AGC (Automatic Gain Control) for a constant sound level.
- Automatic modulation control for a constant audio transmit modulation level.
- Low distortion IC audio circuit.
- Automatic noise limiter to reduce pulse noise.
- "HI-LO" switch: Reduces the output power.
- Antenna with BNC connector.
- Jack for external power source and battery charger.

### WARNINGS

- While 75-785 has been designed for many years of reliable, trouble-free performance, it is a precision piece of electronic equipment that should not be exposed to water or to extreme temperatures.
- Do not leave batteries installed over a long period of time as leakage may occur and cause damage to the radio.
- Never use different batteries from the ones suggested.
- Clean the unit with a damp cloth only, never use harsh chemicals.

## CARE OF OPTIONAL RECHARGEABLE Ni-Cd BATTERIES

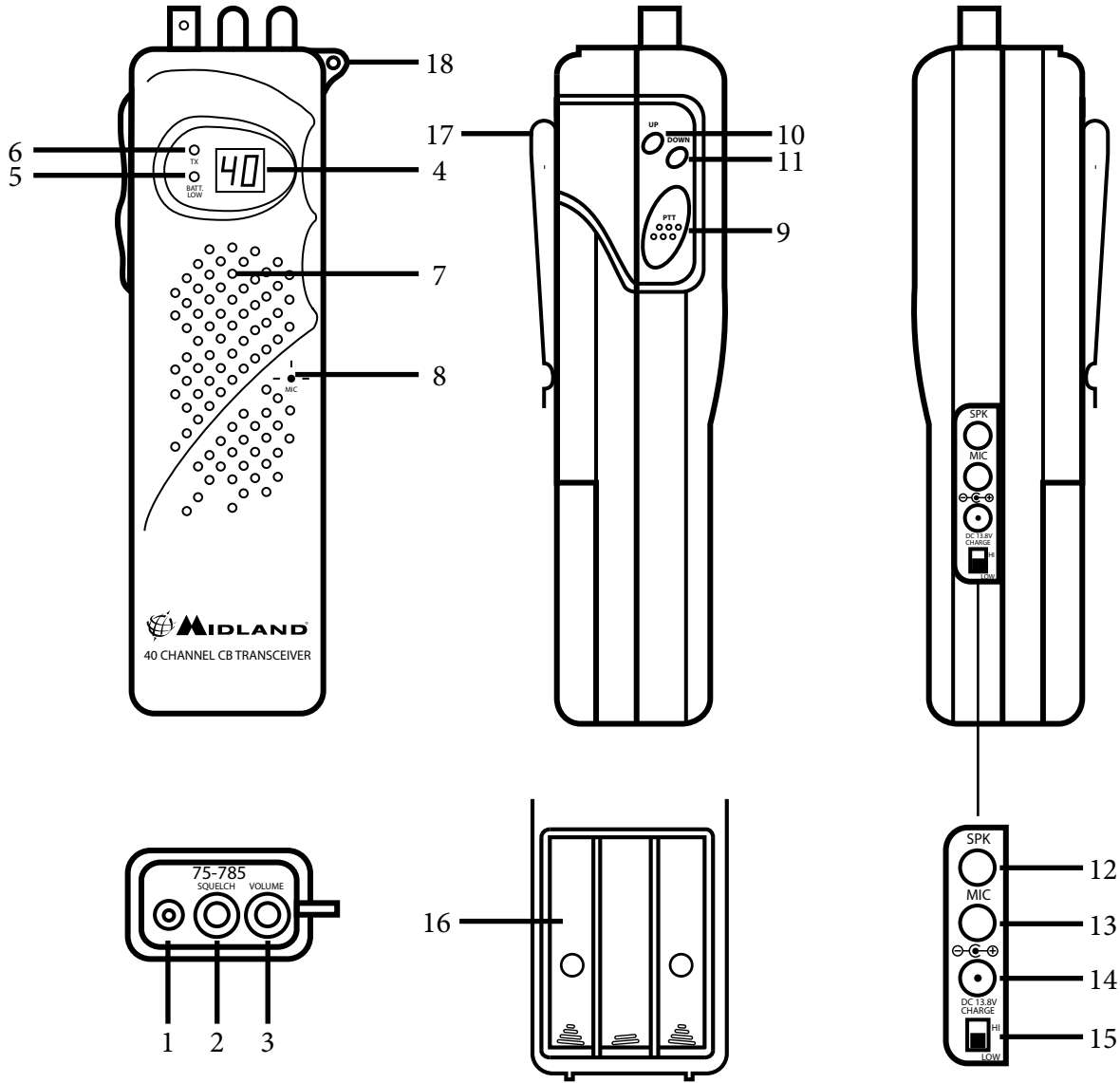
The following is meant as general information regarding Ni-Cd batteries.

- Always allow the battery to fully charge before using.
- Allow the batteries to fully discharge before recharging. Full discharge will be indicated by the “BATT. LOW” indicator.
- The above will prevent the batteries from developing “memory” which effectively reduces their capacity.
- It is better to store Ni-Cd batteries that are discharged rather than charged.
- Never use batteries which differ from the ones recommended. Do not mix old and new batteries or batteries of different capacities.
- If you experience problems when using the transceiver, check the following:
  - A. Batteries must be in good condition;
  - B. The volume level and squelch control setting;
  - C. The channel selector for an active channel;
  - D. The antenna must be properly inserted.

## CONTROLS AND INDICATORS

1. Antenna connector with BNC connector: To obtain better results, use either a telescopic or an external antenna.
2. Squelch Knob: for the maximum receiver sensitivity, the control must be regulated exactly where the receiver background noise disappears.
3. On/Off Volume Control: In “OFF” position your transceiver is off. Turn this control clockwise to switch on the unit. Continue turning the knob clockwise to set the audio level, until you get a comfortable reception.
4. Display: Indicates the selected channel (from 1 to 40). The display turns off when the squelch is operative.
5. “BATT. LOW” LED: This indicator lights when the batteries are low. Replace the alkaline or recharge the AA Ni-Cd batteries.
6. “TX” LED: The indicator lights when the unit is transmitting
7. Speaker
8. Microphone: during transmission, hold the microphone two inches from your mouth, speaking in a clear, normal voice.
9. Push to Talk Button (“PTT”): By pressing it, the transmitter is activated. When released, you activate the receiver.
10. “Channel UP” button: Tunes to the next channel. Autorepeat is activated by holding this button.
11. “Channel DOWN” button: Tunes to the previous channel. Autorepeat is activated by holding this button.
12. “SPK” jack: external loudspeaker jack (the internal loudspeaker will be disabled).
13. “PTT/MIC” jack: PTT jack / external microphone.
14. 13.8 VDC Charge: Power supply/charge jack. You can power the unit from external sources (car battery, etc.) and to recharge the Ni-Cd batteries.
15. “HI/LOW” Switch: Selects the output power level during transmission.
16. Battery Compartment: Insert 9 AA alkaline or Ni-Cd batteries. (Note: alkaline batteries are not rechargeable).
17. Belt Clip
18. Hole for wrist strap

# CONTROLS AND INDICATORS



## HOW TO OPERATE WITH YOUR TRANSCEIVER

1. Insert the antenna into the antenna connector.
2. Insert 9 AA alkaline or Ni-Cd batteries into the battery compartment (pay attention to the polarity). When using Ni-Cd batteries, switch the interrupter inside this compartment to “Ni” position: in this way, the Ni-Cd batteries can be charged by an optional charger. Select the “AL” position when using the alkaline batteries.
3. Rotate the ON/OFF volume control clockwise to turn the unit on. Adjust the volume to the desired listening level.
4. Adjust the SQUELCH control.
5. Select the desired channel using the “UP/DOWN” buttons.

To transmit: Press and hold the PTT button, then talk to the microphone.

To receive: Simply release the PTT button.

## ANTENNA

The 75-785 antenna connector permits the use of any kind of 50  $\Omega$ / 27 MHz band antennas.

Better results both in RX and TX can be obtained by using a telescopic antenna. The supplied rubber antenna, however, is more compact and practical to use. It is suitable for communications where maximum range is not necessary.

## POWER JACK/RECHARGE

This jack enables you to power the unit using an external power source or directly with the battery of your vehicle using the supplied power cord (the plug must be connected to the power source).

The jack, also, permits the recharge of Ni-Cd batteries through an optional charger. (Attention: To recharge these batteries, switch the interrupter inside the battery compartment onto the “Ni” position.)

## CB COMMUNICATIONS CODES

Radios operators have universally adapted the “10” code for standard communications. It enables them to communicate more easily in noisy surroundings.

Here below you will find some of the most common codes and their meaning:

<b>Code</b>	<b>Meaning</b>
10-1.....	Receiving poorly
10-2.....	Receiving well
10-3.....	Stop transmitting
10-4.....	OK-Understood
10-6.....	Busy-Stand by
10-7.....	Out of service - Leaving air
10-8.....	In Service - Subject to call
10-9.....	Please repeat
10-10.....	Transmission completed - Standing by
10-13.....	Road advice - weather conditions
10-20.....	What is your location?
10-33.....	Emergency traffic
10-36.....	Exact time
10-41.....	Switch to channel
10-62.....	Cannot receive - use phone
10-70.....	Fire at _____
10-200.....	Police needed at _____

# SPECIFICATIONS

## General

Channels	40 AM
Frequency Range	26.965-27.405 MHz
Frequency Control	PLL
Temperature Range	-10° – +55°C
Loudspeaker	8 Ω 0.5 Watt
Microphone	Electret Type
Power Supply Range	13.8VDC nom., 10.9VDC – 15.6VDC
Dimensions	55 × 180 × 45 mm
Weight	0.56 lbs (255 gr.)

## Receiver

Receiving system	Superheterodyne with double conversion
I.F.	1 <sup>st</sup> IF : 10.965 MHz - 2 <sup>nd</sup> IF: 455 KHz
Sensitive	< 1 μV for 10dB (s+n)/N
Audio Output Power @10% THD	0.5 W @ 8 Ω
Audio Distortion	< 8% @ 1KHz
Image rejection	65 dB
Adjacent channel selectivity	65 dB
Signal Noise Ratio	45 dB
RX Consumption	60 mA

## Transmitter

Output Power	4 W @ 13.8 VDC
Modulation	85% – 95%
Audio Frequency Response	400 Hz – 2.5 KHz
Frequency Tolerance	0.005%
Harmonic Emission Suppression	> 70 dB
Current Consumption	900 mA (without modulation)

## **SERVICE**

If you have a problem which you believe requires service, please first check the FAQ section of this website, check your Owner's Manual, or call and speak with a service technician. Many problems can be remedied without returning the unit for service. If necessary, return as follows:

1. Pack the unit in its original box and packing. Then pack the original box in a suitable shipping carton.  
Caution: Improper packing may result in damage during shipment.
2. Include the following:
  - a. Full description of any problems
  - b. Daytime telephone number, name & address
3. For warranty service include a photocopy of the bill of sale from an authorized dealer or other proof of purchase showing the date of sale.
4. You do not need to return accessory items (Microphones, Mounts, and Owners Guide) unless they might be directly related to the problem.
5. Repairs not covered by warranty or units that are over ONE year old are subject to a repair fee. Please call for a quote on repair service cost at 816-241-8500. Send only cashier's check, money order, Master Card or Visa card number.

For Technical Support Contact:

Midland Radio Corporation

5900 Parretta Drive

Kansas City, Missouri 64120

Phone: (816) 241-8500

Fax: (816) 241-5713

E-mail: [mail@midlandradio.com](mailto:mail@midlandradio.com)

Web site: [www.midlandusa.com](http://www.midlandusa.com)

## **LIMITED WARRANTY**

Midland Radio Corporation will repair or replace, at its option without charge, any Midland CB Radio which fails due to a defect in material or workmanship within ONE year following the initial consumer purchase. This warranty does not apply to accidents of any kind, exposure to pressure, extreme temperatures, and submersion water damage as this product is water resistant but not waterproof, battery leak or abuse. Accessories have a 90 day warranty from date of purchase, including any mounts and microphones. This warranty does not include the cost of labor for removal or re-installation of the product in a vehicle or other mounting. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Note: The above warranty applies only to merchandise purchased in the United States of America or any of the territories or possessions thereof, or from a U.S. Military exchange.

For product purchased in Canada: Performance of any obligation under this warranty may be obtained by returning the warranted product, along with proof of purchase, to your dealer in Canada. This warranty gives you specified legal rights. Additional warranty rights may be provided by law in some areas.

## **FCC COMPLIANCE**

This device complies with Part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.



*2-Way Radios*



*Weather Radios*

 Bluetooth



*Bluetooth Headsets*



*HD Wearable Video Cameras*



*Marine Radios*



*Emergency Crank Radios*



*CB Radios*

**We'd love to hear from you! Let us know what you think of your new Midland product at**



**You Tube**  
Broadcast Yourself™

**or by visiting us at  
[www.midlandusa.com](http://www.midlandusa.com)**

**MIDLAND RADIO CORPORATION  
5900 Parretta Drive  
Kansas City, MO 64120  
Call 816.241.8500**

**Note: Features & Specifications are subject to change without notice. MIDLAND is not responsible for unintentional errors or omissions on its packaging.**