

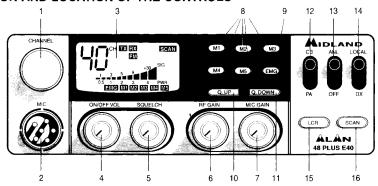
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# ALAN 48 PLUS E40

Your 40 channel Mobile CB represents the state-of-the art in high-tech engineering. Designed for 40 FM channel Citizen Band Mobile operation, this compact package is big in performance. It is a quality piece of electronic equipment, skillfully constructed from the finest components. The circuitry is all a solid-state, mounted on rugged printed circuit boards. It is designed for many years of reliable, trouble-free performance. The nightlight-buttons allow the night use. Your mobile CB has a built-in 40 Channel Phase-Locked Loop synthesizer circuit. The PLL circuit achieves a new technique for generating all the required frequencies with fewer crystals. The result is much tighter frequency control and superior reliability.

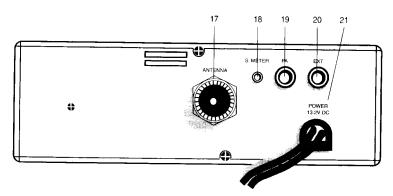
# **FUNCTION AND LOCATION OF THE CONTROLS**



- 1. Channel selector
- Microphone jack: insert the mic connector in this jack.
- Multifunction backlighted display. It shows:
  - A. Channel selected number (from 1 up 40)
  - The received signal strenght and the power of the transmitting signal
  - FM mode
  - RX/TX:TX=transmit mode; RX=receive mode D.
  - SCAN mode E.
  - EMG mode
- G. M1-M2-M3-M4-M5: preset memory channels "ON/OFF Volume" Control: in "OFF" position your transceiver is OFF. Turn this control clockwise to switch on the unit. Turn the knob clockwise a little more to set the audio level, until you get a comfortable reception. With "PA-CA" selector set in "PA" position, the knob controls the audio output level.
- "Squelch" Control: for the maximum receiver sensivity, the control must be regulated exactly where the receiver background noise disappears.
- "RF" (Radio Frequency) Gain Control: It controls the reception sensitivity. To increase sensitivity, simply turn it clockwise. Sensitivity decreases turning it counterclockwise. Low sensitivity is useful when very strong signals are present in the band.
- "Mic (Microphone) Gain Control": in TX mode, it controls the microphone amplification. To get the best results, use the microphone and set the optimum position for both the distance from your mouth and for the amplification level, asking to your partner when the modulation comes out better.
- "M1-M2-M3-M4-M5" buttons: these buttons allow the storing and recalling of 5 preselected channels. How to store: select the desired channel and press M1 for at least 3 sec to store the choosen channel in the M1 memory. Repeat these steps to memorise the other preset.
- EMG button: emergency channel. By pressing it, the unit will be automatically positioned on CH 9 (emergency channel). The display will shows "EMG". It will not be possibile to accidentally change the channel.
- "Q.UP Q.DOWN" buttons: to skip 10 channels UP (Q. UP) or 10 channels DOWN (Q. DOWN).
- "CB/PA" Selector: in the "CB" position, the unit operates as a transceiver. You can use the PA (public address) function only if you connect a speaker to the PA jack. In this case the "Volume knob controls the amplification level.
- "ANL/OFF" Selector: in the "ANL" position it activates an automatic noise limiter for the impulsive noises (caused by the engine of the car or other sources).
- Local /DX Selector: "Local" position: to receive strong signal only. "DX" position: to receive weak signals.

- 15. "LCR" button: to recall the last used channel.
- "SCAN" button: with this control, you can automatically seek for a busy channel. Turn the Squelch clockwise until the background noise is no longer heard. Press the "SCAN" button: the transceiver will scan automatically all the channels until a carrier is being received.

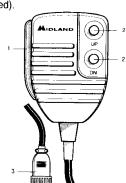
#### **REAR PANEL**



- 17. Antenna connector (SO239 connector type).
- 18. S. Meter jack: it allows a external "S. Meter" connection.
- "PA" jack: by connecting with an external loudspeaker, you can use the unit as an audio-amplifier. "EXT" jack: external loudspeaker jack (the internal loudspeaker is excluded).
- 21. Power 13.2V DC: power supply cable.

#### **MICROPHONE**

- PTT: transmission button
- 2. UP/DOWN buttons: manual channels selector
- 6 pin microphone connector



## **INSTALLATION**

Safety and convenience are the primary consideration for mounting any piece of mobile equipment. All controls must be readily available to the operator without interfering with the movements necessary for safe operation of the vehicle. Set the proper position in the car to install the transceiver using the supplied supporting bracket or eventually the slide bracket. Tighten the retaining screws. The fixing bracket must be close to metal-

#### **POWER SUPPLY**

Be sure the transceiver is off. In the direct-voltage power supply, is very important to observe the polarity even if the unit is protected against the accidental inversion:

Red = positive pole (+)

Black = negative pole (-)

The same colors are present on the battery and in the fuse box of the car. Correctly connect the cable terminal to the battery.

#### **INSTALLING AN ANTENNA**

- 1. Place the antenna as high as possible
- The longer the antenna, the better will be the performance
- 3. If possible, mount the antenna in the center of whatever surface you choose
- 4. Keep antenna cable away from noise sources, such as the ignition switch, gauges, etc.
  5. Make sure you have a solid metal-to-metal ground connection
- 6. Prevent cable damage during antenna installation

WARNING: To avoid damage, never operate your CB radio without connecting a proper antenna. A periodical control of the cable and of the ROS is recommended.

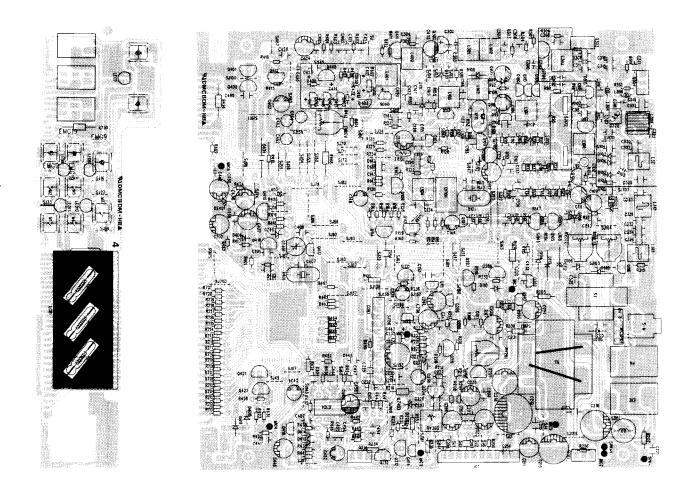
# **HOW TO OPERATE WITH YOUR TRANSCEIVER**

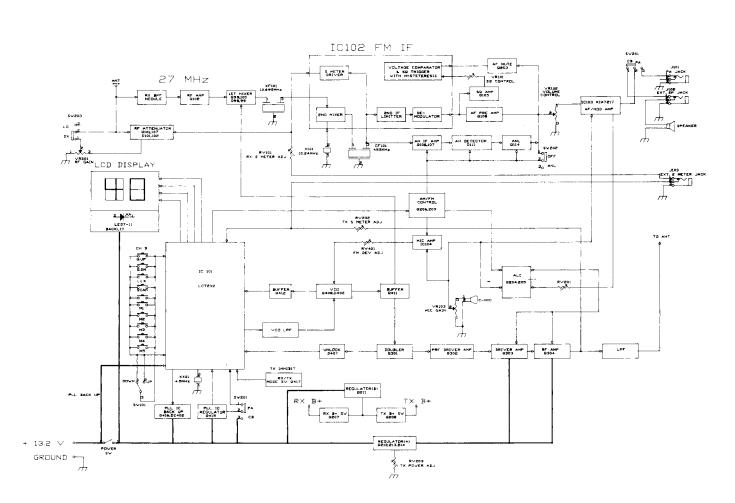
- 1. Screw the microphone plug into the microphone jack
- Make sure your antenna is securely connected to the antenna connector Make sure the SQUELCH control is turned fully counterclockwise
- Turn on the unit and adjust the volume control
- 5. Select your desired channel
- To transmit, press the PTT button and speak in a normal tone of voice
- To receive, release the PTT button

## **TECHNICAL SPECIFICATIONS**

GENERAL Channels	40 514
	40 FM 26.965 to 27.405 MHz
Frequency Control	20.903 to 27.403 MITZ
	-10°±55° C
DC input voltage	13.2V DC ±15%
Size	180 (L)* 50 (H)* 150 (P) mm
	1kg
RECEIVER	
Receiving system	Dual conversion superheterodyne
Intermediate frequency	I° IF: 10.695 MHz • II° IF: 455 KHz
Sensitivity	0.5µV for 20dB SINAD
Audio output power @10% THD	2.0 W @ 8 Ohm
	Less than 8% @ 1KHz
	65dB
Adjacent channel rejection	65dB
Signal/Noise ratio	45dB
Current drain at stand/by	
TRANSMITTER	
	4W @ 13.2V DC
	FM:1.8KHz±0.2KHz
	from 400Hz to 2.5KHz
	RF 50 Ohm unbalanced
	40 dB MIN
Current drain	1100mA

All specifications are subject to change without notice.





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