

ALAN 42 MULTI

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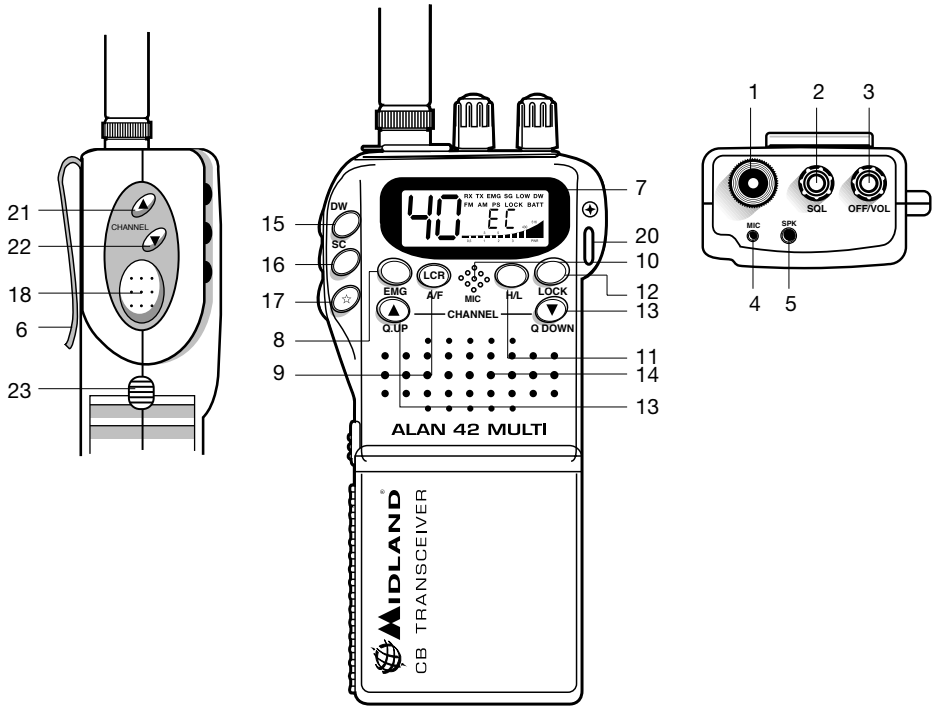
INTRODUCTION

ALAN 42 MULTI is a small-size portable transceiver which guarantees the best performance during the years even under heavy conditions. What is unique to this innovative transceiver is the capability **to select any of the European CB bands** with an easy and fast procedure. ALAN 42 MULTI has a built-in **Channel Phase Loop synthesizer (PLL)** circuit and an automatic **battery economy circuit**.

The **wide display** can be illuminated and allows the night use. Optional microphones can be connected to the equipment thanks to the external mike plug situated on the upper side of the radio.

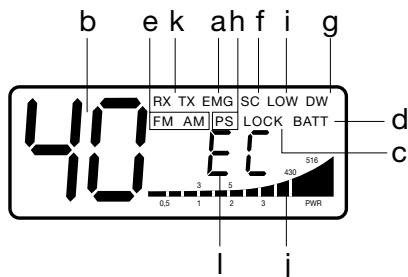
The unit is preset at the factory on the “EC”band , CEPT 40CH FM 4W.

FUNCTION AND LOCATION OF THE CONTROLS



1. **Antenna connector:** insert into this plug the antenna supplied with the radio. It is possible to use external vehicular antennas to obtain a better performance.
2. **Squelch Control:** this control cancels the background noise of the receiver. By turning the knob to the right the function is activated, by turning the knob to the left the function is deactivated. The knob should be regulated exactly at the point 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. Turn the knob clockwise a little more to set the audio level, until you get a comfortable reception.
4. **MIC jack:** connect by inserting the loudspeaker mike to the plug.
5. **External loudspeaker jack:** connect by inserting the loudspeaker mike to the plug.
6. **Belt clip**

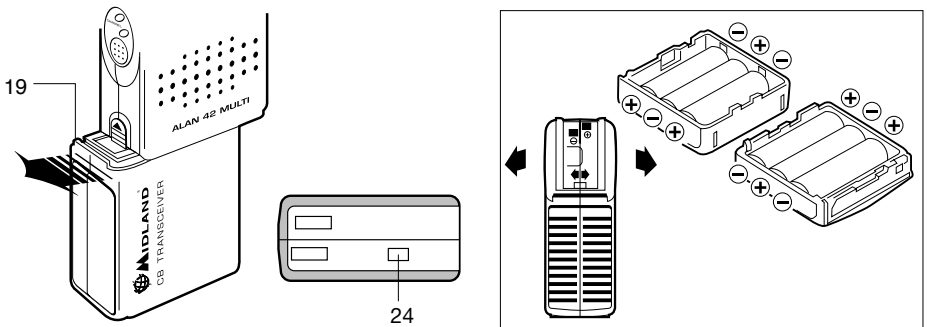
7 Multifunction backlighted display.



- This liquid crystal display has been projected to show the operative modality:
- a. **EMG** function activated
 - b. Channel selected number(from 1 up to 40)
 - c. **Lock**: keyboard lock function activated
 - d. **BATT**: Run-down batteries indicator
 - e. **AM/FM** mode
 - f. **SC**: SCAN function activated
 - g. **DW**: DUAL WATCH function
 - h. **P. S.:** Save function activated
 - i. **LOW** function activated
 - j. The received signal strength and the power of the transmitting signal
 - k. **RX/TX**: TX=transmit mode; RX=receive mode
 - l. Frequency band selected
8. **EMG button**: emergency channel. By pressing this button, the unit automatically skips to Channel 9 (emergency channel). The display will shows **EMG**. It will not be possible to change accidentally the channel. To cancel this function, press the button again.
 9. **A/F-LCR button**: to select AM mode or FM mode; the modulation you choose will appear on the display. If you select a frequency band operating in FM mode only, the **A/F-LCR** button will activate the **LCR** function (Last Channel Recall).
 10. **Microphone**: during transmission, keep your mouth 4 cm far from the unit, and speak with a normal tone of voice to the microphone.
 11. **H/L button**: it selects the output power level during trasmission.When the unit is turned on, it always transmits with high power (4W). By pressing this button, the unit will transmit with low power (1W). The display will show “LOW”. Press again the H/L button to return to “HIGH” power level.
 12. **LOCK button**: it allows you to lock the keyboard, thus avoiding accidental use of the keys.
 13. **Q.UP - Q.DOWN buttons**: to skip 10 channels up (Q.UP) or 10 channels down (Q.DOWN).
 14. **Loudspeaker**
 15. **Dual Watch**: this function allows the synthonization on two different channels at the same time. Thanks to this function, you can monitor a second channel. When a signal on the second channel is received, the conversation on the first channel is automatically interrupted and the receiver switches on the second channel. The monitoring starts again 4 seconds after the signal end.

To activate this function, operate as follows:

- Select the desired channel through the channel selector
 - Press the **DW** button
 - Select the second channel
 - Press the button **DW** again
 - To cancel the function press again the **DW** button or the **PTT** button.
16. **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.
 - When it finds the carrier, it stops and starts again some seconds after the end of the communication on the channel.
 - When the radio is transmitting, the scan function is deactivated.
 17. ☆ **button:** display lighting (temporized). This function allows to operate in darkness conditions. By pressing this button, the display is lighted for 5 seconds.
 18. **Push to talk button (PTT):** Its pressure activates the transmission. When it is released, the receiver is activated.
 19. **Battery compartment:** insert 6 Ni-Cd alkaline batteries.



20. **Hole for wrist belt**

21. **Channel UP:** to skip to the next channel. Keeping this button pressed, the "autorepeat" function is obtained.
22. **Channel DOWN:** to skip to the previous channel. Keeping this button pressed, the "autorepeat" function is obtained.
23. **Battery pack contact:** lift the button and take the batteries out (see drawing).
24. **Auxiliary antenna contact:** for the connection to the vehicular adaptor.

How to operate with your ALAN 42 MULTI

1. Insert the antenna in the antenna connector.
2. Insert 6 alkaline batteries into the battery compartment, noting polarity (the alkaline batteries are not rechargeable)
3. Rotate the **ON/OFF** volume control clockwise to turn the unit on. Adjust the volume for a normal listening level.
4. Adjust the **SQUELCH** control
5. Select the desired channel by the **UP/DOWN** or **QUICK UP/QUICK/DOWN** buttons

Note: if the channel does not change, control that the EMG or LOCK button has not been pressed. In this case, press the EMG or LOCK button to deactivate this function.

As far as the other functions are concerned, refer to previous instructions.

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

To receive: simply release the PTT button.

CAUTION: DON'T EXPOSE THE DISPLAY TO EXTREME TEMPERATURES.

FREQUENCY BAND SELECTION

The frequency bands must be chosen according to the country you are in.

Procedure:

1. Switch off the unit.
2. Turn it on while pushing the **"A/F-LCR"** and **"SC"** buttons.
3. By pushing the **▲** e **▼** buttons, select the desired frequency band (see the chart here below).
4. To fix your selection, press the **"A/F-LCR"** button.

NOTE: If you select a frequency band which operates in FM mode only, the "A/F-LCR" control activates the LCR function (Last Channel Recall).

FREQUENCY BAND CHART

Displayed digits	Country
I	Italy 40 CH AM/FM 4Watt
I2	Italy 34 CH AM/FM 4Watt
D	Germany 80 CH FM 4Watt / 12 CH AM 1 Watt
D2	Germany 40 CH FM 4Watt / 12 CH AM 1 Watt
EU	Europe 40 CH FM 4Watt / 40 CH AM 1 Watt
EC	CEPT 40 CH FM 4Watt
E	Spain 40 CH AM/FM 4Watt
F	France 40 CH FM 4Watt / 40 CH AM 1 Watt
UK	England 40 CH FM 4Watt English frequencies + EC 40 CH FM 4Watt CEPT frequencies

ATTENTION!

The frequency band allowed all over Europe is 40CH FM 4W (EC) – See the “Restrictions on the use” table.

TECHNICAL SPECIFICATIONS

Channels	40 FM (see the Frequency band chart)
Frequency Range	25.615-30.105 MHz
Operating mode.....	F3E (FM), A3E (AM).
Antenna impedance	50 Ohm.
Loudspeaker	8 Ohm 0.5W.
Microphone.....	condenser type
Power supply	7.2 ÷ 13,2 nom 12V
Dimensions	30x70x140 mm.
Weight	220 gr. (without batteries).

RECEIVER

Sensitivity at 10dB S/N.....	0.5 μ V (AM), 0.25 μ V (FM)
Selectivity.....	more than 60dB
Squelch range.....	0.25V-500 μ V
Audio output power	0.5W 8 ohm (10% distortion)
Distortion at 1000 μ V	3%
Audio frequency response.....	400-2400 Hz
Intermediate frequency.....	I° 10.695 MHz
.....	II° 455 KHz
Spurious response.....	more than 60 dB
Current drain at stanby	100 mA when the save mode is off
.....	45 mA when the save mode is on

TRANSMITTER

RF Output Power	duty cycle 10% 4W AM/FM
Frequency Tolerance	0.005%
Harmonic Suppression.....	more than 70 dB
Current Drain.....	900 mA
Modulation	AM 90% (\pm 5%)
.....	FM dev. 2.0KHz

All specifications are subject to change without notice.