

ALINCO

VHF/UHF FM MOBILE TRANSCEIVER

DUAL BANDER

DR Series

DR-510T

(U.S. Model)

DR-510E

(Europe Model)

**TINY-TOUGH AND TERRIFIC
BIG POWER IN A COMPACT PACKAGE**

DR-510T



DR-510E

Cross Band - Full Duplex

The **ALINCO DR-510T/510E** 2m FM Dual Band Mobile Transceivers have been specially designed to condense maximum performance and operating convenience into an ultra compact package. An impressive array of features give maximum flexibility in mobile installations.

High Output Power

The DR- 510T/510E provide a powerful 45Watts on 2m and 35Watts on 70cm. A HI/LO power switch 5 watt LOW power selection on both bands as well.

Compact Size and Lightweight.

140(W)×50(H)×205(W)mm (5-1/2"×2"×8-1/16") at 1.7Kgs(3.74 lbs)

Cross Band Full Duplex Operation.**14 Multi Function Memory Channels.**

The unit contains 14 fully programmable Memory Channels. Each channel stores operating frequency, Standard offset and other usefull information.

Highly Visible LCD.

A new multi color LCD display for improved visibility.

6 Channel Spacing steps.

for ease of operation 5, 10, 12.5, 15, 20 and 25 KHz.

4 Scanning Modes.

- (a) VFO -Scanning of the entire band.
- (b) Memory -Scanning of selected memories.
- (c) Programmed Band-Scanning of a selected segment of the band.
- (d) Priority Scanning-Allows selection of a frequency, in VFO or Memory, to serve as a priority frequency.

Restricted Access Operation.

allows for programmable encode/decode sub-audible tones(DR-510T) or a 1,750Hz tone burst function(DR-510E).

Microphone

The standard microphone offers:

- (A) UP/DOWN buttons for ease of frequency/Memory selection.
- (B) An LED "ON AIR" indicator and "LOCK" switch to enable/disable microphone function(DR-510E)
- (C) DTMF Encoder built-in.(DR-510T)

Duplexer Built-in

When antenna for both bands(VHF&UHF) is in use only one cable for transceiver is necessary.

Other Outstanding Features :

- Function Lock Key
- Reverse Key-Inverts TX-RX
- Memory Skip
- Odd Offset
- Multiple Standard Offsets
- Other too numerous list.

Accessories supplied as standard :

- Hand Microphone(Condencer type)
 - a. 16 button DTMF Microphone(DR-510T)
 - b. Hand Microphone(DR-510E)
- Mobile Mounting Bracket
- Mounting Hardware
- D.C. power Cable

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SPECIFICATIONS

General

Frequency Coverage	144.00—147.995Mhz J & 440—450Mhz(U.S.Version) 144.00—145.9875Mhz J & 430—440Mhz(Europe Version)
Frequency Resolution	5, 10, 12.5, 15, 20 and 25Khz. steps
Antenna Impedance	50 ohms unbalanced
Power Supply requirement	13.8 Volts D.C.
Current Drain at 13.8V	Receiving Squelched does not exceed 500mA Transmitting High:45W approx. 9.5A at VHF High:35W approx. 10A at UHF Low: 5W approx.4A at VHF Low: 5W approx.4A at UHF
Dimension	140mm(W) x 50mm(H) x 205mm(D) (5-1/2") x (2") x (8-1/16")
Weight	Approx. 1.7Kgs.(3.75Lbs.)
@Transmitter	
Output power	High:45Watts at VHF, 35Watts at UHF Low:Approx. 5Watts at both bands
Emission Mode	16F3
Modulation System	Variable Reactance F.M.
Max. Frequency Deviation	±5Khz
Spurious Emission	More than 80dB below Carrier
Microphone	Electret Condenser Microphone
Operating Mode	Simplex Duplex: ±600Khz from receive frequency at 144—147.995Mhz or 144—145.9875Mhz ±1.6, 5 and 7.6Mhz from receive frequency. at 440.00—450.00Mhz or 430-440Mhz

DTMF Encoder

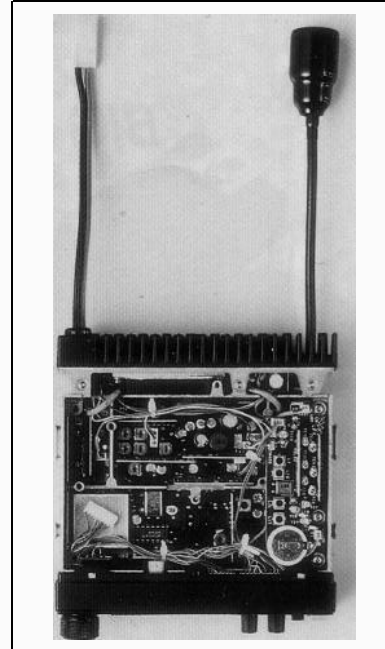
Built-in

@Receiver

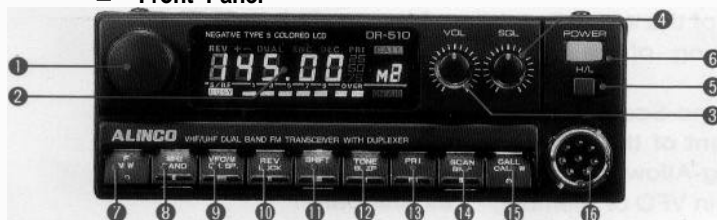
Receiving System	Superhetrodyne, dual conversion
Modulation acceptance	16F3
Intermediate frequency	1st 10.7Mhz 2nd 455Khz at VHF 1st 30.825Mhz 2nd 455Khz at UHF
Sensitivity	12dB SINAD less than 0.16μV
Selectivity	More than ±6Khz at -6dB Less than ±12Khz at -60dB
Audio Power Output	More than 1.5Watts(8 ohms—10% Distortion)
Speaker Impedance	8 ohms

Note:Specifications are subject to change without notice.
Specifications are guaranteed for amateur band only.

Rugged Die-Cast Chassis



Front Panel



- ① Main Dial
- ② LCD Panel
- ③ Volume Control
- ④ Squelch Control
- ⑤ H/L Switch
- ⑥ Power Switch
- ⑦ Function/Memory Write Key
- ⑧ MHz(Band) Key
- ⑨ VFO/M/Channel Step Key
- ⑩ Reverse/Lock Key
- ⑪ Shift Key
- ⑫ Sub Tone/Beep Key
- ⑬ Priority Key
- ⑭ Scan/Memory Skip Key
- ⑮ Call Channel/Call Channel Write Key (DR-510E) Tone Burst Key
- ⑯ Microphone Terminal
- ⑰ Reverse Indication
- ⑱ Offset Indication
- ⑲ Tone Encoder Indication

LCD Panel



- @Tone Decoder(Tone Squelch)Indication
- @Priority Indication
- @Call Channel Indication
- ⑲ Frequency Indication
- @Decimal Readout Point
- ⑲ Busy Indication
- ⑲ S/R Meter Indication
- ⑲ On Air Indication
- @Memory Indication
- @Memory Channel Indication

Authorized Dealer:



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