

# ALINCO

Mobile/Base  
VHF+UHF Analog FM Land Mobile Transceiver

# DR-638



Mobile/Base  
VHF+UHF FM Amateur Radio Transceiver

# DR-638HE

## Dual-Band Mobile Transceiver with Full Duplex Capability

The new DR-638 dual-band transceiver from Alinco makes a sharp attractive addition to any operating environment. Starting with full duplex capability, cross-band repeat and a remotely mountable control head, the DR-638 is a solid performer for base or mobile operation.

With a highly visible large, 6 character alphanumeric display features variable display colors for custom illumination. Ignition key on/off feature, theft alarm, extended receive capabilities, a variety of signaling and scan modes are also included at no extra cost!

The backlit, DTMF microphone EMS-77 allows remote control of the transceiver. Put the DR-638 with its good looks and smart operating features to work right away in your base station or vehicle as a reliable and easy-to-use, high-quality VHF/UHF transceiver that is perfect for simplex and repeater operations!



## FEATURES

- VHF/UHF full duplex operation includes V/V and U/U modes.
- 758 channels programmable (HE: available as programmable memory channels)
- H/M/L power output settings-  
VHF:50W/25W/10W/5W,UHF:40W/25W/10W/5W
- Large 6 character alphanumeric backlit display
- Inversion scrambling (DR-638 only)
- Internal duplexer – single antenna connector
- Removable control head can be remotely mounted or inverted for optimal speaker placement
- Expanded receive range includes AM civil aviation band (DR-638 only)
- Crossband repeat (DR-638 only)
- Variable Display color tone
- Illuminated DTMF EMS-77 microphone allows direct VFO frequency entry and remote control of transceiver
- CTCSS,DCS,Tone-Burst Tones,2-tone and 5-tone signaling
- CTCSS Tone and DCS scan
- Variety of scan modes and priority channel monitoring
- TOT, BCLO, Talk Around, Reverse and ANI
- Utility software and cable cloning
- Ignition key activated power on/off feature

### [Standard accessories]



Standard accessories declared herein are our factory default and may vary at moment of sales depending on the market and Dealers' sales policy.

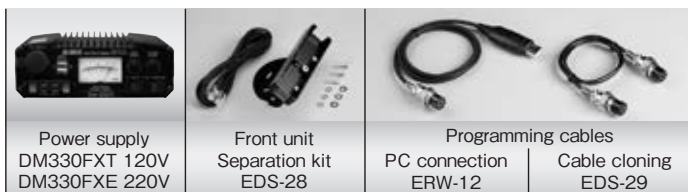
[Spare accessories] \*Bracket and DC cable may slightly differ from the original parts.

ADFM78 : Mobile bracket

ADUA38 : DC Power Cable (15A Fuse)

EMS-77 : Back-Lit microphone with key pad

## Options



## SPECIFICATIONS

### General

Tested to comply MIL-STD-810G  
-Shock: Method 514.6/I,IV -Vibration: Method 516.6/I

|                       |  |
|-----------------------|--|
| Frequency Range (MHz) | DR-638<br>TX : 136~174MHz/400~480MHz<br>RX : 108~180MHz(AM/FM)/220~260MHz,<br>400~523MHz, 350~399.995MHz(FM) |
|                       | DR-638HE<br>TX/RX : 144~146MHz/430~440MHz  |
| Number of Channels    | 758 channels   |
| Channel Spacing       | 25KHz (Wide mode)  |
|                       | 20KHz (Middle mode)  |
|                       | 12.5KHz (Narrow mode)  |
| Channel step          | 2.5KHz,5KHz, 6.25KHz, 8.33KHz, 10KHz,<br>12.5KHz, 15KHz, 20KHz, 25KHz, 30KHz, 50KHz                          |
| Operating Voltage     | 13.8V DC $\pm$ 15%   |
| Squelch               | Carrier/CTCSS/DCS/5Tone/2Tone/DTMF   |
| Frequency Stability   | $\pm$ 2.5ppm   |
| Operating Temperature | -20°C~+60°C  |
| Dimensions W×H×D      | 139×40×212 mm or 5.47×1.58×8.35 inches approx.   |
| Weight                | 1.14kg or 40.21 ounce approx.  |

### Receiver

|                              | Wide mode           | Narrow mode          |
|------------------------------|---------------------|----------------------|
| Sensitivity (12dB Sinad)     | $\leq$ 0.25 $\mu$ V | $\leq$ 0.35 $\mu$ V  |
| Adjacent Channel Selectivity | $\geq$ 70dB         | $\geq$ 60dB          |
| Intermodulation              | $\geq$ 65dB         | $\geq$ 60dB          |
| Spurious Rejection           | $\geq$ 70dB         | $\geq$ 70dB          |
| Audio Response               | +1~-3dB(0.3~3KHz)   | +1~-3dB(0.3~2.55KHz) |
| Hum & Noise                  | $\geq$ 45dB         | $\geq$ 40dB          |
| Audio distortion             | $\leq$ 5%           |                      |
| Audio power output           | >2W@10%             |                      |

### Transmitter

|                        | Wide mode                                  | Narrow mode          |
|------------------------|--|----------------------|
| Power Output           | 50W/25W/10W/5W(VHF)<br>40W/25W/10W/5W(UHF) |                      |
| Modulation             | 16K $\Phi$ F3E                             | 11K $\Phi$ F3E       |
| Adjacent Channel Power | $\geq$ 70dB                                | $\geq$ 60dB          |
| Hum & Noise            | $\geq$ 40dB                                | $\geq$ 36dB          |
| Spurious Emission      | $\geq$ 60dB                                | $\geq$ 60dB          |
| Audio Response         | +1~-3dB(0.3~3KHz)                          | +1~-3dB(0.3~2.55KHz) |
| Audio Distortion       | $\leq$ 5%                                  |                      |

Specifications are subject to change without notice due to advancements in NOTE technology.

※ Peripherals like an antenna, mounting hardware, coax cable etc are required for proper operation.



**DR-638HE**  
European amateur  
radio version

### Authorized Dealer:

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\* Projections are not included in the declared dimension values.

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