

**ALINCO**

# DR-600T

VHF/UHF FM  
TWIN BAND MOBILE TRANSCEIVER



# SPECIFICATION

## \* General

### Frequency coverage:

DR-600T (U.S. Version)  
144.000-147.995MHz (TX),  
137.000-173.995MHz (RX),  
440.000-449.995MHz (TX),  
410.000-469.995MHz (RX)

### Frequency Resolution:

5, 10, 12.5, 15, 20, and 25kHz steps

### Antenna Impedance:

50 Ohms unbalance

### Power Supply Requirement:

13.8 Volts D.C.

### Current Drain at 13.8V:

Receiving

Squelched: does not exceed 800mA

Transmitting

VHF High: 45W approx. 9.5A

Middle: 10W approx. 4.5A

Low: 5W approx. 3.5A

UHF High: 35W approx. 10A

Middle: 8W approx. 5A

Low: 4W approx. 4A

### Dimension:

5-9/10" (W) x 2"(H) x 7"(D)

(150mm x 50mm x 178mm)

Weight:

Aprox. 3.3lbs. (1.5kgs)

## \* Transmitter

### Output Power:

VHF High: 45W

Middle: 10W

Low: 5W

UHF High: 35W

Middle: 8W

Low: 4W

### Emission Mode:

F3E (FM)

### Modulation System:

Variable Reactance F.M.

### Max. Frequency Deviation:

+/- 5kHz

### Spurious Emission:

-60dB or under below carrier

### Microphone:

Electret Condenser Microphone

### Operating Mode:

#### Simplex

#### Duplex:

5kHz and 12.5kHz steps between 0 and 10.995MHz

from receive

frequency at 144-147.995MHz and 440-449.995MHz

## DTMF Encoder/Decoder:

Built-in (DR-600T only)

## \* Receiver

### Receiving System:

Superheterodyne, Dual Conversion

### Modulation Acceptance:

F3E (FM)

### Intermediate Frequency:

1st 21.6MHz and 455kHz at VHF

1st 30.825MHz and 455kHz at UHF

### Sensitivity:

12dB SINAD - 16dBu

### Selectivity:

+/- 6kHz or under at - 6dB

+/- 12kHz or under at - 60dB

### Audio Power Output:

Approx. 2.5W

### Speaker Impedance:

8 Ohms

## \* Accessories supplied as standard

-Hand Microphone (Condenser type)

a. 16 button DTMF Microphone (DR-600T)

b. Hand Microphone (DR-600E)

-Mobile Mounting Bracket

-Mounting Hardware

-D.C. Power Cable

## MODEL CHART

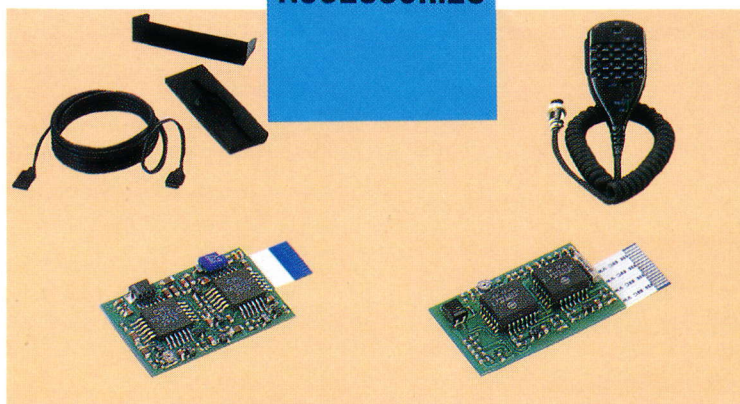
tone BURST ..... Not Available

Subaudible Tone ..... Encode Included, Decode Optional

DTMF ..... Encoder Included (16 Buttons)

DTMF ..... Decoder Included

## ACCESSORIES



- EDC-19

Separate Mounting Kit  
with 3m (9ft. 10in.) Cable

- EDC-20

Separate Mounting Kit  
with 5m (16ft. 5in.) Cable

- EJ-7U

Tone Squelch Unit  
(for 2 bands)

- EMS-3

Remote Control Micro-  
phone  
with DTMF keypad  
(Standard for DR-600-T)

- EJ-8U

DTMF Unit  
(for 2 bands)  
Standard in  
DR-600T

Specifications subject to change without notice.

## ALINCO ELECTRONICS INC.

438 Amapola Avenue, Unit 130, Torrance, CA 90501, U.S.A.

# DR-600T



Experience all of today's exciting VHF/UHF FM action with Alinco's DR-600T and enjoy dual band operation at its absolute best. This powerful and easy-to-use 2 meter/70cm FM transceiver is jam-packed with special features like simultaneous dualband receive, full duplex operation, scanning, DTMF code paging and, yes, remote controlled cross band repeating. Your most-wanted options are factory installed in the DR-600T, thus making it an outstanding value. Frequencies and memories can be selected by front panel controls or via the supplied DTMF equipped microphone. The DR-600T can also be remote controlled from a single or dual band FM handheld, and that includes changing frequencies, switching in/out of crossband repeat mode, plus much more. This dual band FM transceiver has it all!

The DR-600T combines rugged construction, wide frequency coverage, and high tech features to produce a dual band FM transceiver suited for both mobile and base station use. It has a remarkably sensitive and selective receiver, strong 45 watt 2 meter/35watt 70cm transmitter, and full bodied FM audio that sounds terrific. The front panel can even be separated from the transceiver's main body for a custom installation (optional EDC-20 kit required).

## FEATURES

### Wide Frequency Coverage.

The DR-600T transceives from 144-148 and 440-450MHz, plus receives the 150-173MHz public service and NOAA weather bands. After a simple home mod it also receives the 118-136MHz AM aircraft band.

### Three Output Power Selections.

Direct selection of 45, 10, or 5 watts for 2 meters and 35, 8, or 4 watts for 70cm. Plenty of power and phenomenal flexibility!

### Easy Operation.

Separate volume and squelch controls for each band. Quick one-button muting of each band. Front buttons color-keyed according to functions.

### Direct Frequency and Memory Selection From Microphone.

Switch the included DTMF microphone to "remote" and you can enter frequencies right on its keypad, change bands, shift to call channel, and use DTMF automatic dialers. Memories can also be selected via the microphone's "up/down" buttons. Superb frequency agility!

### Multi-Function Remote Control.

Any single band or dual band FM handheld with a DTMF pad can be used to remotely switch on/off the DR-600T's crossband repeat function, enter frequencies on either band, and select memories. The necessary DTMF decoder is built in the DR-600T. The DR-600T's DSQ can also be used to limit access.

**Simultaneous Dual Band Receive.** Monitor both bands at once or scan one band for surprise activity while listening to a favorite repeater on the other band.

### Full Duplex Operation.

Transmits on one band while receiving on the other band. Perfect for telephone-style autopatching with crossband repeaters.

### Automatic Band Exchange (ABX) Function.

When activated, an incoming signal on the sub band exchanges operation so it becomes the main band.

### Crossband Repeat Mode.

When activated, the DR-600T receives the low power signal from your FM handheld on one band and retransmits it at high power on the other band. Great for camping, hiking, etc.!

### Remote-Mount Front Panel

The front panel can be separated from the main body and mounted on your auto's dash or console for a custom installation. The transceiver can then be installed under a seat or in the trunk for security. Requires optional EDC-20/16 ft. Cable or EDC-19/9 ft. Cable kit.

### 40 Memory Channels.

Includes 28 memories that store any frequency, Tx shift, and CTCSS tone, plus one call channel per band and 10 ARM memory channels.

### Automatic Repeater Memory Function (ARM).

10 repeater channels can be stored automatically. When ARM is activated, scanning pauses on inactive channels, then starts again automatically. ideal for finding inactive repeaters.

### Built-In CTCSS Encoder.

Full selection of all popular subaudible tones. Essential for operation with limited-access repeaters.

### Scanning.

DR-600T will scan full range of both bands, your programmed range, memories, or priority scan between VFO, memory and call channel. You catch all the action!

### DSQ (DTMF Squelch) Function.

Built-in DTMF decoder board lets you pre-program 3-digit codes for personal paging and code squelch calling. When activated, you can silently monitor a busy frequency or repeater and receive only paging beeps or calls from others dialing your code on their DTMF-equipped transceiver.

### Code Squelch Function.

You pre-program a 3-digit code into the DR-600T and activate its Code Squelch; when another transceiver sends that code, the DR-600T's squelch opens so you can copy other stations. Can be set for private use, group calling/paging, or calling/paging individual group members. The selective calling system of the '90s!

### Cancellation Function.

You can instantly cancel any special function during its operation by simply pressing the CANCEL button.

### Reverse Function.

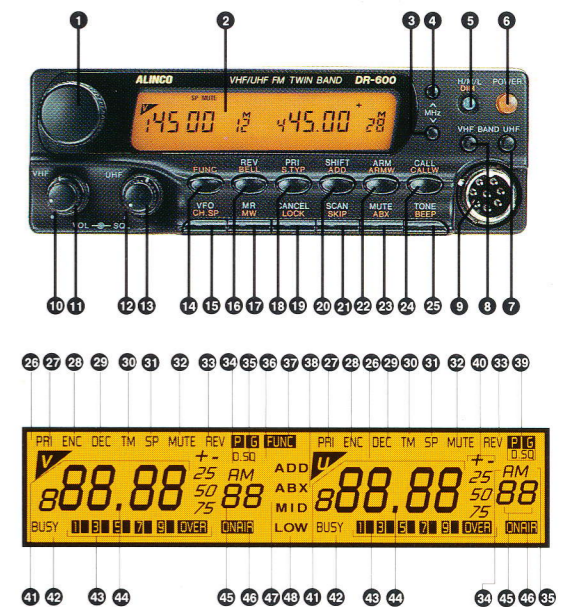
Pressing the front REV button exchanges transmit and receive frequencies. Ideal for listening on repeater input channels and checking direct/simplex range.

### Bell Function.

An incoming signal on a selected channel triggers a beep plus band annunciators in LCD readout blink and alert you to a call. Combined with DSQ function, you can set the beep to activate only when a specific individual calls on your selected frequency.

## ADDITIONAL FEATURES

- Six tuning steps selectable: 5, 10, 12.5, 20 & 25KHz.
- Autopatch auto dialers built-in.
- Reverse function for checking direct/simplex range.
- Bell function alerts you to calls.
- Selectable bright or dim LCD backlight.
- Rear cooling fan for long life.
- Separate VHF/UHF antenna sockets.



## FEATURE IDENTIFICATIONS

### FRONT PANEL

1. Main Dial
2. LCD Panel
3. MHz Down Key
4. MHz Up Key
5. Transmit Power H/M/L/Dimmer Switch
6. Power switch
7. UHF Band Switch
8. VHF Band Switch
9. Microphone Terminal
10. VHF Squelch Control
11. VHF Volume Control
12. UHF Squelch Control
13. UHF Volume Control
14. Function Key
15. VFO/Channel Step Key
16. Reverse/Bell Key
17. Memory/Memory Write Key
18. Priority/Scan Type Key
19. Cancel/Key Lock Key
20. Shift/Program Scan Add Key
21. Scan/Memory Skip Key
22. ARM/ARM Manual Write Key
23. Mute/ABX Key
24. Call/Call Write Key(T), Tone Burst Key(E)
25. Tone Squelch/Beep Sound Key

### LCD PANEL

26. Main Band Indication
27. Priority Indication
28. Tone Encoder Indication
29. Tone Decoder (Tone Squelch) Indication
30. Timed Scan Indication
31. Vacant Scan Indication
32. Mute Indication
33. Reverse Indication
34. ARM Indication
35. Memory Indication
36. Program Scan Add Indication
37. Function indication
38. ABX Indication
39. DSQ Indication
40. Shift Indication
41. Frequency, DSO Code, Dial No. Indication
42. Busy Indication
43. S/R/F Indication
44. Decimal Read Out Point/Scan Indication
45. Memory Channel Indication
46. On Air Indication
47. Transmit Power Middle Indication
48. Transmit Power Low Indication

### REAR PANEL

- VHF External Speaker Terminal
- UHF/VHF UHF Mixing External Speaker Terminal
- VHF Antenna Terminal
- UHF Antenna Terminal
- Power Connector