

# ALINCO

**DMR**  
DIGITAL MOBILE RADIO ASSOCIATION



Handheld Transceiver

VHF DJ-D17

UHF DJ-D47

## *The Cost-effective Digital Migration Solution.*



- Up to 16 hours of operating time with standard battery.
- Improved call capacity with DMO 2-slots in Direct mode.
- Programmable up to 1024ch in 248ch per Zone.
- Meets IP67 and MIL-STD810C-G.
- Stun/Kill/Revive, Emergency call, mandown, VOX, Vibration, Dual-slot trunking and more!

### Digital-Analog Dual mode

Smooth migration from analog to DMR 2-slot Tier II digital

### 1.8" Graphic Dot-matrix True Color Display

A large, full color, 5-line display

### Transmit Interrupt

The priority signal request programmable

### Real-time GPS Localization

Integrated GPS enables the real time tracking

### Versatile Voice Calls & Data Services

Supports Private, Group, All and Emergency calls in voice, in addition to data services such as GPS and Text messages

### Advanced Encryptions of Voice and Data

Enhanced ARC 40-bit digital encryption and scrambled analog call features

### Multiple Analog Signaling Modes

Supports MDC1200, DTMF, 2- and 5-Tone signaling



### Military Standards 810

|                    | 810C    |                | 810D    |              | 810E    |              | 810F    |               | 810G    |                      |
|--------------------|---------|----------------|---------|--------------|---------|--------------|---------|---------------|---------|----------------------|
| Applicable MIL-STD | METHODS | PROC./CAT      | METHODS | PROC./CAT    | METHODS | PROC./CAT    | METHODS | PROC./CAT     | METHODS | PROC./CAT            |
| Low Pressure       | 500.1   | I              | 500.2   | II           | 500.3   | II           | 500.4   | II            | 500.5   | II                   |
| High Temperature   | 501.1   | I,II           | 501.2   | I/ A1,II/ A1 | 501.3   | I/ A1,II/ A1 | 501.4   | I/Hot, II/Hot | 501.5   | I/Hot A1,II/Hot (A1) |
| Low Temperature    | 502.1   | I              | 502.2   | I/C3,II/C1   | 502.3   | I/C3,II/C1   | 502.4   | I/C3,II/C1    | 502.5   | I/C3,II/C1           |
| Temperature Shock  | 503.1   | -              | 503.2   | I/A1C3       | 503.3   | I/C1A3       | 503.4   | I             | 503.5   | I/C                  |
| Solar Radiation    | 505.1   | II             | 505.2   | I            | 505.3   | I            | 505.4   | I             | 505.5   | I                    |
| Rain               | 506.1   | I,II           | 506.2   | I,II         | 506.3   | I,II         | 506.4   | I,III         | 506.5   | I,III                |
| Humidity           | 507.1   | II             | 507.2   | II           | 507.3   | II           | 507.4   | -             | 507.5   | II                   |
| Salt fog           | 509.1   | -              | 509.2   | -            | 509.3   | -            | 509.4   | -             | 509.5   | -                    |
| Dust               | 510.1   | I              | 510.2   | I            | 510.3   | I            | 510.4   | I             | 510.5   | I                    |
| Vibration          | 514.2   | VIII/F,CURVE-W | 514.3   | I/10,II/3    | 514.4   | I/10,II/3    | 514.5   | I/24          | 514.6   | I/24                 |
| Shock              | 516.2   | I,II           | 516.3   | I,IV         | 516.4   | I,IV         | 516.5   | I,IV          | 516.6   | I,IV                 |

## Specifications

### General Handhelds

|                                  |                                    |
|----------------------------------|------------------------------------|
| Frequency Range                  | VHF 136~174MHz, UHF 400~470MHz     |
| Channel Capacity / Zone Capacity | 1024 / 248                         |
| Channel Spacing                  | 12.5KHz / 20KHz / 25KHz            |
| Operating Voltage                | 7.5V DC $\pm$ 20% (2000mAh Li-ion) |
| Dimension (approx. W x H x D)    | 137mm $\times$ 55mm $\times$ 35mm  |
| Weight (approx.)                 | 362g Ant. & Battery incld.         |

### Transmitter Handhelds

|                             |                                                              |
|-----------------------------|--------------------------------------------------------------|
| Frequency Stability         | $\pm$ 0.5ppm                                                 |
| Power Output                | 1W/4W(UHF), 1W/5W(VHF)                                       |
| Modulation Limiting         | $\pm$ 2.5kHz@12.5kHz, $\pm$ 4.0kHz@20kHz, $\pm$ 5.0kHz@25kHz |
| FM Hum and Noise            | -40dB@12.5kHz, -45dB@20/25kHz                                |
| Conducted/Radiated Emission | -36dBm@<1GHz, -30dBm@>1GHz                                   |
| Adjacent Channel Power      | -60dB@12.5kHz, -70dB@20/25kHz                                |
| 4FSK Digital Modulation     | 12.5KHz(data only) : 7K60FXD / 12.5KHz(data+voice) : 7K60FXE |
| Analog Modulation           | 11K0F3E@12.5kHz, 14K0F3E @20kHz, 16K0F3E@25kHz               |
| Digital Protocol / Vocoder  | ETSI TS102361-1, -2, -3 / AMBE+2™                            |

### Receiver Handhelds

|                                     |                                               |
|-------------------------------------|-----------------------------------------------|
| Frequency Stability                 | $\pm$ 0.5ppm                                  |
| Analog / Digital Sensitivity        | 0.3 $\mu$ V/(12dB SINAD) / 0.22 $\mu$ V/BER5% |
| Intermodulation                     | TIA603C:70dB ETSI:65dB                        |
| Adjacent Channel Selectivity (ETSI) | 60dB@12.5kHz, 70dB@20/25kHz                   |
| Spurious Response Rejection         | TIA603C : 70dB, ETSI : 70dB                   |
| Audio output (Distortion 3% typ.)   | approx.1W                                     |
| Hum and Noise                       | -40dB@12.5kHz, -45dB@20/25kHz                 |
| Audio Response /Audio Distortion    | +1 ~ -3dB/ $\leq$ 3% (typical)                |
| Conducted Spurious Emission         | -57dBm@<1GHz, -47dBm@>1GHz                    |

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Authorized Dealer:

## Standard Accessories



| Battery Pack                      | Battery Charger | AC Adapter        |
|-----------------------------------|-----------------|-------------------|
| EBP-103<br>Li-ion 7.4V<br>2000mAh | EDC-292         | EDC-291<br>(220V) |
| Whip antenna                      | Belt Clip       |                   |
| EA-262 (VHF)<br>EA-263 (UHF)      | EBC-53          |                   |

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

## Options

- PC interface cable  
ERW-18  
Available exclusively to dealers.
- Earphone microphone  
EME-78
- Battery pack  
EBP-105  
Li-ion 7.4V  
3000mAh
- Plain speaker microphone  
EMS-86

## GPS

Accuracy specs are for long-term tracking  
(95th percentile values >5 satellites visible at normal -130dbm signal strength.)

TIFF Cold start (Time to First Fix)  
<60 sec.

TIFF hot start (Time to First Fix)  
<10 sec.

Horizontal Accuracy  
<5meters mobiles, <5m Handhelds

## Environmental Specifications

Operating Temperature -30°C ~ +60°C

Storage Temperature -45°C ~ +85°C

ESD IEC 61000-4-2

Ingress protection IP 67

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**Caution**

Please be sure to read the instruction manual before using the product for your safety.

**RoHS**

