

## Specifications

General	Handhelds	Mobiles	Repeaters
Frequency Range	VHF 136~174MHz, UHF 400~470MHz		
Channel Capacity / Zone Capacity	1024 / 248	1024 / 248	16
Channel Spacing	12.5KHz / 20KHz / 25KHz		
Operating Voltage	7.5V DC±20%(2000mAh Li-ion)	13.8V ±15%	DC13.8V±20% or AC 100-250V 50/60Hz
Dimension (approx. W x H x D)	137mm×55mm×35mm	176mm×59mm×183mm	482.5mm×338.5mm×132.5mm
Weight (approx.)	362g Ant. & Battery incld.	1.5kg	11.5kg

Transmitter	Handhelds	Mobiles	Repeaters
Frequency Stability	±0.5ppm		
Power Output	1W/4W(UHF), 1W/5W(VHF)	DR-D18: 25W / D18H: 45W DR-D48: 25W / D48H: 40W	VHF: 5 ~ 50W / UHF: 5 ~ 40W Adjustable by PC setting
Modulation Limiting	±2.5kHz@12.5kHz, ±4.0kHz@20kHz, ±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	Mobiles	Repeaters
Frequency Stability	±0.5ppm		
Analog / Digital Sensitivity	0.3μV/(12dB SINAD) / 0.22μV/BER5%		0.3μV/(12dB SINAD) / 0.3μV/BER5%
Intermodulation	TIA603C:70dB ETSI:65dB	TIA603C:70dB ETSI:70dB	TIA603C : 75dB, ETSI : 60dB
Adjacent Channel Selectivity (ETSI)	60dB@12.5kHz, 70dB@20/25kHz		65dB@12.5kHz/ 75dB@20/25kHz
Spurious Response Rejection	TIA603C : 70dB, ETSI : 70dB	TIA603C : 75dB, ETSI : 70dB	TIA603C:85dB ETSI:80dB
Audio output (Distortion 3% typ.)	approx.1W	approx.3W	(N/A)
Hum and Noise	-40dB@12.5kHz, -45dB@20/25kHz		
Audio Response /Audio Distortion	+1~-3dB/≤ 3% (typical)		(N/A) / ≤ 3% (typical)
Conducted Spurious Emission	-57dBm@<1GHz, -47dBm@>1GHz		

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# ALINCO

**DMR**  
DIGITAL MOBILE RADIO ASSOCIATION



### Handheld Transceiver

VHF DJ-D17  
UHF DJ-D47

### Repeater

VHF RS-D7  
UHF RS-D8

### Mobile Transceiver

VHF DR-D18 / D18H  
UHF DR-D48 / D48H



*The Cost-effective Digital Migration Solution.*



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

**RoHS**





## Handheld Transceiver

VHF DJ-D17  
UHF DJ-D47



- 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!

### Standard Accessories



Battery Pack	Battery Charger	AC Adapter
EBP-103 Li-ion 7.4V 2000mAh	EDC-292	EDC-291 (220V)
Whip antenna	Belt Clip	
EA-262 (VHF) or 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.
- Battery pack EBP-105 Li-ion 7.4V 3000mAh

### Common features

#### 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

## Mobile Transceiver

VHF DR-D18 / D18H  
UHF DR-D48 / D48H



- Standard 25W and High-Powered 45W(VHF)/40W(UHF) H models.
- Multi-lingual Display supports English, French, German, Spanish and more!
- 4 programmable keys provide one-touch operations.
- Radio check, Remote monitor, Call alert, Permanent-monitoring, Transmit interrupt, Stun / Kill / Revive and more!

### Standard Accessories



Bracket	DC-Cable	Microphone
ADFM517	ADUA100	EMS-82

Mounting hardware and spare fuse included.

### Options



- PC interface cable ERW-19 Available exclusively to dealers.
- Remote / DTMF microphone EMS-84



DJ-D17/D47, DR-D18/D48



## Military Standards 810

Applicable MIL-STD	810C		810D		810E		810F		810G	
	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

### 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 / DJ-D17/D47  
IP 54 / DR-D18/D48

## Repeater

VHF RS-D7  
UHF RS-D8

- Professional design suitable for desktop, cabinet and rack installations.
- Outstanding Heat Dissipation with intelligent cooling fan.
- Analog / digital mixed mode detects signals automatically and sets correct mode.
- 9 LED indicators on the front panel display current status of operations.
- IP connection enables repeaters in different areas to communicate data, voice and packets over a TCP/IP based network.



### Standard Accessories

- AC cord ADUA99
- DC cable ADUA101