

ALINCO

VHF/UHF AMATEUR RADIO DIGITAL TRANSCEIVER

DR-MD520T/E

T:145/222/440MHz

E:144/430MHz

FC CE



■ Built-in GPS receiver with APRS support

■ Automatic Repeater Roaming

■ DMR Tier I and Tier II

■ MAX output power 55W(VHF) / 40W(UHF)

■ 4000 channels, 250 zones, 250 scan lists

■ 500,000 Digital contact list

■ Large 1.77 inch full color LCD display



GPS Receiver
Built-in



Real Two-slot
DMR



Plenty of
Text Messages



Digital Voice
Recorder

APRS is a registered trademark of Bob Bruninga, WB4APR.

www.**ALINCO**.com

Versatile features

Common to Digital and Analog modes



- 4000 channels, 250 zones, 250 scan lists
- Displays DMR ID, Call sign, Name and Geographical info
- Allows CSV export/import of setting parameters
- Easy import of DMR contact database (entire world wide)
- Single or dual channel selectable
- FM broadcast receiver with 100 memory channels and VFO
- Manually programmable Side and Hot keys
- Automatic date and time calibration by GPS
- X-band repeat, Analog uplink/Digital downlink or vice versa (T-version only)
- Emergency alarm
- Mixed Mode Operation: Automatically detects and switches between analog and digital modes depending on the signal received
- Recording time 4 Hours
- Automatic date and time calibration by GPS

Digital mode

- 10,000 Talk Groups, 250 Radio ID, 500,000 contact lists
- Displays the Caller ID and name
- Selective calls including Individual, Group or All
- Digital Monitor function to receive signals without matching ID or color codes
- Plenty of Text Messages 100 pre-programmable short messages of up to 200 characters each, capable of editing through the keys without using a PC

Analog mode

- Variety of signaling; CTCSS/DCS/DTMF/ 2-TONE/5-TONE encode and decode
- Four different Tone-burst tones
- Programmable Auto Repeater Shift in VFO mode
- Kill & Stun functions

Authorized Dealer:

Specifications

General

Frequency Range (DR-MD520T)	RX: 136MHz-174MHz, 220MHz-225MHz, 400MHz-480MHz 108MHz-137MHz (AM) 76MHz-108MHz(WFM)
	TX: 144MHz~148MHz, 222MHz~225MHz, 420MHz~450MHz
Frequency Range (DR-MD520E)	RX: 136MHz-174MHz, 400MHz-480MHz 108MHz-137MHz (AM) 76MHz-108MHz(WFM)
	TX: 144MHz~146MHz, 430MHz~440MHz
Operating model	16K0F3E/11K0F3E/7K60FXD/7K60FXE
Number of Channels	4000 channels
Channel Spacing	Analog: 12.5/25KHz
	Digital: 12.5KHz
Zones per Radio	250 zone (MAX 250ch/zone)
Operating Voltage	13.8V DC ±15%
Operating Temperature Range	-20~+60°C
Frequency Stability	±2.0ppm
Antenna Impedance	50Ω
Dimensions (WxHxD Approx)	141x40x188 mm (5.55x1.57x7.40 inches)
Weight (Approx)	1.04kg /36.68 ounces
Recording time	4 Hours
Current drain	15 A max.

Transmitter

RF Power Output	145MHz: 55W/25W/10W/1W
	223MHz: 5W / 1W (Only T version)
	435MHz: 40W/25W/10W/1W
Channel Spacing	Less than 1GHz: -36dBm
	More than 1GHz: -30dBm
FM Hum & Noise (Analog)	25kHz: 40dB
	12.5kHz: 36dB
Adjacent channel power	-60dB

Receiver

Sensitivity (Analog/12dB SINAD)	25kHz: 0.25uV
	12.5kHz: 0.35uV
Sensitivity (Digital/BER)	5%: 0.3uV
	1%: 0.7uV
FM Hum & Noise (Analog)	25kHz:45dB
	12.5kHz:40dB
Audio Distortion	≤5%
Audio Output	2W / 8Ω

Cellular frequencies blocked on T-version.

Standard Accessories

Microphone	Mobile Bracket	DC Cable
EMS-88 with DTMF keyboard	ADFM78	ADUA38 with Fuse Holder
Spare Fuses (15A) 2pcs	Hardware Kit for Bracket	Mic Hanger
		ERW-21 PC Interface Cable
		EA-0289 GPS-Anenna



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

Copyright Alinco, Inc., Osaka, Japan. All rights reserved. Although Alinco has designed this brochure to be as accurate and comprehensive as possible, we reserve the right to make changes at any time to our equipment line, optional accessories, specifications, standard accessories, or availability of any such devices we manufacture and distribute. Please note that certain products and accessories may not be available in all countries of distribution therefore consult your Authorized Alinco Dealer for product availability and pricing. Specifications apply only to ham bands unless otherwise specified. Colors of images herein may appear slightly different from actual products due to print. Permits required for MARS use.

ALINCO
INCORPORATED / Electronics Division
Yodoyabashi Dai-Bldg 13F, 4-4-9 Koraihashi,
Chuo-ku, Osaka 541-0043 Japan
Phone: +81-6-7636-2362 Fax: +86-6-6208-3802
http://www.ALINCO.com
E-mail: export@alinco.co.jp

FNFNFNEN-PE
Ver.1.1 MD520
Printed in Japan

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



• An amateur radio license is required to operate this product.