



## DIGITAL MOBILE RADIO ASSOCIATION

#### PROFESSIONAL DIGITAL TWO-WAY RADIO

#### Features:

- ★ On a permiteed frequency, DMR radio can obtain double calling capacities by means of TDMA technology.
- ★ Supporting both analogue and digital working modes, and realizing a stable switch between both modes.
- ★ Prolonging battery life. Compared with analogue radio, the battery life between two charging cycles for TDMA digital radio is much better, max up to 40%.
- ★ Integrated voice and data, not only improve the work efficiency, but also support multiple applications.
- ★ Able to define side keys to facilitate users to do some common functions.
- ★ Providing TFT color display and visual icons, and user-friendly menu operation.
- ★ To use digital vocoder AMBE+2<sup>™</sup> to ensure excellent audio quality. Whatever in kinds of environment, it could provide clearer sound quality than analogue radio.
- ★ To use TFT high definition display makes operation easier and agiler.



# CDM-550H Digital Mobile Radio









### **CDM-550H**

#### **Main features**

- ◆ TOT
- Scan
- FM radio
- Backlight Control
- High/Low power
- Language Selection
- Profiles selection
- Keytone Control
- Display mode
- Zone Setting
- Talk Around

#### **Digital features**

- Message
- Remote Stun
- Remote Kill
- Remote Revive
- Private Call
- Group Call
- General call
- Contacts

- No-address Call
- Remote Monitor
- Remote Detection
- Call Alert
- Call log
- Emergent Alarm
- Voice Encription
- GPS (Optional)

#### **Analog features**

- CTCSS
- ◆ DCS
- Scrambler
- Compandor

#### **Technical parameters**

#### **Specification**

Model	CDM-550H(DMR)	
Frequency Range	VHF	UHF
	136-174MHz	400-430 / 440-480MHz
Channel Capacity / Zone	16 / 16	
Digital Mode	TDMA-T2(DMR)	
Temperature	-20℃~+60℃	
Measurement(HxWxD)	140x175x46mm	
Voltage Rating	DC 13.8V	

#### Receiver

Frequency	136-174MHz	400-430/440-480MHz
Channel spacing	12.5kHz /25kHz /6.25kHz	
Frequency stability (-20℃、+60℃、+25℃)	+/-1.5ppm	
Analog sensibility	0.25 μV (12dB SINAD 0.3 μV (20dB SINAD)	)
Digital sensibility	5% BER: 0.3μV	
Intermodulation	65 dB	
Adjacent channel selectivity	60 dB @ 12.5kHz 65 dB @ 25kHz	
Spurious rejection	65 dB	
Rated audio	2W	
Audio distortion @ rated audio	3%	
FM hum and noise	-40 dB @ 12.5kHz -45 dB @ 25kHz	
Audio response	+1、-3dbB	
Spurious emission	-57 dBm	

#### **Transmitter**

Transmitter		
Frequency range	136-174MHz	400-430/440-480MHz
Channel spacing	12.5kHz /25kHz / 6.25kHz	
Frequency stability (-20℃、+60℃、+25℃)	+/-1.5ppm	
Output power	L: 25W	25W
	H: 50W	40W
Modulation Limited	+/-2.5kHz @ 12.5kHz +/-5.0kHz @ 25kHz	
FM hum and noise	-40 dB @ 12.5kHz -45 dB @ 25kHz	
Conducted / radiated emission	-36 dBm<1GHz -30 dBm>1GHz & <4GHz	
Adjacent channel power	-60 dB @ 12.5kHz -65 dB @ 25kHz	
Audio response	+1、-3dbB	
Audio distortion	3%	
FM modulation	12.5 kHz: 11KOF3E 25 kHz: 16KOF3E	
4FSK digital modulation	12.5kHz only data: 7K60FXD 12.5kHz data and audio: 7K60FXE	
Digital vocoder type	AMBE+2™	
Digital agreement	ETSI-TS102 361-1 -2 -3	

#### **GPS** (Optional)

Precisely and standard designed for a long-term positioning (95% value > could		
find 5 satellites @ rated -130dBm signal strength		
TTFF (time to fist fix) cold start	< 1 min	
TTFF(time to fist fix) warm start	< 10 s	
Horizontal position accuracy	< 10 ms	