

# CDM750<sup>™</sup>

# Available in Low Band, VHF and UHF Operates on Conventional Systems

### Features include:

- 4 Channels
- Data Capable
- Scan

Monitors channels for activity

- Repeater Talkaround
   Unit-to-unit communication, bypassing the repeater
- MDC 1200 Encode Signaling Sends information via digital signals Features Include:

Caller ID Encode: Allows users to identify you as the caller

Selective Radio Inhibit: Can be remotely deactivated if lost or stolen

Call Alert: Notifies users that you're trying to reach them

- X-Pand<sup>™</sup> Audio Enhancement Crisp, clear audio quality
- Monitor/Permanent Monitor
   Allows continuous channel monitoring
- Remote Mountable Control Head



## The Practical Radio—that gets the job done

This radio is ideal for organizations and businesses with moderate communication requirements, especially those in construction and manufacturing industries. The CDM750 radio provides simple yet high-performing functionality. Its streamlined features include the essentials to keep users communicating steadily and efficiently—including limited signaling capabilities and two customizable function buttons. Motorola's flexible X-Pand™ audio feature and a large front-projecting speaker ensure clear, crisp sound, even in noisy environments. The CDM750 radio is a practical tool to get the job done.

### **SPECIFICATION SHEET**

		Low Band	VHF	UHF
Channel Capacity:		4	4	4
Typical RF Output:	Low Power High Power	40-60VV	1-25W 25-45W	1-25W 25-40W
Frequencies:		29.7-36 MHz, 36-42 MHz 42-50 MHz	136-174 MHz	403-470 MHz 450-512 MHz
Dimensions: (H x W x D)	Low Power (1-25 High Power	5W) 2.3 × 6.93 × 9.47 in. 58 × 176 × 240 mm	2.2 x 6.93 x 6.97 in. 56 x 176 x 177 mm 2.2 x 6.93 x 7.44 in. 56 x 176 x 189 mm	2.2 x 6.93 x 6.97 in. 56 x 176 x 177 mm 2.2 x 6.93 x 7.44 in. 56 x 176 x 189 mm
Weight:	Low Power High Power	N/A 4.5 lbs (2.04 Kg)	3.15 lbs (1.43 Kg) 3.5 lbs (1.59 Kg)	3.15 lbs (1.43 Kg) 3.5 lbs (1.59 Kg)
Current Drain: Rx @ rated, external 8 o	Standby ohm speaker	.4A 1.5A	.3A 1.5A	.3A 1.5A
Transmit:		17A	7A@25W, 13.5A@45W	8A@25W, 13.5A@40W
FCC Description:		AZ492FT1627 (29.7-36 MHz) AZ492FT1628 (36-42 MHz)	AZ492FT3796 (25W) AZ492FT3795 (45W)	AZ492FT4835 (25W, 403-470 MHz) AZ492FT4830 (40W, 403-470 MHz) AZ492FT4829 (25W, 450-512 MHz) AZ492FT4836 (40W, 450-512 MHz)

TRANSMITTER SPECIFICATIONS					
		Low Band	VHF	UHF	
Channel Spacing:		12.5/20/30 kHz	12.5/20/25 kHz*	12.5/20/25 kHz*	
Frequency Stability: (-30° to +60° C, +25° Ref.)		± 5 ppm	± 2.5 ppm	± 2.5 ppm	
Power Output:	Low Power High Power	40-60W	1-25W 25-45W	1-25W 25-40W	
Modulation Limiting:		± 5.0	± 2.5 @ 12.5 kHz ± 4.0 @ 20 kHz ± 5.0 @ 25 kHz*	± 2.5 @ 12.5 kHz ± 4.0 @ 20 kHz ± 5.0 @ 25 kHz*	
FM Hum and Noise:		-45dB (25 kHz)	-40dB @ 12.5 kHz, -45dB @ 25 kHz*	-40dB @ 12.5 kHz, -45dB @ 25 kHz	
Conducted/Radiated Spurious Emission:		-26dBm < 1 GHz, -26dBm > 1 GHz	-36dBm < 1 GHz -30dBm > 1 GHz	-36dBm < 1 GHz -30dBm > 1 GHz	
Adjacent Channel Power:		-70dB	-60dB @ 12.5 kHz, -70dB @ 25 kHz*	-60dB @ 12.5 kHz, -70dB @ 25 kHz*	
Audio Response:		TIA 603 and ETS300 and CEPT 84 Annex 2	TIA 603 and ETS300 and CEPT 84 Annex 2	ETS300 and CEPT 84 Annex 2	
Audio Distortion:		3% Typical	3% Typical	3% Typical	
FM Modulation:		16K0F3E (25 kHz)	16K0F3E (25 kHz)* 11K0F3 (12.5 kHz)	16K0F3E (25 kHz)* 11K0F3 (12.5 kHz)	

RECEIVER SPECIFICATIONS				
	Low Band	VHF	UHF	
Frequencies:	29.7-36 MHz, 36-42 MHz 42-50 MHz	136-174 MHz	403-470 MHz 450-512 MHz	
Channel Spacing:	12.5/20/30 kHz	12.5/20/25 kHz*	12.5/20/25 kHz*	
Frequency Stability: (-30° C to +60° C, +25° Ref.)	± 5 ppm	± 2.5 ppm	± 2.5 ppm	
Sensitivity: (12dB SINAD)	0.3 μV (0.25 Typical)	0.3 μV (0.23 Typical)	0.3 μV (0.23 Typical)	
Intermodulation:	78dB Typical	75dB @ 12.5 kHz 78dB @ 25 kHz*	75dB @ 12.5 kHz 75dB @ 25 kHz*	
Adjacent Channel Selectivity:	80dB	65dB @ 12.5 kHz 80dB @ 20 kHz 80dB @ 25 kHz*	65dB @ 12.5 kHz 75dB @ 20 kHz	
Spurious Rejection:	80dB	75dB @ 12.5 kHz VHF 80dB @ 25 kHz*	70dB @ 12.5 kHz 75dB @ 25 kHz*	
Rated Audio: External with 4 ohm speaker	3W Internal, 13W External	3W Internal, 13W External	3W Internal, 13W External	
Audio Distortion @ Rated Audio:	3% Typical	3% Typical	3% Typical	
Hum and Noise:	-45dB	-40dB 12.5 kHz, -45dB 25 kHz*	-40dB 12.5 kHz, -45dB 25 kHz*	
Audio Response:	TIA603 and ETS300 and CEPT 84 Annex 2	TIA603 and ETS300 and CEPT 84 Annex 2	TIA603 and ETS300 and CEPT 84 Annex 2	
Conducted Spurious Emission:	-57dBm < 1 GHz -47dBm > 1 GHz	-57dBm < 1 GHz -47dBm > 1 GHz	-57dBm < 1 GHz -47dBm > 1 GHz	

<sup>\*</sup>Availability of new 25 kHz equipment may be restricted due to Narrowbanding regulations in your country. Please check with your frequency coordinator and/or regulatory agency for the latest information on Narrowbanding.

PORTABLE MILITARY STANDARDS							
Applicable MIL-STD	810C	810D	810E				
	Method/Procedure	Method/Procedure	Method/Procedure				
Low Pressure:	500.1/1	500.2/2	500.3/2				
High Temperature:	501.1/1, 2	501.2/1, 2	501.3/1, 2				
Low Temperature:	502.1/2	502.2/1, 2	502.3/1, 2				
Temperature Shock:	503.1/1	503.2/1	503.3/1				
Solar Radiation:	505.1/1	505.2/1	505.3/1				
Rain:	506.1/2	506.2/2	506.3/2				
Humidity:	507.1/2	507.2/2, 3	507.3/3				
Salt Fog:	509.1/1	509.2/1	509.3/1				
Dust:	510.1/1	510.2/1	510.3/1				
Vibration:	514.2/8, 10	514.3/1	514.4/1				
Shock:	516.2/1, 5	516.3 /1	516.4/1				



Operating Temperature: -30° to +60° C
Storage Temperature: -55° to +85° C
Thermal Shock: -40° to +85° C
Humidity: 95% RH @ 8 Hr.

ESD: IEC 801-2 KV
Water Intrusion: IP54
Packing Test: Impact Test