



# CDM750™

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™ 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**

GENERAL SPECIFICATIONS			
	Low Band	VHF	UHF
Channel Capacity:	4	4	4
Typical RF Output:	Low Power High Power	40-60W	1-25W 25-45W
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 (1-25W)  High Power	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)
Current Drain:	Standby Rx @ rated, external 8 ohm speaker	.4A 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	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

\*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

ENVIRONMENTAL	
Operating Temperature: -30° to +60° C	ESD: IEC 801-2 KV
Storage Temperature: -55° to +85° C	Water Intrusion: IP54
Thermal Shock: -40° to +85° C	Packing Test: Impact Test
Humidity: 95% RH @ 8 Hr.	



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