

TWO-WAY RADIOS

## **CDM750: The Practical Radio**

Ideal for organizations with moderate communication requirements, 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 unique X-Pand™ audio enhancement and a large front-projecting speaker ensure clear, crisp sound, even in noisy environments. The practical CDM750 radio gives you virtually everything you need to get the job done.

## CDM750 Mobile Radio

## **Additional CDM750 Features:**

- Large, easy-to-use controls
- Powerful, front-projecting speaker
- 12.5/25 kHz switchable channel spacing
- Remote mountable control head
- Data capable



## **Mobile Two-Way Radio Specifications**

General Specifications			
	Low Band	VHF	UHF
Channel Capacity		4	
Typical RF Output Low Power High Power	40-60W	1-25W 25-45W	1-25W 25-40W
Frequency	29.7-36 MHz 36-42 MHz 42-50 MHz	136-174 MHz	403-470 MHz 450-512 MHz
Dimensions (H x W x L) Low Power	_	2.2" x 6.93" x 6.97" (56 mm x 176 mm x 177 mm)	
Dimensions (H x W x L) High Power	2.3" x 6.93" x 9.47" (58 mm x 176 mm x 240 mm)	2.2" x 6.93" x 7.44" (56 mm x 176 mm x 189 mm)	
Weight Low Power (1-25W) High Power	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 Transmit	.4 A 1.5 A 17 A	.3 A 1.5 A 7 A @ 25W 13.5 A @ 45W	.3 A 1.5 A 8 A @ 25W 13.5 A @ 40W
FCC Description	AZ492FT1627 (29.7-36 MHz) AZ492FT1628 (36-42MHz) AZ492FT1626 (42-50 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	
Frequencies	29.7-36 MHz 36-42 MHz 42-50 MHz	136-174 MHz 403-470 M 450-512 M		
Channel Spacing	20 kHz	12.5/20/25 kHz		
Frequency Stability (-30° C to +60° C, +25° Ref.)	± 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 kH / ±4.0 @ 20kHz / ±5.0 @25 kHz		
FM Hum & Noise	-40 dB	-40 dB -40 dB 12.5 kHz -45 dB 25 kHz		
Conducted/Radiated Emission	-36 dBm < 1 GHz -30 dBm > 1 GHz			
Adjacent Channel Power	-70 dB -60 dB @ 12.5 kHz -70 dB @ 25 kHz			
Audio Response	TIA 603 & ETS300 & ETS 300 / CEPT 84 CEPT 84 Annex 2			
Audio Distortion	3% typical			
FM Modulation	25 kHz 16K0F3E 25 kHz 16K0F3E 12.5 kHz 11K0F3			

For more information, please contact:		

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	20 kHz 12.5/20/25 kHz			
Frequency Stability (-30° C to +60° C, +25° Ref.)	± 5 ppm	± 2.5 ppm		
Sensitivity (12 dB SINAD)	0.3 μV 0.25 μV typical	0.3 µV 1 0.23 µV typical		
Intermodulation	80 dB typical	75 dB @ 12.5 kHz 78 dB @ 25 kHz	75 dB @ 12.5 kHz 75 dB @ 25 kHz	
Adjacent Channel Selectivity	80 dB	65 dB @ 12.5 kHz 80 dB @ 25 kHz	65 dB @ 12.5 kHz 75 dB @ 25 kHz	
Spurious Rejection	80 dB	75 dB @ 12.5 kHz VHF 80 dB @ 25 kHz VHF	70 dB @ 12.5 kHz 75 dB @ 25 kHz	
Rated Audio (external audio with 4 ohm speaker)		3W Internal 13W External		
Audio Distortion @ Rated Audio	3% typical			
Hum and Noise	-45 dB -40 dB 12.5 kHz -45 dB 25 kHz			
Audio Response	TIA603 & ETS300 & CEPT 84 Annex 2			
Conducted Spurious Emission		-57dBm < 1 GHz -47 dBm > 1 GHz		

Mobile Military Standards 810 C, D, & E							
	8	810C		810D		810E	
Applicable MIL-STD	Methods	Procedures	Methods	Procedures	Methods	Procedures	
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 Specifications		
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	

Ask your dealer about the other CDM Series Two-Way Radios that utilize exclusive X-PAND technology.



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