



THE PRACTICAL RADIO—THAT GETS THE JOB DONE

CDM750™

**AVAILABLE IN LOW BAND, VHF AND UHF
OPERATES ON CONVENTIONAL SYSTEMS**

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.

CDM750™ SPECIFICATIONS

FEATURES AND BENEFITS:

- **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
- **X-Pand™ Audio Enhancement**
Crisp, clear audio quality
- **Monitor/Permanent Monitor**
Allows continuous channel monitoring



- 1 Multicolored LED Indicators**
Visible feedback of transmit, scan, and monitor status
- 2 Large, Easy to Use Controls**
- 3 Large Textured PTT Button on Palm Microphone**
- 4 Powerful, Front-Projecting Speaker**
- 5 Rugged, Die-Cast Chassis with Polycarbonate Outer Shell**
- 6 2 Customizable Function Buttons (P1, P2)**
Program for instant access to your favorite features
- 7 4 Channel Selector Buttons**

GENERAL SPECIFICATIONS

		Low Band	VHF	UHF
Channel Capacity		4	4	4
Typical RF Output	Low Power		1-25W	1-25W
	High Power	40-60W	25-45W	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 (1-25W)		2.2 x 6.93 x 6.97 in. 56 x 176 x 177 mm	2.2 x 6.93 x 6.97 in. 56 x 176 x 177 mm
	High Power	2.3 x 6.93 x 9.47 in. 58 x 176 x 240 mm	2.2 x 6.93 x 7.44 in. 56 x 176 x 189 mm	2.2 x 6.93 x 7.44 in. 56 x 176 x 189 mm
Weight	Low Power	N/A	3.15 lbs (1.43 Kg)	3.15 lbs (1.43 Kg)
	High Power	4.5 lbs (2.04 Kg)	3.5 lbs (1.59 Kg)	3.5 lbs (1.59 Kg)
Current Drain Rx @ rated, external 8 ohm speaker	Standby	.4A	.3A	.4A
		1.5A	1.5A	1.5A
Transmit		17A	7A@25W, 13.5A@45W	7A@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 Capacity		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
Typical RF Output	Low Power		1-25W	1-25W
	High Power	40-60W	25-45W	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		17A	7A@25W, 13.5A@45W	7A@25W, 13.5A@40W
Conducted/Radiated Spurious Emission		-26dBm < 1 GHz	-36dBm < 1 GHz	-36dBm < 1 GHz
		-26dBm > 1 GHz	-30dBm > 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)

PRODUCT SPEC SHEET
CDM750™

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 Method/Procedure	810D Method/Procedure	810E 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
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

Motorola Solutions, Inc. 1301 East Algonquin Road Schaumburg, Illinois 60196, U.S.A. 800-367-2346 motorolasolutions.com

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2012 Motorola Solutions, Inc. All rights reserved. R3-1-2041A

