



PM1500 Professional Series

Two-Way Mobile Radio and Accessories



Standard and Dual Control Head Packages Available
P25 Interoperability Capable
Performance in Critical Situations

PM1500 Professional Series

Two-Way Mobile Radio

Safety, productivity, and efficiency demand reliable communication. Challenges increase across wide areas and in communities that are growing geographically. For the people who keep government and commercial institutions functioning, staying linked is a vital need. Motorola has specifically designed the PM1500 Professional Series two-way mobile radio to meet the needs of public safety, public works, utility, transportation and construction professionals. The PM1500 offers durability, extensive signaling, and a standard external speaker for users who communicate under tough, loud conditions and must depend on clear communication.

PM1500 Standard Package

- Palm Microphone
- 7.5 Watt External Speaker
- Mounting Hardware
- 20 Ft. Power Cable
- 17 Ft. Remote Mount Cable
- Ignition Sense Cable
- User Guide CD
- 2-Year Standard Warranty

PM1500 Dual Control Head Standard Package Also Includes

- Two Palm Microphones
- One 7.5 Watt External Speaker
- One 13 Watt External Speaker
- Two 17 Ft. Remote Mount Cables
- Additional Mounting Bracket



Standard Features

255 Channels

Multicolored LED Indicators

Large Channel and Push Button On/Off Volume Knobs

Backlit 8-Character Alphanumeric Display

User friendly icons and soft menu so you easily view status and access features. Display for viewing of channel names and Caller ID

Programmable Emergency Button

Alerts dispatcher in an emergency situation

4 Programmable Buttons

Easy access to favorite features. Optional keypad microphone allows you to scroll through the menu and access up to 16 programmable features

7.5 Watt External Speaker

Allows for clear, crisp communication in loud environments

Dual Control Head Option

Enables multiple radio control heads to be located within the same vehicle. Available with independent volume and backlight display

P25 Conventional Upgradeable

A single software upgrade makes this radio P25 Interoperable and able to interact with other networks in times of crisis



Quality that delivers under tough conditions... For a stronger, more efficient community.

PM1500 Programmable Features

Choose up to 16. Top features include:

Emergency

Alerts dispatcher in urgent situations

Repeater Talkaround

Unit-to-unit communication, bypassing the repeater

Channel Scan

Monitors the scan list channels for any activity

Zone Up/Zone Down

Allows you to select alternate zones

Dim

Sets preferred volume level for radio speaker

Nuisance Channel Delete

Temporarily deletes a specific channel from your scan mode if you no longer want to hear activity on that channel

Additional PM1500 Features allow you to send and receive information in a variety of ways with Quik-Call II™, MDC1200, and DTMF Signaling

Selective Call – Send and receive calls from a specific group or individual

Call Alert – Send and receive alerts of incoming calls

MDC1200 Signaling Only Features:

Push-to-Talk ID – Identify your calls

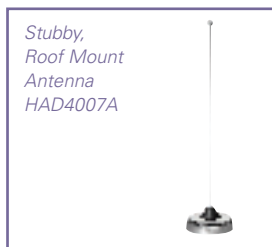
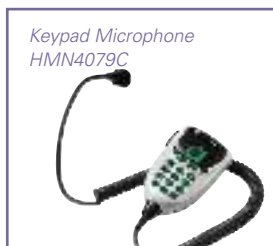
Emergency (Encode/Decode) – Alerts dispatcher in urgent situations

Status/Message (Encode) – Allows radio to send pre-programmed messages

Selective Radio Inhibit (Decode) – Allows system owner to disable stolen or missing radios

Radio Check (Decode) – Lets others check your radio status

PM1500 Accessories: Customizing one radio or an entire fleet



Microphone

To manage menus and converse conveniently

Speakers

Ideal for extremely noisy environments

Power Cables

Providing power to suit your needs

Switches

Footswitches improve operating convenience and safety

Alarm Cable

External alarm cable for added security

Antennas

Optimize range and quality for different configurations

For a complete listing of accessories and availability contact us today.

SPECIFICATIONS

GENERAL SPECIFICATIONS			ENVIRONMENTAL	
	UHF	VHF	Operating Temperature	-30°C to +60°C
Frequency Range	380-470 MHz	136-174 MHz	Storage Temperature	-40°C to +85°C
Channel Bandwidth	12.5/25 kHz	12.5/25 kHz	International Protection	IP54 certified
Dimensions (H x W x D)				
Control Head	2.56 x 7.22 x 3.38 inches (65 x 183.5 x 85.8 mm)			
High Power Radio Transceiver	2.765 x 8.08 x 12.31 inches (70.2 x 205.2 x 312.7 mm)			
Weight				
Control Head	6.1lbs (2.77 kg)			
High Power Radio Transceiver	8.8lbs (3.99 kg)			

POWER AND BATTERY DRAIN		
Model Type	380-470 MHz	136-174 MHz
Minimum RF Power Output	25-110 Watt	25-110 Watt
Operation	12V DC Negative Ground	12V DC Negative Ground
Standby at 13.8V	0.65A-0.85A	0.5A-0.7A
Receive at Rate Audio at 13.8V	1.5A-3.2A	1.3A-3.0A

	Typical Performance Specifications	
	UHF	VHF
Frequency Range	380-470 MHz	136-174 MHz
RF Power	25-110W	25-110W
Maximum Frequency Separation	Ref Above Bandsplit	Full Bandsplit
Frequency Stability Operating	2 ppm	2.5 ppm
Frequency Accuracy	(-30° to +60°C; +25°C ref) +/- 2ppm	(-30° to +60°C)
Modulation Limiting		
25 kHz channel	+5 kHz	+5 kHz
12.5 kHz channel	+2.5 kHz	+2.5 kHz
Channel Spacing Analog	12.5/25 kHz	12.5/25 kHz
FM Hum and Noise		
25 kHz	45 dB	50 dB
12.5 kHz	40 dB	40 dB
Emissions	Conducted -85 dBc Radiated -20 dBc	Conducted -85 dBc Radiated -85 dBc
Audio Response		
(6dB/Octave Pre-emphasis from 300 to 3000 Hz)	+1, -3 dB (EIA)	+1, -3 dB (EIA)
Audio Distortion per EIA	2%	2%

	Typical Performance Specifications	
	UHF	VHF
Channel Spacing	12.5/25 kHz	12.5/25 kHz
Maximum Frequency Separation	Full Bandsplit	Full Bandsplit
Analog Sensitivity		
20 dB Quieting	0.25µV 0.40µV	0.25µV 0.40µV
12 dB SINAD per EIA	0.20µV 0.30µV	0.20µV 0.30µV
Intermodulation	80 dB 85 dB	85 dB 85 dB
Spurious Response Rejection	90 dB 90 dB	90 dB 90 dB
Audio Output Power at 3% distortion	75W (ext. speaker)	75W (ext. speaker)
Adjacent Channel Rejection	75 dB 82 dB	85 dB 85 dB
Selectivity (12.5 kHz/25 kHz)		

FCC TYPE ACCEPTANCE ID		
TRANSMITTER POWER		
Band	380-470 MHz	136-174 MHz
Output	25-110 W	25-110 W
Number	AZ492FT4870	AZ492FT3808
Model	AAM79KTD9PW5_N	AAM79QTD9PW5_N

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F	
	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II
High Temperature Storage	501.1	I	501.2	I/A1	501.3	I/A1	501.4	I/Hot
High Temperature Storage	501.1	II	501.2	II/A1	501.3	II/A1	501.4	II/Hot
Low Temperature Storage	502.1	I	502.2	I/C3	502.3	I/C3	502.4	I/C3
Low Temperature Operational	502.1	I	502.2	II/C1	502.3	II/C1	502.4	II/C1
Temperature Shock	503.1	-	503.2	I/A1-C3	503.3	I/A1-C3	503.4	I/Hot-C3
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I
Rain Blowing	506.1	I	506.2	I	506.3	I	506.4	I
Rain Steady	506.1	II	506.2	II	506.3	II	506.4	III
Humidity	507.1	II	507.2	II	507.3	II	507.4	-
Salt Fog	509.1	-	509.2	-	509.3	-	509.4	-
Blowing Dust	510.1	I	510.2	I	510.3	I	510.4	I
Blowing Sand			510.2	II	510.3	II	510.4	II
Vibration Minimum Integrity	514.2	VIII/F, Curve-W	514.3	I/10	514.4	I/10	514.5	I/24
Vibration Loose Cargo			514.3	II/3	514.4	II/3	514.5	II/5
Shock Functional	516.2	I	516.3	I	516.4	I	516.5	I
Shock Crash Hazard	516.2	III	516.3	V	516.4	V	516.5	V
Shock Bench Handling	516.2	V	516.3	VI	516.4	VI	516.5	VI

Accelerated Life Test

Motorola's Accelerated Life Test (ALT) is a developmental process of rigorous laboratory testing that simulates years of field use. Motorola has a firm commitment to quality and reliability. These radios have been designed, manufactured and tested to achieve high levels of component and workmanship quality. Motorola radios are designed to minimize costly repairs and downtime.



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