



# PM1500

## Professional Series Two-Way Mobile Radio



### 255 Channels

### Multicolored LED Indicators

### 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

### Programmable Emergency Button

Alerts dispatcher in an emergency situation

### 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

### Large Channel and Push Button On/Off Volume Knobs

### 7.5 Watt External Speaker

Allows for clear, crisp communication in loud environments

### P25 Conventional Upgradable

### Dual Control Head Option

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

### 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

### 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

### Additional Features

Send and receive information in a variety of ways:

#### Quik-Call II™, MDC1200 and DTMF Signaling

- **Selective Call (Decode)**  
Receive a call from a specific group or individual
- **Call Alert (Decode)**  
Receive alerts of incoming calls when a short distance from radio

#### MDC1200 Signaling Only

- **Push-to-Talk ID (Encode)**  
Identify outgoing calls
- **Radio Check (Decode)**  
Lets others check users radio status
- **Emergency (Encode)**  
Alerts dispatcher in urgent situations
- **Selective Radio Inhibit (Decode)**  
Allows system owner to disable stolen or missing radios

### To keep things running efficiently, safely, and productively, you need to stay connected.

That's why so much quality and performance is built into the Professional Series PM1500 two-way mobile radio from Motorola. Long-range communications are robust with the mobile radio that packs 110 watts of power. The rugged housing and standard external speaker of the PM1500 make it the dependable choice in tough, loud environments. You'll appreciate the user-friendly design of the controls, backlit alphanumeric display and programmable buttons for easy access to favorite features.

The PM1500 puts quality Motorola technology to work helping public safety, utility, transportation and construction users with strong, reliable communications – even over long distances.

### Linking Communities with Project 25 (P25)

With a single software upgrade, the PM1500 becomes P25 interoperable. This vital feature gives you the ability to interact with other networks in times of crisis.

## SPECIFICATION SHEET

### PM1500 PROFESSIONAL SERIES Two-Way Mobile Radio

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	6.1 lbs (2.77 kg)			
High Power Radio Transceiver	8.8 lbs (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

TRANSMITTER		
	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) +/- 2 ppm	(-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	Conducted Radiated
Radiated	-20 dBc	-85 dBc
Audio Response	+1, -3 dB (EIA)	+1, -3 dB (EIA)
(6 dB/Octave Pre-emphasis from 300 to 3000 Hz)		
Audio Distortion per EIA	2%	2%

RECEIVER		
	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

MILITARY STANDARDS 810C, D, E & F								
	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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