



# ***PR1500 Professional Series***

Two-Way Radio and Accessories



***P25 Interoperability Capable  
Performance in Critical Situations***



# PR1500 Professional Series

## Two-Way Radio

In large and small communities alike, people rely on police and fire departments to keep their families safe and their properties secure. In times of emergency and severe weather, they count on critical first responders and public utility workers in crisis situations. It's specifically for these safety professionals that Motorola has designed the PR1500 Professional Series two-way radio. The PR1500 offers a higher level of durability, range and audio sophistication for those who need reliable communications in the toughest of conditions.

### PR1500 Standard Package

IMPRES™ NiMH 1850 mAh Battery

IMPRES Single Unit Rapid Charger

VHF or UHF Antenna

2.25 Inch Belt Clip

Remote Speaker Microphone Adapter

Accessory Connector Dust Cover

User Guide CD

2-Year Standard Warranty



### Standard Features

#### 32 Channels

#### Large Raised Channel and On/Off Volume Knobs

Easy to operate when wearing gloves

#### 3 Position Concentric Switch

Allows customization of radio features for ease of use

#### Programmable Emergency Button

Alerts dispatcher in emergency situations

#### Sealed Accessory Connector

Customize audio solutions to meet your needs. Backward compatible with existing accessories

#### Enhanced Audio Features

Noise reduction software and Audio Gain Control (CPS Programmable) allow audio customization to meet your needs

#### 3 Programmable Side Buttons and Large, Textured Push-To-Talk Button

Easy access to favorite features. Easy to operate when wearing gloves and provides good tactile response.

#### Adjustable Power Levels

Preserves battery life

#### Priority/Dynamic Priority Channel Scan

Frequently scan higher priority channels. Easily add or delete scan list members

#### Monitor/Permanent Monitor

Allows continuous channel monitoring

#### IMPRES™ Energy System

Battery, charging and reconditioning system that automates battery maintenance, optimizes cycle life, and maximizes talktime

#### P25 Conventional Upgradeable

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



# A higher level of performance for tough and critical conditions

## PR1500 Programmable Features

Choose up to 12. Top features include:

### Emergency

Alerts dispatcher in urgent situations

### Repeater Talkaround

Unit-to-unit communication, bypassing the repeater

### Channel Scan

Monitors the selected channel for any activity

### Dynamic Priority

Adds a priority channel to the scan list

### Volume Set

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 PR1500 Features allow you to send and receive information in a variety of ways with MDC1200 Signaling and Quik-Call II™

**Push-to-Talk ID (Encode)** – Identify your outgoing calls

**Selective Call (Decode)** – Receive a call from a specific group or an individual caller

**Call Alert (Decode)** – Receive alerts of incoming calls when you're a short distance from your radio

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

**Emergency (Encode)** – Alerts dispatcher in urgent situations

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

## PR1500 Accessories: Customizing one radio or an entire fleet



### Traditional

#### Batteries and Chargers

Different battery chemistries to best suit your needs as well as single and multi-unit charger options

### IMPRES™

#### Batteries and Chargers

Offer superior, long-lasting performance with automated maintenance

### Carry Accessories

Keep the radio secure and safe from the elements wherever you go

### Remote Speaker Microphones

Talk or listen without removing the radio from belt or case

### Ear Microphones

Compact, with tremendous audio clarity for hands-free communication

### Headsets

For hands-free operation in a variety of models to fit your needs and preferences

### CommPort™ Integrated Microphone/ Receiver System

Combines ear microphone with receiver so you can speak in a whisper and hear in a noisy crowd

### Surveillance Kits

Allow you to discreetly receive and transmit communications

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

## SPECIFICATIONS

GENERAL SPECIFICATIONS				ENVIRONMENTAL	
	VHF 136-174 MHz	UHF R1 380-470 MHz	UHF R2 450-520 MHz		
Channel Capacity	32	32	32	Operating Temperature	-30°C to +60°C
Model Numbers	AAH79KDC9PW5_N	AAH79QDC9PW5_N	AAH79SDC9PW5_N	Storage Temperature	-40°C to +85°C
FCC Designation	AZ489FT3807	AZ489FT4865	AZ489FT4866	Humidity	Per MIL-STD
FCC Emissions Designators	11K0F3E, 16K0F3E, 8K10F1E, 8K10F1D			ESD	IEC 801-2 KV
Power Supply	Rechargeable nickel-cadmium, or IMPRES nickel-metal hydride battery			Water Intrusion	IP54, MIL-STD
Dimensions (HxVxL)	6.00 x 2.30 x 1.50 inches				
Weight	with NiCD Battery	19.85 oz.			
	with FM NiCD Battery	19.85 oz.			
	with IMPRES NiMH Battery	20.63 oz.			
	with FM IMPRES NiMH Battery	20.63 oz.			
Average Battery Life @ 5-5-90 Duty Cycle*	High Power (5W)	8 hours			
	with High Capacity NiCD	8 hours			
	with High Capacity NiCD FM	10 hours			
	with High Capacity NiMH	10 hours			
	with High Capacity NiMH FM	10 hours			

\* 5% receive, 5% transmit, 90% standby

TRANSMITTER			
	Typical Performance Specifications		
	VHF	UHF R1	UHF R2
Frequency Range	136-174 MHz	380-470 MHz	450-520 MHz
Channel Spacing	12.5/25 kHz	12.5/25 kHz	12.5/25 kHz
Maximum Frequency Separation	Full Bandsplit	Full Bandsplit	Full Bandsplit
Rated RF Output Power Adj*	1 to 5 W	1 to 5 W	1 to 5 W
Frequency Stability* (-30°C to +60°C; +25°C Ref.)	±0.00025%	±0.0002%	±0.0002%
Modulation Limiting*			
25 kHz channel	±5.0 kHz	±5.0 kHz	±5.0 kHz
NPSAP channel	N/A	N/A	N/A
12.5 kHz channel	±2.5 kHz	±2.5 kHz	±2.5 kHz
Emissions* (Conducted & Radiated)	-65 dBc	-70 dBc	-70 dBc
Audio Response* (6 dB/Octave Pre-emphasis from 300 to 3000 Hz)	+1, -3 dB	+1, -3 dB	+1, -3 dB
FM Hum & Noise Radio*			
25 kHz	-46 dB	-45 dB	-45 dB
12.5 kHz	-42 dB	-40 dB	-40 dB
Audio Distortion*	1%	2.0%	2.0%

\* Measured in the analog mode per TIA/EIA 603.  
Specifications subject to change without notice.

RECEIVER			
	Typical Performance Specifications		
	VHF	UHF R1	UHF R2
Frequency Range	136-174 MHz	380-470 MHz	450-520 MHz
Channel Spacing	12.5/25 kHz	12.5/25 kHz	12.5/25 kHz
Maximum Frequency Separation	Full Bandsplit	Full Bandsplit	Full Bandsplit
Audio Output Power at Rated*	500 mW	500 mW	500 mW
Frequency Stability* (-30°C to +60°C; +25°C Ref.)	±0.00025%	±0.0002%	±0.0002%
Analog Sensitivity*			
12 dB SINAD	.25 µV	.25 µV	.25 µV
Selectivity*			
25 kHz channel	-80 dB	-73 dB	-73 dB
12.5 kHz channel	-63 dB	-63 dB	-63 dB
Intermodulation*	-78 dB	-73 dB	-75 dB
Spurious Rejection*	-80 dB	-75 dB	-75 dB
FM Hum and Noise*			
25 kHz	-52 dB	-47 dB	-50 dB
12.5 kHz	-40 dB	-40 dB	-47 dB
Audio Distortion*	1%	2.0%	2.0%

PORTABLE 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	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1
Temperature Shock	503.1	I*	503.2	I/A1C3	503.3	I/A1C3	503.4	I
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	I*
Salt Fog	509.1	I*	509.2	I*	509.3	I*	509.4	I*
Blowing Dust	510.1	I	510.2	I	510.3	I	510.4	I
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24
Shock	516.2	I, II	516.3	I, IV	516.4	I/IV	516.5	I, IV

\* Military Standards specify a single procedure for this test.

## FACTORY MUTUAL APPROVALS

The PR1500 is Factory Mutual approved and Canadian Standard Association approved as intrinsically safe for use in Classes I, II, and III, Division 1, Groups C, D, E, F and G, as well as non-incendive use in Class I, Division 2, Groups A, B, C and D on models ordered with the Factory Mutual option, and battery.

### 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 workman quality. Motorola radios are designed to minimize costly repairs and downtime.



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MD-EUPR1500BROCH  
5/07