



# MAG ONE™ BPR™ 20

## AFFORDABLE AND RELIABLE RADIO FOR SMALL BUSINESS

An affordable, high-performance communication tool, the BPR20 is a reliable solution for your communication needs. When you equip your work force with this device, they can react more efficiently. Quicker response, better customer service, saved trips, and increased safety – they all add up to better operations and a streamlined process. The BPR 20 two-way radio not only provides affordable communication, but also a complete assortment of tested and certified accessories to customize your radio solution, all backed by Motorola service and a 1-year limited radio warranty\*.

### 16 CHANNELS

This feature allows multiple users and groups to communicate and can help organize teams in different talkgroups for improved efficiency.

### SMALL AND LIGHTWEIGHT

At only 4.21 inches high, the small and lightweight design make this device easy to carry while on the go.

### SQUELCH LEVELS

Helps minimize interference from undesired weak signals and helps weak signals be heard.

### TRICOLOR LED

Indicates radio status and battery levels at a glance.

### LARGE, TEXTURED PUSH-TO-TALK BUTTON

Easy to find and use without looking.

### SINGLE PRIORITY SCAN

Frequently scans higher priority channels.

### LARGE ROTARY CHANNEL SELECTOR

Allows you to change channels easily.

### ON/OFF AND VOLUME CONTROL

Large knob lets you adjust the volume quickly.

### ADJUSTABLE POWER LEVEL

Helps save battery life and adjusts transmit power to accommodate user environment.

### RUGGED, DIE-CAST CHASSIS

Polycarbonate housing provides greater protection.

### USED IN MANY MARKETS

Designed for education, hospitality, retail and small construction markets.

### STANDARD PACKAGE:

- BPR20 Radio
- 1200 mAh NiMH Battery
- Rapid-rate Charger
- 2 Inch Spring Belt Clip
- Antenna
- Operating Manual
- Safety Manual
- 1-Year Limited Radio Warranty\*

\*6 month limited warranty on accessories.



### 2 PROGRAMMABLE BUTTONS

Program up to four settings from these 12 features:

- High/Low Power
- Volume Set
- Monitor
- Sticky Monitor
- Scan
- Nuisance Channel Delete
- Repeater Talkaround
- PL/DPL
- Button Lock
- Battery Save Mode
- Squelch
- Customized Feature



## BPR 20 TWO-WAY PORTABLE RADIO TYPICAL SPECIFICATIONS

### GENERAL SPECIFICATIONS

	VHF	UHF
Channel Capacity	16	16
Model Numbers (16 channel)	AAH84KBC4AA1AN	AAH84RBC4AA1AN
FCC Designation	AZ489FT3810	AZ489FT4873
FCC Emissions Designators	11K0F3E/16K0F3E	11K0F3E/16K0F3E
Dimensions (H x W x L)	4.21 x 2.28 x 1.46 inches (107 x 58 x 37 mm)	
Weight (with NiMH/Li-ion)	11.08 ounces (314 g)/9.52 ounces (270 g)	
Average Battery Life @ 5-5-90 Duty Cycle <sup>1</sup> Low Power (1W)	Up to 11 hours	

### TRANSMITTER

	VHF	UHF
Frequency Range	150-174 MHz	450-470 MHz
Channel Spacing	12.5 kHz	12.5 kHz
RF Output	1 to 2W	1 to 2W
Frequency Stability <sup>2</sup>	±2.5 ppm	±2.5 ppm
Spurs and Harmonics	-63 dBc (-26 Bm)	-63 dBc (-27 Bm)
FM Hum and Noise Radio <sup>2</sup> (12.5 kHz)	40 dB	40 dB
Modulation Limiting <sup>2</sup> (12.5 kHz)	±2.5 kHz	±2.5 kHz
Audio Response (0.3-3 kHz) <sup>2</sup>	+1 to -3 dB	+1 to -3 dB
Audio Distortion <sup>2</sup>	5%	5%

### RECEIVER

	VHF	UHF
Frequency Range	150-174 MHz	450-470 MHz
Channel Spacing	12.5 kHz	12.5 kHz
Sensitivity <sup>2</sup> (12 dB SINAD)	<-119 dBm (.25uV)	<-117.5 dBm (.3uV)
Adjacent Channel Selectivity <sup>2</sup> (12.5 kHz)	-60 dB	-60 dB
Intermodulation <sup>2</sup> (12.5 kHz)	-60 dB	-60 dB
Spurious Rejection <sup>2</sup>	65 dB	65 dB
Audio Distortion <sup>2</sup>	<5%	<5%
Hum and Noise Radio <sup>2</sup> (12.5 kHz)	40 dB	40 dB
Conducted Emission	-57 dBm	-57 dBm
Audio Output @ <5% Distortion <sup>2</sup>	500mW (at 24 ohm)	500mW (at 24 ohm)

<sup>1</sup> 5% receive, 5% transmit, 90% standby.

<sup>2</sup> All electrical specifications and methods refer to EIA/TIA 603 standards. Specifications shown are typical and subject to change without notice.

### MILITARY STANDARDS 810 C, D, E AND 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.
High Temperature Storage	501.1	I	501.2	I	501.3	I	501.4	I
Low Temperature Storage	502.1	I	502.2	I, II	502.3	I, II	502.4	I, II
Temperature Shock	503.1	I	503.2	I	503.3	I	503.4	I
Solar Radiation	505.1	I	505.2	I	505.3	I	505.4	I
Humidity	507.1	II	507.2	II, III	507.3	II, III	507.4	III
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/X	514.3	I	514.4	I	514.5	I

### ENVIRONMENTAL

Operating Temperature	-30° to +60° C (Radio Only)
Sealing	Passes rain testing per IPX4
Shock and Vibration	Die-cast with impact resistance polycarbonate housing, passes EIA 603B
Dust and Humidity	Weather-resistant housing passes EIA 603B

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