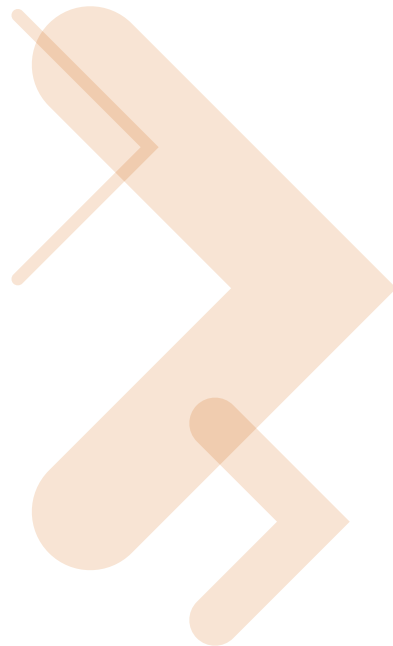


# *Mag One™ by Motorola BPR™ 40*

Affordable and Reliable Radio for Small Business



# What is Mag One by Motorola?

## The Mag One Difference – Quality plus Value

Designed specifically for businesses and organizations that need a reliable, easy-to-use communication tool, we develop our two-way radios with two key factors in mind – quality and value. Mag One by Motorola is the perfect choice for schools, retail operations, hospitality and entertainment establishments and light construction businesses.

Why? Because Mag One by Motorola two-way radios provide the instant communication that helps improve performance and safety – allowing employees to do their jobs more efficiently and productively. It's also affordable enough to allow you to outfit your entire team with instant communication.

- Value – you'll get the most for your money
- Legendary Reliability – Motorola radios perform time and again
- Ease-of-use – simple operation with no training required
- Audio Quality – messages come through loud and clear
- Programmable – customize features to meet each user's needs
- Power Flexibility – for locations close at hand or spread over a distance



## Functionality of features.

### Large Rotary Channel Selector

Allows you to change channels easily.

### On/Off and Volume Control

Large size lets you adjust the volume quickly.

### Adjustable Power Level

Helps save battery life. Adjusts transmit power to accommodate user environment.

### 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.

### 2 Programmable Buttons

Easy access to favorite features. 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

### 8 or 16 Channels

Allows multiple users and groups to communicate. Organize teams into different talkgroups for improved efficiency.

### Small and Lightweight

It's easy to carry at only 4.21 inches high. And over 14% lighter with a Li-ion battery.

- 9.5 oz with Li-ion battery
- 11.08 oz with NiMH battery

### 2 Inch Spring Belt Clip

Comes standard for convenient portability.

### Audio Accessory Connector

### Speaker

**Rugged, Die-Cast Chassis**  
Polycarbonate housing provides greater protection.

### Microphone



*Shown actual size.*

## The Mag One by Motorola BPR 40

An affordable, high-performance communication tool that will be a reliable solution for your communication needs. When you equip your work force with the BPR 40, they will be able to 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 Mag One by Motorola BPR 40 two-way radio not only provides affordable communication, but also a complete assortment of accessories for radio customization. And it's backed by Motorola service and a 1-year limited radio warranty\*.

### It's a little radio with a big list of features:

- 8 or 16 channels for communication to a wide group
- 2 programmable buttons for easy access to frequently used features
- 12 programmable features to choose from including a customized feature of your choice
- Small size and light weight provides comfort during long work shifts
- High/Low power provides flexibility for a variety of situations
- Affordably priced
- A variety of Mag One accessories enhance radio versatility
- Backed by Motorola service and a 1-year limited warranty

## Programming features combined with the right accessory create a custom solution.

The Motorola BPR 40 has 12 programmable features to choose from. Add the accessories that complement the job and build a custom communication tool for each user.

### High/Low Power

Allows power level changes from High to Low.

### Volume Set

Allows you to check the audio and alert tone volume level.

### Monitor

Allows current channel monitoring; disables squelch.

### Sticky Monitor

Allows continual monitoring until deactivated.

### Scan

Starts or stops the channel scan.

### Nuisance Channel Delete

Temporarily removes unwanted channels during scan.

### Repeater Talkaround

Allows toggling between Repeater and Talkaround, unit-to-unit, communication mode.

### PL/DPL

Enables/Disables PL/DPL matching to receive messages.

### Button Lock

Locks/unlocks all buttons except the PTT button, and Channel and On/Off/ Volume Knobs.

### Battery Save Mode

Allows toggling between Battery Saver ON or OFF.

### Squelch

Selects desired squelch level: Normal or Tight.

### Customized Feature

Program a customized feature of your choice.

\*6 month limited warranty on accessories.



### Standard Package Includes:

- Radio – Ships at 1 Watt
- 1200 mAh NiMH Battery or 1500 mAh Li-ion Battery
- Rapid-rate Charger
- 2 Inch Spring Belt Clip
- Antenna
- Operating Manual
- Safety Manual
- 1-Year Limited Radio Warranty

The following Mag One accessories have been tested with the BPR 40 to ensure maximum performance.



Mag One Remote Speaker  
Microphone PMMN4008



Mag One Ultra Lightweight Headset  
with In-line PTT/VOX Switch PMLN4445



Mag One Earbud with In-line  
Microphone and PTT/VOX Switch  
PMLN4442



Mag One Hard Leather Case  
PMLN4742



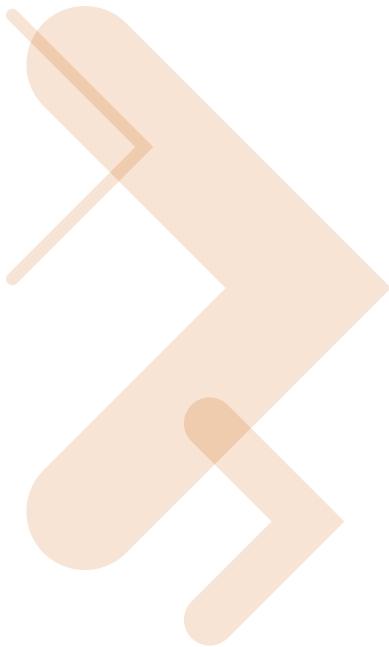
Mag One Ear Receiver with In-line  
Microphone and PTT/VOX Switch  
PMLN4443\_B



Mag One 1200mAh NiMH Battery  
PMNN4071\_R

## SPECIFICATIONS

### BPR 40 Two-Way Portable Radio Typical Specifications



GENERAL SPECIFICATIONS		
	VHF	UHF
Channel Capacity	8 or 16	8 or 16
Model Numbers (8 channel)	AAH84KDS8AA1_N	AAH84KDS8AA1_N
Model Numbers (16 channel)	AAH84KDJ8AA1_N	AAH84RCJ8AA1_N
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>	Up to 8 hours Up to 11 hours	
High Power (5W/4W)		
Low Power (1W)		

TRANSMITTER		
	VHF	UHF
Frequency Range	150-174 MHz	450-470 MHz
Channel Spacing	12.5/25 kHz	12.5/25 kHz
RF Output	1 to 5W	1 to 4W
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> (12.5/25 kHz)	40 dB	40 dB
Modulation Limiting <sup>2</sup> (12.5/25 kHz)	±2.5 kHz / ±5 kHz	±2.5 kHz / ±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	12.5/25 kHz	12.5/25 kHz
Sensitivity <sup>2</sup> (12 dB SINAD)	<-119 dBm (.25uV)	<-117.5 dBm (.3uV)
Adjacent Channel Selectivity <sup>2</sup> (12.5/25 kHz)	-60 dB / -65 dB	-60 dB / -65 dB
Intermodulation <sup>2</sup> (12.5/25 kHz)	-60 dB / -65 dB	-60 dB / -65 dB
Spurious Rejection <sup>2</sup>	65 dB	65 dB
Audio Distortion <sup>2</sup>	<5%	<5%
Hum and Noise Radio <sup>2</sup> (12.5/25 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

Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements.  
Version 2 09/09



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