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

Speaker
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.
## GENERAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>VHF</th>
<th>UHF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channel Capacity</td>
<td>8 or 16</td>
</tr>
<tr>
<td>Model Numbers (8 channel)</td>
<td>AAH84KDS8AA1_N</td>
</tr>
<tr>
<td>Model Numbers (16 channel)</td>
<td>AAH84KDS8AA1_N</td>
</tr>
<tr>
<td>FCC Designation</td>
<td>AAH849T38/G, AAH849T48/G</td>
</tr>
<tr>
<td>FCC Emissions Designations</td>
<td>11K03E/16K03E</td>
</tr>
<tr>
<td>Dimensions (H x W x L)</td>
<td>4.21 x 2.28 x 1.46 inches (107 x 58 x 37 mm)</td>
</tr>
<tr>
<td>Weight (with NiMH/Li-ion)</td>
<td>11.08 ounces (314 g)/9.52 ounces (270 g)</td>
</tr>
<tr>
<td>Average Battery Life @ 9.5-9.8 Duty Cycle</td>
<td></td>
</tr>
<tr>
<td>High Power (5W/4W)</td>
<td>Up to 8 hours</td>
</tr>
<tr>
<td>Low Power (1W)</td>
<td>Up to 11 hours</td>
</tr>
</tbody>
</table>

## RECEIVER

<table>
<thead>
<tr>
<th>VHF</th>
<th>UHF</th>
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</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>150-174 MHz</td>
</tr>
<tr>
<td>Channel Spacing</td>
<td>12.5 kHz</td>
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<tr>
<td>RF Output</td>
<td>1 to 5W</td>
</tr>
<tr>
<td>Frequency Stability</td>
<td>±2.5 ppm</td>
</tr>
<tr>
<td>Spurns and Harmonics</td>
<td>-63 dBc/-26 dBm</td>
</tr>
<tr>
<td>Adjacent Channel Selectivity</td>
<td>-60 dB/65 dB</td>
</tr>
<tr>
<td>Intermodulation</td>
<td>-60 dB/65 dB</td>
</tr>
<tr>
<td>Spurious Rejection</td>
<td>65 dB</td>
</tr>
<tr>
<td>Hum and Noise Radio</td>
<td>40 dB</td>
</tr>
<tr>
<td>Audio Response (0.3-3 kHz)</td>
<td>+1 to -3 dB</td>
</tr>
<tr>
<td>Audio Distortion</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Audio Output @ &lt;5% Distortion</td>
<td>500mW (at 24 ohm)</td>
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</table>

## MILITARY STANDARDS 810 C, D, E and F

<table>
<thead>
<tr>
<th>MIL-STD 810C</th>
<th>MIL-STD 810D</th>
<th>MIL-STD 810E</th>
<th>MIL-STD 810F</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Temperature Storage</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
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<tr>
<td>Low Temperature Storage</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
</tr>
<tr>
<td>Temperature Shock</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
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<tr>
<td>Humidity</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
</tr>
<tr>
<td>Salt Fog</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
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<tr>
<td>Blowing Dust</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
</tr>
<tr>
<td>Vibration</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
<td>Method Proc./Cat.</td>
</tr>
</tbody>
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## ENVIRONMENTAL

| Operating Temperature | -30° to +46° C (Radio Only) |
| Sealing | Passes rain testing per IPX4 |
| Shock and Vibration | Die-cast with impact resistance polycarbonate housing, passes MIL-STD 600B |
| Dust and Humidity | Weather-resistant housing passes MIL-STD 600B |

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