FEDERAL SIGNAL

Model MOD Series

Modulator
High Powered Omni Speaker

Federal Signal’s Modulator High Powered Speaker Array offers the same proven technology as the original Modulator with the exception of a smaller compact chassis. Modulator provides a flat frequency response up to 2000Hz producing intense warning signals and digital voice messaging over a large area. The Modulator design enables the siren to produce a high sound level and intelligible voice communications.

The innovative omni-directional electronic Modulator speaker array consists of modules that utilize four 100 watt drivers. It also provides clear voice communication and offers warning signals which are produced by Federal Signal’s UltraVoice™ electronic controller and amplifier system. Custom tones and professionally recorded voice messages for the UltraVoice controller are available and can be purchased upon request.

The Modulator High Powered Speaker Array combined with the UltraVoice controller is ideal for community/municipal, industrial and military applications where immediate instruction is necessary.

The Modulator and UltraVoice controller can be networked via radio, IP, landline, cellular and/or satellite communications. Powering is available in AC, DC, or solar. The system typically operates from batteries which are charged from either AC or Solar. Federal Signal can also provide customized solutions to fit your special applications.

Features

- Light-weight, compact design
- Utilizes Federal Signal Ultravoice™ for control and amplification
- Excellent frequency response for clear voice reproduction
- 360° coverage without sound variation in horizontal planes
- Easy servicing through convenient access panels
- Anechoic chamber-certified

<table>
<thead>
<tr>
<th>Model</th>
<th>Active Modules</th>
<th>Total Watt</th>
<th>Decibels @ 100'</th>
<th>Effective Range @ 70 dBc</th>
<th>Height in</th>
<th>Net Lbs</th>
<th>Weight Kg</th>
<th>Shipping Lbs</th>
<th>Shipping Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOD1004B</td>
<td>1</td>
<td>400</td>
<td>106 dBc</td>
<td>1,200'</td>
<td>28&quot;</td>
<td>125</td>
<td>56.8</td>
<td>264</td>
<td>120</td>
</tr>
<tr>
<td>MOD2008B</td>
<td>2</td>
<td>800</td>
<td>112 dBc</td>
<td>1,800'</td>
<td>43&quot;</td>
<td>190</td>
<td>86.4</td>
<td>294</td>
<td>133.6</td>
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<tr>
<td>MOD3012B</td>
<td>3</td>
<td>1200</td>
<td>115 dBc</td>
<td>2,200'</td>
<td>57&quot;</td>
<td>255</td>
<td>115.9</td>
<td>444</td>
<td>201.8</td>
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<tr>
<td>MOD4016B</td>
<td>4</td>
<td>1600</td>
<td>118 dBc</td>
<td>2,800'</td>
<td>72&quot;</td>
<td>320</td>
<td>145.5</td>
<td>544</td>
<td>247.3</td>
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<tr>
<td>MOD5020B</td>
<td>5</td>
<td>2000</td>
<td>120 dBc</td>
<td>3,100'</td>
<td>86&quot;</td>
<td>385</td>
<td>175</td>
<td>744</td>
<td>338.2</td>
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<tr>
<td>MOD6024B</td>
<td>6</td>
<td>2400</td>
<td>121 dBc</td>
<td>3,400'</td>
<td>101&quot;</td>
<td>450</td>
<td>204.5</td>
<td>960</td>
<td>436.4</td>
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<tr>
<td>MOD8032B</td>
<td>8</td>
<td>3200</td>
<td>124 dBc</td>
<td>4,200'</td>
<td>130&quot;</td>
<td>580</td>
<td>263.6</td>
<td>1392</td>
<td>632.7</td>
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</table>
**Modulator® High Powered Omni Speaker (MOD)**

**SPECIFICATIONS**

- **Frequency Response:** 200-2000Hz
- **Color:** Off-White
- **Paint Type:** TGIC-polyester powder coat
- **Modulator Horn Type:** Hyperbolic flare
- **Horizontal Coverage:** 360º +/- 1 dB(C)
- **Diameter:** 35”/88.9cm
- **Wind Loading @ 110mph wind velocity:**
  - MOD1004B: 251 lbs
  - MOD2008B: 377 lbs
  - MOD3012B: 503 lbs
  - MOD4016B: 629 lbs
  - MOD5020B: 755 lbs
  - MOD6024B: 881 lbs
  - MOD8032B: 1133 lbs

1 Wind loading is the calculated force of wind at 110mph (shoreline), exposure D (flat, unobstructed coastal areas) on frontal area 4.64 ft. per American National Standards Institute A58.1 “Minimum design loads for buildings and other structures.”

**HOW TO ORDER**

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Specify speaker array model number – each speaker array model must be ordered with a specific corresponding UV and Amplifier.

**Controller**

- MOD1004B: UV + 1 UV400
- MOD2008B: UV + 2 UV400
- MOD3012B: UV + 3 UV400
- MOD4016B: UV + 4 UV400
- MOD5020B: UV + 5 UV400
- MOD6024B: UV + 6 UV400
- MOD8032B: UV + 8 UV400

1 Controllers available in Radio, IP, and Landline.

Note: 40 feet of cable is supplied with siren. Extension cable in 10 foot increments is also available. Mounting the UV controller further than 100 feet is not recommended (further mounting may decrease power output).

**ACCESSORIES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>Flashing light for top of MOD</td>
<td>191XL-024*</td>
</tr>
<tr>
<td>Red Quadraflare 4 light kit</td>
<td>MOD-QF-KIT</td>
</tr>
<tr>
<td>Blue Quadraflare 4 light kit</td>
<td>MOD-QF-KIT-B</td>
</tr>
</tbody>
</table>

* Indicates color: (A) Amber, (B) Blue, (C) Clear, (G) Green or (R) Red

**REPLACEMENT PART**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
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</thead>
<tbody>
<tr>
<td>Driver, 100 watt</td>
<td>K8570063A</td>
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</table>

*UltraVoice is a registered trademark of Federal Signal Corporation.*