

## MB™-2

Compact High-Efficiency  
Mid-Bass Horn

### SPECIFICATIONS:

**Enclosure:**

MB™-2

**Frequency Response, 1 Meter on Axis,  
Swept Sine Averaged Across Operating  
Bandwidth in Anechoic Environment:**

250 Hz - 1.2 kHz

**Low Frequency Limit (-3 dB point):**

N/A

**Usable Low Frequency Limit (-10 dB point):**

N/A

**Power Handling:**

250 watts continuous (44.7 volts RMS)  
500 watts program

**Sound Pressure Level, 1 Watt at 1 Meter,  
Swept Sine Input in Anechoic Environment:**

104 dB

**Maximum Sound Pressure Level:**

128 dB

**Radiation Angle Measured At -6 dB Point of  
Polar Response:****Horizontal Plane:**

250 - 500 Hz

110° +/- 20°

500 - 2,000 Hz

100° +/- 20°

**Vertical Plane:**

250 - 500 Hz

90° +/- 10°

500 - 2,000 Hz

80° +/- 10°

**Directivity Factor  $R_Q$  (Q) 500 Hz - 2kHz****Median:**

6.2 (+1.4, -0.8)

**Directivity Index  $D_i$  500 Hz - 2 kHz Median:**

8.0 dB (+0.9 dB, -0.7 dB)

**Transducer Complement:**

(1) 12 inch 1202-4 Black Widow® low driver

**Resonant Frequency ( $F_R$ ):**

60 Hz

**Impedance (Nominal):**

8 ohms

**Impedance (Minimum):**

5.7 ohms

**Input Connections:**

Two ¼" female connectors in parallel

**Enclosure Materials and Finish:**

7 ply, high-density, ¾" plywood, finished in black splatter paint

**Dimensions:**

30½" (77.8 cm) W × 16" (40.6 cm) H ×

25½" (63.8 cm) D

**Net Weight:**

75 lbs. (34.1 kg)

### DESCRIPTION:

The MB™-2 is a compact version of the MB-1 mid-bass horn, designed to be lighter and smaller yet provide similar professional performance at slightly lower SPL. A component of the Project Two Series, it is optimized for use in medium to high level sound reinforcement with a short to medium throw and wide dispersion. The cabinet is constructed of 7 ply, ¾", high-density plywood, finished in black splatter paint and reinforced with steel corners. Recessed handles are provided for ease of transport and set-up. The MB-2 is comprised of a 12" 1202-4 Black Widow® used as a compression driver loaded onto a straight wooden horn structure. Engineered for triamplification in a 3-way system, no passive crossover is included, and when crossed-over at or within its designated bandwidth of 250 Hz to 1.2 kHz, a smooth robust response is achieved. Connections are provided via two ¼" female connectors in parallel.

**FREQUENCY RESPONSE:**

The frequency response of the MB™-2 is measured in an anechoic environment at a distance of 1 meter while using a 2.82 volt logarithmically swept sine input. This measurement is useful in determining the accuracy in which the enclosure reproduces the input signal. The combination of the 12 inch 1202-4 Black Widow® loaded into a straight horn results in a flat desirable response as shown in Figure 1.

**POWER HANDLING**

There are many different approaches to power handling ratings, the most common being EIA standard RS-426A. The derived shape of this test spectrum was an attempt to simulate the spectral content of contemporary music.

Although it does resemble contemporary music, EIA-RS-426A does not contain the same levels of very low frequency material found in live music situations. Very high levels of low frequency material produce distortion and, ultimately, device failure. The presence of the low frequency material will therefore yield lower device ratings than produced by EIA standard RS-426A.

Although the Peavey ratings are lower than those produced by the EIA test spectrum, they are far more reliable and will have a direct correlation to real world situations.

**ARCHITECTURAL & ENGINEERING SPECIFICATIONS:**

The loudspeaker system shall have an operating bandwidth of 250 Hz to 1.2 kHz. The output level shall be 104 dB when measured at a distance of one meter with an input of one watt. The nominal impedance shall be 8 ohms. The continuous power handling shall be 250 watts, maximum program power of 500 watts, with a minimum amplifier headroom of 3 dB. The outside dimensions shall be 30% inches wide by 16 inches high by 25% inches deep. The weight shall be 75 lbs. The loudspeaker system shall be a Peavey model MB™-2.

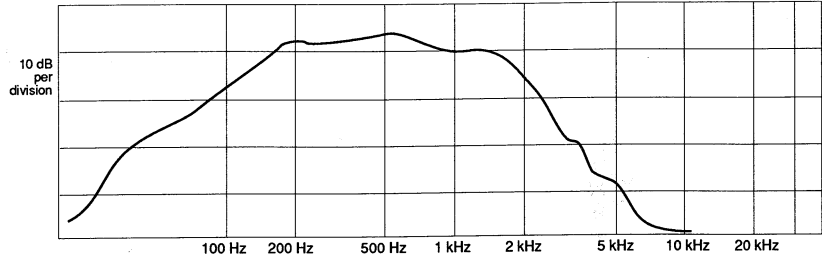


Figure 1. FREQUENCY RESPONSE

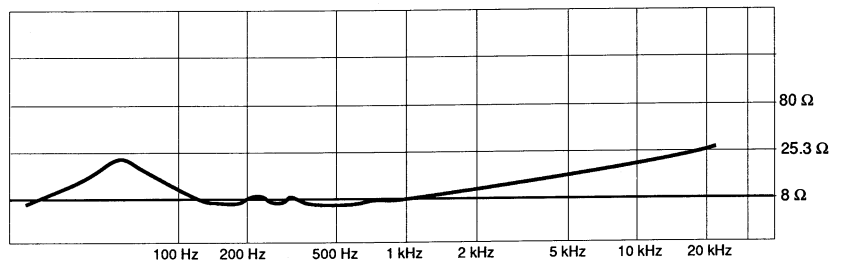
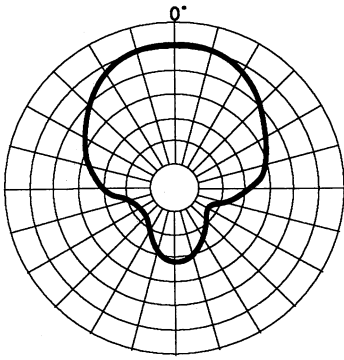


Figure 2. IMPEDANCE

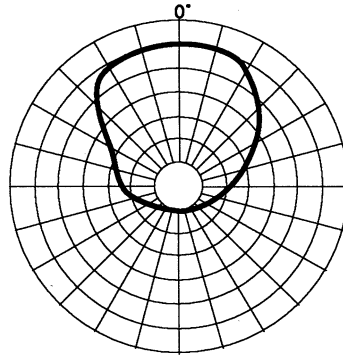
**ONE YEAR LIMITED WARRANTY** --Note: For details, refer to the warranty statement. Copies of this statement may be obtained by contacting Peavey Electronics Corporation, P. O. Box 2898, Meridian, Mississippi 39302-2898.

5 dB per Division

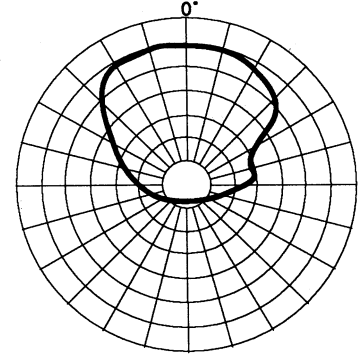
### HORIZONTAL



— 500 Hz



— 1 kHz



— 2 kHz

5 dB per Division

### VERTICAL

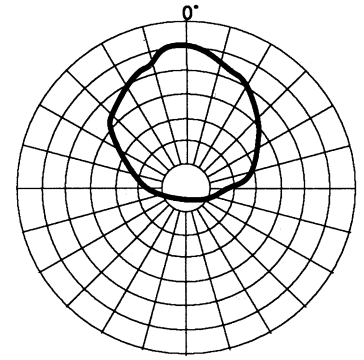
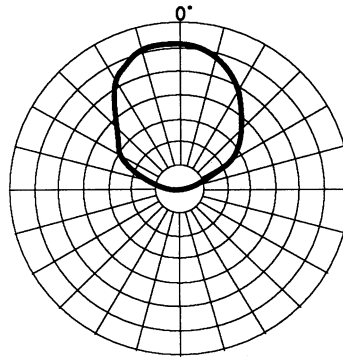
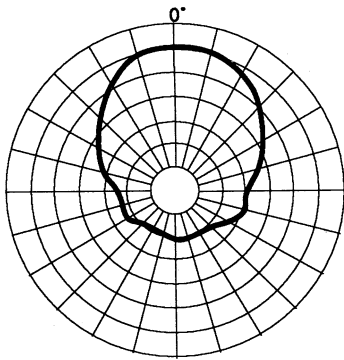


Figure 3. POLAR PATTERNS



**Features and specifications subject to change without notice.**

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