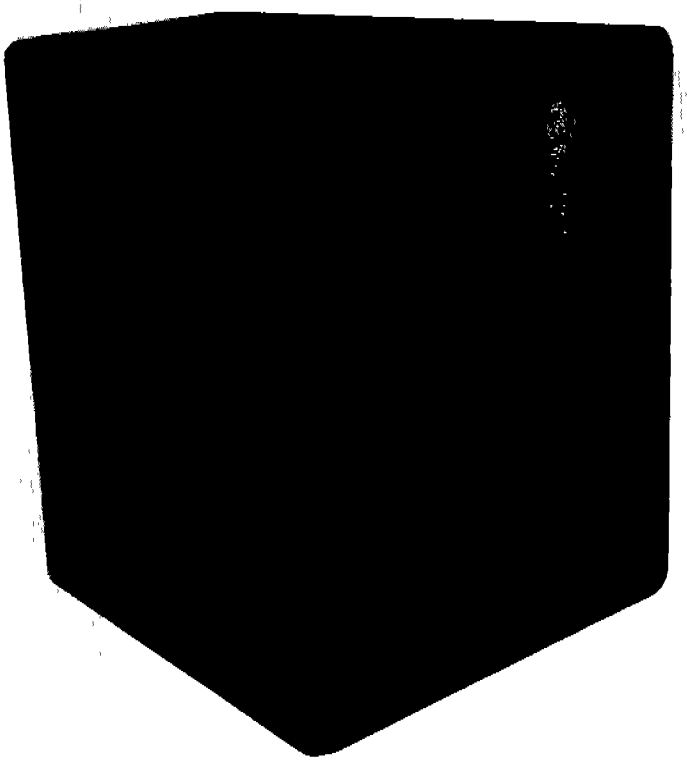


HDH™ 4

High-Level MidBass High Frequency Manifold System

SPECIFICATIONS

Enclosure:
HDH™ 4

Frequency Response, 1 Meter on Axis, Swept Sine Averaged Across Operating Bandwidth in Anechoic Environment:
300 Hz - 18 kHz

Low Frequency Limit (-3 dB Point):
300 Hz

Usable Low Frequency Limit (-10 dB Point):
250 Hz

Power Handling:
Mids:
250 watts continuous (44.7 volts RMS)
500 watts program
Highs:
160 watts continuous (35.8 volts RMS)
320 watts program

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

Maximum Sound Pressure Level:
131 dB

Radiation Angle Measured at -6 dB Point of Polar Response:

Horizontal Plane:	Vertical Plane:
250—500 Hz	**250—500 Hz**
170°+/-60°	165°+/-65°
500—10,000 Hz	**500—10,000 Hz**
80°+/-12°	60°+/-20°
10,000—16,000 Hz	**10,000—16,000 Hz**
50°+/-10°	40°+/-10°

Directivity Factor Q, 500 Hz—16,000 Hz Median:
10.7 (+29.1, - 5.9)

Directivity Index D_i, 500-16,000 Hz Median:
10.3 dB (+5.7 dB, - 3.5 dB)

Transducer Complement:
1 1204-4 BW coupled to an MB™-3 60° H × 40° V mid bass horn
4 22A™ compression drivers coupled to a CH™-5 80° H × 40° V horn by a four-driver manifold

Box Tuning Frequency (F_{box}):
N/A

Crossover Frequency:
1200 Hz

Crossover Type:
Active HDH processing controller

Crossover Slope:
18 dB/octave mid, 18 dB/octave high

Impedance (Nominal):
8 ohms mid, 8 ohms high

Impedance (Minimal):
6.1 ohms mid, 5.6 ohms high

Input Connections:
Two Cannon EP-4-14 4-pin male wall-mount receptacles wired in parallel

Enclosure Materials and Finish:
High-density, 7 ply, ¾" plywood covered with heavy-duty, wear-resistant carpet

Mounting:
Provided with 5 fixed flying points, (2 top, 2 bottom, 1 back)

Dimensions:
27" (68.6 cm) W × 30⅜" (77.2 cm) H × 27" (68.6 cm) D

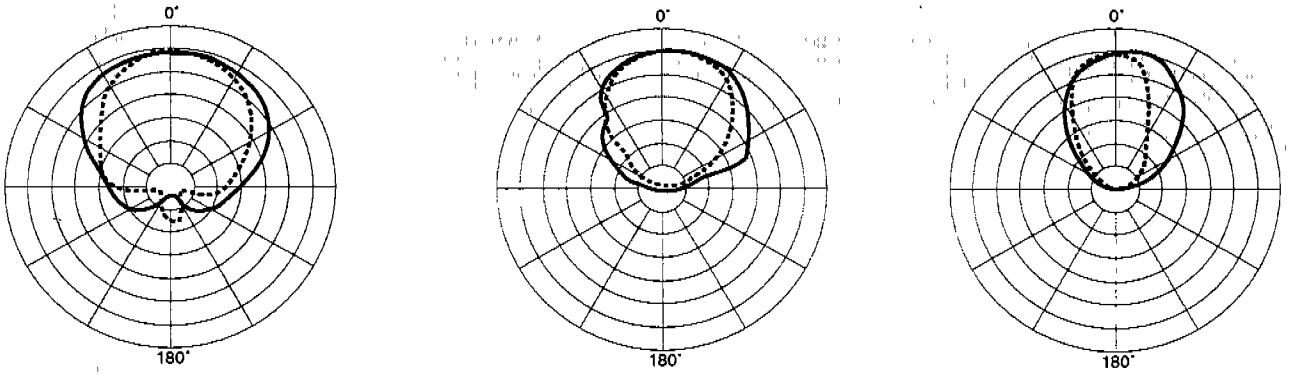
Net Weight:
153 lbs. (69.4 kg)

DESCRIPTION:

The HDH™ 4 is a two-way, mid-high frequency enclosure designed to work along with the HDH™ 3 for sound reinforcement. Its trapezoidal shape permits the arrangement of multi-enclosure arrays, providing maximum coverage. The enclosure is constructed of ¾", 7 ply, high-density plywood reinforced with 12 gauge steel bracing, then covered with a rugged wear-resistant carpet. A black opaque grille is permanently attached to the baffle to provide component protection and cosmetic appeal. Five pivoted Aeroquip mounting points are located on the top, bottom and back of the enclosure to provide suspension at any angle without overstressing any single flying point. The 2-way system is comprised of a 12 inch 1201-8 Black Widow® speaker loaded onto an MB™ 3 mid frequency horn, and four 22A™ compression drivers mounted, via, a four-driver manifold onto a CH™-5 constant directivity horn. The input frequency spectrum is controlled by the HDH™ Processing Controller which is an active crossover/preamplifier. By sampling each amplifier output, the HDH™ Processor provides a low

5 dB per Division

HORIZONTAL



500 Hz
1 kHz

2 kHz
4 kHz

8 kHz
16 kHz

5 dB per Division

VERTICAL

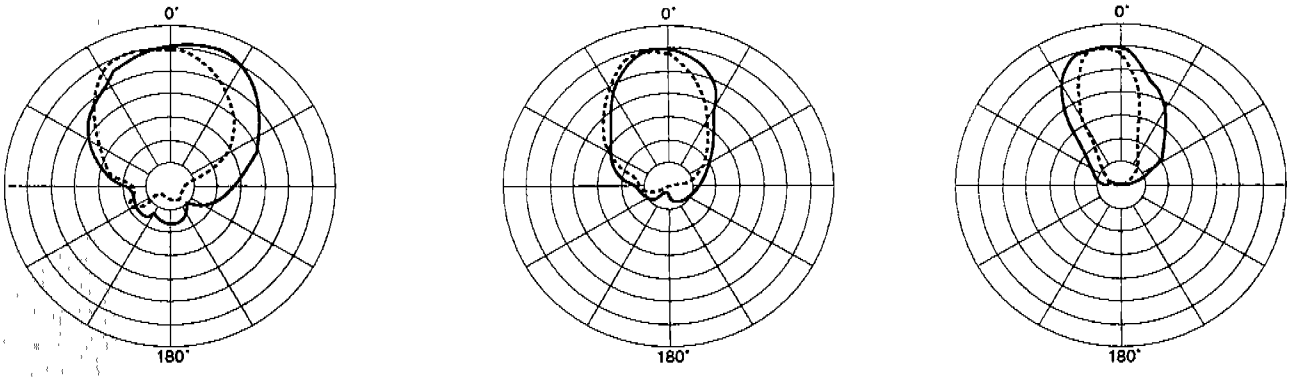
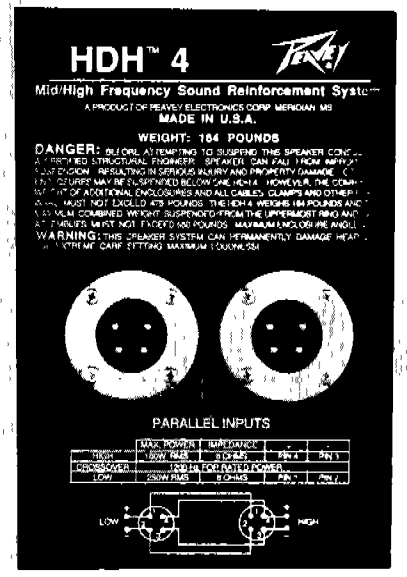


Figure 3. POLAR PATTERNS



frequency excursion control, loudness compensation and three-panel thermal protection. The HDH 4 along with the HDH Processing Controller yields ultra-high level sound reinforcement from 250 Hz - 18,000 Hz.

DIRECTIVITY:

Beamwidth and directivity factors are derived from the -6 dB points from the polar plots (see figure 3) which are measured in a whole space anechoic environment. These are specifications which provide a reference to the coverage characteristics of the enclosure. These parameters provide insight for proper enclosure placement and installation in the chosen environment. The blending of the components of the HDH exhibits a desirable beamwidth and directivity factor (figures 4 and 5) suitable for all high-level sound reinforcement applications.

FREQUENCY RESPONSE:

The frequency response of the HDH™ 4 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 MB™-3 loaded 1201 and the four 22A™ compression drivers on the CH™-5 horn along with the HDH™ Processor 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 device 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.

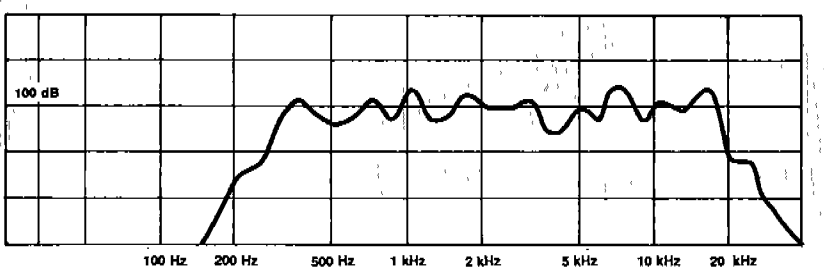


Figure 1. FREQUENCY RESPONSE

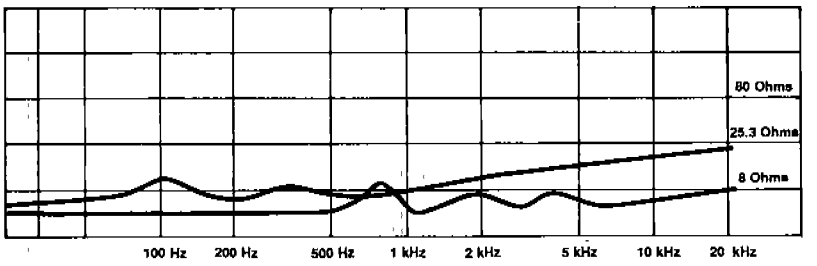


Figure 2. IMPEDANCE

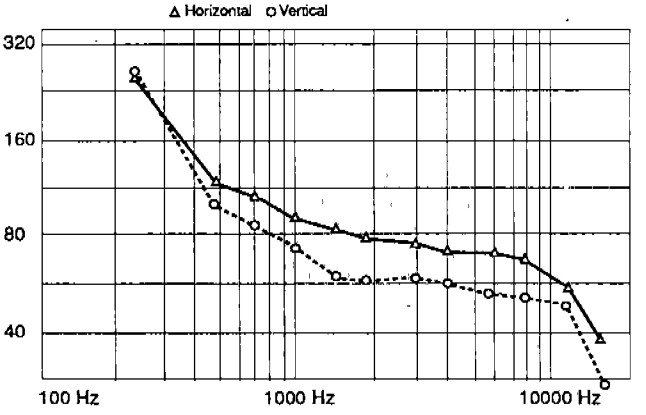


Figure 4. BEAMWIDTH VS. FREQUENCY

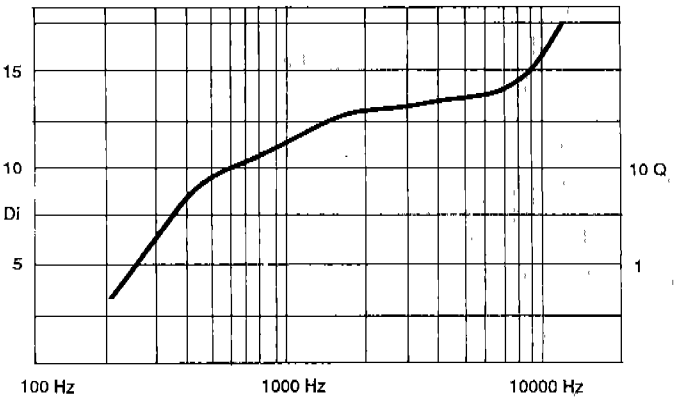


Figure 5. DIRECTIVITY

MOUNTING:
The HDH™ 4 is supplied with five fixed, pivoted Aeroquip flying points (two top, two bottom, one back) which enable hanging at any angle. The cabinet is reinforced with 12 gauge steel brackets which tie all six faces into a sturdy single unit. The grille is permanently attached to the baffle to alleviate any possibility of separation of the grille from the enclosure.

ARCHITECTURAL & ENGINEERING SPECIFICATIONS:
The loudspeaker system shall have an operating bandwidth of 300 Hz to 18 kHz. The output level shall be 109 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 (mids) and 160 watts (highs); maximum program power of 500 watts (mids) and 320 watts (highs), with a minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 80 degrees in the horizontal plane and 40 in the vertical plane. The outside dimensions shall be 27 inches wide by 30⅜ inches high by 27 inches deep. The weight shall be 153 lbs. The loudspeaker system shall be a Peavey model HDH™ 4.

PEAVEY ONE-YEAR LIMITED WARRANTY/REMEDY

Peavey's liability to the purchaser for damages from any cause whatsoever and regardless of the form of action, including negligence, is limited to the actual damages up to the greater of $500.00 or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. Such purchase price will be that in effect for the specific product when the cause of action arose. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. Peavey does not assume liability for personal injury or property damage arising out of or caused by a non-Peavey alteration or attachment, nor does Peavey assume any responsibility for damage to interconnected non-Peavey equipment that may result from the normal functioning and maintenance of the Peavey equipment.

UNDER NO CIRCUMSTANCES WILL PEAVEY BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, INCIDENTAL DAMAGES OR ANY CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

THESE LIMITED WARRANTIES ARE IN LIEU OF ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE, PROVIDED, HOWEVER, THAT IF THE OTHER TERMS AND CONDITIONS NECESSARY TO THE EXISTENCE OF THE EXPRESS LIMITED WARRANTIES, AS HEREINABOVE STATED, HAVE BEEN COMPLIED WITH, IMPLIED WARRANTIES ARE NOT DISCLAIMED DURING THE APPLICABLE ONE-YEAR OR NINETY-DAY PERIOD FROM DATE OF PURCHASE OF THIS PRODUCT.

SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THESE LIMITED WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

THESE LIMITED WARRANTIES ARE THE ONLY EXPRESS WARRANTIES ON THIS PRODUCT, AND NO OTHER STATEMENT, REPRESENTATION, WARRANTY OR AGREEMENT BY ANY PERSON SHALL BE VALID OR BINDING UPON PEAVEY.

In the event of any modification or disclaimer of express or implied warranties, or any limitation of remedies, contained herein conflicts with applicable law, then such modification, disclaimer or limitation, as the case may be, shall be deemed to be modified to the extent necessary to comply with such law.

Your remedies for breach of these warranties are limited to those remedies provided herein and Peavey Electronics Corporation gives this limited warranty only with respect to equipment purchased in the United States of America.

INSTRUCTIONS - WARRANTY REGISTRATION CARD

1. Mail the completed WARRANTY REGISTRATION CARD to:
PEAVEY ELECTRONICS CORPORATION
POST OFFICE BOX 2898
MERIDIAN, MISSISSIPPI 39301

Features and specifications subject to change without notice.

PEAVEY ELECTRONICS CORPORATION / 711 A Street / Meridian, MS 39301 / U.S.A. / Telephone: (601) 483-5365 / Telex: 504115 / Fax: 484-4278

#80300795 6/88
Printed in U.S.A.