

SPECS

PEAVEY ELECTRONICS

DTH™ 5 Minimum Profile Enclosure

SPECIFICATIONS

Frequency Response, 1 meter on-axis, swept sine in anechoic environment:

115 Hz - 16 kHz

Low-Frequency Cut-Off (-3 dB point):

115 Hz

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

90 Hz

Power Handling:

Full Range

400 W continuous (40 V RMS)

800 W program

Biamp Mid

400 W continuous (40 V RMS)

800 W program

Biamp High

80 W continuous (25.3 V RMS)

160 W program

Sound Pressure Level, 2.0 V (1 watt)

• **1 meter in anechoic environment:**

101 dB (Full Range)

103 dB (Biamp)

Maximum Sound Pressure Level:

127 dB (Full Range)

Radiation Angle Measured at -6 dB

Point of Polar Response:

500 - 1,600 Hz:

Horiz. 68° ±18°

Vert. 51° ±12°

1.6 - 5 kHz:

Horiz. 67° ±10°

Vert. 45° ±10°

5 - 16 kHz:

Horiz. 58° ±19°

Vert. 35° ±5°

Directivity Factor, Q (Mean):

17.3 ±9.3

Directivity Index, Di (Mean):

11.8 dB ±2.3 dB



Transducer Complement:

Two SP10825 Scorpion® Plus drivers
One 44T™ compression driver coupled to
a CH™ 5 constant-directivity horn

Crossover Frequency:

2 kHz

Time Offset:

.67 ms (delay highs)

Impedance, Z:

4 ohms nominal
3.2 ohms minimum

Input Connections:

Two Neutrik® 4-conductor Speakon®
connectors (NL4MP)

Enclosure Materials & Finish:

3/4" plywood with battleship grey carpet
and plasticized metal grille

PEAVEY®

Dimensions (H x W x D):

46 1/2" x 18 3/4" x 30 1/4"
(118.1 cm x 47.6 cm x 76.8 cm)

Net Weight:

151 lbs. (68.6 kg)

FEATURES

- 44T™ compression driver
- **Anti-axial** mid-bass driver arrangement
- Dual SP10825 Scorpion® Plus drivers
- High power-handling polypropylene caps
- 16-ga. plasticized metal grille
- Full-range/biamp operation

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DESCRIPTION

Through a cosmetic metamorphosis of the DTH™ 1, the DTH™ 5 was born. It was designed as a true minimum-profile enclosure, measuring only 18 3/4" at its widest point up front, while tapering to a mere 9" at the back. Because of the trapezoidal geometry of these enclosures, building arrays is much easier. This shape also greatly reduces standing wave build-up within the enclosure. The DTH 5 is a two-way, mid/high-frequency system utilizing two SP10825 Scorpion® Plus mid-bass drivers and a 44T™ compression driver coupled to a CH™ 5 horn. This is a constant-directivity 80° x 40° horn. The CH 5 used in this application has been cut down to allow it to fit in the narrow baffle area. Access to the 44T is gained by removing the bolted-on top. This also allows you to get to the crossover circuit board when changing from full-range to biamp operation is desired. The mid-bass section of the DTH 5 is horn-loaded to improve output & directivity. It is further augmented by a critically optimized rear volume. This air cavity's primary function is **Reactance Annulling**, which improves and extends the low-frequency response. Its secondary function is to optimize transient response and improve power handling. As an additional improvement to the sonic quality of the mid-bass section, one of the 10" drivers has been mounted backwards (its electrical polarity has also been reversed so that its acoustical polarity is identical to the other 10" driver). This **Anti-axial** arrangement of the drivers eliminates virtually all even-order harmonic distortion. Recessed areas have been provided on the top that coincide with the placement of the feet on the bottom.

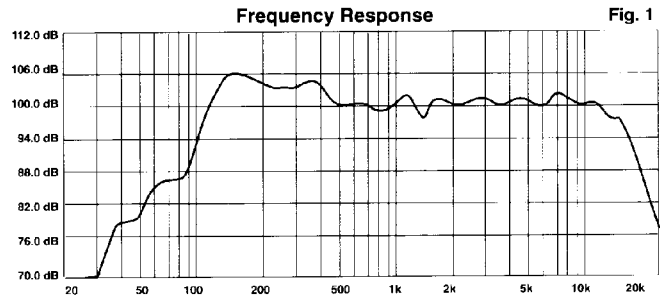


Fig. 1

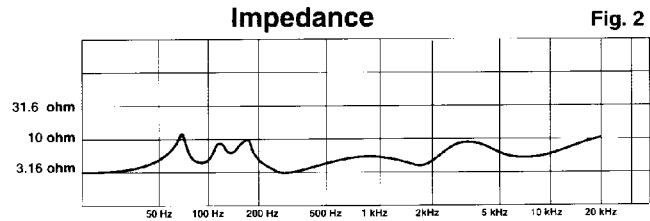


Fig. 2

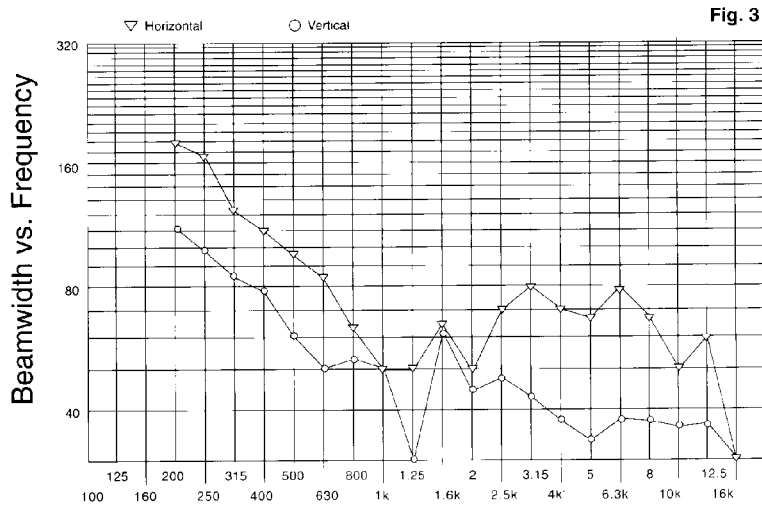


Fig. 3

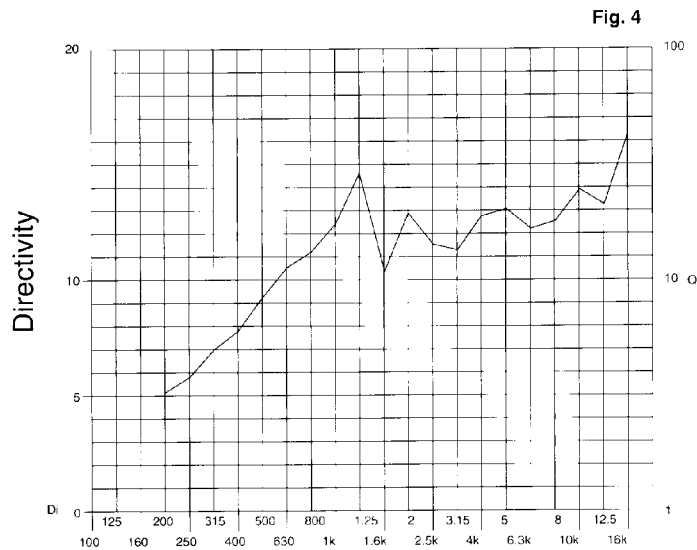
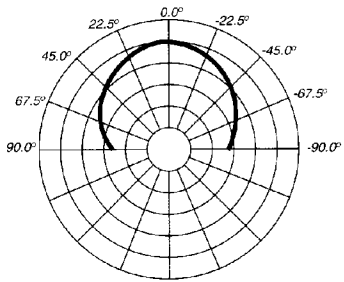


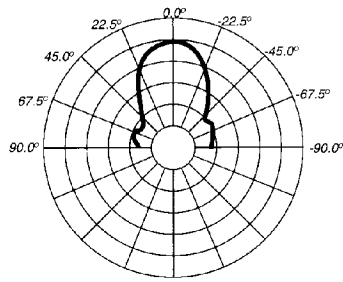
Fig. 4

HORIZONTAL POLAR PATTERNS

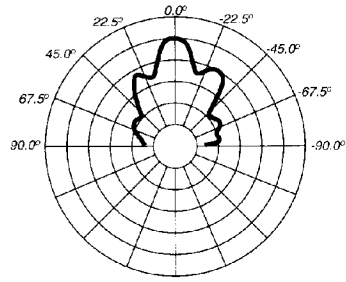
6 dB per division



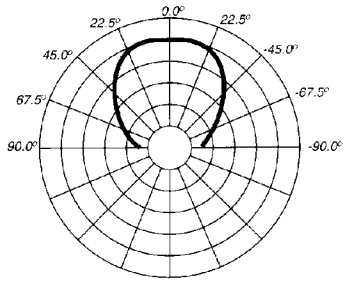
500 Hz



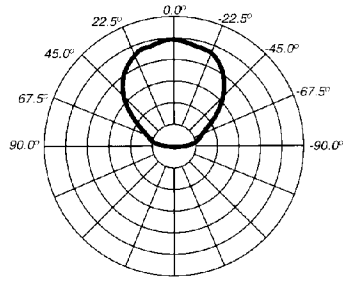
1 kHz



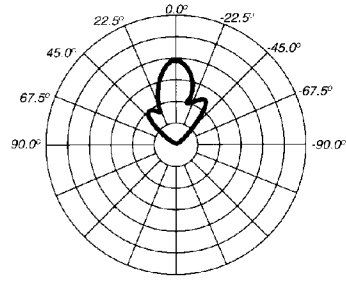
2 kHz



4 kHz



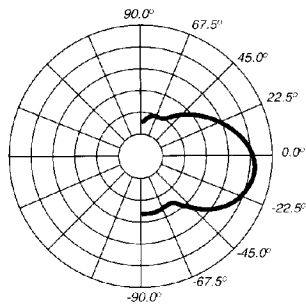
8 kHz



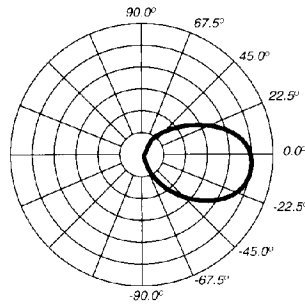
16 kHz

VERTICAL POLAR PATTERNS

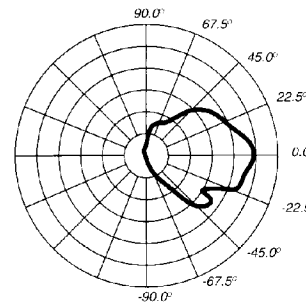
6 dB per division



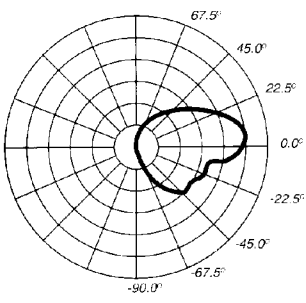
500 Hz



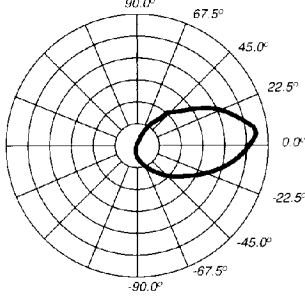
1 kHz



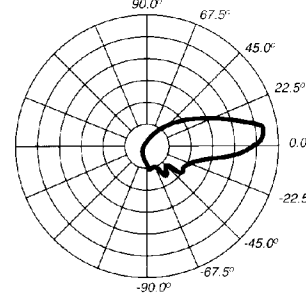
2 kHz



4 kHz



8 kHz



16 kHz

This allows integral stacking of the enclosures. High power-handling polypropylene capacitors are used throughout the crossover. This results in a cleaner sound, especially at high power levels, as well as improved reliability. Two internally paralleled Neutrik® 4-conductor Speakon® connectors are provided for input to the speaker. A 1/4" phone jack is also provided for full range input purposes. (This input should not be used for high power operation). A battleship grey velour carpet covers the DTH 5. This is a low-wear, high abrasion-resistant carpet, similar to those used in the automotive industry. A heavy-duty 16-gauge metal grille dresses off the enclosure and provides superior protection for the drivers. This grille has been coated with a special plasticized paint. This aids greatly in damping grille vibrations at high sound pressure levels.

All this combines to give you a great-looking and great-sounding loudspeaker perfectly suited to any sound reinforcement application.

DIRECTIVITY

Beamwidth and directivity factors are derived from the -6 dB points from the polar plots, 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 DTH™ 5 exhibits a desirable beamwidth and directivity factor suitable for all high-level sound reinforcement applications.

FREQUENCY RESPONSE

This measurement is useful in determining how accurately a given enclosure reproduces an input signal. The frequency response of the DTH™ 5 is measured at 1 meter using a 2.0-volt swept sine input. As shown in Figure 1, the selected drivers in the DTH 5 combine to give a smooth frequency response from 115 Hz to 16 kHz.

POWER HANDLING

There are many different approaches to power handling ratings. Peavey rates this speaker system's power handling using a modified form of the AES Standard 2-1984. Utilizing audio band (20 Hz - 20 kHz) pink noise with peaks over four times the RMS level, this strenuous test signal assures the user that every portion of this system can withstand today's high-technology music. The test signal contains large amounts of very low-frequency energy, effectively simulating the frequency content of live music situations. The full

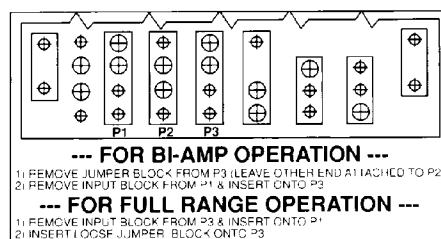
measure of high frequencies in the test signal allow for exposure of the speaker system to synthesized tones that may extend beyond audibility. This rating is contingent on having a minimum 3 dB of amplifier headroom available.

ARCHITECTURAL & ENGINEERING SPECIFICATIONS

The loudspeaker system shall have an operating bandwidth of 115 Hz to 16 kHz. The output level shall be 101 dB when measured at a distance of one meter with an input of one watt. The nominal impedance shall be 4 ohms. The continuous power handling shall be 400 watts, with maximum program power of 800 watts and minimum amplifier headroom of 3 dB. The outside dimensions shall be 18 3/4 inches wide by 46 1/2 inches high by 30 1/4 inches deep. The weight shall be 151 lbs. The loudspeaker system shall be a Peavey model DTH™ 5.

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.



Features and specifications subject to change without notice.

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