

SPECS

PEAVEY ELECTRONICS

DTH™-2 Minimum Profile Enclosure

SPECIFICATIONS

Frequency Response, 1 meter
On-Axis, Swept Sine in Anechoic
Environment:

55 Hz - 18 kHz

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

55 Hz

Useable Low Frequency Limit:
(-10 dB point)

40 Hz

Power Handling:

Full Range

400 W continuous (56.5 V RMS)

800 W program

Bi-amp Low

350 W continuous (52.9 V RMS)

700 W program

Biamp Hi

80 W continuous (25.3 V RMS)

160 W program

Sound Pressure Level, 2.8 V (1 Watt)
1 meter in Anechoic Environment:

98 dB

Maximum Sound Pressure Level:

122 dB

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

500 - 1600 Hz:

Horiz. 90.7° ±13.7°

Vert. 88.8° ±24.3°

1.6 - 5 kHz:

Horiz. 82.5° ±11.8°

Vert. 51.7° ±9.5°

5 - 16 kHz:

Horiz. 61.0° ±17.7°

Vert. 42.7° ± 6.0°

Directivity Factor, Q (Mean):

12.7 ±8.8

Directivity Index, DI (Mean):

10.3 dB ±2.5 dB

Transducer Complement:

One 1505-8 DI Black Widow®

One 44-T™ compression driver coupled to
a CH™-5 constant directivity horn

Box Tuning Frequency:

50 Hz

Crossover Frequency:

2 kHz

Time Offset:

.69 mS (delay lows)

Impedance, Z:

8 ohms nominal

5.6 ohms minimum

Input Connections:

Two Neutrik® 4 conductor Speakon®
(NL4MP)

Enclosure Materials & Finish:

¾" plywood with battleship grey carpet &
plasticized metal grille

Dimensions: (H x W x D)

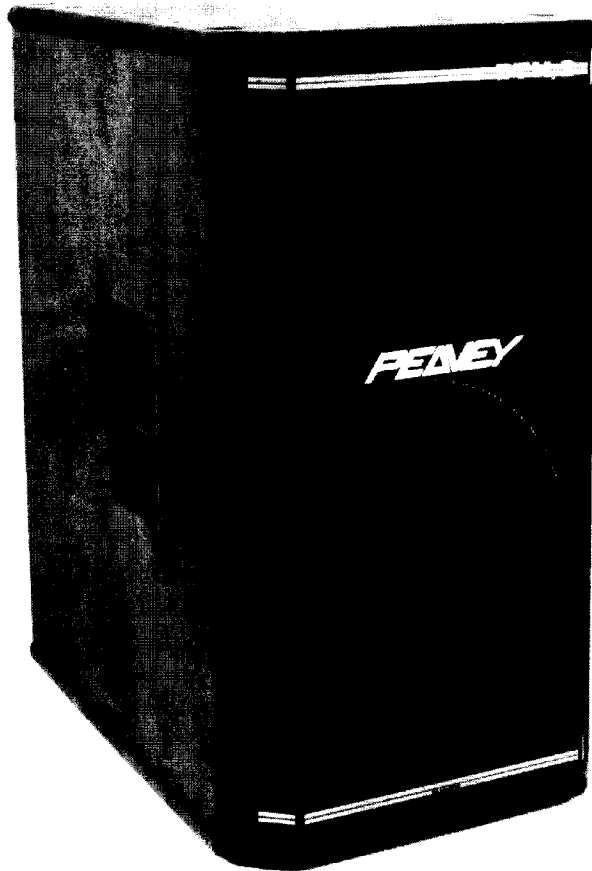
32¼" x 18¾" x 30¼"

(81.9 cm x 47.6 cm x 76.8 cm)

Net Weight:

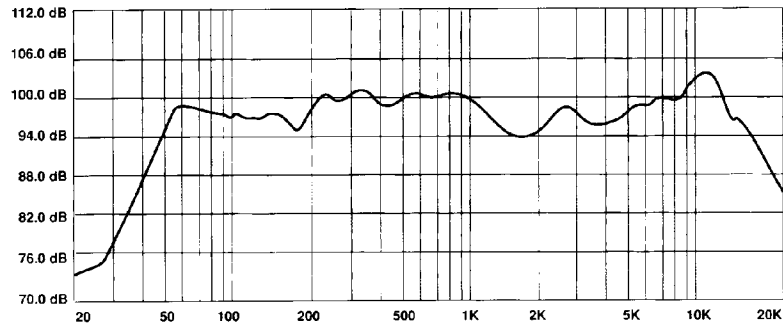
118 lbs. (53.6 kg)

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Speakon® is a registered trademark of Neutrik AG.



PEAVEY®

Frequency Response, Fig. 1



Impedance, Fig. 2

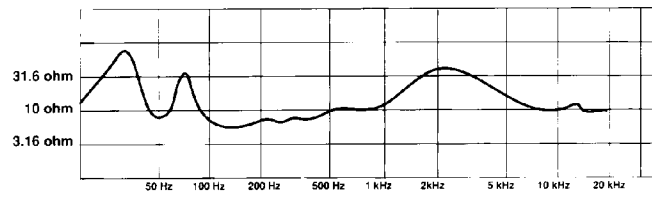


FIG. 3

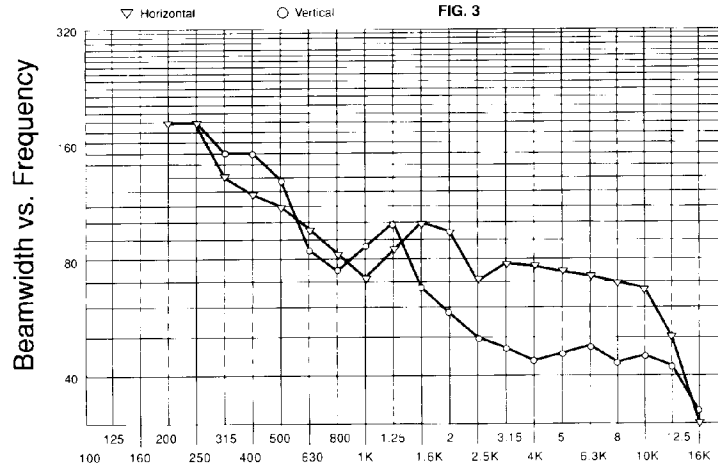
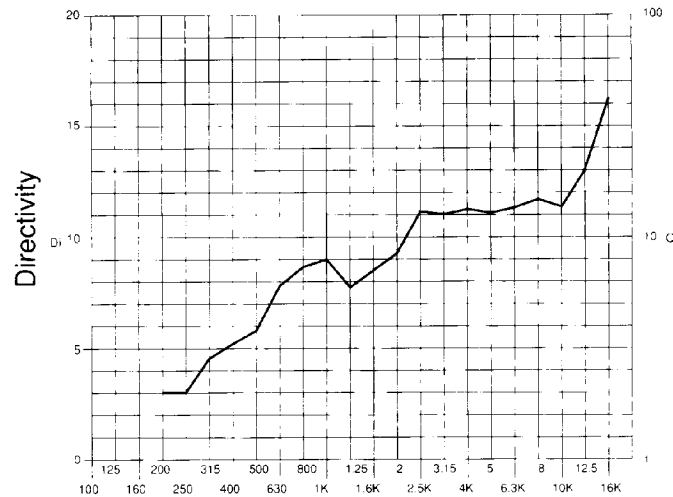
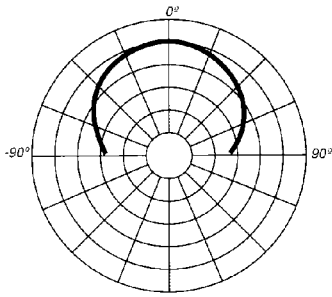


FIG. 4

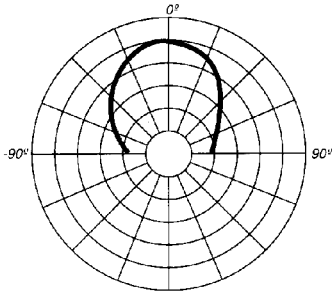


HORIZONTAL POLAR PATTERNS

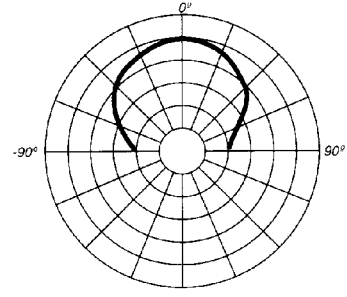
6 dB per division



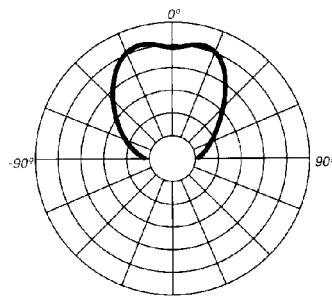
500 HZ



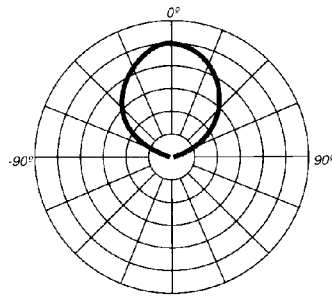
1 kHz



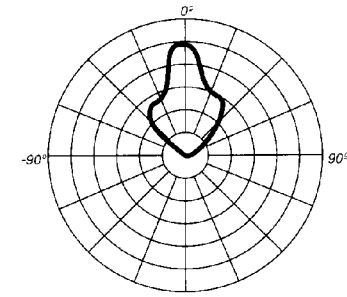
2 kHz



4.0 kHz



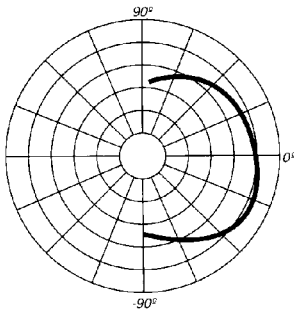
8 kHz



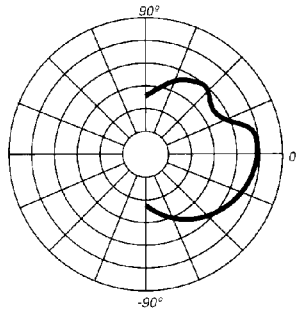
16 kHz

VERTICAL POLAR PATTERNS

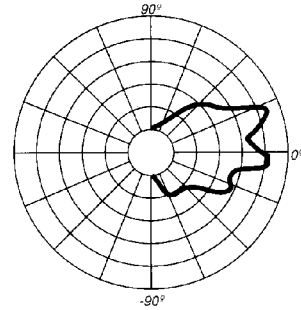
6 dB per division



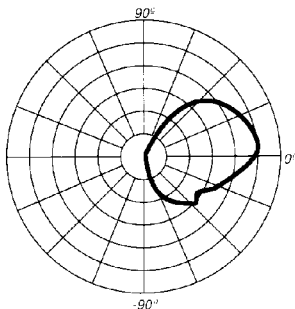
500 Hz



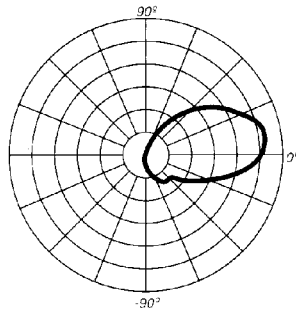
1 kHz



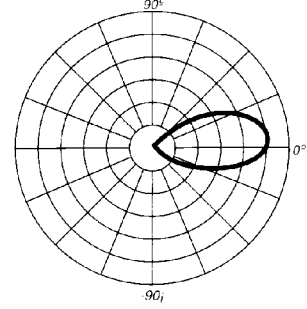
2 kHz



4 kHz



8 kHz



16 kHz

FEATURES

- Full range/biamp operation
- High power handling polypropylene capacitors
- 16 gauge plasticized metal grille
- Interlocking top/bottom for stackability
- 44T Compression Driver

DESCRIPTION

The new DTH™-2 was designed as a true minimum profile enclosure. It measures only 18¾" 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-2 is a two-way system using a 1505-8 DT woofer and a 44T compression driver coupled to a CH-5 horn. In this application the CH-5 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. Recessed areas have been provided on the top that coincide with the placement of the feet on the bottom. This allows integral stacking of enclosures. An internal passive crossover is utilized to enable the system to run full-range directly from the factory. Bi-amp operation is also possible simply by moving a few jumper connectors on the circuit board. 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. A Neutrik 4 conductor Speakon connector is provided for input to the speaker. A "Battleship Grey" velour carpet covers the DTH-2. 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. The grille has been specially coated with a 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 (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 DTH™-2 exhibits a desirable beamwidth and directivity factor (figure 3 and 4) 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-2 is measured at 1 meter using a 2.8 volt swept sine input. As shown in Figure 1, the selected drivers in the DTH-2 combine to give a smooth frequency response from 55 Hz to 18 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 tone 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 55 Hz to 18 kHz. The output level shall be 98 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 400 watts, maximum program power of 800 watts, with a minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 80 degrees in the horizontal plane and 40 degrees in the vertical plane. The outside dimensions shall be 18¾ inches wide by 32¼ inches high by 30¼ inches deep. The weight shall be 118 lbs. The loudspeaker system shall be a Peavey model DTH™-2.

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.

PEAVEY®

Features and specifications subject to change without notice.

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