

# SPECS

PEAVEY ELECTRONICS

## I522™ HC

### Two-Way Enclosure

#### SPECIFICATIONS

**Frequency Response:**

60 Hz - 17 kHz

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

60 Hz

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

44 Hz

**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:**

101 dB

**Maximum Sound Pressure Level:**

122 dB

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

Horizontal Plane	Vertical Plane
<b>500-1.6 kHz</b> 85° ± 15°	<b>500-1.6 kHz</b> 90° ± 15°
<b>1.6 kHz - 5 kHz</b> 90° ± 15°	<b>1.6 kHz - 5 kHz</b> 65° ± 20°
<b>5K - 16 kHz</b> 103° ± 5°	<b>5K - 16 kHz</b> 55° ± 3°

**Directivity Factor Q****500 Hz-16,000 Hz Median:**

8 (+3.7, -3.1)

**Directivity index Di 500-16,000 Hz  
Median:**

8.9 dB (+1.8 dB - 2 dB)

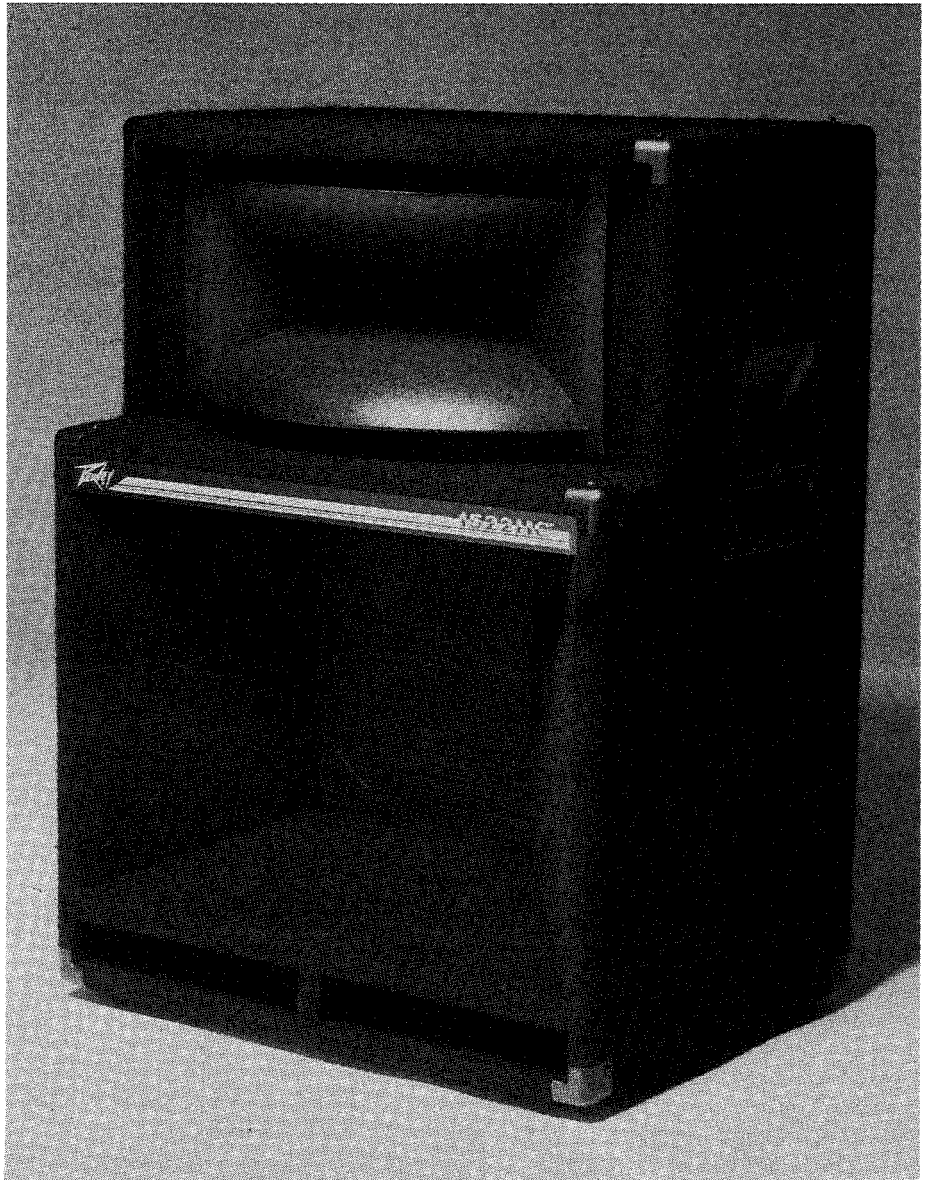
**Transducer Complement:**

1-15 inch Scorpion® 15825 woofer

1-22T™ Titanium Compression driver load-  
ed onto a CH™-2 90° H x 45° V horn

**Tuning Frequency (F box):**

40 Hz

**Crossover Frequency:**

800 Hz

**Crossover Type:**

Passive

**Crossover Slope:**

12 dB/octave High and Low pass

**Impedance (Nominal):**

8 ohms

**Impedance (Minimum):**

5.1 ohms

**Input Connections:**

Two 1/4" female full-range inputs



**Enclosure Materials and Finish:**

High density 3/4" plywood covered in heavy duty black carpet reinforced with metal corners

**Dimensions:**

24 3/4" (62.87cm) W x 33 3/4" (85.73cm) H x 18 3/8" (46.67cm) D

**Net Weight:** 100 lbs.

**FEATURES**

- Wide-range, horn-loaded, two-way sound reinforcement system
- New 22T™ 2" titanium diaphragm compression driver
- Carpet covered
- Low frequency horn designed for smooth low and mid frequency
- Advanced crossover design for smooth, efficient driver integration
- Vents located to improve low-frequency distortion
- Power handling 250 watts continuous, 500 watts program

**DESCRIPTION**

The 1522HC is the top of the HC line. The 1522HC is the only HC Series speaker that uses the 22T compression driver. The 1522HC is a high power full-range, 2-way all horn-loaded enclosure designed for general purpose public address and vocal sound reinforcement. The cabinet is constructed of high-density plywood, covered with heavy duty black carpet then reinforced with steel corners. The two-way system is comprised of a 15 inch Scorpion® 15825 low-frequency driver. 22T™ compression driver mounted onto a CH™-2 90° x 45° constant directivity horn supplying the high frequencies. Its all-horn-loaded design increases sound pressure level to high level in sound reinforcement. The frequency spectrum is divided by a 2-way passive crossover, allowing the drivers to operate in optimum time alignment giving the system a smooth frequency response from 60 Hz out to 17,000 Hz. Two 1/4" female full-range jacks are supplied as input connections.

**FREQUENCY RESPONSE**

This measurement is useful in determining how accurately a given enclosure reproduces an input signal. The frequency response of the 1522HC is measured at 1 meter using a 2.82 volt swept sine input. As shown in Figure 1, the selected drivers in the 1522HC combine to give a smooth frequency response from 60 Hz to 17 kHz.

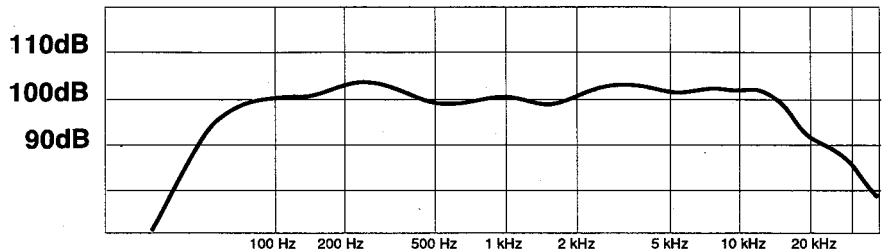


Figure 1. FREQUENCY RESPONSE

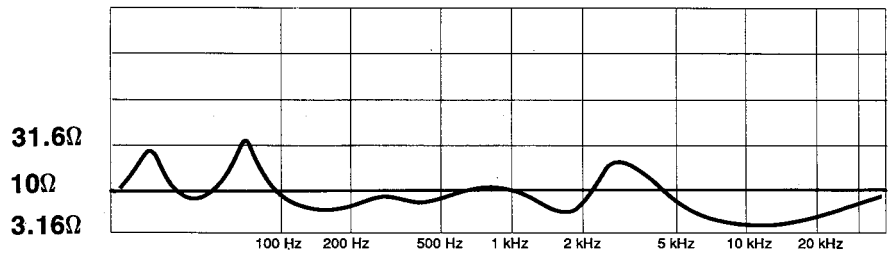


Figure 2. IMPEDANCE

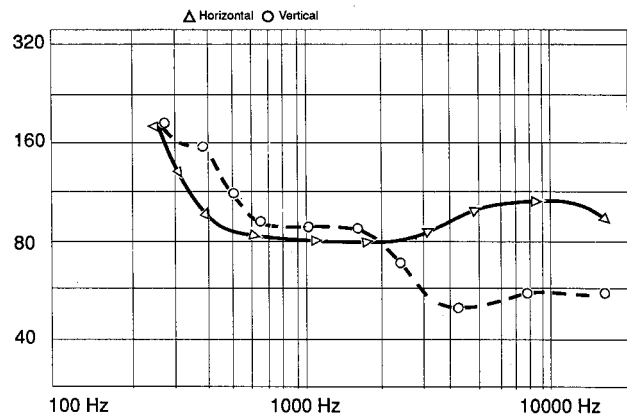


Figure 4. BEAMWIDTH VS. FREQUENCY

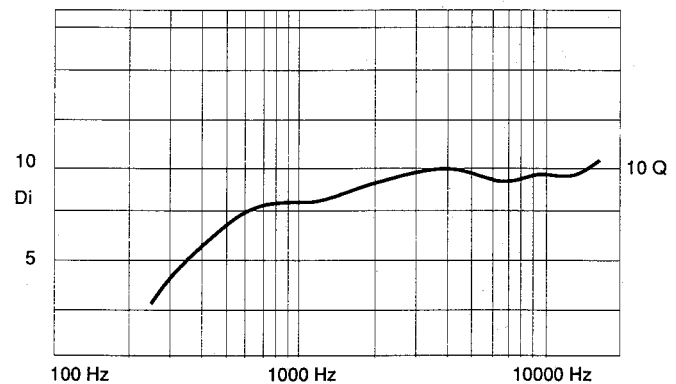
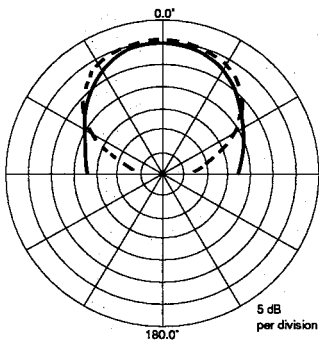
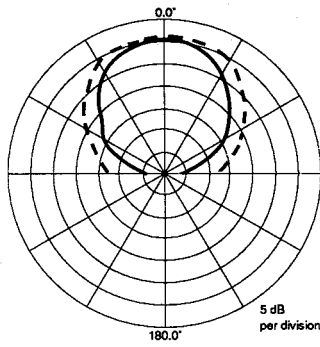


Figure 5. DIRECTIVITY

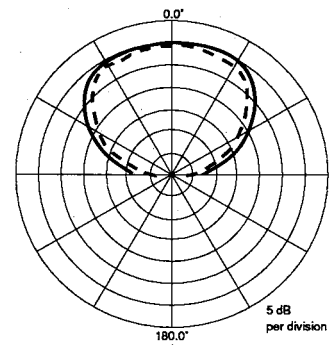
**HORIZONTAL**



— 500 Hz  
- - - 1 kHz

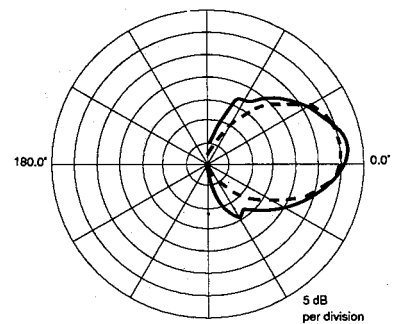
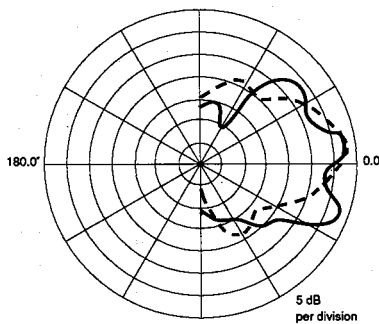
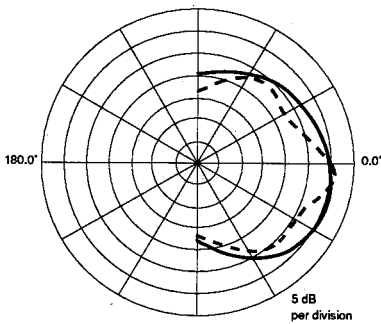


— 2 kHz  
- - - 4 kHz



— 8 kHz  
- - - 16 kHz

**VERTICAL**



**Figure 3. POLAR PATTERNS**

**PEAVEY** **1522HC**<sup>TM</sup>

**Sound Reinforcement System**

A PRODUCT OF PEAVEY ELECTRONICS CORP.  
MERIDIAN, MS MADE IN U.S.A.

**MAX POWER: 500W RMS (PROGRAM)**  
**250W RMS (44.7V RMS)**

**IMPEDANCE: 8 OHMS**

**CROSSOVER: 800 Hz**

**WARNING: THIS SPEAKER SYSTEM CAN PERMANENTLY  
DAMAGE HEARING! USE EXTREME CARE SETTING MAXIMUM  
LOUDNESS!**

**FULL RANGE**



**INPUTS**

## **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 1522HC exhibits a desirable beamwidth and directivity factor (figure 4 and 5) suitable for all high-level sound reinforcement applications.

## **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 60 Hz to 17 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 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 nominal radiation geometry shall be 90° in the horizontal plane and 45° in the vertical plane. The outside dimensions shall be 24¾" wide by 33¾" high by 18¾" deep. The weight shall be 100 pounds. The loudspeaker system shall be a Peavey model 1522HC.

## **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.

Peavey Electronics Corporation 711 A Street / Meridian, MS 39302-2898 / U.S.A. / (601) 483-5365 / Telex: 504115 / Fax: 484-4278