

# **SPECIFICATIONS**

#### **Enclosure:**

Prosys™ 112HC

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

52 Hz - 18 kHz

Low Frequency Limit (-3 dB point):

Usable Low Frequency Limit (-10 dB point):

46 Hz

Internal Power Amplifiers:

150 watts continuous RMS of built-in amplifier power (0.5 volt RMS input sensitivity)

Sound Pressure Level 1 Watt at 1 Meter Swept Sine Input in Anechoic Environment: 96 dB

Maximum Sound Pressure Level (with music):

116 dB

Radiation Angle Measured at -6 dB Point of Polar Response

Horizontal Plane 500 Hz-1.6 kHz 135° ±5°

Vertical Plane 500 Hz-1.6 kHz 135° ±10°

**1.6 kHz-5 kHz** 85° ±40° **1.6 kHz-5 kHz** 90° ±40°

**5 kHz-16 kHz 5 kHz-16 kHz** 70° ±15° **45**° ±10°

Directivity Factor Q 500 Hz-16 kHz Median:

6.8 dB, +14.6 dB, -3.6 dB

Directivity Index Di 500 Hz-16 kHz Median:

8.3 dB, +5.0 dB, -3.3 dB Transducer Complement:

One 12" long-throw heavy-duty woofer, one 6½" flared-cone closed back midrange driver, and the Peavey CDH-90™ 90° H x 40° V constant directivity dynamic horn tweeter.

Tuning Frequency (F box):

55 Hz (6th order alignment)

Crossover Frequency:

450 Hz and 5 kHz (Electro acoustic)

**Crossover Type:** 

Internal Passive

Crossover Slope:

All are staggered-pole 12 dB/octave

Impedance (Nominal):

4 ohms

Impedance (Minimum):

3.2 ohms

(no external speaker system access)

Input Connections:

Two RTS 1/4" phone jacks, and one each male and female XLR connector, all in parallel, balanced input

**Enclosure Materials and Finish:** 

High density plywood internally braced, covered in black carpet, drivers are protected by a black 3-D metal grille.

# Mounting:

SA-1 stand adaptor built-in, four tall rubber feet provided for floor standing use.

#### Dimensions:

24" H (61.0 cm) x  $17^{3}/_{8}$ " (44.1 cm) W x  $137'_{8}$ " (35.2 cm) D

## Optional Accessories:

S-1 Tripod Speaker Enclosure Stand

## Net Weight:

61 lbs.

# INPUT SPECIFICATIONS Input Impedance:

Greater than 100K ohms

CMRR:

Greater than 40 dB @ 120 Hz

# **AMPLIFIER SPECIFICATIONS Frequency Response:**

+0, -1 dB from 10 Hz to 40 kHz at 150 W into 4 ohms

Slew Rate:

40 V/US into 4 ohms

Damping Factor:

200 @ 1 kHz into 4 ohms

THD:

Less than 0.2%, 100 mW to 150 W RMS, 10 Hz to 20 kHz @ 4 ohms; typically below 0.1%

#### Hum & Noise:

100 dB below 150 W, 20 Hz to 20 kHz

## **Additional Remarks:**

Self-contained sound system. Powered, processed enclosure with volume control, balanced line level inputs, DD™ compression built-in

## **DESCRIPTION**

The Prosys™ 112 HC is a compact, full-range, powered speaker enclosure designed to accept the input from a line level signal source, such as a mixer, and provide accurate reproduction for sound reinforcement, public address, keyboard monitoring, or musical playback.

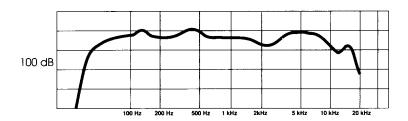
The enclosure is constructed of high density plywood internally braced. The covering is durable black carpet material, and the driver components are protected with a 3-D black perforated metal grille.

The 3-way system is comprised of a 12" long-throw heavy-duty woofer supplying the electronically processed low end; a high efficiency, flared-cone midrange driver; and a 90° X 40° constant directivity dynamic horn tweeter. The frequency spectrum is divided by a sophisticated staggered-pole passive crossover to optimally blend and shape the three drivers' response, contributing to a smooth frequency response from 52 to 18 kHz.

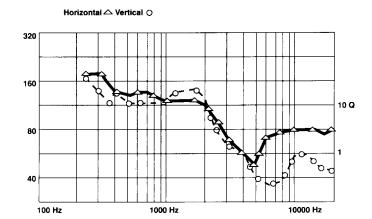
Additionally, the built-in processor control circuitry applies low frequency boost with subsonic filtering. The boost action of this processor varies dynamically with signal level, and its characteristics are tailored specifically for this enclosure and amplifier combination.

Input to the Prosys 112 HC is provided via either a ¼" RTS phone jack or a professional style XLR connector. Both types of inputs can be daisy-chained to supply signals to other Prosys units via a set of parallel connectors, and both inputs can be used in a balanced or single-ended configuration.

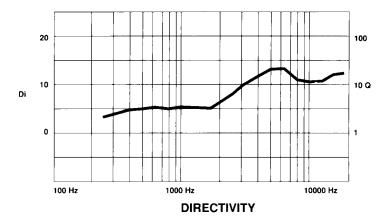
The power section providing the amplification is supplied by a low distortion, 150 watt power amplifier, selected for its reliability and superb musical performance capability. The built-in power stage includes our patented DDT™ compression, which virtually eliminates audible power amp clipping. For stand mounted use, we have included the SA-1 stand adaptor on the bottom of the enclosure, facilitating this style of use when using standard 13/8″ stand shafts.



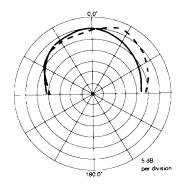
#### **FREQUENCY**



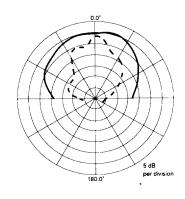
**BEAMWIDTH VS. FREQUENCY** 



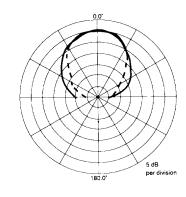
#### **HORIZONTAL**





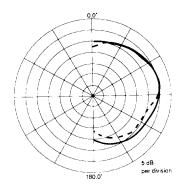


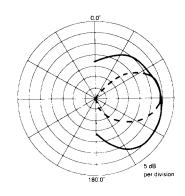


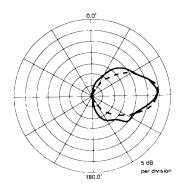


---- 8 kHz ----- 16 kHz

# VERTICAL







# ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The powered loudspeaker system shall have one high impedance, balanced. line-level input/output on the rear panel, consisting of two XLR connectors in parallel with two 1/4" RTS phone jacks. A volume control will be located next to the input/output jacks. The system electronics shall have a frequency response which deviates no more than +0, -1 dB from 10 Hz to 40 kHz up (signal processing defeated) to rated power delivery; a slew rate of 40 V/US; a damping factor greater than 200 @ 1 kHz; a total harmonic distortion less than 0.2% from 10 Hz to 20 kHz at or below rated power delivery; and the hum and noise more than 100 dB below full rated output. The input signal shall be electronically processed to supply low frequency boost, specifically tailored to this system, along with subsonic filtering. The internal power amp

shall be capable of 150 watts continuous power into the 4 ohm system load, and shall feature DDT™ compression. The enclosure shall be constructed of high-density plywood, heavily braced internally, and covered with carpet material. The cabinet shall incorporate an SA-1 stand adaptor on the bottom, along with four tall rubber feet. A handhold shall be provided on either side of the cabinet. The driver components shall be protected by a recessed, 3-D perforated metal grille. The powered loudspeaker system shall be a 3-way system utilizing a 12" heavy-duty woofer loaded into a 6th-order vented cabinet, a closed back 61/2" midrange and a 90° V constant directivity dynamic horn tweeter.

The amplifier shall interface with the speaker drivers via a passive, high slope crossover network. The operating bandwidth shall extend from 5 Hz to 18 kHz minimum. The nominal output

level shall be 96 dB when measured at a distance of one meter when the speaker section is driven with an unprocessed signal level of 1 watt. The continuous power handling of the speaker section shall be 150 watts with a minimum program headroom of 3 dB. The outside dimensions shall be 17³/8″ wide by 24″ high by 13²/8″ deep. The weight shall be 61 lbs. The unit shall operate from standard 120 V AC, 50/60 Hz power, and have a 10 foot grounded power cord attached to the rear panel. The unit shall be called the Peavey Prosys™ 112HC.

# 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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