

LEVIATHAN II[™]TRI-AXIAL

FULL-RANGE HORN LOUDSPEAKER SYSTEM

APPLICATIONS:

- •Stadia
- •Amphitheatres
- •Arenas
- •Large Public Gatherings

FEATURES:

- •True full-range, point-source sound
- •No-compromise horn projection
- •Ultra-high directivity
- •High intelligibility
- •Weather resistant, space saving design
- •Long distance projection capability

DESCRIPTION

The Leviathan II [™]Tri-Axial Loudspeaker System is designed to overcome the sound transmission problems inherent to large public gathering places. The Leviathan II is a high efficiency, high output, low distortion loudspeaker system. It provides high directivity and precise pattern control throughout the audio spectrum, thus projecting clear, concert quality sound over long distances and in difficult acoustical environments.

The Leviathan II is comprised of three concentrically (triaxially) mounted horn/driver sections.

The low frequency section of the Leviathan II is a massive 34 Hz flare rate straight horn driven by six 15 inch drivers capable of horn performance down to and below 40 Hz. The six 15 inch high-sensitivity Ferrofluid-cooled drivers provide not only the required power capacity but also a large combined throat/diaphragm area for low distortion operation even at extreme output levels.

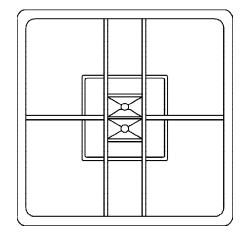
The midrange section of the Leviathan II is the M4 compression driver on a PC1542M40 $^{\circ}x 20^{\circ}$ horn. With its large throat area, low compression phase plug, rigid diaphragm, and massive motor structure, the M4 is capable of delivering high output levels with low distortion.

The high frequency section of the Leviathan II is comprised of two EM2822.8" exit compression drivers mounted to a single PCD[™]Focused Array 40 °x20° horn. The EM282 employs a 3.55" Ferrofluid-cooled voice coil with an ultra high strength carbon fiber diaphragm. This rigid structure is connected to the driver's 2.8" throat by a low-compression, combined radial and circumferential phase plug. Two EM282's combined on the PCD Focused Array horn provide both high directivity and high output.

The PCD Focused Array horn is mounted coaxially within the PC1542M midrange horn and this combined unit is concentrically mounted in the mouth of the Leviathan II bass horn.

All horn sections of the Leviathan II are sandwich core construction utilizing hand-laminated fiberglasss. This form of construction produces horns that are relatively lightweight, nonresonant and highly weather-resistant.

The Leviathan II is uniquely designed for long range applications that require the highest quality of sound at remarkable sound pressure levels.



Specifications

Type:

Full Range Tri-Axial Horn Loudspeaker System **Frequency Response:** 40 Hz - 12kHz

Power Capacity:

LF: 1200W Continuous, 3000W Program

- MF: 200W Continuous, 500W Program
- HF: 320W Continuous, 800W Program
- Sensitivity:
 - LF: 108 dB SPL 1 Watt/1 Meter
 - MR: 112 dB SPL 1 Watt/1 Meter
 - HF: 111 dB SPL 1 Watt/1 Meter

Nominal Dispersion:

LF: 90° H x 90° V (100 Hz) 60° H x 60° V (250 Hz)

- MR & HF: 40° H x 20° V
- **Nominal Impedance:**

LF: 2.7 ohms, MR: 8 ohms, HF: 4 ohms

- **Crossover Frequencies:**
- 385 Hz, 1800 Hz

Components:

LF: Six 15" Ferrofluid-cooled woofers in a compression chamber mounted to a straight 34Hz flare fiberglass horn.

MR: One M4 4" exit loudspeaker, one fiberglass Pattern Control Horn HF: Two 2.8" exit EM282 loudspeakers on a $\ PCD^{TM}$ Focused Array fiberglass horn

Dimensions:

Height: 72 inches (1828.8 mm) Width: 72 inches (1828.8 mm)

Depth: 84 inches (2133.6 mm)

Weight:

750 lbs. (340.9 kg)

Shipping Dimensions (Unit is bolted, face down on pallet):

- Height: 90 inches (2286 mm)
- Width: 75 inches (1905 mm)

Depth: 75 inches (1905 mm)

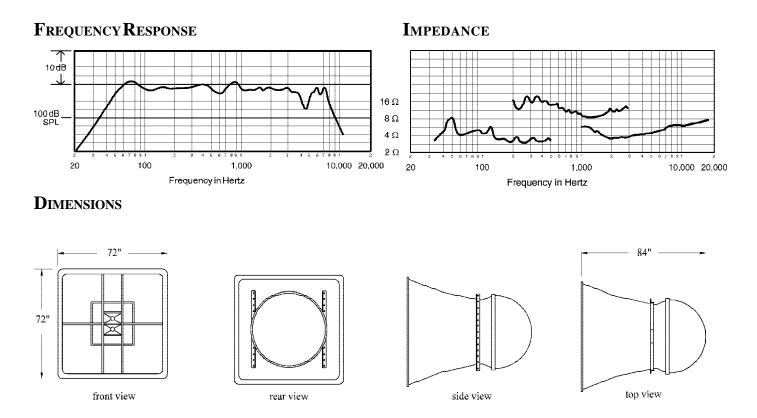
Shipping Weight: 800 lbs. (363.6 kg)

LEVIATHAN Page 1 of 2

C O M M U N I T Y P R O F E S S I O N A L L O U D S P E A K E R S 333 East Fifth Street Chester, PA 19013-4511 USA Phone (610) 876-3400 Fax (610) 874-0190



LEVIATHAN II™ TRI-AXIAL FULL-RANGE HORN LOUDSPEAKER SYSTEM



ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The loudspeaker system shall be a tri-axially configured three-way system, horn loaded in all three frequency bands. The system shall consist of one exponential low frequency horn (Leviathan II) with 34 Hz flare rate driven by six Ferrofluid-cooled 15" (380 mm) LF drivers (LFSR815), one midrange 40 ° x 20° (HxV) Pattern Control horn (PC1542M) driven by a 6.65" (168 mm) diaphragm, 4" (101.6 mm) exit compression driver (M4) and one Focused Array horn driven by two 3.55" (89 mm) carbon fiber diaphragm, 2.8" (71.12 mm) exit compression drivers (EM282). The components shall be mounted tri-axially. The system shall be crossed over at 385 Hz and 1,800 Hz with a external 24 dB/octave electronic crossover with a 38 Hz high-pass filter and 3.8ms of delay on the high-frequency drivers. The system shall meet the following performance criteria: Amplitude response, low-frequency section: 40 Hz - 280 Hz +/- 3 dB, mid-frequency section: 385 Hz - 1,800 Hz +/- 2 dB, high frequency section: 1,800 Hz - 12,000 Hz +/- 3 dB. Power handling of 1,200 watts RMS LF, 200 watts RMS MF and 320 watts RMS HF. Sensitivity at one meter with one watt applied of 108 dB LF, 112 dB MF and 111 dB HF. Nominal coverage pattern of 60 ° x 60° (H x V) (250 Hz) LF, 40 ° x 20° (H x V) MF and 40 ° x 20° (H x V) HF and weigh 750 lbs. (740.9 kg.). The system shall be capable of a maximum continuous sound pressure level of 136 dB.

LIMITED WARRANTY

Community loudspeaker systems are guaranteed to be free from defects in materials and workmanship for a period of five years from the date of sale to the original purchaser. This warranty does not apply to products which have been subjected to abuse, accident, modification, improper handling/installation, or repairs made without factory authorization or by other than an authorized Community Field Service Station. Items or products covered by this warranty will be repaired or replaced, at the option of Community, without charge for materials or labor, provided products are returned prepaid for inspection to the Community factory in Chester, PA.

Specifications subject to change without notice.

LEVIATHAN Page 2 of 2