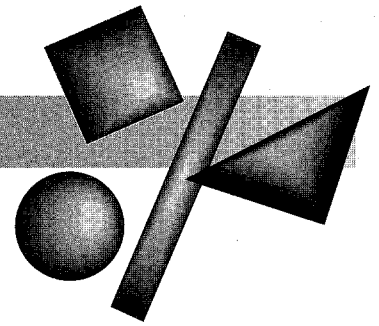


FORSYTHE SERIES



L12/CX2

High Output Coaxial Loudspeaker System

L12/CX2 Advantages

- High Output Capability** — greater than 120 dB SPL maximum output at 1m
- Wide Bandwidth** — 60Hz to 19,000 Hz + 3 dB
- High Power Handling** — 180 Watts AES
- Wide Coverage** — 100 degrees Nominal
- True Horn Loading** over its entire operating range
- Magnetic Damping Fluid** in the voice coil gap of the high frequency driver for improved reliability and smoother response
- Optional Forsythe Designed Crossover** with asymmetrical sloped equalized filters

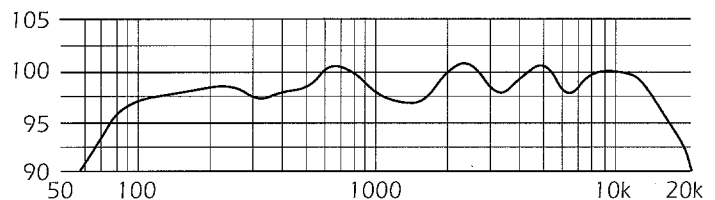
Description

The L12/CX2 is a 12 inch, two-way coaxial loudspeaker designed for high-fidelity high output distributed systems. Typical applications include arenas, gymnasiums, ballrooms, meeting facilities and houses of worship. The L12/CX2 is part of a new generation of coaxial drivers designed to fill the void between low-cost low output 8 & 12 inch industrial ceiling speakers and expensive 12 and 15 inch studio monitor coaxial loudspeakers. Additionally, its high output capabilities make it ideal for incorporation into compact full range systems.



L12/CX2XO Axial Frequency Response

The L12/CX2's compression tweeter offers considerably greater output and reliability than any dome type design HF driver, while offering wider coverage than both dome or horn type competitive coaxial systems. As an additional reliability measure, magnetic damping fluid is used in the voice coil gap for improved thermal conductivity further increasing power handling.



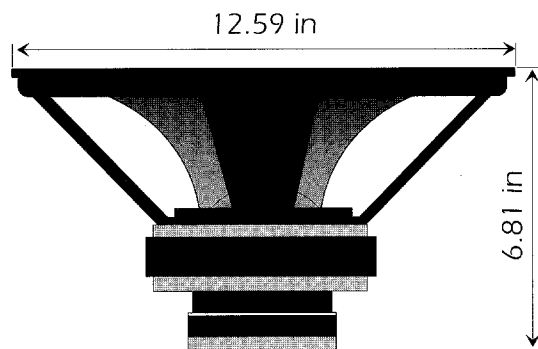
The advanced performance of the L12/CX2 simplifies system design and installation in a number of important ways. Its smooth frequency response and freedom from peaks significantly simplifies system equalization and improves gain before feedback, while its smooth wide coverage angle simplifies system design and virtually eliminates "hot spots" below the speaker.



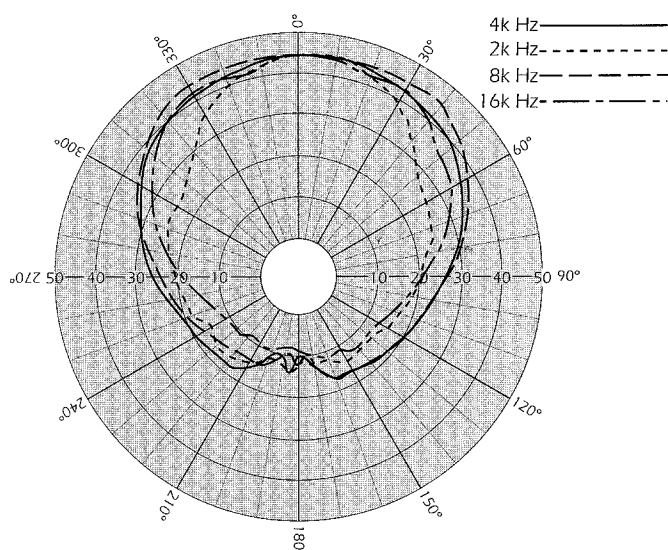
EASTERN ACOUSTIC WORKS, INC.

One Main Street, Whitinsville, MA 01588 • (508) 234-6158

L12/CX2 Dimensions



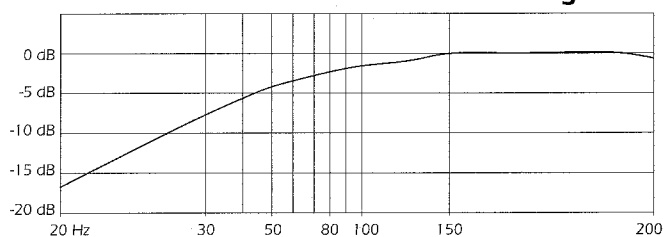
Polar Response



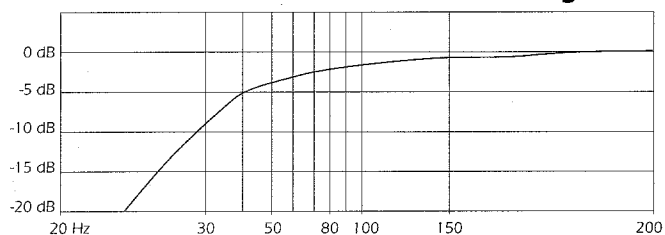
Low Frequency Response

In Typical Vented Box Applications

L12/CX2 in 1.7 ft³ Vented Box 55 Hz Tuning



L12/CX2 in 3.7 ft³ Vented Box 45 Hz Tuning



Specifications

Description High output coaxial loudspeaker system

Configuration 12-in Two-way

Frequency Response
 ± 3 dB: 60 Hz to 19k Hz
 LF Limit -10 dB: 30 Hz

Efficiency / Axial Sensitivity
 SPL 1w @ 1m: 98 dB SPL
 1/2 Space Efficiency: 2.78%

Power Handling
 AES Standard: 180 watts
 100 Hour Sine Wave: 100 watts
 Nominal Impedance: 8 ohms

Maximum Output
 SPL (peak): 120.6 dB
 SPL (long term): 118.0 dB
 LF (acoustic watts): 5.0 peak
 2.8 long term

Nominal Coverage Angles (-6 dB)
 1k Hz: 110 degrees 2k Hz: 75 degrees
 4k Hz: 110 degrees 8k Hz: 110 degrees
 16k Hz: 85 degrees

Subsystem Data
 Low Frequency: 12-in Cone Driver
 High frequency: Compression Driver Coaxially Mounted To LF Driver

Optional Crossover Data (L12/CX2X0)
 Operating Mode: Full Range Passive
 Crossover Frequency: 2,800 Hz
 Slope: 18 dB / Octave

Dimensions & Weights
 External Diameter: 320 mm (12.6 in)
 Total Depth: 173 mm (6.8 in)
 Net Weight: 6 kg (13.2 lbs)

Baffle Hole Opening Diameter
 Front Mounting: 286 mm (11.26 in)
 Rear Mounting: 285 mm (11.22 in)
 Flange Thickness: 16.5 mm (0.65 in)

Small Parameters
 Fs: 60 Hz Mms: 0.034 kg
 Qms: 8 Cms: 0.00021 m/N
 Qes: 0.49 Vas: 0.065 m³
 Qts: 0.46 B*: 12.2 T*m
 D: 0.0245 m Vd: 0.00019 m³
 Re: 5.7 ohms Sd: 0.0471 m²
 Xmax: ± 4 mm