

CLAIR BROTHERS P-4 (PISTON) LOUDSPEAKER

Application

The Clair Brothers P-4 "Piston Box" represents a new concept in speaker design. By utilizing state of the art cone transducer and enclosure design technologies, the cabinet is considerably streamlined, creating an versatile, truly arrayable three-way triamped full range speaker system. The P-4 is equally at home in theaters, night clubs, houses of worship, and any portable application.

Features

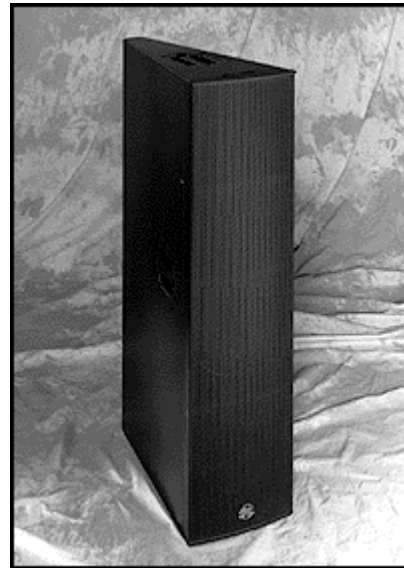
Unique in appearance, the P-4's frontal area is approximately thirteen inches wide, with side walls tapering to a rear width under three inches. This wedge shape allows the use of numerous speakers in tight arrays, minimizing speaker pattern overlap, diminishing comb filtering and phase cancellation. The net result is high quality, coherent sound distribution.

Contributing to the compact size of the P-4 is the selection of components. The low frequency section features a box cavity loaded with two high power, reduced weight 12" cone transducers. The isolated midrange section contains a single 12" cone transducer. The high frequency section contains neodymium driver with a 2" throat coupled to a 40° x 60° constant-directivity horn.

Constructed of durable 19mm, 13-ply Baltic Birch and covered with epoxy mastic, the P-4 is built to withstand the punishment of any professional audio application.

Options

The P-4 may be rigged horizontally via infrastructure or vertically using a custom "top bar" rigging kit, which may be designed to fly a specified number of cabinets.



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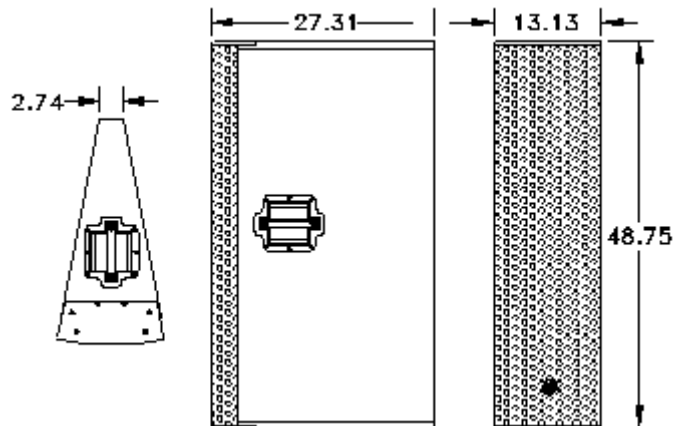
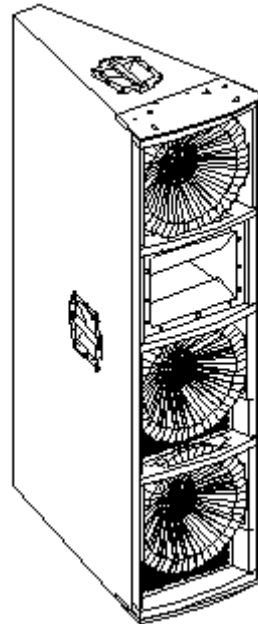
Specifications

Frequency Range	38 Hz to 20 kHz
LF Transducer	2 X 12" Cone
MF Transducer	12" Cone
HF Transducer	2" Compression Driver
System Sensitivity (1 w @ 1 M)	LF: 98 dB SPL MF:103 dB SPL HF:113.4 dB SPL @ 2kHz
Nominal HF Coverage Angles	40° x 60° Array Element
Nominal Impedance	LF: 4 ohms MF: 8 ohms HF: 16 ohms
Finish	Epoxy Mastic with Black Overcoat
Connector	EP8
Rigging	Infrastructure through cabinet, Custom "top bar" kit available
Dimensions (H x W x D)	48.75" x 13.13" Front/2.74" Rear x 27.31"
Enclosure Weight	160 lb.

Due to constant research, development and improvements all specifications are subject to change without notice

Architects' and Engineers' Specifications

The loudspeaker shall be a three-way active system featuring a total of four drivers. The low frequency section shall contain two 12-inch drivers capable of handling 600 watts of pink noise with a 6 dB crest factor for 8 hours (as per EIA RS-426-A standard). The mid frequency section shall contain a single 12" driver capable of handling 300 watts of pink noise with a 6 dB crest factor for 8 hours (as per EIA RS-426-A standard). The mid driver shall be loaded independent of the low-frequency components. The high frequency section shall contain a single 2" compression driver coupled to a 60° x 40° constant directivity horn. The driver shall be capable of handling 150 watts (1 kHz - 10 kHz) of pink noise with a 6 dB crest factor for 2 hours (as per AES-1984 and ANSI S4.26-1984 standards). The enclosure shall be constructed of 19mm, 13-ply Baltic Birch and be covered with a black epoxy mastic. Rigging shall be accomplished via infrastructure through the cabinet (horizontal), or via a custom "top bar" structure (vertical). Dimensions shall be 48.75" high, 13.25 inches front width tapering 11.25° to a 2.74" rear width, and 27.31" deep. The system weight shall be 160 lb. The loudspeaker system shall be the Clair Brothers P-4.



THE TRANSDUCERS OF THESE BOXES ARE THE HIGHEST QUALITY JBL SPEAKERS OF 12" AND THE UNIQUE DRIVER JBL 2450 NEODYNIUM , 150WATTS , THE HIGHEST RANGE OF THE JBL HORNS.

Clair Brothers P4 speakers are the mainstay of an outstanding audio system. Packaged in a unique compact size, these tri-amped, full ranged speakers produce a cleaner more distinctive sound than any competitor's cabinets. The full ranged speakers are approximately 13" across the front tapering to approximately 2½" across the back (large enough for a Cannon EP-8 connector). Weighing only 160 lbs these speakers are equally at home in a small theater as they are in a large outdoor concert setting. The compact and incredibly durable Clair Brothers P4 speaker cabinet is the ultimate in sound quality. Award winning and world renowned, Clair Brothers speakers deliver a natural, unprocessed audio fidelity with crystal clear tones unparalleled in the industry. It is easy to see why we have the edge on our competition - the Clair Brothers edge.