Screen 4P

Three-way passive system

features

- Three-way design
- Very low distortion mid-range
- High SPL
- 90° x 40° dispersion

applications

- Behind screen placement
- Medium scale cinemas



The Screen 4P is a 3-way system, with dedicated mid-range and high frequency sections. Developed by Martin Audio systems designers, this innovative solution overcomes the strenuous demands on the high frequency section of traditional 2-way cinema systems. By splitting the frequency band from 630Hz-20kHz into dedicated mid-range and high frequency sections the Screen 4P produces superior, low distortion sound for small/medium scale cinema environments.

The bass enclosure, with twin 15" (380mm) high power reflex loaded bass drivers, is designed in a shallow format for behind-the-screen placement. The bracket mounted compound MF/HF horn section can be easily adjusted and aimed for optimum audience reception.

Exceptionally smooth, flat sound in front of the screen and astonishingly high SPL's are produced via the innovative combined mid and HF horn which operates above 630Hz, avoiding the distortion associated with traditional large format compression drivers. The mid-range horn operates from 630Hz-3kHz and features a special 6.5" (165mm) treated cone drive unit mounted on a $90^{\circ} \times 40^{\circ}$ horn with a unique 'phase-ball' loading device, which exhibits exemplary pattern control to minimise seat to seat variation. The constant Q high frequency horn, utilising a 1" (25mm) compression driver operating from 3kHz-20kHz, exactly matches the coverage pattern of the mid horn.

An internal passive network provides 630Hz and 3kHz crossover points and ensures smooth transistion between the loudpeaker elements.

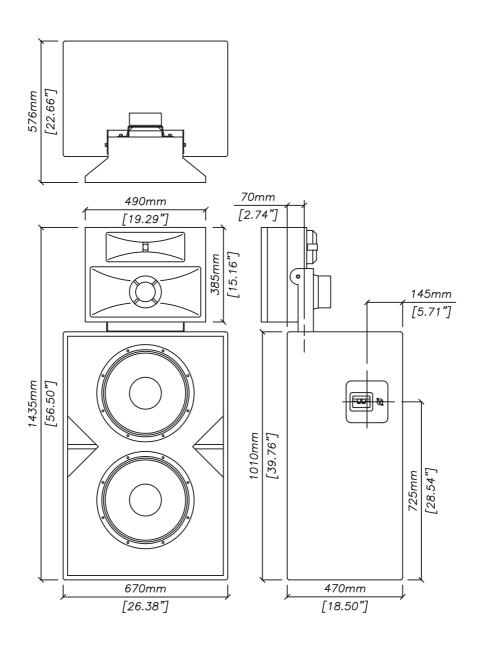
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overall dimensions



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technical specifications

TYPE FREQUENCY RESPONSE (I)	Three-way passive screen system $45Hz-20kHz \pm 3dB$
DRIVERS	2 x 15" (380mm) bass driver
	6.5" (165mm) mid driver
	I" (25mm) exit compression driver
RATED POWER (2)	LF + MF + HF: 800W AES, 3200W peak
SENSITIVITY (3)	LF + MF + HF: I00dB
NOMINAL IMPEDANCE	LF + MF + HF: 4 ohms
DISPERSION (-6dB)	90° horizontal, 40° vertical
CROSSOVER	630Hz passive, 3kHz passive
ENCLOSURE	Vented
FINISH	Matt black
CONNECTORS	Binding Posts
DIMENSIONS	LF: (W) 670mm x (H) 1010mm x (D) 470mm
	(W) 26.4ins x (H) 39.8ins x (D) 18.5ins
	MF/HF: (W) 490mm x (H) 385mm x (D) 290mm
	(W) 19.3ins x (H) 15.1ins x (D) 11.4ins
WEIGHT	LF: 63.8kg (140.4lbs) MF/HF: 9kg (19.8lbs)

Notes

- (I) Measured on-axis in half space at 2 metres, then referred to I metre.
- (2) AES Standard ANSI S4.26-1984.
- (3) Measured in half space conditions at 2 metres with 1 watt input, using band limited pink noise,
- (4) Measured in half space conditions at 2 metres using band limited pink noise, then referred to I metre.

Trade Descriptions Act

Due to Martin Audio's policy of continuing improvement, we reserve the right to alter these specifications without prior notice.

Martin Audio is committed to refining state of the art sound reinforcement, combining in-depth product and field applications research with advanced manufacturing techniques. Every Martin Audio product is built to the highest manufacturing standards and rigorously tested to ensure that it meets the performance criteria specified in the design.

architectural and engineering specifications

The loudspeaker system shall be of the three-way passive type supplied in two separate sections. The bass section shall consist of two 15" (380mm) direct radiating reflex loaded low frequency transducers in a shallow profile enclosure. The compound horn section shall consist of one 6.5" (165mm) mid frequency transducer mounted on a 90° x 40° horn with a 'phase-ball' loading device and one 1" (25mm) exit HF compression driver mounted on a 90° x 40° constant directivity horn. The low and mid frequency sections shall be integrated by an internal 630Hz passive crossover network. The mid and high frequency sections shall be integrated by an internal 3kHz passive crossover network.

Performance of the loudspeaker system shall meet or exceed the following criteria:

Frequency response measured I metre on axis shall be $45Hz-20kHz\pm3dB$.

High frequency dispersion at -6dB points shall be $90^{\circ}H \times 40^{\circ}V$.

Power handling shall be 800W AES, 3200W peak LF \pm MF \pm HF.

Rated impedance shall be 4 ohms LF + MF + HF. Sensitivity I Watt/I metre shall be I00dB LF + MF + HF.

Dimensions LF: (W) 670mm x (H) 1010mm x (D) 470mm (26.4ins x 39.8ins x 18.5ins) MF/HF: (W) 490mm x (H) 385mm x (D) 290mm (19.3ins x 15.1ins x 11.4ins).

Weight LF: 63.8kg (140.4lbs) MF/HF: 9kg (19.8lbs).

The loudspeaker system shall be the Martin Audio Screen 4P.

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