

# Screen 4

Three-way bi-amp system

cinema

## features

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

## applications

- Behind screen placement
- Medium scale cinemas



The Screen 4 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 4 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° x 40° 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. A 3kHz passive crossover network ensures smooth transition between mid and HF horns. Full performance of the Screen 4 is normally achieved when configured for bi-amped operation using the Martin Audio CMX1A cinema controller to feed two separate amplifier channels driving the bass enclosure and horn section.

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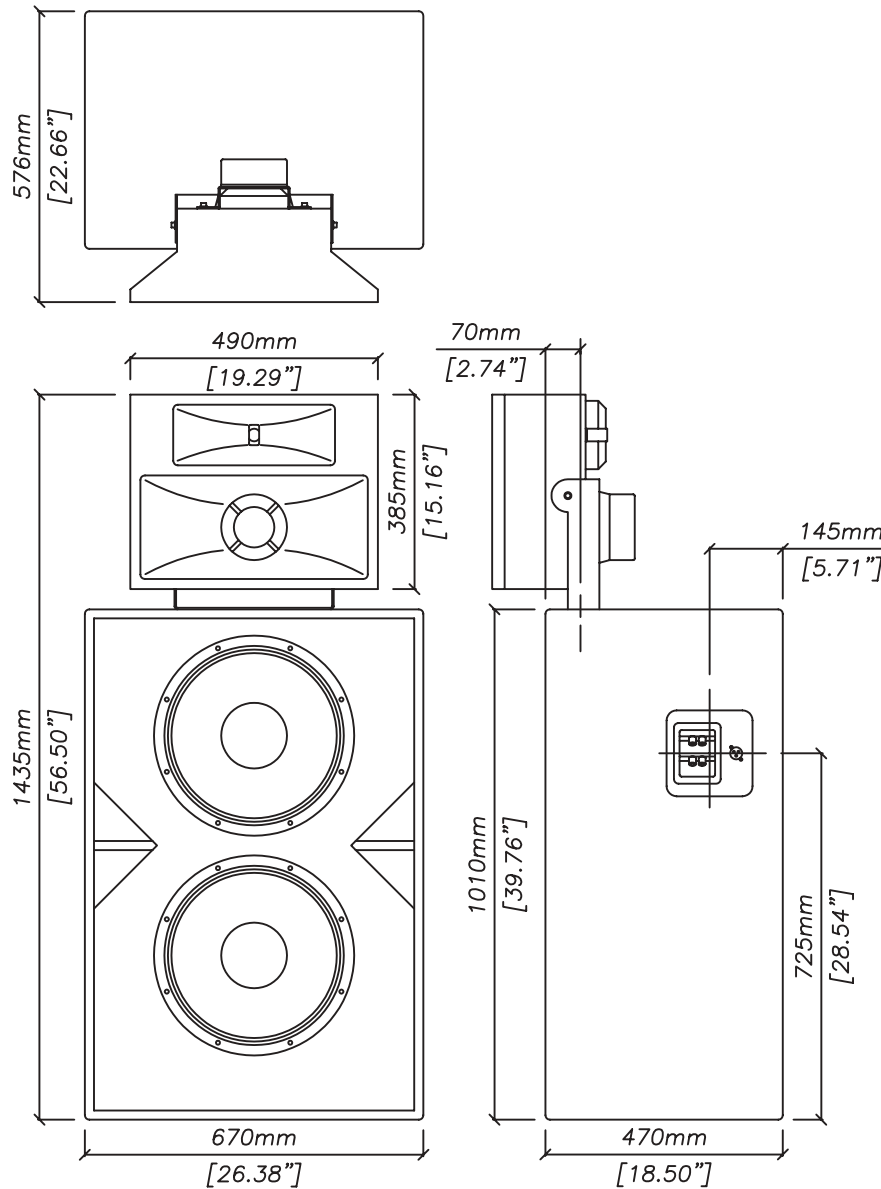


# Screen 4

Three-way bi-amp system

overall dimensions

cinema



SCREEN 4

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# Screen 4

Three-way bi-amp system

## technical specifications

|                        |  |
|------------------------|--|
| TYPE                   | Three-way bi-amp screen system   |
| FREQUENCY RESPONSE (1) | 45Hz-20kHz $\pm$ 3dB   |
| DRIVERS                | 2 x 15" (380mm) bass driver<br>6.5" (165mm) mid driver<br>1" (25mm) exit compression driver  |
| RATED POWER (2)        | LF: 800W AES, 3200W peak<br>MF + HF: 150W AES, 600W peak   |
| SENSITIVITY (3)        | LF: 100dB<br>MF + HF: 106dB  |
| NOMINAL IMPEDANCE      | LF: 4 ohms<br>MF + HF: 16 ohms   |
| DISPERSION (-6dB)      | 90° horizontal, 40° vertical   |
| CROSSOVER              | 630Hz active, 3kHz passive   |
| ENCLOSURE              | Vented   |
| FINISH                 | Matt black   |
| CONNECTORS             | Binding Posts  |
| DIMENSIONS             | LF: (W) 670mm x (H) 1010mm x (D) 470mm<br>(W) 26.4ins x (H) 39.8ins x (D) 18.5ins<br>MF/HF: (W) 490mm x (H) 385mm x (D) 290mm<br>(W) 19.3ins x (H) 15.1ins x (D) 11.4ins |
| WEIGHT                 | LF: 61kg (134.5lbs) MF/HF: 9kg (19.8lbs)   |

### Notes

- (1) Measured on-axis in half space at 2 metres, then referred to 1 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, then referred to 1 metre.
- (4) Measured in half space conditions at 2 metres using band limited pink noise, then referred to 1 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 bi-amp 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 loudspeaker system shall be operated with a separate electronic controller providing a 630Hz crossover between low and mid/high frequency sections. The mid and high frequency sections shall be integrated by an internal 3kHz passive crossover network.

Performance of the loudspeaker system with its electronic controller shall meet or exceed the following criteria:

Frequency response measured 1 metre on axis shall be 45Hz-20kHz  $\pm$  3dB.

High frequency dispersion at -6dB points shall be 90°H x 40°V.

Power handling shall be 800W AES, 3200W peak LF, 150W AES, 600W peak MF + HF.

Rated impedance shall be 4 ohms LF, 16 ohms MF + HF.

Sensitivity 1 Watt/1 metre shall be 100dB LF, 106dB 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: 61kg (134.5lbs) MF/HF: 9kg (19.8lbs).

The loudspeaker system shall be the Martin Audio Screen 4.

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