# Screen 6B

Three-way bi-amp system

### features

- Three-way design
- Bi-amp operation
- Very low distortion mid-range
- Full pattern control to 300Hz
- ▶ 90° x 50° dispersion

## applications

- Behind screen placement
- Large scale cinemas



The Screen 6B full-range system has been developed for use in large to very large-scale cinema environments. The system consists of a  $4 \times 15^{\circ}$  (380mm) low frequency section plus a unique mid-range unit and high frequency horn which exhibits ideal pattern control across its operating range from 300Hz-20kHz.

The compound mid-range/HF horn has been engineered to overcome the distortion and power handling constraints of the traditional 2-way approach, where a single large format compression driver is used to produce both mid and high frequencies.

The mid section of the Screen 6B features a 6.5" (165mm) treated cone driver mounted on a large  $90^\circ$  x  $50^\circ$  horn which offers true pattern control down to 300Hz in both the horizontal and vertical planes. The driver is loaded by the Martin trademark 'phase-ball' device to maintain consistent off-axis performance right across the mid-band. Above 2kHz, high frequencies are generated by a 1" (25mm) exit compression driver with dispersion characteristics which exactly match the mid.

The combined response of the mid-range and high frequency horns is exceptionally smooth, both on and off-axis, ensuring uniform, high quality sound reproduction throughout the cinema auditorium. The bracket supplied to mount the mid-range/HF horn can be easily adjusted in both planes.

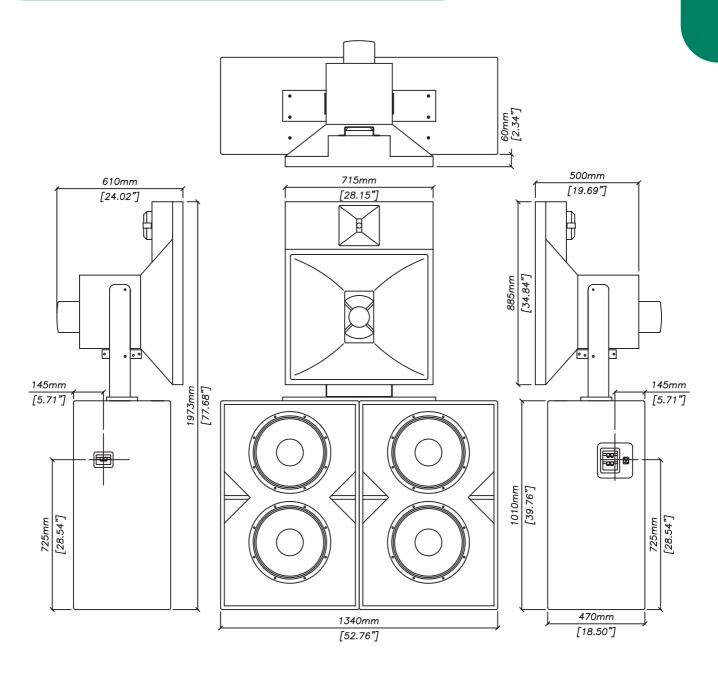
The Screen 6B would normally be operated as a bi-amped system using the Martin Audio CMX2A Cinema Controller.



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overall dimensions



SCREEN 6B

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# Screen 6B

Three-way bi-amp system

# technical specifications

TYPE	Three-way bi-amp screen system
FREQUENCY RESPONSE (I)	$45Hz-20kHz \pm 3dB$
DRIVERS	4 x 15" (380mm) bass driver
	6.5" (165mm) mid driver
	I" (25mm) exit compression driver
RATED POWER (2)	LF: 1600W AES, 6400W peak
	MF + HF: 150W AES, 600W peak
SENSITIVITY (3)	LF: 103dB
	MF + HF: 107dB
NOMINAL IMPEDANCE	LF: 2 x 4 ohms
	MF + HF: 8 ohms
DISPERSION (-6dB)	90° horizontal, 50° vertical
CROSSOVER	420Hz active, 2kHz passive
ENCLOSURE	Vented
FINISH	Matt black
CONNECTORS	Binding Posts
DIMENSIONS	LF: (W) 1340mm x (H) 1010mm x (D) 470mm
	(W) 52.8ins x (H) 39.8ins x (D) 18.5ins
	MF/HF: (W) 715mm x (H) 885mm x (D) 610mm
	(W) 28. lins x (H) 34.8ins x (D) 24ins
WEIGHT	LF: 2 x 61kg (134.5lbs) MF/HF: 18kg (39.6lbs)
	<b>5</b> , , <b>5</b> , ,

#### 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, then referred to 1 metre.
- (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 biamp type supplied in three separate sections. The two bass sections shall each consist of two 15" (380mm) direct radiating reflex loaded low frequency transducers in a shallow profile enclosure. The large format compound horn section shall consist of one 6.5" (165mm) treated cone driver mounted on a 90° x 50° horn with a 'phase-ball' loading device and one 1" (25mm) exit HF compression driver mounted on a 90° x 50° constant directivity horn. The loudspeaker system shall be operated with a separate electronic controller providing a 420Hz crossover between low and mid/high frequency sections. The mid and high frequency sections shall be integrated by an internal 2kHz passive crossover network.

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

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

High frequency dispersion at -6dB points shall be  $90^{\circ} H \times 50^{\circ} V$ .

Power handling shall be 1600W AES, 6400W peak LF, 150W AES, 600W peak MF + HF.

Rated impedance shall be 2 x 4 ohms LF, 8 ohms MF  $\pm$  HF

Sensitivity I Watt/I metre shall be 103dB LF, 106dB MF + HF.

Dimensions LF: (W) 1340mm x (H) 1010mm x (D) 470mm (52.8ins x 39.8ins x 18.5ins) MF/HF: (W) 715mm x (H) 885mm x (D) 610mm (28.1ins x 34.8ins x 24ins).

Weight LF: 2 x 61kg (134.5lbs) MF/HF: 18kg (39.6lbs).

The loudspeaker system shall be the Martin Audio Screen 6B.

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