

Three-way full range system

features

- Very high SPL capability
- Full frequency performance
- Arrayable trapezoid cabinet
- Three-way horn loaded system
- Constant 55° dispersion
- Switchable active/passive HF
- Suitable for flown or ground stacked use
- Load certified MAN flying points

applications

- Large scale theatre and live sound touring
- Fixed installations multi-purpose auditoria, theatres, sports arenas



The W8 is a highly efficient 3-way touring sound reinforcement system which achieves full-frequency performance down to 80Hz. Its 55° horizontal dispersion pattern and trapezoid footprint allows it to be arrayed to suit a variety of medium and large scale theatre and live sound applications.

Each W8 enclosure houses a vertically splayed dual 12" (300mm) driver low-mid horn to cover the frequency band from 80Hz to 750Hz. The high-mid band between 750Hz and 3.5kHz is produced by a specially developed 6.5" (165mm) treated cone driver loaded by a unique toroidal phase plug and horn which maintains constant 55° horizontal dispersion over the entire operating range of the device. High frequencies are generated by a 1" (25mm) exit compression driver on a constant Q HF horn with dispersion characteristics engineered to match the high-mid.

Use of twin 12" (300mm) drivers for the low-mid allows the W8 to operate down to 80Hz. This makes it a very flexible system, capable of full-range performance on its own and making additional low-frequency enclosures a performance enhancing option rather than a necessity.

The W8 is built from multi-laminate birch plywood and is fully equipped for touring with rear castors, grille protection, top and bottom mounted flip-handles and pocket handles on the cabinet sides. It is fitted with load certified MAN flying points which link between cabinets to provide a fast and secure means of assembling an array.

The W8 can be actively driven 3-way or can alternatively be switched to 2-way operation with the high-mid to HF transition performed by an internal 3.5kHz passive crossover.

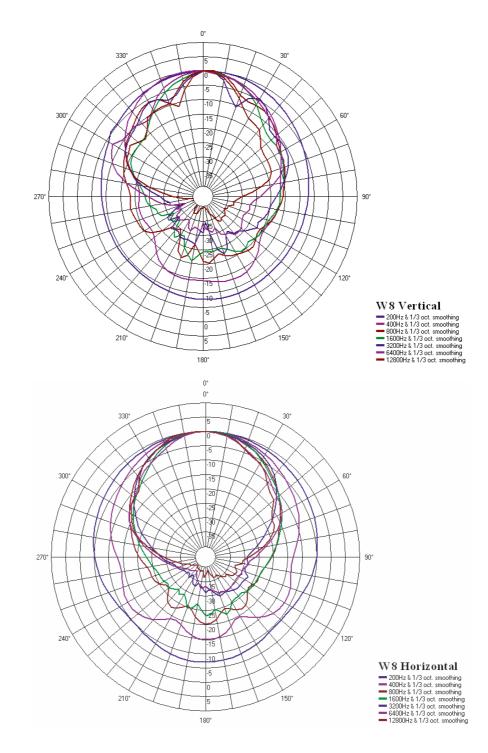
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polar plots



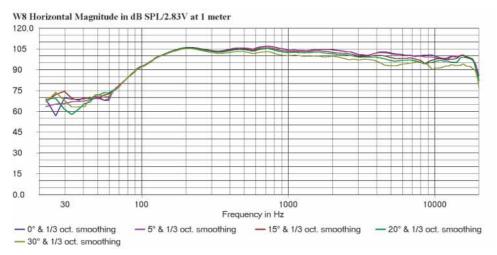
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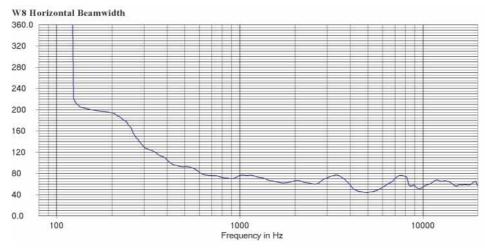


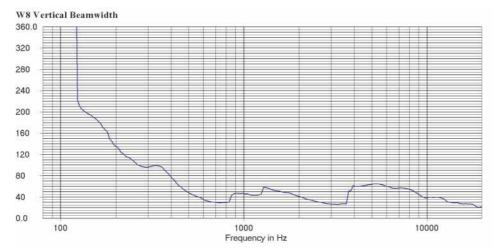
W8

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frequency responses



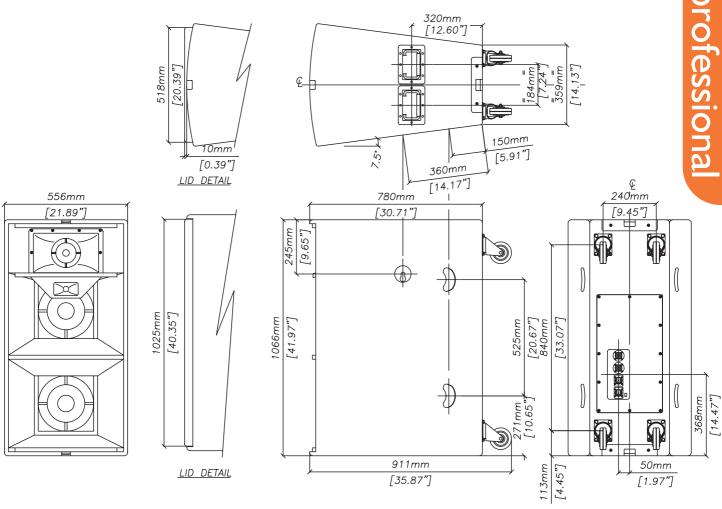




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overall dimensions



<u>W8</u>

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technical specifications

TYPE	Three-way full-range trapezoid, switchable
	active/passive HF
FREQUENCY RESPONSE (I)	120Hz-18kHz ± 3dB
	80Hz @ -10dB
DRIVERS	2 x 12" (300mm) low-mid horn
	6.5" (165mm) high-mid horn
	I" (25mm) exit HF compression driver
RATED POWER (2)	Low-mid: 400W AES, 1600W peak
	High-mid/(High-mid + HF): I50W AES, 600W peak
	HF: 60W AES, 240W peak
RECOMMENDED AMPLIFIER	400-550W into 4 ohms
SENSITIVITY (3)	Low-mid: 106dB
	High-mid/(High-mid + HF): 108dB
	HF: 107dB
MAXIMUM SPL (4)	129dB continuous, 135dB peak
NOMINAL IMPEDANCE	LF: 8 ohms
	High-mid/(High-mid + HF): 16 ohms
	HF: 16 ohms
DISPERSION (-6dB)	55° horizontal, 30° vertical
CROSSOVER	750Hz active, 3.5kHz active/passive
FINISH	Textured grey paint
PROTECTIVE GRILLE	Grey perforated steel
CONNECTORS	2 x Neutrik NL8, 2 x EP8
FITTINGS	2 x MAN Flying points
DIMENSIONS (inc. wheels)	(W) 556mm x (H) 1066mm x (D) 780mm (911mm)
	(W) 21.9ins x (H) 42ins x (D) 30.7ins (35.9ins)
WEIGHT	90kg (198lbs)

accessories

W8FKII	Flying chain assembly
HTKQF8	Quick release flying stud / D-ring
HTKHIS	Heavyweight install stud

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 I watt input, using band limited pink noise,
- (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 type with switchable active/passive HF. The low-mid section shall consist of two 12" (300mm) cone transducers mounted on a horn flare with a precision moulded waveguide. The high-mid section shall consist of a 6.5" (165mm) cone driver mounted on a constant directivity horn flare with integral toroidal waveguide. The high frequency section shall consist of a I" (25mm) exit HF compression driver mounted on a constant directivity horn which shall be internally protected for signals below its intended passband by a power and frequency matching network. The enclosure shall be of the heavily braced multi-laminate trapezoidal plywood type.

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 $120Hz-18kHz \pm 3dB$.

High frequency dispersion at -6dB points shall be 55°H x 30°V.

Power handling shall be 400W AES, 1600W peak Lowmid, I50W AES, 600W peak High-mid/(HF), 60W AES, 240W peak HF.

Rated impedance shall be 8 ohms Low-mid, 16 ohms High-mid/(HF), 16 ohms HF.

Maximum SPL measured at I metre on axis shall be 129dB continuous, 135dB peak.

Dimensions (W) 556mm x (H) 1066mm x (D) 911mm (21.9ins x 42ins x 35.9ins). Weight 90kg (198lbs).

The loudspeaker system shall be the Martin Audio W8.



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