

# W3

Arrayable three-way compact trapezoid system

## features

- ▶ Arrayable compact trapezoid enclosure
- ▶ Bi-amplified three-way system
- ▶ Very high SPL output capability
- ▶ 65° coverage angle from compound mid/high horn
- ▶ Multi-laminate birch plywood construction
- ▶ Certified MAN quick-connect flying option

## applications

- ▶ Theatre sound systems
- ▶ Club sound reinforcement
- ▶ Underslung/infill for concert sound reinforcement
- ▶ Music playback in nightclubs
- ▶ On-stage instrument monitor



touring and theatre

Extremely versatile, the Wavefront W3 is a unique, innovative full-range system, utilising advanced Martin Audio engineering to achieve true three-way full frequency performance from an enclosure only 28" high. It delivers the clarity required for speech and music applications as well as the power, warmth and depth to generate an exciting live sound or playback experience in nightclubs.

The low frequency driver is a powerful 15" (380mm) transducer cooled by a heat exchange system developed to reduce power compression. Mid-range and high frequencies are generated by a unique mid/HF horn featuring the same technology used in Wavefront 8 touring systems. The mid-range and high frequency horns are designed to have matched coverage patterns to ensure that they combine perfectly both on and off-axis.

Century Point, Halifax Road, Cressex Business Park,  
High Wycombe, Buckinghamshire HP12 3SL, England.  
Telephone: +44 (0)1494 535312 Facsimile: +44 (0)1494 438669  
E-mail: [info@martin-audio.com](mailto:info@martin-audio.com)  
All information is Copyright © 2011 Martin Audio Ltd.

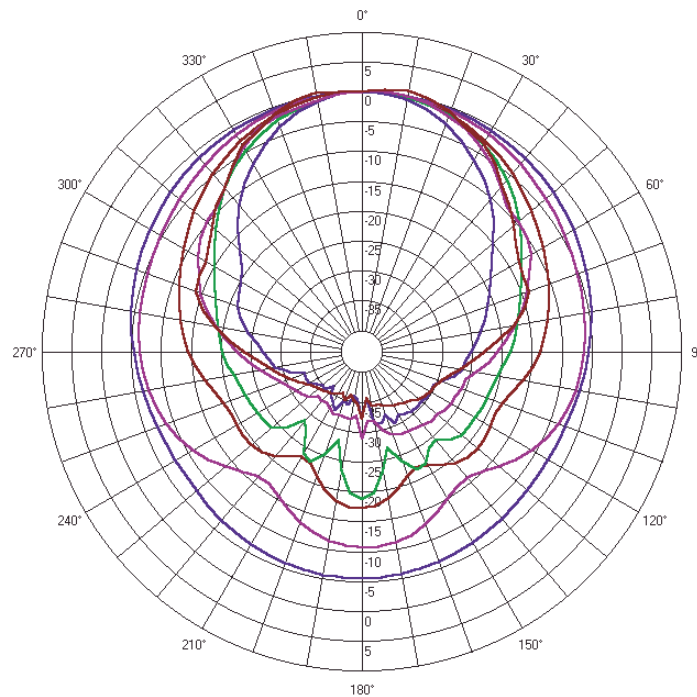
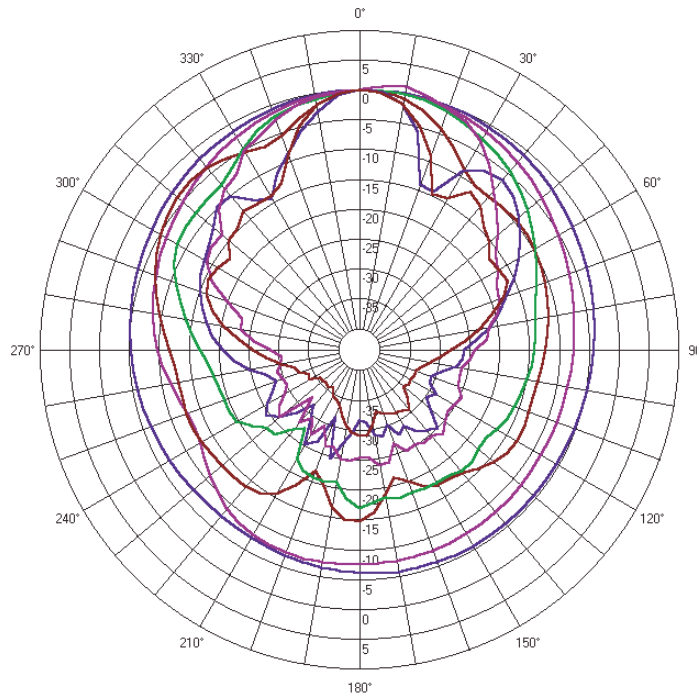


# W3

Arrayable three-way compact trapezoid system

polar plots

touring and theatre



Century Point, Halifax Road, Cressex Business Park,  
High Wycombe, Buckinghamshire HP12 3SL, England.  
Telephone: +44 (0)1494 535312 Facsimile: +44 (0)1494 438669  
E-mail: [info@martin-audio.com](mailto:info@martin-audio.com)  
All information is Copyright © 2011 Martin Audio Ltd.



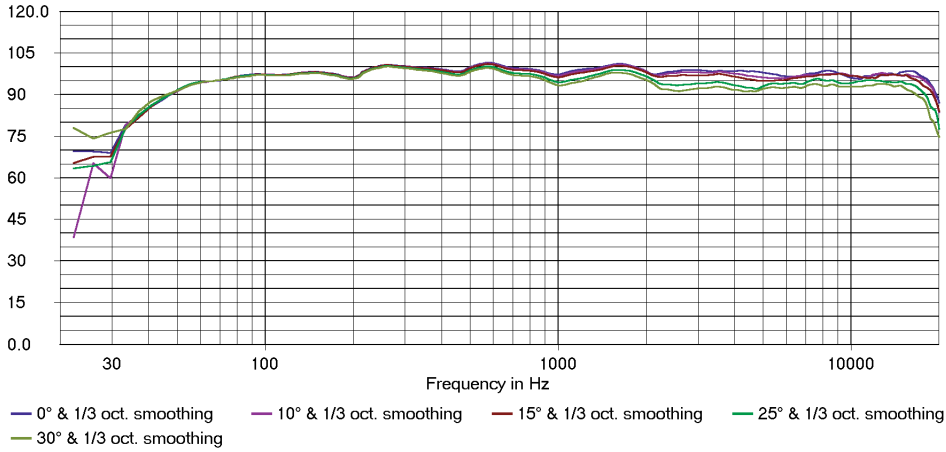
# W3

Arrayable three-way compact trapezoid system

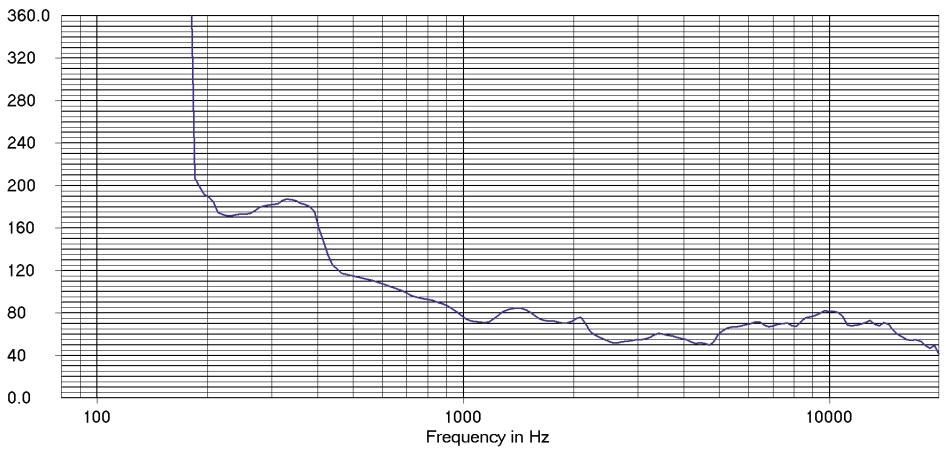
frequency responses

touring and theatre

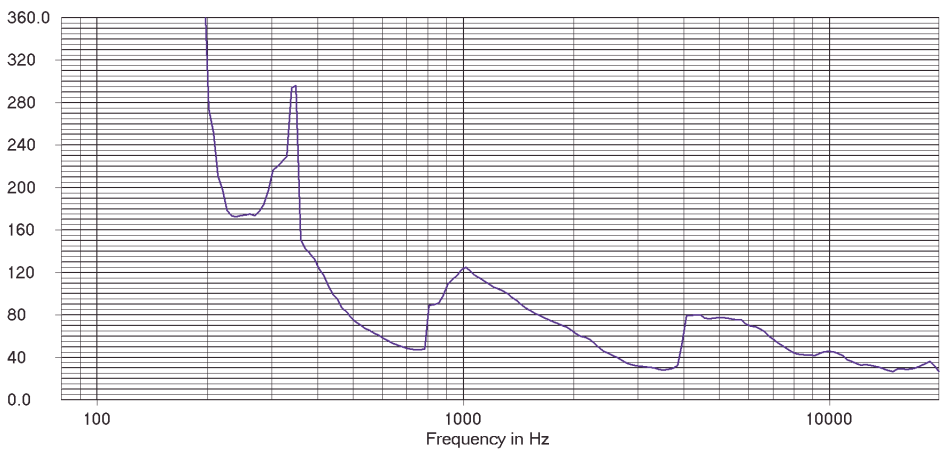
W3 Horizontal Magnitude in dB SPL/2.83V at 1 meter



W3 Horizontal Beamwidth



W3 Vertical Beamwidth



Century Point, Halifax Road, Cressex Business Park,  
High Wycombe, Buckinghamshire HP12 3SL, England.  
Telephone: +44 (0)1494 535312 Facsimile: +44 (0)1494 438669  
E-mail: [info@martin-audio.com](mailto:info@martin-audio.com)  
All information is Copyright © 2011 Martin Audio Ltd.

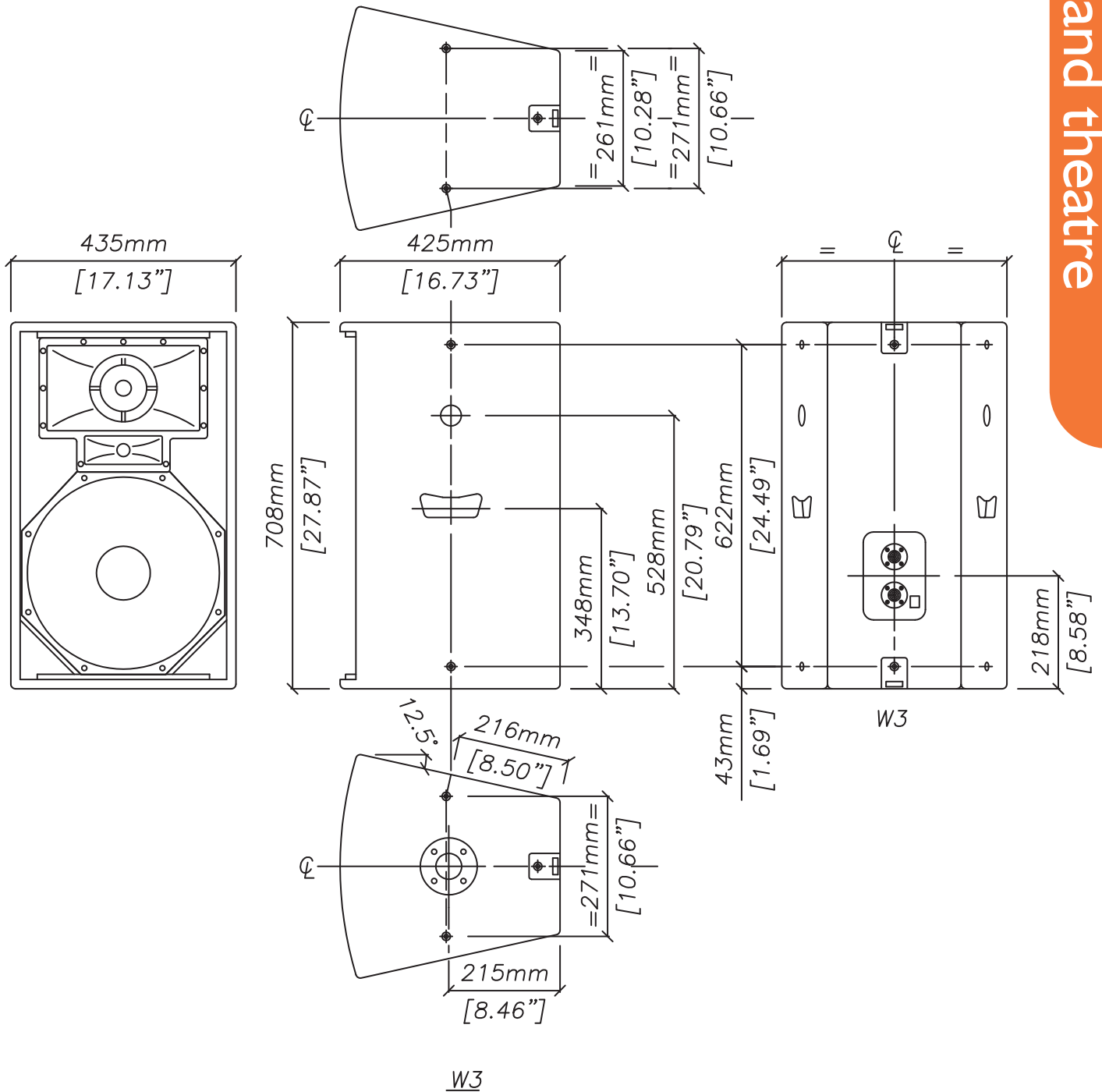


# W3

Arrayable three-way compact trapezoid system

overall dimensions

touring and theatre



Century Point, Halifax Road, Cressex Business Park,  
High Wycombe, Buckinghamshire HP12 3SL, England.  
Telephone: +44 (0)1494 535312 Facsimile: +44 (0)1494 438669  
E-mail: info@martin-audio.com  
All information is Copyright © 2011 Martin Audio Ltd.



# W3

## Arrayable three-way compact trapezoid system

### technical specifications

TYPE	Compact bi-amplified three-way trapezoid
FREQUENCY RESPONSE (5)	55Hz-18kHz $\pm$ 3dB -10dB @ 45Hz
DRIVERS	15" (380mm) / 3" (75mm) voice coil 6.5" (165mm) horn loaded mid-range 1" (25mm) exit HF compression driver
RATED POWER (2)	LF: 400W AES, 1600W peak MF + HF: 150W AES, 600W peak
RECOMMENDED AMPLIFIER	MA3.0
SENSITIVITY (6)	LF: 100dB MF + HF: 104dB
MAXIMUM SPL (calculated @ 1m)	126dB continuous, 132dB peak
NOMINAL IMPEDANCE	LF: 8 ohms MF + HF: 16 ohms
DISPERSION (-6dB)	65° horizontal, 40° vertical
CROSSOVER	650Hz active via DX1.5 or DX2 controller 3.3kHz passive
FINISH	Textured grey paint
PROTECTIVE GRILLE	Grey perforated steel
CONNECTORS	2 x Neutrik NL4
FITTINGS	8 x M8, 4 x M6 threaded inserts 1 x mounting pole socket 2 x MAN blanking plates 2 x rear kelp fittings
DIMENSIONS	(W) 435mm x (H) 708mm x (D) 425mm (W) 17.1ins x (H) 27.9ins x (D) 16.7ins
WEIGHT	31.5kg (69lbs)

### accessories

HTKWT3Y	Flying yoke
HTKCT05	8mm Shouldered eye bolt
GPT060	Fitted enclosure flying points
HTKLI5	Lightweight install stud

### 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 at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (4) Measured in half space at 2 metres using band limited pink noise, then referred to 1 metre.
- (5) Measured on-axis in open (4 $\pi$ ) space at 2 metres, then referred to 1 metre.
- (6) Measured in open (4 $\pi$ ) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (7) Measured in open (4 $\pi$ ) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (8) Measured in open (4 $\pi$ ) space at 2 metres with 2.83V input, using band limited pink noise, then referred to 1 metre.
- (9) Calculated at 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 consisting of one 15" (380mm) direct radiating reflex loaded low frequency transducer, one 6.5" (165mm) cone driver mounted on a constant directivity horn flare with integral toroidal waveguide and one 1" (25mm) exit HF compression driver mounted on a constant directivity horn in a trapezoidal plywood enclosure. The enclosure shall be fitted with an integral pole mounting socket and threaded inserts for wall and ceiling mounting. The loudspeaker shall be operated with a separate electronic controller providing a 650Hz crossover between low and mid/high frequency sections. Mid and high frequency sections shall be integrated by an internal 3.3kHz 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 55Hz-18kHz  $\pm$  3dB.

High frequency dispersion at -6dB points shall be 65° H x 40° V.

Power handling shall be 400W AES, 1600W peak LF, 150W AES, 600W peak MF+HF.

Rated impedance shall be 8 ohms LF, 16 ohms MF+HF. Maximum SPL measured at 1 metre on axis shall be 126dB continuous, 132dB peak.

Dimensions (W) 435mm x (H) 708mm x (D) 425mm (17.1ins x 27.9ins x 16.7ins).

Weight 31.5kg (69lbs).

The loudspeaker system shall be the Martin Audio W3.