

# AM906

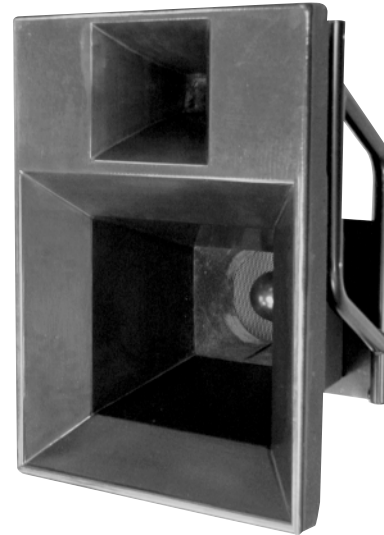
Large format mid/high horn

## features

- ▶ 90° x 60° large format horn
- ▶ High SPL mid/high install system
- ▶ Lightweight composite construction
- ▶ Port assisted, large format 10" (250mm) mid horn
- ▶ 1.4" (35mm) exit high frequency horn
- ▶ Constant directivity in both horizontal and vertical planes

## applications

- ▶ Sports Stadia
- ▶ Arenas
- ▶ Exhibition halls



The AM906 is an extended range mid/high system which has been developed specifically for large scale install applications such as arenas and stadia. It can be used in either a bi-amplified or optional 2-way passive configuration. As a stand-alone system it provides exceptional intelligibility over its uniform 90° x 60° coverage pattern. For full-range music reproduction, it can also be used in conjunction with the ASI 18 low-frequency loudspeaker.

The mid horn section utilises a 10" (250mm) cone driver loaded by a unique "phase-ball" device which ensures consistent off-axis performance across the midband and avoids "beaming" at the upper end of the frequency range. Extended performance down to 135Hz @ -10dB is achieved by reflex porting the rear chamber of the driver. A low distortion motor system ensures clarity of output and consistency of tonal balance even at extreme power levels.

High frequencies are reproduced by a 1.4" (35mm) exit compression driver loaded by a 90° x 60° horn with a dispersion pattern which exactly matches the mid.

The mid and high frequency sections feature large-format, square-mouth horn designs to ensure that their constant directivity characteristics are maintained down to the same frequency in both horizontal and vertical planes.

The AM906 is constructed from a weather resistant, lightweight composite material and is equipped with comprehensive mounting points to allow for flexible install and arraying requirements.

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)  
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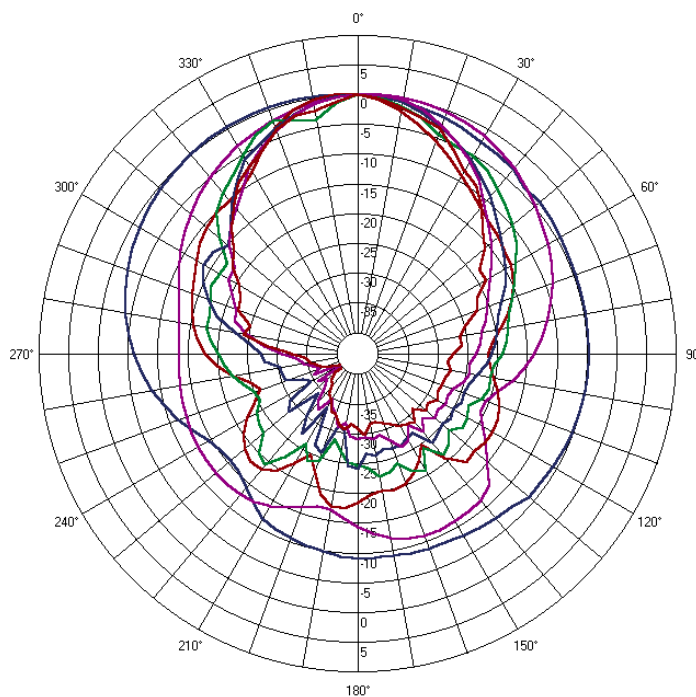


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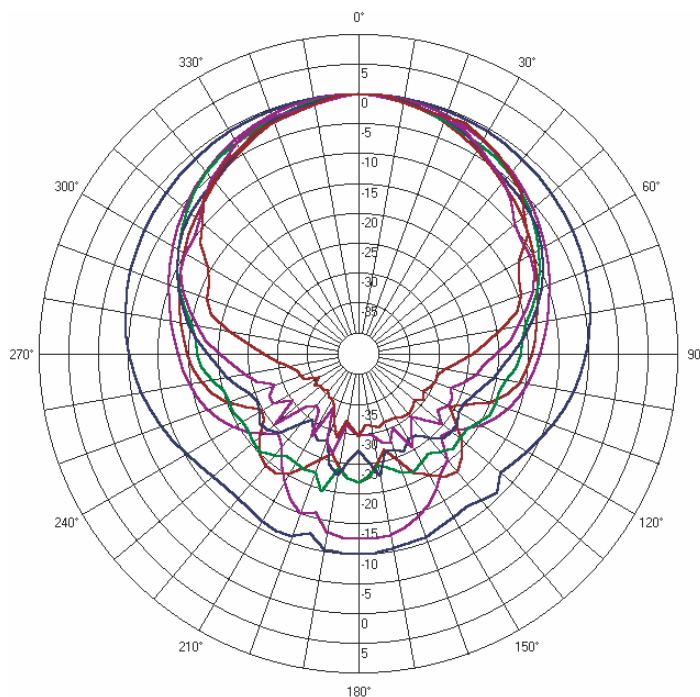
polar plots

architectural



**AM906 Vertical**

- 200Hz & 1/3 oct. smoothing
- 400Hz & 1/3 oct. smoothing
- 800Hz & 1/3 oct. smoothing
- 1600Hz & 1/3 oct. smoothing
- 3200Hz & 1/3 oct. smoothing
- 6400Hz & 1/3 oct. smoothing
- 12800Hz & 1/3 oct. smoothing



**AM906 Horizontal**

- 200Hz & 1/3 oct. smoothing
- 400Hz & 1/3 oct. smoothing
- 800Hz & 1/3 oct. smoothing
- 1600Hz & 1/3 oct. smoothing
- 3200Hz & 1/3 oct. smoothing
- 6400Hz & 1/3 oct. smoothing
- 12800Hz & 1/3 oct. smoothing

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E-mail: [info@martin-audio.com](mailto:info@martin-audio.com)  
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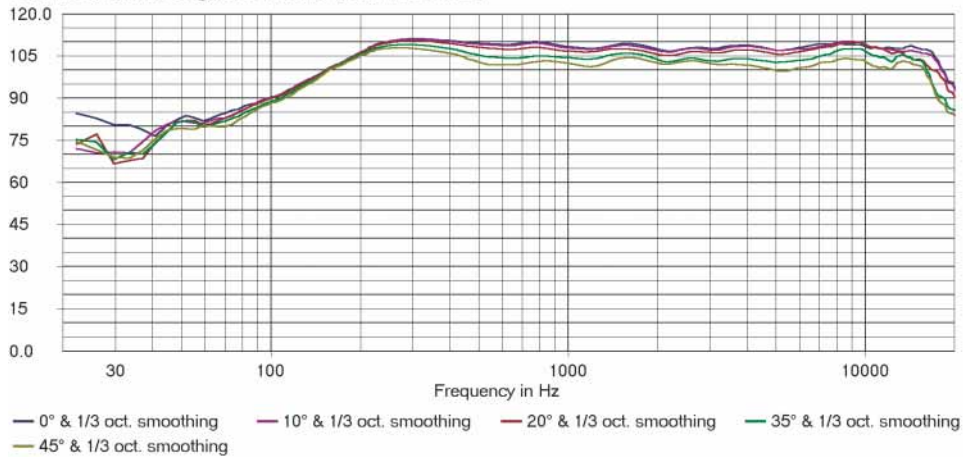
# AM906

Large format mid/high horn

frequency responses

architectural

AM906 Horizontal Magnitude in dB SPL/2.83V at 1 meter



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E-mail: [info@martin-audio.com](mailto:info@martin-audio.com)  
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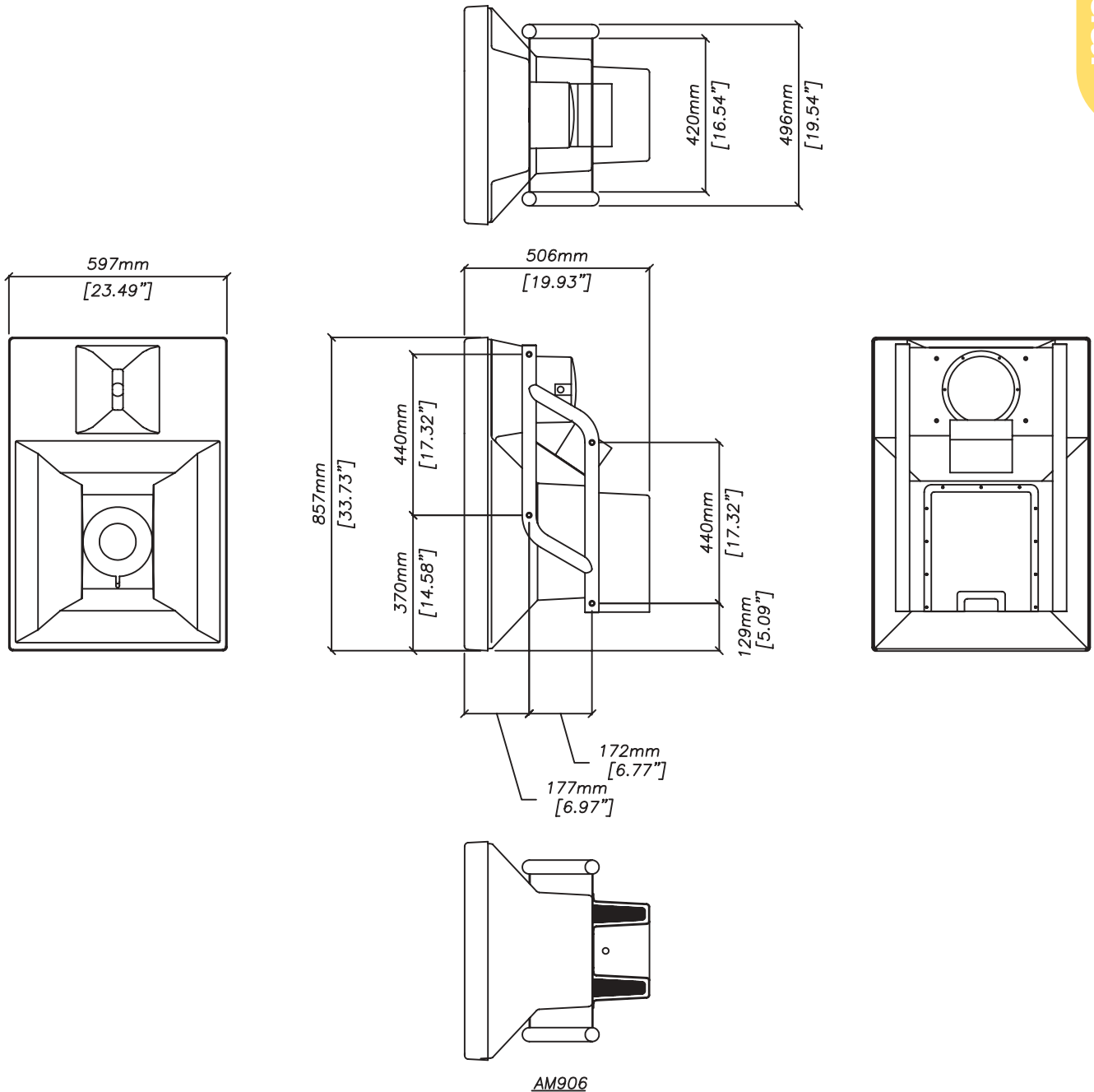


# AM906

Large format mid/high horn

overall dimensions

architectural



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# AM906

Large format mid/high horn

## technical specifications

TYPE	Two-way large format mid/high horn
FREQUENCY RESPONSE (1)	165Hz-18kHz $\pm$ 3dB 135Hz @ -10dB
DRIVERS	10" (250mm) midrange driver 1.4" (35mm) exit HF compression driver
RATED POWER (2)	MF: 400W AES, 1600W peak HF: 150W AES, 600W peak Passive 2-way: 400W AES, 1600W peak
SENSITIVITY (3)	MF: 108dB HF: 106dB Passive 2-way: 107dB
MAXIMUM SPL (calculated)	MF: 134dB continuous, 140dB peak HF: 128dB continuous, 134dB peak Passive 2-way: 133dB continuous, 139dB peak
NOMINAL IMPEDANCE	MF: 8 ohms, HF: 8 ohms Passive 2-way: 8 ohms
DISPERSION (-6dB)	90° horizontal, 60° vertical
CROSSOVER	1.5kHz active or passive
CONSTRUCTION	Lightweight weather resistant composite
CONNECTORS	3m flying leads
MOUNTING	Yoke or via 8 flying points to fit M12 bolts
DIMENSIONS	(W) 597mm x (H) 857mm x (D) 506mm (W) 23.5ins x (H) 33.7ins x (D) 20ins
WEIGHT	34kg (76lbs)
OPTIONS	Passive 2-way crossover 150W 70/100 volt line transformer

## architectural and engineering specifications

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 165Hz-18kHz  $\pm$  3dB.

High frequency dispersion at -6dB points shall be 90° H x 60° V.

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

Rated impedance shall be 8 ohms MF & HF.

Maximum SPL calculated at 1 metre on axis shall be 134dB continuous, 140dB peak MF, 128dB continuous, 134dB peak HF.

Dimensions (W) 597mm x (H) 857mm x (D) 506mm (23.5ins x 33.7ins x 20ins).

Weight 34kg (76lbs).

The loudspeaker system shall be the Martin Audio AM906.

### 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.

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