

# THS

## 15" Triaxial Point Source Loudspeaker

**TH**  
SERIES

### Features

- Bi-amp three-way loudspeaker system
- Compact trapezoid enclosure with very high output capability
- Triaxial Point Source configuration with user-rotatable mid/high frequency horn
- 15" (380mm)/4" (100mm) voice coil, low distortion neodymium LF driver
- 4" (100mm) HT polymer ring radiator/1.4" (35mm) exit MF driver
- 2.5" (64mm) HT polymer ring radiator/1.4" (35mm) exit HF driver
- 85° H x 50° V dispersion
- Supported by DISPLAY 3 software

### Applications

- Touring, theatre and corporate AV events
- DJ and Club installation
- Medium-large scale installations including stadia



Capable of 135dB peak, THS is an extremely powerful point source loudspeaker which combines very high output with extended frequency response. It is ideally suited to medium-scale club applications and installations which call for exceptionally high sound levels from a compact, standalone loudspeaker system.

Packing three high-technology drivers into a relatively small trapezoid enclosure, its innovative three-way triaxial configuration delivers enhanced output for its size and gives it the edge over comparable two-way systems in terms of superior mid and high frequency performance. Adding a compact Martin Audio SX subwoofer to extend low frequency output creates a dynamic, four-way setup with a small footprint.

To ensure the most effective use of amplifier count, THS is designed to be bi-amplified, with an internal passive network performing the mid/high crossover function.

The THS triaxial driver is a remarkable, state-of-the art device. Its LF section comprises a reflex-loaded, high-specification 15" LF driver with a 4" coil, waterproof cone and neodymium magnet structure. A 4" midrange ring radiator and a 2.5" HF ring radiator, both with high temperature polymer diaphragms, are arranged coaxially at the rear of the LF driver and integrated into a 1.4" exit. This transitions through the magnet structure of the LF driver into an 85° x 50° horn. The horn itself is user rotatable, with a large mouth to maintain pattern control down through the midrange.

The durable birch plywood enclosure is finished in hardwearing textured paint and incorporates multiple threaded inserts to facilitate a variety of portrait and landscape mounting options — including eyebolt, yoke, pole and truss mounting. Twin handles assist installation and deployment. A steel grille with a triple-layer polyester backing protects the drivers and resists dust and water ingress.

Recommended amplifiers include Martin Audio iKON amplifiers with onboard DSP or VIA amplifiers used in conjunction with a DX4.0, DX0.6, or DX0.4 controller. THS systems can be modelled in 3D using DISPLAY 3 design and prediction software.

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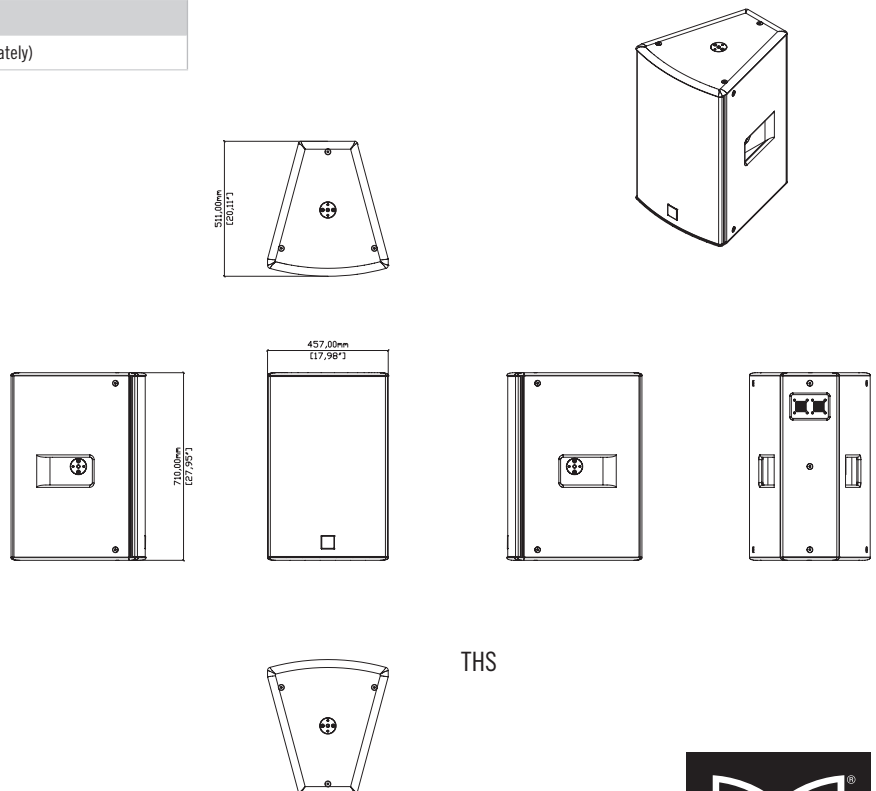
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### Technical Specifications

TYPE	Bi-Amp 3-way (Passive MF/HF) Loudspeaker
FREQUENCY RESPONSE (5)	54Hz-18kHz $\pm$ 3dB, -10dB @43Hz with preset
DRIVERS	LF: 15" (380mm) / 4" (100mm) coil neodymium motor MF: 1.4" (25mm) exit / 4" (100mm) coaxial HT polymer ring radiator HF: 1.4" (25mm) exit / 2.5" coaxial HT polymer ring radiator
RATED POWER	LF: 800W AES, 3200W Peak MF/HF: 110W AES, 440W Peak
RECOMMENDED AMPLIFIER	iK42, iK81 or VIA5002 with VIA2502
SENSITIVITY (6)	LF: 100dB MF/HF: 109dB
MAXIMUM SPL (9)	129dB continuous, 135dB peak
NOMINAL IMPEDANCE	LF: 8 Ohms MF/HF: 8 Ohms
DISPERSION (-6dB)	85° horizontal, 50° vertical
CROSSOVER	650Hz/4.8kHz
ENCLOSURE	Birch plywood
FINISH	Textured black finish
PROTECTIVE GRILLE	Black perforated steel
CONNECTORS	NLT4MPXX-BAG speakons (pair)
PIN CONNECTIONS (Input)	LF : 1+ / 1- , MF/HF : 2+/2-
PIN CONNECTIONS (Link)	1+ / 1- , 2+ / 2-
FITTINGS	13 x M10 fixings, 4 x M10 Bracket Mounting Points and Two Handle Pockets
DIMENSIONS	710mm (H) x 457mm (W) x 511mm (D) 27.95ins (H) x 17.98ins (W) x 20.11ins (D)
WEIGHT	35.6 kg / 78.48 lbs
ACCESSORIES	Portrait and landscape yokes (sold separately)

#### 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.



### Architectural Specifications

The loudspeaker shall be a three-way, triaxial system comprising a reflex-loaded 15" low frequency driver, a 4" ring-radiator midrange compression driver, and a 2.5" ring-radiator high frequency compression driver. The outputs of the mid and high frequency drivers shall be integrated into a 1.4" diameter exit which shall transition through the magnet structure of the low frequency driver into a horizontal constant directivity horn. The horn shall be user-rotatable to enable portrait or landscape deployment of the loudspeaker.

The loudspeaker shall be bi-amplified and operated in conjunction with a dedicated electronic controller or controller amplifier which shall provide a 650Hz crossover between low and mid/high frequency sections. The mid and high frequency devices shall be integrated by an internal 4.8kHz passive crossover network.

The dispersion pattern of the loudspeaker shall be 85° horizontal x 50° vertical. The on-axis frequency response shall be 54Hz-18kHz  $\pm$  3dB. The low and mid/high frequency sections of the loudspeaker shall each produce a maximum SPL of 135dB peak at 1 metre. Power handling shall be 800W AES, 3200W peak (LF) and 110W AES, 440W peak (MF + HF). Rated impedance shall be 8 ohms LF, 8 ohms MF + HF.

The loudspeaker enclosure shall be trapezoidal in shape, constructed from plywood and be finished with a hardwearing textured paint. It shall incorporate two pocket handles and be fitted with threaded inserts to accommodate eyebolt, yoke, pole and truss mounting accessory options. A perforated steel grille with a triple-layer polyester backing shall protect the driver components.

The rear connector panel shall be fitted with two NL4 type connectors.

Dimensions (W x H x D) shall be 457mm x 710mm x 511mm (17.98in x 27.95in x 20.11in). Weight shall be 35.6kg (78.48lbs).

The loudspeaker shall be the Martin Audio THS.

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