

# Blackline H3<sup>+</sup>

Three-way bi-amp trapezoid Hybrid®  
fully horn loaded

## features

- ▶ All-horn three-way system
- ▶ 'Phase-ball' loaded mid-driver
- ▶ Hybrid® LF section
- ▶ Fitted with handles and castors
- ▶ Five year limited warranty

## applications

- ▶ Larger club performance
- ▶ Large scale installs



The Blackline H3<sup>+</sup> is a very high performance, all-horn, three-way system in a single wide-bandwidth package. New drivers have been developed for improved performance in all bands. The Hybrid® low frequency section comprises a horn-loaded 15" (380mm)/4" (100mm) voice coil driver that is reflex loaded to extend the LF output to below the natural horn cut-off point. The new LF driver features a water resistant cone and triple roll surround for increased excursion.

The mid-horn of the H3<sup>+</sup> has a unique 'phase-ball' loading device which maintains the constant directivity characteristics of the horn at the upper end of its range. It is driven by a new 10" (250mm) midrange driver with an aluminium demodulating ring for improved high-mid clarity and reduced distortion when driven hard. The 70° x 40° HF section of the H3<sup>+</sup> features a neodymium 1" (25mm) exit compression driver with a Kapton diaphragm for high sensitivity and extended HF performance. The internal mid/high passive crossover allows this three-way system to be driven in a bi-amp configuration.

A Martin Audio M3<sup>+</sup> or DX1.5 Electronic Controller is available to provide H3<sup>+</sup> crossover and limiter facilities.

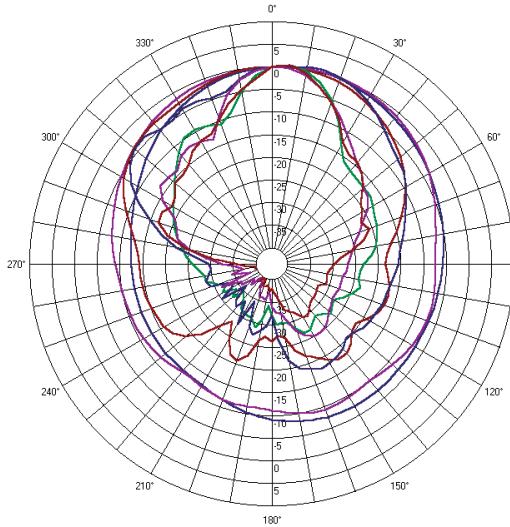
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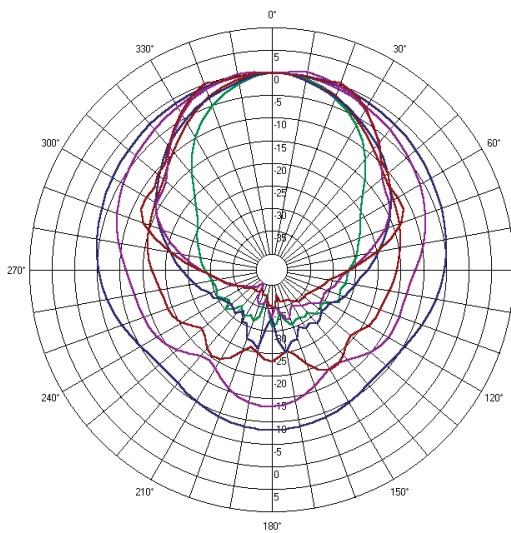
Three-way bi-amp trapezoid Hybrid®  
fully horn loaded

polar plots



## H3<sup>+</sup> Vertical

- 200Hz & 1/3 8ve
- 400Hz & 1/3 8ve
- 800Hz & 1/3 8ve
- 1600Hz & 1/3 8ve
- 3200Hz & 1/3 8ve
- 6400Hz & 1/3 8ve
- 12800Hz & 1/3 8ve



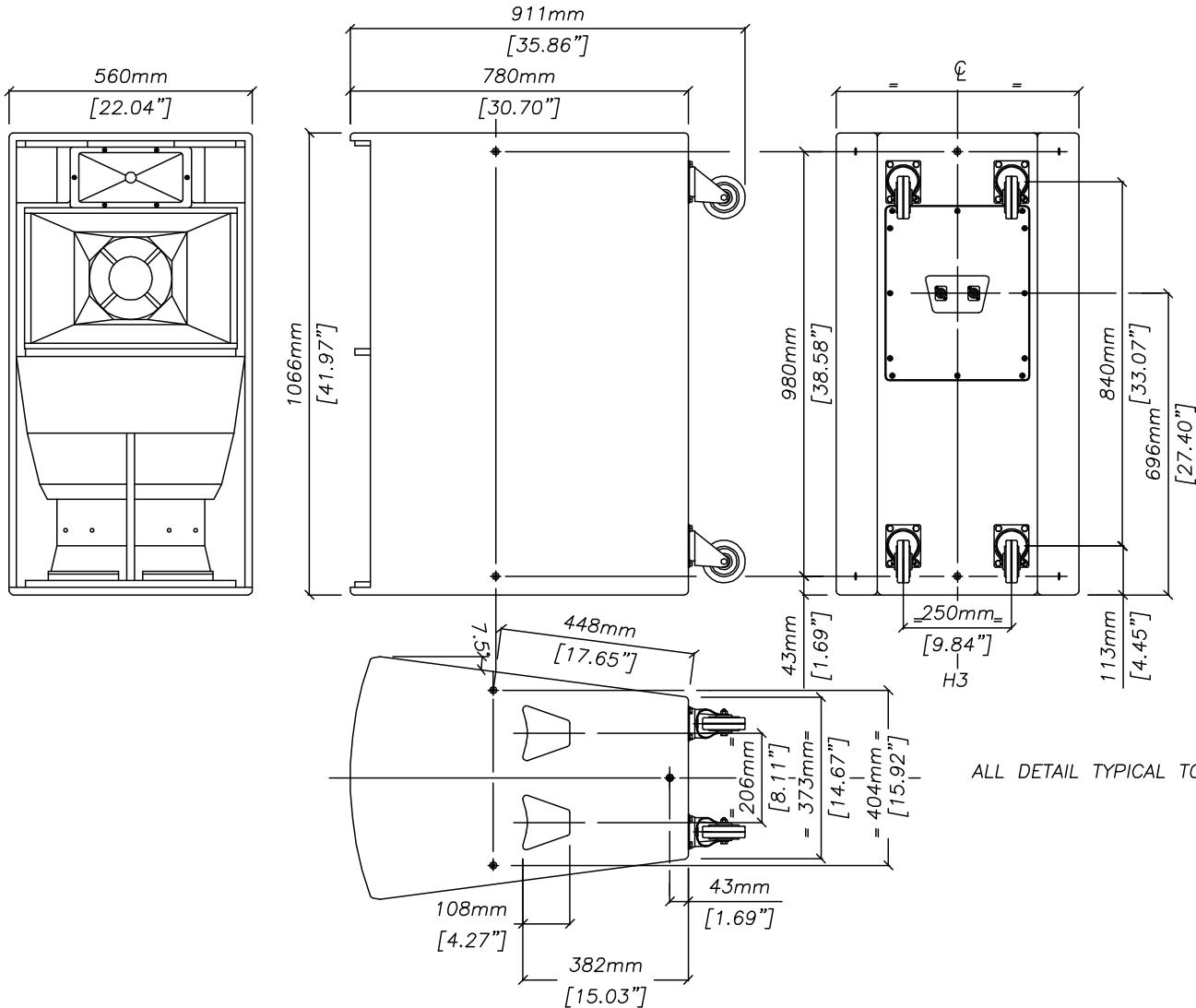
## H3<sup>+</sup> Horizontal

- 200Hz & 1/3 8ve
- 400Hz & 1/3 8ve
- 800Hz & 1/3 8ve
- 1600Hz & 1/3 8ve
- 3200Hz & 1/3 8ve
- 6400Hz & 1/3 8ve
- 12800Hz & 1/3 8ve

# Blackline H3<sup>+</sup>

Three-way bi-amp trapezoid Hybrid®  
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overall dimensions



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H3+

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## technical specifications

TYPE	Three-way bi-amp trapezoid Hybrid® fully horn loaded
FREQUENCY RESPONSE (5)	50Hz-18kHz ± 3dB
DRIVERS	15" (380mm)/4" (100mm) coil bass driver 10" (250mm)/2.5" (63.5mm) coil mid driver 1" (25mm) exit HF compression driver
RATED POWER (2)	LF: 750W AES, 3000W peak MF + HF: 300W AES, 1200W peak
RECOMMENDED AMPLIFIER	iK42, MA3.0
SENSITIVITY (6)	LF: 104dB, MF + HF: 104dB
MAXIMUM SPL (9)	133dB continuous, 139dB peak
NOMINAL IMPEDANCE	LF: 8 ohms, MF + HF: 8 ohms
DISPERSION (-6dB)	70° horizontal, 40° vertical
CROSSOVER	200Hz active, 2kHz passive
ENCLOSURE	250 litre, multi-laminate birch ply
FINISH	Textured black paint
PROTECTIVE GRILLE	Black perforated steel
CONNECTORS	2 x Neutrik NL4
PIN CONNECTIONS	LF+,- : 1+,1-, (MF + HF) +,- : 2+,2-
FITTINGS	12 x M10 inserts 4 x 4" (100mm) castors, 4 x pocket handles
DIMENSIONS (inc wheels)	(W) 560mm x (H) 1066mm x (D) 780mm (911mm) (W) 22ins x (H) 42ins x (D) 30.7ins (35.9ins)
WEIGHT	77.5kg (170.5lbs)

## accessories

HTKCT06 10mm Shouldered Eye Bolt for  
F215<sup>+</sup>, H3<sup>+</sup>, H3T<sup>+</sup>, H3H<sup>+</sup>

## 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 (4π) space at 2 metres, then referred to 1 metre.
- (6) Measured in open (4π) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (7) Measured in open (4π) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (8) Measured in open (4π) 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 trapezoidal three-way bi-amp Hybrid® fully horn loaded type, consisting of one 15" (380mm)/4" (100mm) voice coil horn and reflex loaded low frequency transducer, one 10" (250mm)/2.5" (63.5mm) voice coil horn loaded mid frequency transducer with a "phase-ball" loading device and one 1" (25mm) exit titanium diaphragm HF compression driver mounted on a constant directivity horn. The enclosure shall be of a multi-laminate birch ply construction with threaded inserts for wall and ceiling mounting and fitted with 4 pocket handles and 4" (100mm) castors for easy deployment. The loudspeaker shall be operated with a separate electronic controller providing a 200Hz 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 1 metre on axis shall be 50Hz-18kHz ±3dB.

High frequency dispersion at -6dB points shall be 70°H x 40°V.

Power handling shall be 750W AES, 3000W peak LF, 300W AES, 1200W peak MF + HF.

Rated impedance shall be 8 ohms LF, 8 ohms MF + HF. Maximum SPL calculated at 1 metre on axis shall be 133dB continuous, 139dB peak.

Dimensions (W) 560mm x (H) 1066mm x (D) 780mm (22ins x 42ins x 30.7ins).

Weight 77.5kg (170.5lbs).

The loudspeaker system shall be the Martin Audio H3<sup>+</sup>.

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