

**Flex Array series is a high performance modular loudspeaker system designed for use in a variety of medium scale line array or virtual point source sound reinforcement activities ranging from theatres and live music venues to corporate events and regional tours.**

The **TFA-600HWDP** is a networkable, digitally self-powered trapezoidal three-way enclosure combining a patent-pending Dendritic HF waveguide and a patented midrange Polyhorn™ in a single physically aligned waveguide with equal path length, ensuring a phase-coherent wavefront at the horn mouth. This geometry allows the enclosure's dispersion to be easily adapted to the implementation of a line array or a virtual point source application.

The TFA-600HWDP contains a 1" high frequency compression driver on a Dendritic horn, a 6.5" high-mid frequency driver on a patented Polyhorn™ device, and two Turbo-loaded 10" low-mid frequency drivers. It features a wider horizontal dispersion pattern (100°), and can be mixed with standard 75° Flex Array modules to tailor the horizontal dispersion to the venue.

The TFA-600HWDP features a new generation of innovative lightweight Class D amplifiers, utilising revolutionary 96kHz DSP technology to give operating efficiency in excess of 90%. Two independent amplifier channels power the LF and MF/HF drivers separately. A Neutrik™ Powercon connector provides mains input and

3-pin XLR's are used for input and parallel link signal connections. RJ45 network connectors enable multiple loudspeakers to be controlled and monitored over a BVNet network using TurboDrive™ software.

Neodymium drive units are used throughout in order to achieve the compact cabinet's exceptionally low net weight, making it convenient to transport, handle and rig. In addition the drive units are symmetrically arranged within the enclosure, which contributes to the smooth and consistent horizontal and vertical coverage.

The enclosure has both vertical and horizontal flying systems integrated into the cabinet in order to facilitate simple and intuitive rigging with a minimum of external parts. The horizontal, or A mode, system is used to create flown or ground-stacked line array configurations. The B mode vertical rigging system is used for single box and virtual point source applications. This flexibility of use is made possible by the rotatable mid/high section.

A flight-cased trucking system allows three cabinets to be pre-rigged and transported together.

The 15mm birch plywood cabinet is equipped with eight recessed handles on the sides, rear, top and bottom.



## FEATURES

- Digitally self-powered**
- Line array or virtual point source element**
- Ultra low distortion**
- 100°h x 16°v dispersion**
- 135dB max output**
- Trapezoidal enclosure**
- Neodymium drive units**
- Seamless arrayability**

## APPLICATIONS

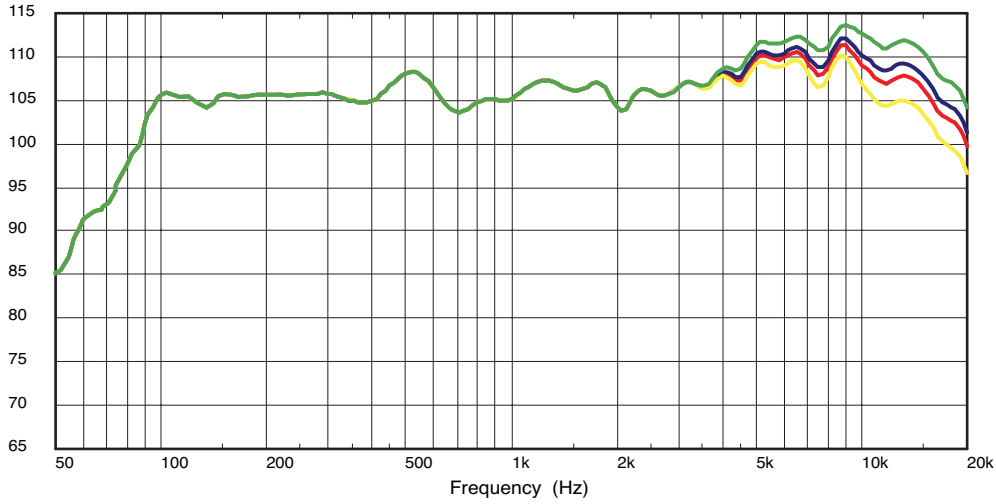
- House of Worship**
- Flown clusters**
- Ground-stacked touring**
- Concert Sound**
- Theatre and corporate**
- Live music venues**
- Dance clubs**

<b>DIMENSIONS (HxWxD)</b>	710mm x 304mm x 560mm (28" x 12" x 22")	
<b>NET WEIGHT</b>	43kg (94.6 lbs)	
<b>COMPONENTS</b>	2 x custom 10" (254mm) LMF driver, 1 x custom 6.5" (165mm) HMF driver on a midrange Polyhorn™, 1 x custom HF driver on a high frequency Dendritic device	
<b>FREQUENCY RESPONSE</b>	90Hz - 18kHz ±3dB, 80Hz - 20kHz ±10dB	
<b>DISPERSION<sup>2</sup></b>	100°H x 16°V @-6db points	
<b>CALCULATED MAX SPL</b>	Single enclosure: 129dB continuous (calculated SPL addition), 135dB peak	
<b>AMPLIFIER</b>	<b>TYPE:</b>	Class D inc SMPS and networked DSP
	<b>POWER OUTPUT:</b>	2 x 800 watts continuous @ 8 ohms (1kHz, 0.01% THD)
	<b>DYNAMIC RANGE:</b>	110dB
	<b>INPUT CLIP:</b>	10dBu
	<b>BANDWIDTH:</b>	20Hz - 20kHz ±0.5dB
	<b>POWER REQUIREMENTS:</b>	100V to 240V AC @ 50/60Hz
<b>CONSTRUCTION</b>	15mm (5/8") birch plywood throughout; rebated, screwed and glued. Finished in black semi-matt textured paint (optional TurboBlue™). Eight recessed carrying handles	
<b>GRILLE</b>	Powder coated perforated stainless steel with reticulated foam backing	
<b>CONNECTORS</b>	Input: (1) XLR female, Link (1) XLR male, pin 2 hot; (1) male Neutrik Powercon; (1) female Neutrik Powercon; (2) RJ4N network ports	
<b>SPARES AND ACCESSORIES</b>	MG-600H	Replacement cloth/expanded metal grille
	LS-1025	10" (254mm) LMF loudspeaker
	RC-1025	Recone kit
	LS-6507	6.5" (165mm) HMF loudspeaker
	CD-117	HF driver
	RD-117	Replacement diaphragm
	TFA-600HWDP AMP	Replacement amplifier

Frequency Response Including DSP Presets 1 through 4

FREQUENCY  
RESPONSE

(dB) Level, Sound pressure



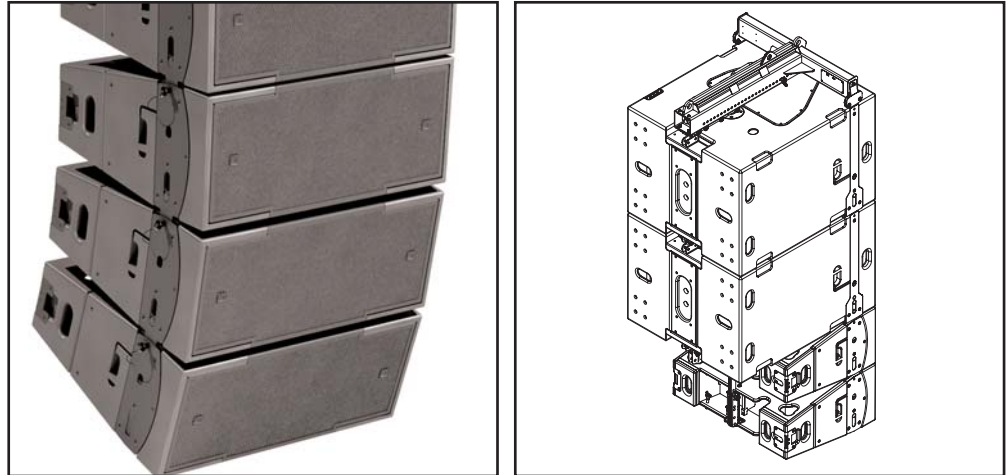
Preset 1 — single unit extremely nearfield

Preset 2 — midfield

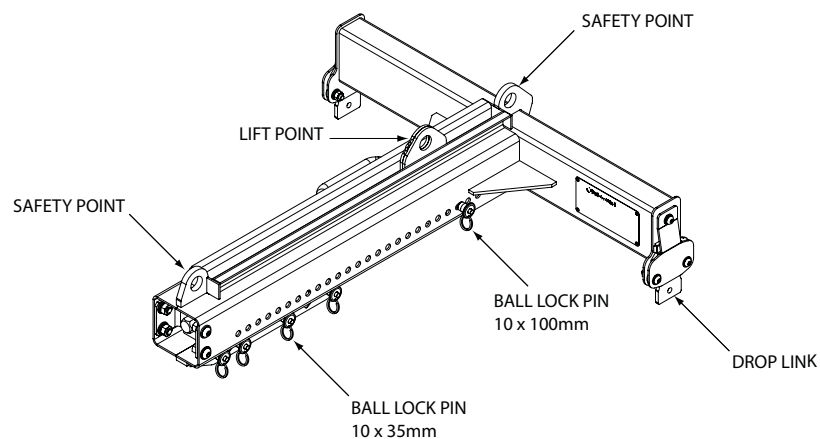
Preset 3 — long throw 1

Preset 4 — long throw 2

The loudspeaker is equipped with an integral rigging systems designed to be suspended from the FB-600 flybar. The flybar provides a single pickup point, equipped with front-to-rear screw



thread adjustment. This facility allows the inclination of a column of loudspeakers to be easily adjusted, even while under load. A column of 16 mid/high loudspeakers is designed to be flown from a single one-tonne motor. The loudspeaker cabinets are coupled using the drop links built into the side-mounted flygear, while the inter-cabinet angles are determined by means of a rear cabinet link, allowing incremental adjustment in 8 steps from 0° to 16°. TFA-600L bass cabinets are designed to fly at the top of the column, with a CF-600 conversion frame providing attachment between the bass cabinet and the first mid-high cabinet.



Virtual point source applications are catered for by fully adjustable flying yokes and T-bars. Cabinets can also be truss mounted using the yokes together with scaffold clamps.

**ARCHITECTURAL  
& ENGINEER'S  
SPECIFICATIONS**

The loudspeaker system shall be of the digitally self-powered trapezoidal type comprising: one 1" (25mm) high frequency driver loaded with a Dendritic device, one 6.5" (165mm) high-mid frequency driver loaded with a patented PolyHorn™, and two 10" (254mm) Turbo-loaded low-mid frequency drivers. Performance specifications of a typical production unit shall meet or exceed the following: frequency response, measured with a swept sine wave input shall be flat within  $\pm 3\text{dB}$  from 90Hz to 18kHz, and within  $\pm 10\text{dB}$  from 80Hz to 20kHz. Dispersion shall average  $100^\circ\text{H} \times 16^\circ\text{V}$ . Calculated maximum SPL (peak) shall be 135dB. Dimensions: 710mm x 304mm x 560mm (28" x 12" x 22"). Weight: 43kg (94.6lbs). The loudspeaker system shall be the Turbosound TFA-600HWDP. No other system shall be acceptable unless the above combined performance specifications are equalled or exceeded. Rigging hardware shall be available comprising a range of load-certified components.

**DIMENSIONS**

