

FLEX ARRAY ENGINEERING INFORMATION

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 concert touring, festivals, corporate events and regional tours.

The **TFA-600LDP** is a compact self-powered horn loaded bass enclosure designed to be flown or ground stacked with Flex Array TFA-600HDP mid/highs. It consists of a single 18" neodymium low frequency driver loaded with a TurboBass device in a birch plywood cabinet.

The proprietary 18" drive unit's magnet system drives a dual-spider split 4" voice coil which allows continuous BL (magnetic force) with displacement, ensuring optimum control from the motor assembly and very low harmonic distortion even at the excursion limits. The 4" coil also results in a lower system moving mass than equivalent 5" units, resulting in higher sensitivity and exceptional response to fast transient peaks.

The TFA-600DP features a new generation of innovative lightweight Class D amplifiers, utilising revolutionary 96kHz DSP technology to give operating efficiency in excess of 90%. 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.

The enclosure is equipped with an integrated flying system which enables it to be flown at the top of a column of Flex Array loudspeakers using a simple conversion frame between the bass enclosures and mid/highs. The same conversion frame is used to provide a stable Flex Array groundstack. A pole mount socket is fitted for use with flying yokes.

The 15mm birch plywood cabinet is equipped with recessed handles on the sides and back, and is supplied with heavy duty wheels in order to aid trucking and handling.



FEATURES

- High definition bass**
- Digitally self-powered**
- 139dB max output**
- Compact enclosure**
- Neodymium drive unit**
- Pole mount socket**
- Integrated flygear**

APPLICATIONS

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

DIMENSIONS (HxWxD) 574mm x 710mm x 848mm (22.6" x 28" x 33.4")

NET WEIGHT 75kg (165lbs)

COMPONENTS 1 x custom 18" (457mm) LF driver

FREQUENCY RESPONSE 38Hz - 150Hz ± 3 dB, 30Hz - 150Hz ± 10 dB Recommended operational range below 250Hz

CALC. MAXIMUM SPL Single enclosure: 133dB continuous (calculated SPL addition), 139dB peak

AMPLIFIER

TYPE: Class D inc SMPA and networked DSP

POWER OUTPUT: 1600 watts continuous @ 8 ohms (1kHz, 0.01% THD)

DYNAMIC RANGE: 110dB

INPUT CLIP: 10dBu

BANDWIDTH: 20Hz - 20kHz ± 0.5 dB

POWER REQUIREMENTS: 100V to 240V AC @ 50/60Hz

CONSTRUCTION 15mm (5/8") birch plywood throughout; heavily braced, rebated, screwed and glued. Finished in black semi-matt textured paint. Eight recessed carrying handles.

GRILLE 2mm powder coated perforated mild steel backed with reticulated foam

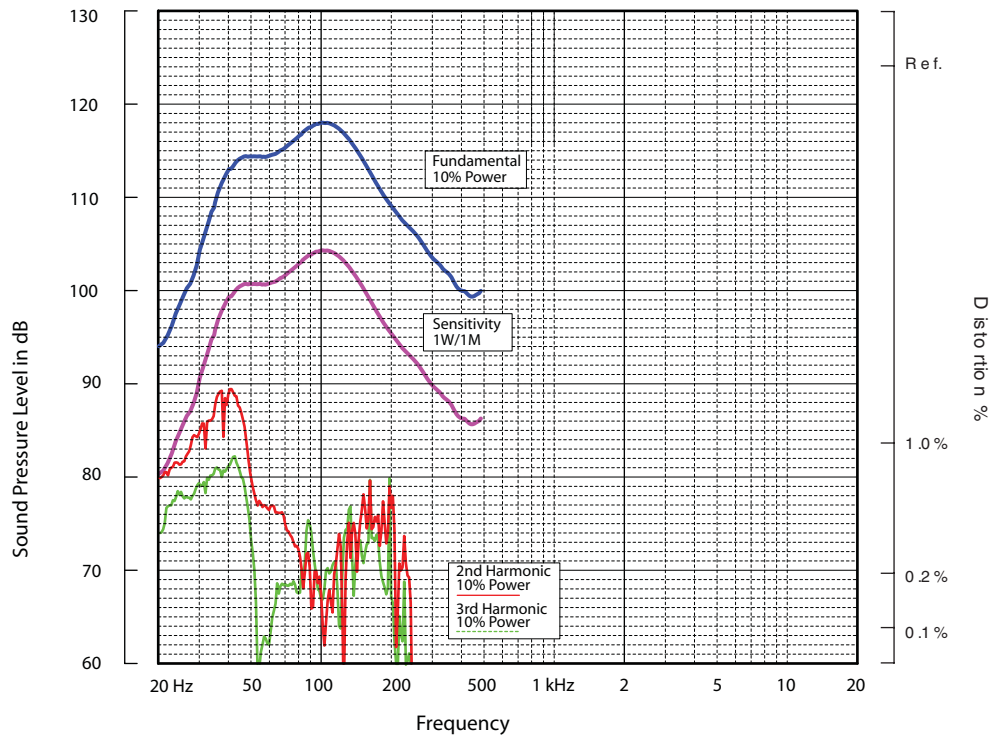
SPARES AND ACCESSORIES

LS-1815 18" (457mm) LF loudspeaker

RC-1815 Recone kit

MG-600L Replacement metal grille

T4 wheels Heavy duty wheels



FREQUENCY RESPONSE

**ARCHITECTURAL
& ENGINEER'S
SPECIFICATIONS**

The system shall be of the self-powered horn-loaded subwoofer type consisting of one 18" (457mm) low frequency driver together with an integrated Class D amplifier module with DSP. 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 38Hz to 150Hz, and within $\pm 10\text{dB}$ from 30Hz to 150Hz. Maximum SPL (peak), measured with music program shall be 139dB. Dimensions: 574mm x 710mm x 848mm (22.6" x 28" x 33.4"). Weight: 75kg (65lbs). The loudspeaker system shall be the Turbosound TFA-600LDP. No other system shall be acceptable unless the above combined performance specifications are equalled or exceeded. Flying and installation hardware shall be available comprising a range of load-certified components.

DIMENSIONS

