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TSB-110

TSB SERIES ENGINEERING INFORMATION

The TSB-110 is a compact sub-bass enclosure designed to be used in a variety of installed sound system applications ranging from clubs and wine bars to theatres, themed environments and places of worship.

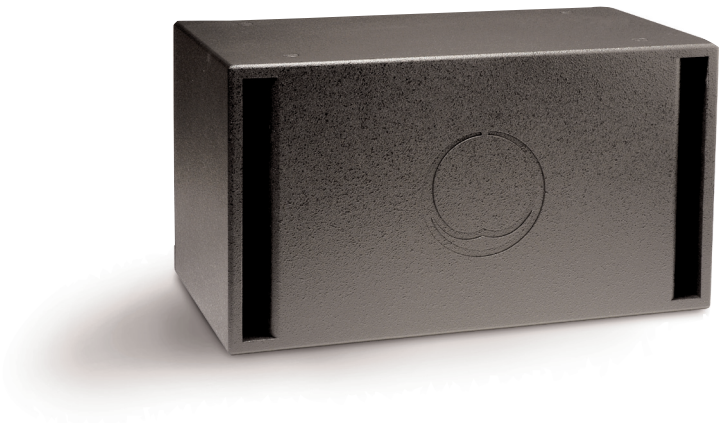
It comprises a dual voice coil 10" LF driver in a birch plywood enclosure consisting of two dissimilar compartments, optimally ported to produce substantial sub-bass energy from a cabinet of extremely modest dimensions.

The TSB-110 provides sub-bass support for several Turbosound enclosures including the IMPACT50 and IMPACT80, as well as loudspeakers from the QLight™ series. It is a essentially a dual channel loudspeaker, having two independent voice coils within the same drive unit, and so a single sub-bass enclosure can be configured as part of a high quality two channel system consisting of up to four satellite units per channel. The left and right low frequency input signals, having very little directionality, are summed to generate a mono bass signal.

A rear panel connector plate provides left and right stereo inputs and outputs via four colour-coded spring-loaded push terminals.

The TSB-110 has been designed to fit into small spaces or architectural features where a conventional bass unit would be impractical. It can therefore be installed discreetly under bars or stages, or even underneath seating, without affecting sonic performance. M10 rigging points are additionally provided to allow the enclosure to permanently installed.

The enclosure is constructed from 15mm (5/8") birch plywood and is available as standard in black textured paint. TurboBlue™ or white semi-matt textured paint is optionally available. Colour-coded push terminals are provided on a connector panel on the rear of the cabinet.



FEATURES

- Compact enclosure
- 350 watt power rating
- Dual voice coil speaker

APPLICATIONS

- Nightclubs and theme bars
- Themed environments
- Retail shops

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DIMENSIONS (HxWxD)	330mm x 585mm x 330mm (13” x 23” x 13”)
WEIGHT	16.5 kg (36.3 lbs)
COMPONENTS	1 x 254mm (10”) dual voice coil LF driver
FREQUENCY RANGE	45Hz to 180Hz @±4dB
POWER HANDLING	300 watts r.m.s., 600 watts program
SENSITIVITY	95dB SPL, 1 watt @ 1 metre
MAXIMUM SPL	120dB continuous, 126dB peak
CROSSOVER	Built in high-pass crossover network at 150Hz
IMPEDANCE	2 x 4 ohms nominal
CONSTRUCTION	15mm (5/8”) birch plywood, finished in black textured paint
CONNECTORS	2 x input L&R spring-loaded push terminals; 2 x NL4MP; 2 x output spring-loaded push terminals
RIGGING	4 x M10 rigging points
OPTIONS	TurboBlue™ or white semi-matt textured paint
SPARES AND ACCESSORIES	LS-1019.2 10” LF driver RC-1019.2 Recone kit

Notes

[1]Measured on axis

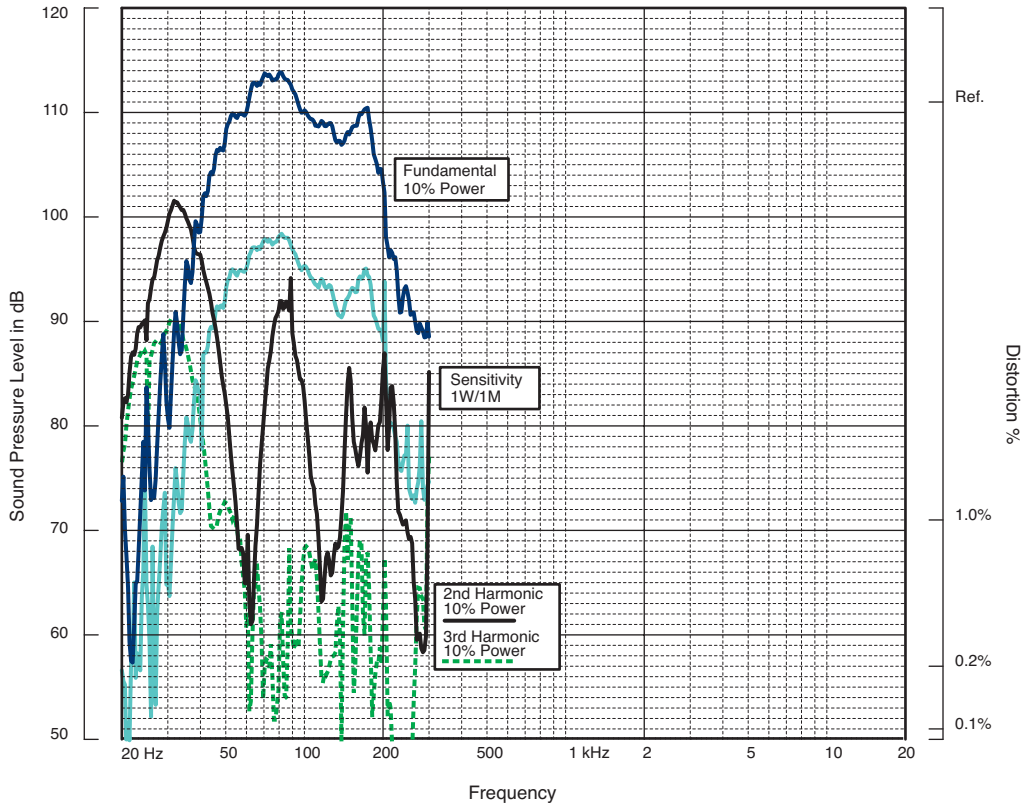
[2]Average over stated bandwidth

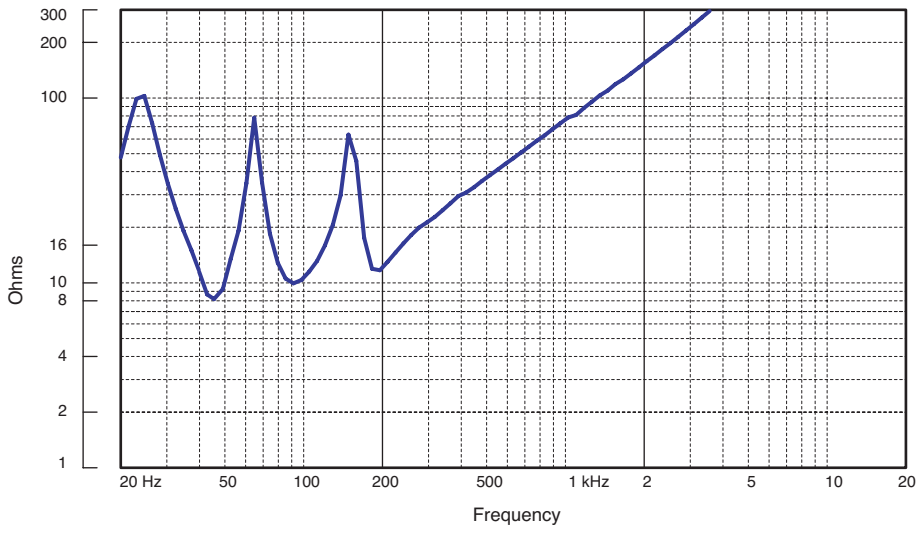
[3]Average over stated bandwidth

[4]Unweighted diode-clipped pink noise. Measured in a half space environment

[5]Verified by subjective listening tests of familiar program material, before the onset of perceived signal degradation

FREQUENCY RESPONSE





NOTES ON MEASUREMENT CONDITIONS

Impedance A constant current circuit was used to measure the impedance. Frequency response The frequency response shown was obtained by feeding a swept sine wave through the system in a half space environment. The position of the microphone was vertically on-axis at a distance of 2 metres, then scaled to represent 1 metre. 2nd & 3rd Harmonic Distortion Distortion measurements were obtained using an Audio Precision harmonic distortion analysis system and comply with AES recommendations for enclosure measurement (AES paper ANSI S4-26-1984). Data Conversion All graphs were digitally generated using the APEX custom software system, designed to translate data derived from Audio Precision 'System One' test equipment into AutoCAD™. This program enables graphical information to be plotted to a high degree of accuracy.

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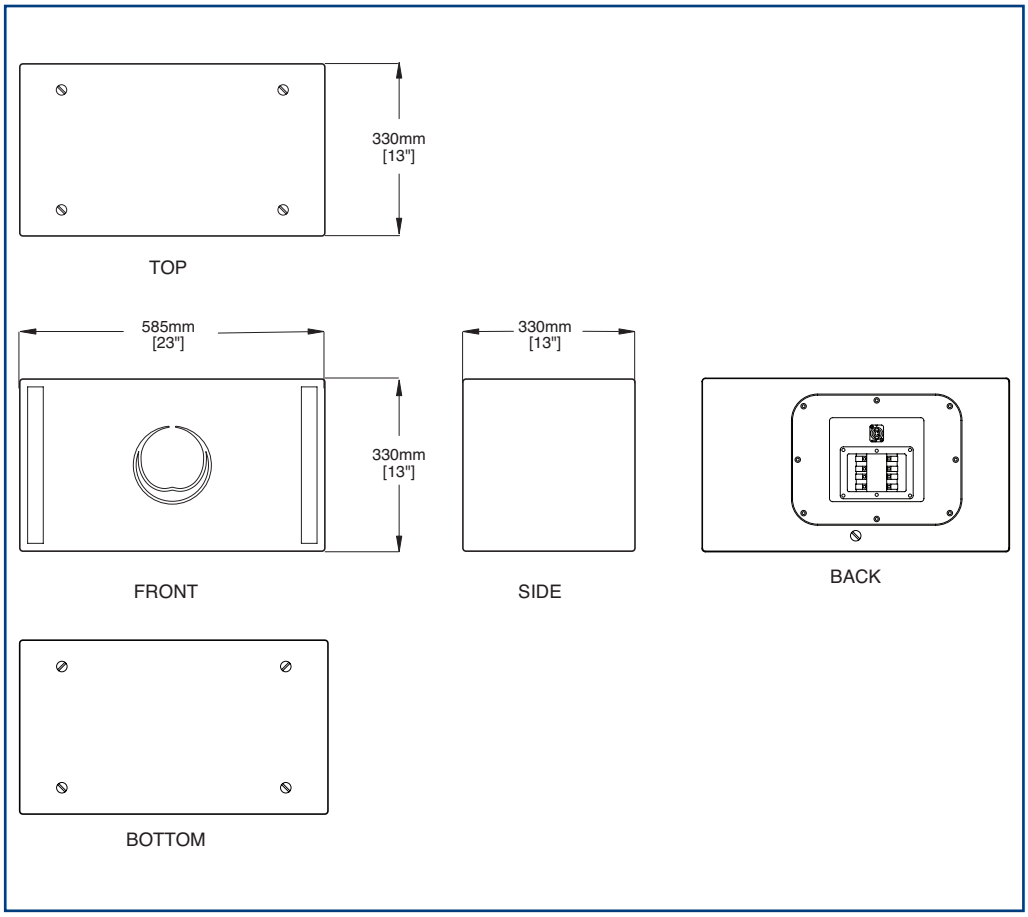
ARCHITECTURAL & ENGINEER'S SPECIFICATIONS

The loudspeaker shall be of the band-pass type consisting of one 254mm (10") dual voice coil LF driver. 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 ±4dB from 45Hz to 180Hz. Nominal impedance shall be: 8 ohms. Power handling shall be 300 watts r.m.s., 600 watts program. Sensitivity, measured with 1 watt input at 1 metre distance on axis, mean averaged over stated bandwidth, shall be 95dB. Maximum SPL (peak) measured with music program input at stated amplifier power shall be 126dB. Dimensions: 330mmH x 585mmW x 330mmD (13" x 23" x 13") Weight: 16.5 kg (36.3 lbs) The loudspeaker system shall be the Turbosound TSB-110. No other loudspeaker shall be acceptable unless submitted data from an independent test laboratory verify that the above combined performance/size specifications are equalled or exceeded.

DIMENSIONS



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