

TCS SERIES ENGINEERING INFORMATION

The TCS-118 is a front loaded subwoofer designed for use with TCS series enclosures.

It consists of a custom 4" voice coil 18" low frequency driver in a compact vented enclosure, optimally tuned for extended low frequency response.

The enclosure is constructed from 3/4" (18mm) birch plywood, heavily braced internally, while the baffle is angled to reduce internal reflections and provide additional system efficiency. It is finished in black semi-matt textured paint (other colours optionally available).

A total of nine M10 threaded rigging points are provided on the cabinet, enabling it to be permanently installed using standard eyebolts.

A rear panel connector plate carries a single Neutrik Speakon NL4MP and a 4-way terminal strip for loop in and loop out connections to additional enclosures.

Recommended complementary products:

TCS-20, TCS-30, TCS-35, TCS-40, TCS-56 enclosures
LMS-D6, LMS-D4 loudspeaker management systems

**FEATURES**

- 18" Subwoofer
- Extended LF response
- Very high power handling

APPLICATIONS

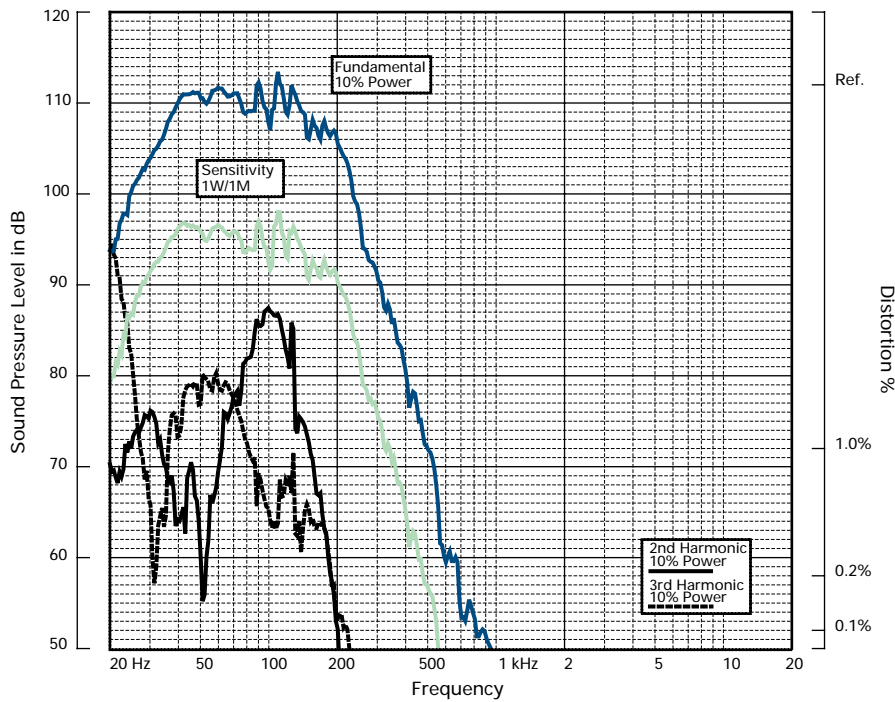
- Theatre
- Houses of Worship
- Restaurants / cafés

DIMENSIONS (HxWxD)	730mm x 705mm x 482mm (28.7" x 27.7" x 19")
NET WEIGHT	45kg / 99lbs
COMPONENTS	1 x custom 18" (457mm) LF driver
FREQUENCY RESPONSE¹	34Hz - 150Hz ±4dB
POWER HANDLING	600 watts r.m.s., 1200 watts program, 1500 watts peak Recommended amplifier 1200 watts @ 8 ohms
SENSITIVITY²	96dB 1W @ 1m
MAXIMUM SPL	127dB continuous, 133dB peak
CROSSOVER	130Hz, 24dB/octave, Linkwitz-Riley
NOMINAL IMPEDANCE	8 ohms
CONSTRUCTION	18mm (3/4") birch plywood; rebated, screwed and glued. Finished in black semi-matt textured paint
GRILLE	Black powder coated perforated steel
CONNECTORS	Neutrik Speakon NL4MP, wired pin1+: positive, pin1-: negative Four way terminal strip for loop in/loop out connection
FLYING HARDWARE	(9) M10 internal steel rigging points
OPTIONS	Optional colours: white, blue, raw birch plywood
SPARES AND ACCESSORIES	LS-1808 18" (457mm) LF loudspeaker RC-1808 Recone kit for LS-1808 MG-118 Replacement perforated metal grille

Notes

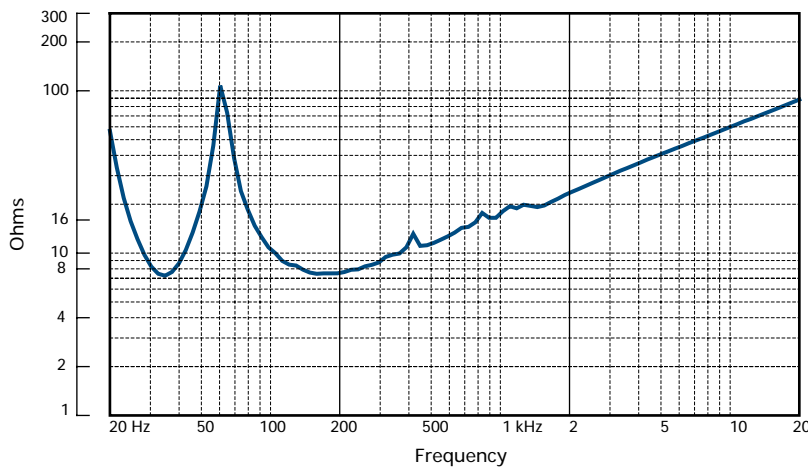
¹Measured on axis

²Average over stated bandwidth



FREQUENCY RESPONSE

IMPEDANCE

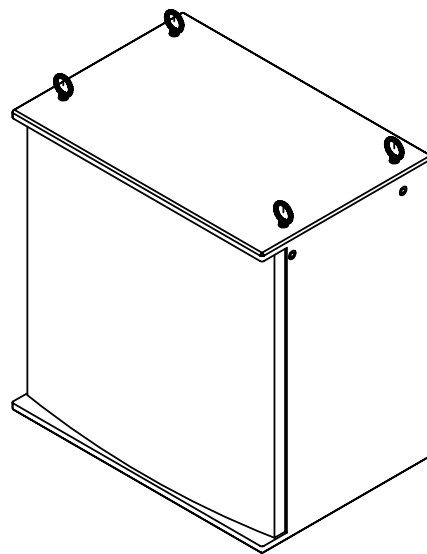


Impedance A constant current circuit was used to measure the impedance. **Frequency response** The frequency response shown was obtained by feeding a swept sine wave through the system in a half space environment. The position of the microphone was vertically on-axis at a distance of 2 metres, then scaled 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.

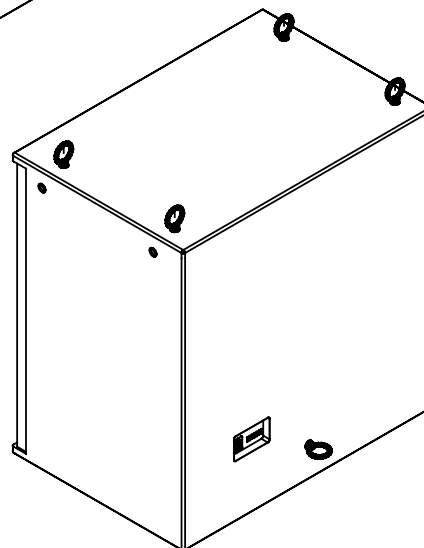
NOTES ON MEASUREMENT CONDITIONS

**INSTALLATION
HARDWARE**

The enclosure is provided with nine M10 rigging points (four on the top, two each on the sides and one on the rear of the cabinet) to enable simple, effective lifting and flying using standard eyebolts (not supplied) as shown below. Downward inclination can be achieved by using the two rigging points towards the front of the cabinet and the single point on the rear.



Front view



Rear view

**ARCHITECTURAL
 & ENGINEER'S
 SPECIFICATIONS**

The system shall be of the subwoofer type consisting of one 18" (457mm) low frequency loudspeaker. Performance specifications of a typical production unit shall meet or exceed the following: Frequency response, measured with swept sine wave input, shall be flat within 34Hz – 150Hz ±4dB. Nominal impedance shall be 8 ohms. Power handling shall be 600 watts r.m.s., 1200 watts program, 1500 watts peak. Sensitivity, measured with 1 watt input at 1 metre distance on axis, mean averaged over stated bandwidth, shall be 96dB. Maximum SPL (peak) measured with music program at stated amplifier input shall be 133dB. Dimensions: 730mmH x 705mmW x 482mmD (28.7"H x 27.7"W x 19"D). The loudspeaker system shall be the Turbosound TCS-118. 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

