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TA-890L

ASPECT SERIES ENGINEERING INFORMATION

The Aspect series is a range of high performance modular loudspeaker enclosures designed for use across a wide spectrum of sound reinforcement activities, easily scaleable to specific acoustical and venue requirements ranging from large scale indoor or outdoor concerts to corporate events, theatre shows and nightclub applications.

The **Aspect TA-890 system** achieves its aim of distributing sound evenly, with consistent frequency response and in a predictable way, across all seats of an auditorium or listening area through the application of patented Polyhorn™ technology to create a segment of a spherical wavefront. It comprises a pair of identically sized loudspeaker enclosures—mid-high and low frequency—designed for flown and ground stacked touring applications.

The **TA-890L** is a low frequency touring enclosure housing two high efficiency 15" drivers loaded with TurboBass™ devices in a portable cabinet covering the frequency range from 45Hz to 100Hz.

It is compatible with the TA-890H mid-high enclosure, and since it is fitted with both vertical and horizontal flying systems, it can be flown in clusters together with TA-890H enclosures. The flying hardware and corner mouldings also provide a locking mechanism to allow the enclosures to be safely ground stacked. Although integral to the box, the flying systems can easily be removed for safety testing. Cabinet construction is based around pre-bent 9-ply beech plywood—this entirely eliminates two cabinet corners, reducing internal reflections as well as greatly increasing cabinet strength.

Thermal performance from the LF drivers has been greatly improved by using neodymium magnet structures which reduce power compression to negligible levels. Cabinet dimensions have been carefully chosen to allow the boxes to be optimally truck packed in the most common US and European vehicles without wasted space.

A rear panel carries two Speakon NL4MP connectors and the cabinet is fitted with ergonomically placed flush handles for easy lifting and carrying. Wheel dollies are also available to aid handling and trucking.

FEATURES

- Double 15" LF drivers
- Total system optimisation
- Very high SPL
- Very compact enclosure
- Integral rigging systems

APPLICATIONS

- Stadia and arenas
- Touring and festivals
- Regional concert touring
- Theatre and Corporate
- Dance clubs

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DIMENSIONS (HxWxD)	795mm x 477mm x 574mm (31.3” x 18.8" x 22.6")
NET WEIGHT	68kg (150 lbs)
COMPONENTS	2 x 15” (381mm) LF drivers
FREQUENCY RESPONSE[1]	45Hz - 250Hz ±4dB
POWER HANDLING	1100 watts r.m.s., 2200 watts program
SENSITIVITY[3]	101dB, 1 watt @ 1metre
MAXIMUM SPL	132dB continuous[4], 138dB peak[5]
CROSSOVER BANDS	30Hz - 101Hz
NOMINAL IMPEDANCE	8 ohms
CONSTRUCTION	15mm (5/8”) beech plywood throughout; rebated, screwed and glued. Finished in black semi-matt textured paint. Four recessed carrying handles
GRILLE	Cloth/expanded metal
CONNECTORS	2 x Neutrik Speakon NL4 wired: pin1+ positive; pin1- negative

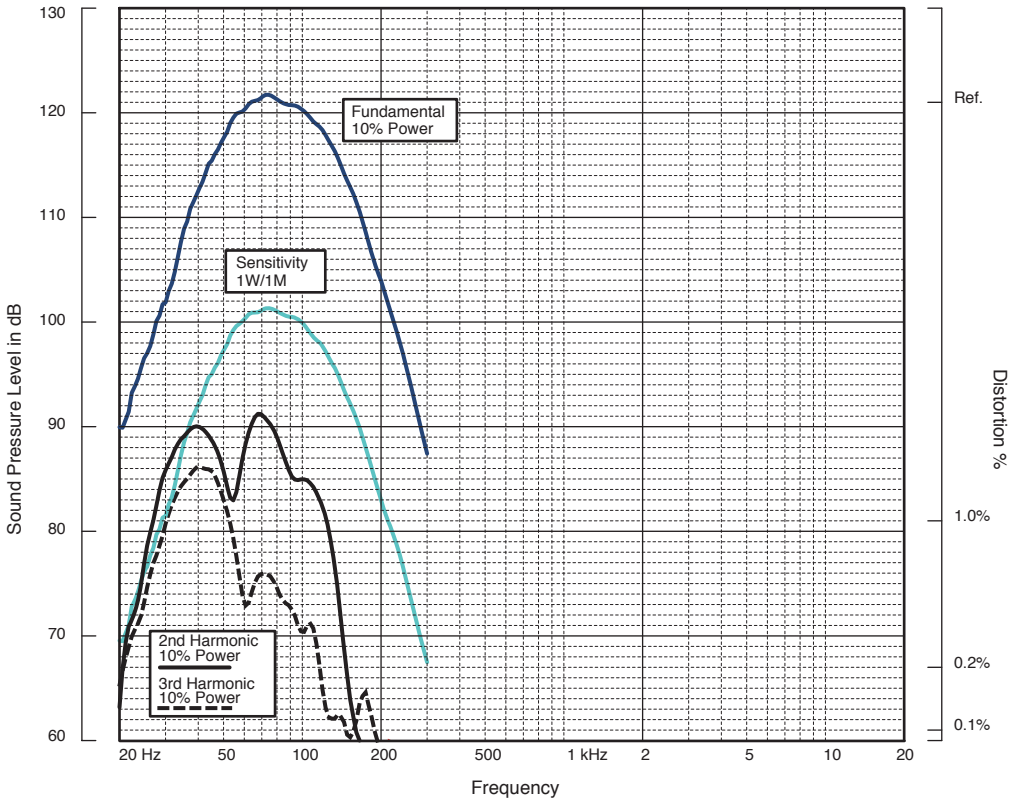
SPARES AND ACCESSORIES

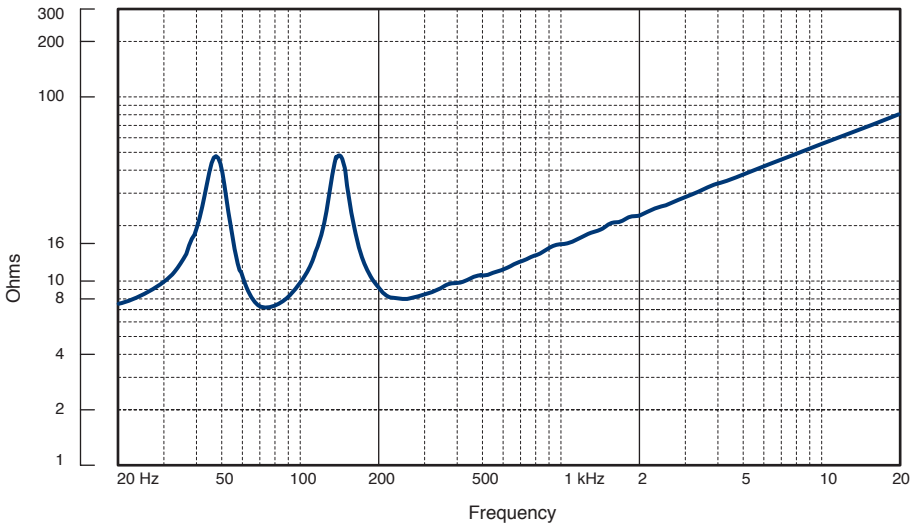
MG-890	Replacement cloth/expanded metal grille
LS-1524	15” (381mm) LF loudspeaker
RC-1524	Recone kit for LS-1524
W-3	Heavy duty wheel

Notes

[1]Measured on axis
[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.

LOW 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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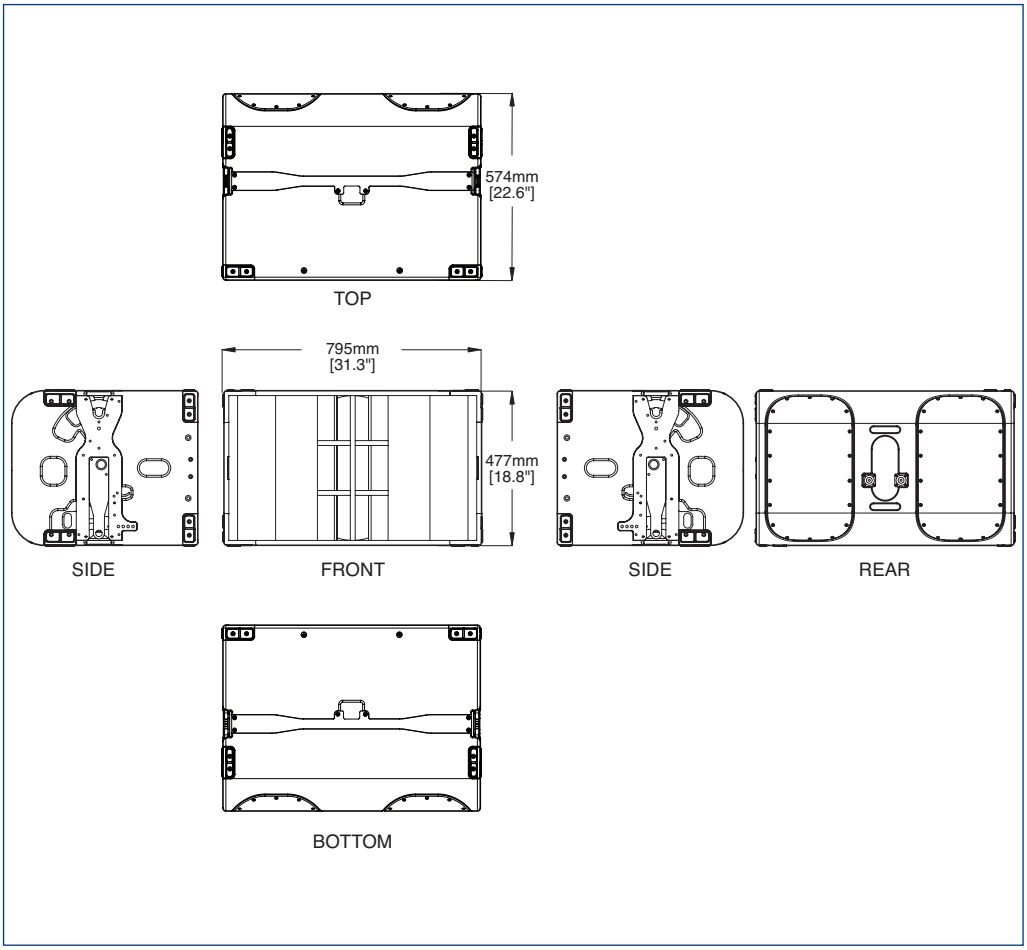
ARCHITECTURAL & ENGINEER'S SPECIFICATIONS

The loudspeaker system shall be of the subwoofer type, consisting of two 15" low frequency loudspeaker loaded with patented TurboBass™ devices. 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 ±4dB from 45Hz - 250Hz. Nominal impedance shall be 8 ohms. Power handling shall be 1100 watts r.m.s., 2200 watts program. Sensitivity, measured with 1 watt input at 1 metre distance on axis, mean averaged over stated bandwidth, shall be 101dB. Maximum SPL (peak), measured with music program input at stated amplifier power shall be 138dB. Dimensions: 795mmH x 477mmW x 574mmD (31.3" x 18.8" x 22.6"). Weight: 68 kg (150 lbs). The loudspeaker system shall be the Turbosound TA-890L. No other loudspeaker system 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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