

TXD SERIES ENGINEERING INFORMATION

The TXD-12M is a compact passive two-way wedge monitor enclosure designed for use in a wide variety of live sound, fixed installation and mobile DJ applications that require professional sound quality in an easily transportable format.

It consists of a 12" reflex-loaded low frequency driver and a 1" high frequency compression driver on a 40°H x 70°V dispersion HF horn in an optimally tuned enclosure. These high grade components are matched with an internal third order passive crossover network to ensure a seamless transition between the HF and LF drivers.

The crossover network incorporates a two-stage thermal overload protection system which prevents damage to the high frequency driver, reacting instantly to large transient peaks while still allowing wide dynamic range to be maintained. Although the protection system is transparent at normal operating levels, as the level increases the signal is gradually and imperceptibly reduced once the critical threshold has been reached.

The cabinet is constructed from 15mm (5/8") birch plywood, screwed and glued together for maximum rigidity. Its symmetrical shape allows the monitor to be inverted and used as left/right mirror image pairs.

In addition to its primary function as a floor monitor, the TXD-12M is also suitable for front-of-house applications and can be used with the integral pole mount socket on top of optional 35mm poles and loudspeaker stands. Two recessed flush handles are provided for easy lifting and carrying, and eight rubber feet are fitted. A grey powder-coated perforated steel mesh grille protects the drive units from damage.

A Neutrik Speakon NL4MP speaker connector is located at each end of the cabinet on recessed panels, providing input and parallel connections to additional TXD series monitors.



FEATURES

- Compact enclosure**
- Symmetrical shape**
- Passive crossover**
- HF protection**
- Pole mount socket**

APPLICATIONS

- Live sound**
- Mobile DJ**
- Fixed installation**

DIMENSIONS (HxWxD)	435mm x 553mm x 288mm (17.1" x 21.8" x 11.3")												
NET WEIGHT	18kg (39.6lbs)												
COMPONENTS	1 x 12" (305mm) LF driver, 1 x 1" (25mm) HF compression driver												
FREQUENCY RESPONSE¹	65Hz - 20kHz ±4dB												
NOMINAL DISPERSION²	40°H x 70°V @ -6dB points												
POWER HANDLING	300 watts r.m.s., 600 watts program Recommended amplifier power 600 watts @ 8 ohms												
SENSITIVITY³	97dB, 1 watt @ 1 metre												
MAXIMUM SPL	122dB continuous ⁴ , 128dB peak ⁵												
CROSSOVER	Internal passive network at 1.8kHz; 12dB/octave high-pass, 12dB/octave low-pass												
NOMINAL IMPEDANCE	8 ohms												
CONSTRUCTION	15mm (5/8") birch plywood enclosure. Finished in black semi-matt textured paint. Two recessed carrying handles. Integral pole mount socket												
GRILLE	Heavy duty powder coated perforated steel mesh												
CONNECTORS	(2) Neutrik Speakon NL4MP, wired pin1+: positive, pin 1-: negative, pins 2+ and 2- N/C												
SPARES AND ACCESSORIES	<table border="0"> <tr> <td>LS-1219</td> <td>12" (305mm) LF loudspeaker</td> </tr> <tr> <td>RC-1219</td> <td>Recone kit for LS-1219</td> </tr> <tr> <td>CD-111</td> <td>1" (25mm) HF compression driver</td> </tr> <tr> <td>RD-111</td> <td>Replacement diaphragm for CD-111</td> </tr> <tr> <td>MG-121/X</td> <td>Metal grille</td> </tr> <tr> <td>PX-121/X</td> <td>Passive crossover network</td> </tr> </table>	LS-1219	12" (305mm) LF loudspeaker	RC-1219	Recone kit for LS-1219	CD-111	1" (25mm) HF compression driver	RD-111	Replacement diaphragm for CD-111	MG-121/X	Metal grille	PX-121/X	Passive crossover network
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Notes

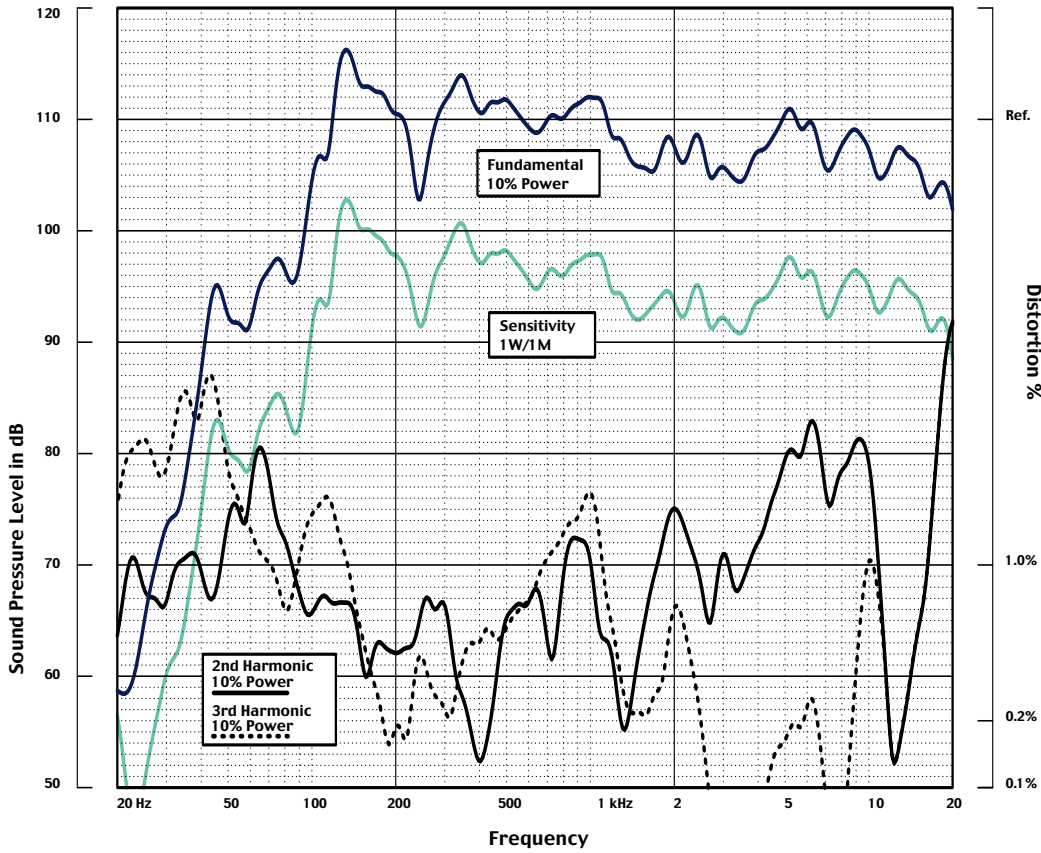
¹ Measured on axis

² Average over stated bandwidth

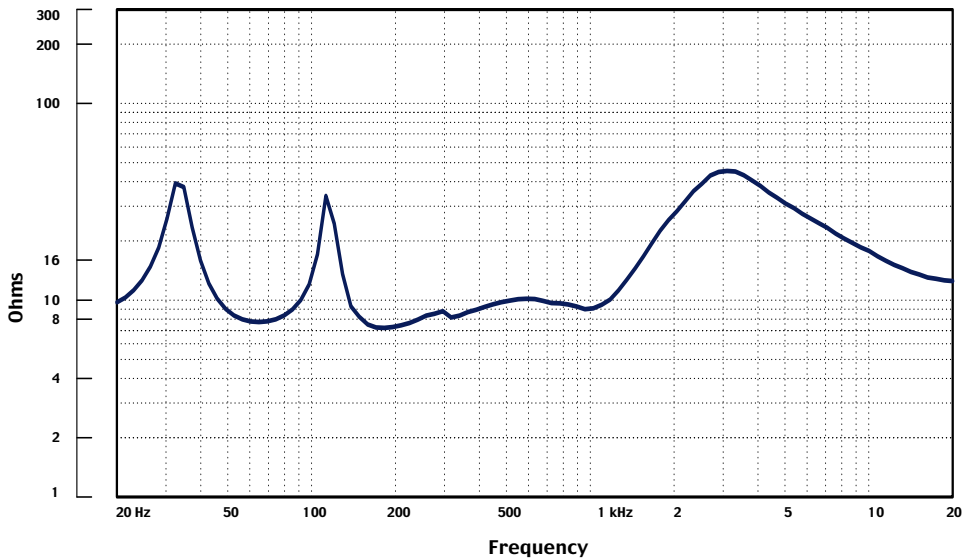
³ Average over stated bandwidth

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



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

**ARCHITECTURAL
& ENGINEER'S
SPECIFICATIONS**

The speaker shall be of the two-way passive wedge monitor type consisting of one 12" (305mm) low frequency driver and one 1" (25mm) high frequency driver. 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 $\pm 4\text{dB}$ from 65Hz - 20kHz. Nominal dispersion, at -6dB points, shall average 40°H x 70°V. 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 97dB. Maximum SPL (peak) measured with music program at stated amplifier input shall be 128dB. Dimensions: 435mmH x 553mmW x 288mmD (17.1"H x 21.8"W x 11.3"D). Weight: 18kg (39.6lbs). The loudspeaker system shall be the Turbosound TXD-12M. 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

