

TXD SERIES ENGINEERING INFORMATION

The TXD-15M is a passive/bi-amp 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 15" reflex-loaded low frequency driver and a 1.4" high frequency compression driver on a 40°H x 60°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 TXD-15M can be used either in passive mode with a single amplifier channel, or bi-amped using two channels of a stereo amplifier and a Turbosound LMS-D4 controller.

The passive 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-15M 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.

Two Neutrik Speakons provide passive input and link connections, and an additional switchable Speakon is used for the bi-amp connection.



FEATURES

- Bi-amp/passive**
- Symmetrical shape**
- HF protection**
- Pole mount socket**

APPLICATIONS

- Wedge monitoring**
- Live sound**
- Drum fill**
- Front of house**

DIMENSIONS (HxWxD)	652mm x 547mm x 363mm (25.7" x 21.5" x 14.3")
NET WEIGHT	30kg (66lbs)
COMPONENTS	1 x 15" (381mm) LF driver, 1 x 3" voice coil HF compression driver
FREQUENCY RESPONSE¹	65Hz - 18kHz ±4dB
NOMINAL DISPERSION²	40°H x 60°V @ -6dB points
POWER HANDLING	Passive: 300 watts r.m.s., 600 watts program Recommended amplifier power 600 watts @ 8 ohms Bi-amp: LF 300 watts r.m.s., 600 watts program @ 8 ohms; HF 100 watts r.m.s., 200 watts program @ 16 ohms
SENSITIVITY³	99dB, 1 watt @ 1 metre
MAXIMUM SPL	124dB continuous ⁴ , 130dB peak ⁵
CROSSOVER	Internal passive network at 1.3kHz; 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 (1) Neutrik Speakon NL4MD-V-S, wired pin1+: LF positive, pin1-: LF negative, pin2+: HF positive, pin2-: HF negative
SPARES AND ACCESSORIES	LS-1521 15" (381mm) LF loudspeaker RC-1521 Recone kit for LS-1521 CD-212 3" diaphragm compression driver RD-212 Replacement diaphragm for CD-212 MG-15M/X Metal grille PX-15M/X Passive crossover network

Notes

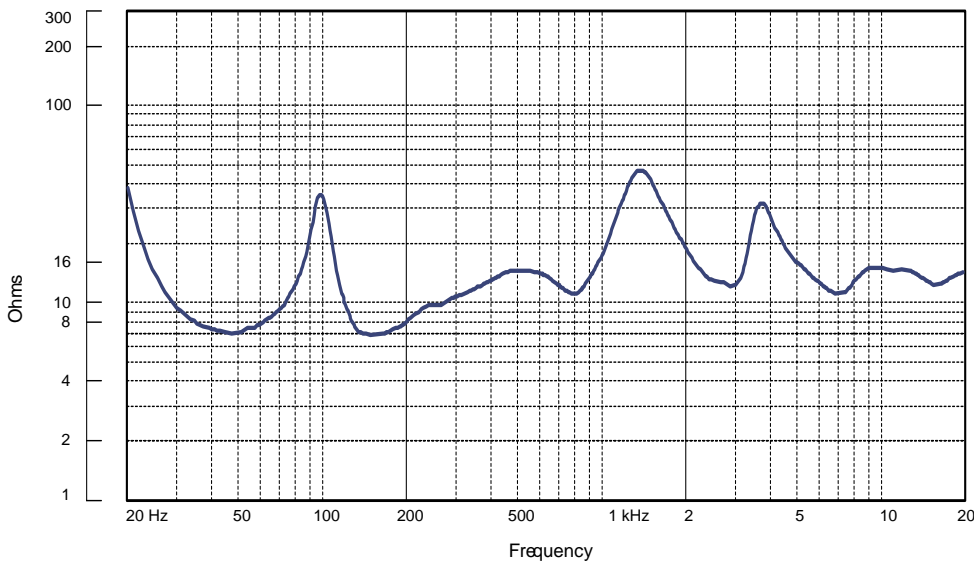
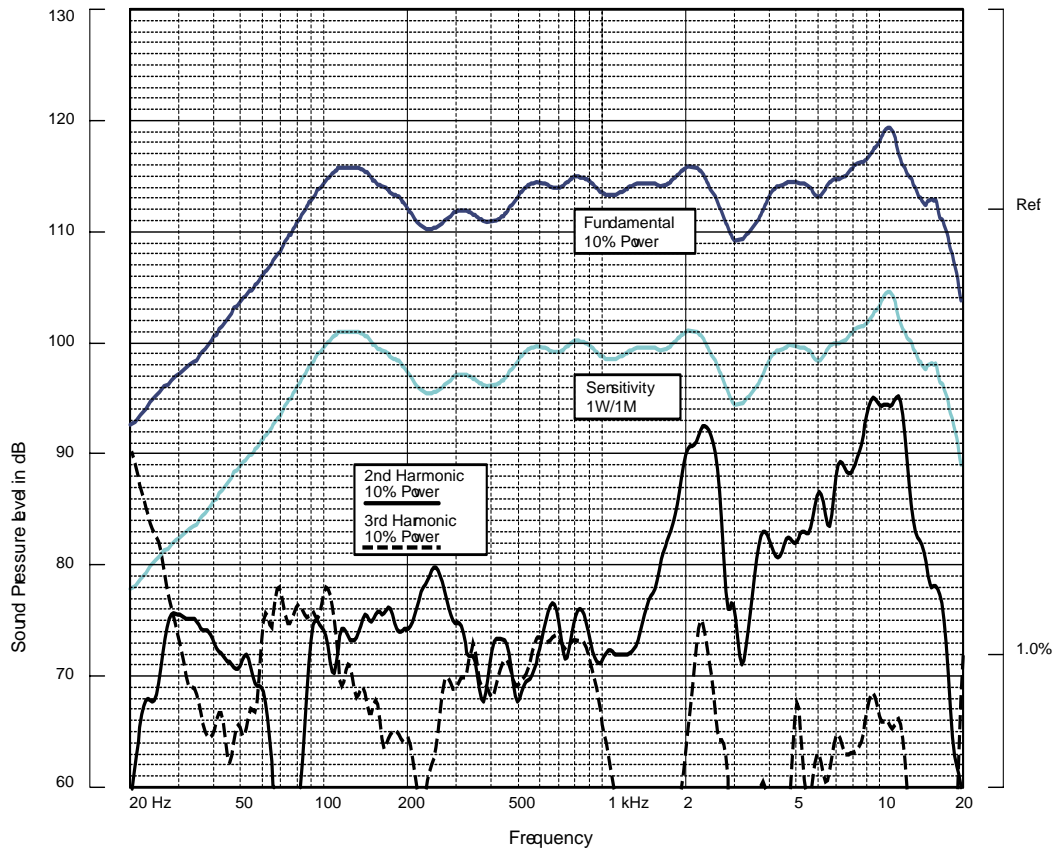
¹ Measured on axis

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



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 switchable bi-amp/passive two-way wedge monitor type consisting of one 15" (381mm) low frequency driver and one 3" voice coil compression 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 - 18kHz. Nominal dispersion, at -6dB points, shall average $40^\circ\text{H} \times 60^\circ\text{V}$. Nominal impedance shall be passive: 8 ohms; bi-amp: LF: 8 ohms, HF: 16 ohms. Power handling shall be 300 watts r.m.s., 600 watts program; bi-amp: LF 300 watts r.m.s., 600 watts program; HF: 100 watts r.m.s., 200 watts program. Sensitivity, measured with 1 watt input at 1 metre distance on axis, mean averaged over stated bandwidth, shall be 99dB. Maximum SPL (peak) measured with music program at stated amplifier input shall be 130dB. Dimensions: 652mmH x 547mmW x 363mmD (25.7"H x 21.5"W x 14.3"D). Weight: 30kg (66lbs). The loudspeaker system shall be the Turbosound TXD-15M. 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

