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 biamped 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



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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 continuous⁴, 130dB peak⁵

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 TurboBlue™ semi-matt textured paint (optional black). 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

RC-1521 Recone kit for LS-1521
CD-212 3" diaphragm compression driver
RD-212 Replacement diaphragm for CD-212

15" (381mm) LF loudspeaker

MG-15M/X Metal grille

PX-15M/X Passive crossover network

Notes

LS-1521

¹Measured on axis

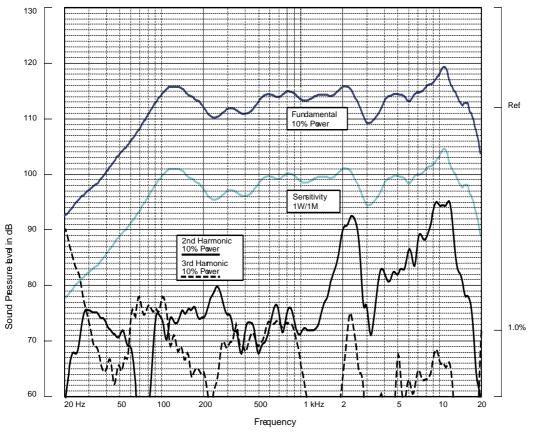
²Average over stated bandwidth

³Average over stated bandwidth

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

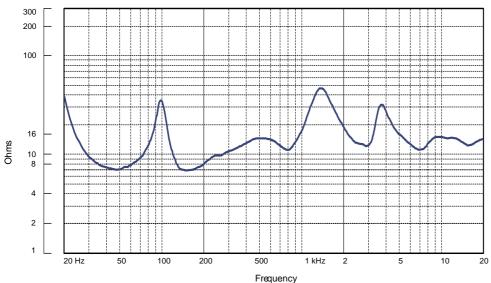
⁵Verified by subjective listening tests of familiar program material, before the onset of perceived signal degradation

TXD SERIES ENGINEERING INFORMATION



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

datasheet TXD-15M

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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 ±4dB from 65Hz - 18kHz. Nominal dispersion, at -6dB points, shall average 40°H x 60°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

