

QLIGHT™ SERIES ENGINEERING INFORMATION

The TQ-425 is a front loaded vented subwoofer enclosure designed to extend the low frequency response of the TQ-445 and other TQ series enclosures. It is equally suited to mobile use in corporate, industrial and audio-visual applications as well as permanent sound reinforcement installations.

It consists of two 4" voice coil neodymium 15" low frequency drivers in a compact vented enclosure, optimally tuned to reproduce high sound pressure levels at bass and sub-bass frequencies.

The TQ-425 is designed for use with Turbosound LMS series digital loudspeaker management systems, which provide 24dB/octave crossovers and a wide range of factory preset programs for QLight™ series and other Turbosound products. When used with the LMS-D26 and TQ-445, the TQ-425 creates a very high quality sound reinforcement system ideally suited for all types of corporate, industrial, theatre and audio visual applications, whether mobile or permanently installed.

The enclosure is constructed from 3/4" (18mm) birch plywood, heavily braced internally, glued and screwed together for maximum strength. It is finished in a durable black semi-matt textured paint (also available in TurboBlue™ textured paint). The loudspeaker drive units are protected by a foam/expanded steel mesh grille.

Flush handles are provided for easy lifting and carrying, and a pole mount socket is included on the top of the cabinet to allow a TQ-445 enclosure to be mounted at the correct distance above the subwoofer.

Two Neutrik Speakon NL4MP connectors provide input and loop out connections to the enclosure. The TQ-425 is fitted with four heavy duty wheels to enable easy transportation.

**FEATURES****High SPL****Compact enclosure****APPLICATIONS****Corporate / Industrial****Theatre****Audio Visual****Drum fills**

DIMENSIONS (HxWxD)	836mm x 511mm x 632mm (32.9" x 20.1" x 24.9")	
NET WEIGHT	54kgs (118.8 lbs)	
COMPONENTS	2 x 15" (381mm) LF drivers	
FREQUENCY RESPONSE¹	45Hz - 200Hz ±4dB	
POWER HANDLING	800 watts r.m.s., 1600 watts program Recommended amplifier power 1600 watts @ 4 ohms	
SENSITIVITY	100dB, 1W @ 1 metre	
MAXIMUM SPL	132dB continuous ³ , 138dB peak ⁴	
NOMINAL IMPEDANCE	4 ohms	
CONSTRUCTION	18mm (3/4") birch plywood throughout; rebated, screwed and glued. Finished in black semi-matt textured paint. Recessed carrying handles. Integral 35mm pole mount. Four heavy duty wheels	
GRILLE	Reticulated foam on expanded steel mesh	
CONNECTORS	(2) x Neutrik Speakon NL4MP, wired pin1+: +ve, pin 1-: -ve	
OPTIONS	TurboBlue™ semi-matt textured paint	
SPARES AND ACCESSORIES	LS-1526	15" (381mm) LF loudspeaker
	RC-1526	Recone kit
	MG-425	Replacement foam / metal grille

Notes

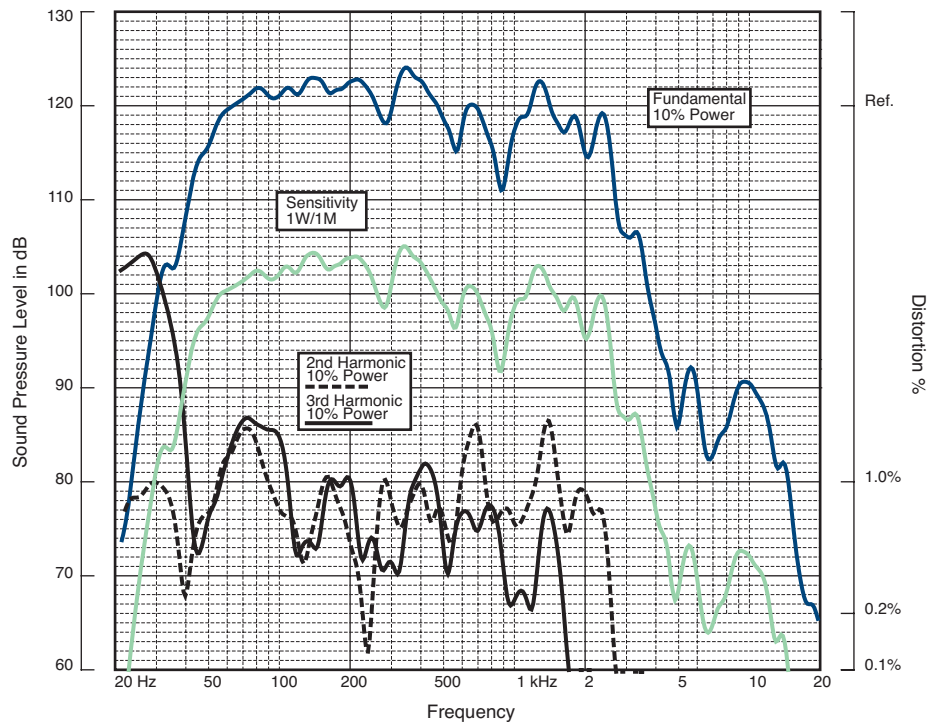
¹Measured on axis

²Average over stated bandwidth

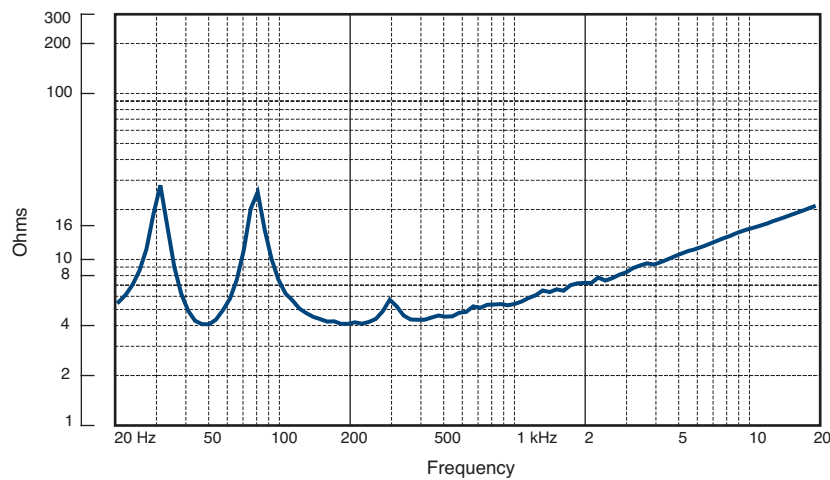
³Unweighted diode-clipped pink noise. Measured in a half space environment.

⁴Verified by subjective listening tests of familiar program material, before the onset of perceived signal degradation.

FREQUENCY RESPONSE



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 loudspeaker shall be of the mono-amplified type, consisting of two reflex loaded 15" (381mm) low frequency loudspeakers in a vented enclosure. Performance specifications of a typical production unit shall be: Frequency response, measured with swept sine wave input, shall be flat within $\pm 4\text{dB}$ from 45Hz to 200Hz. Nominal impedance shall be 4 ohms. Power handling shall be 800 watts r.m.s., 1600 watts program. Sensitivity, measured with 1 watt input at 1 metre distance on axis, mean averaged over stated bandwidth, shall be 100dB. Maximum SPL (peak) measured with music program at stated amplifier power shall be 138dB. Dimensions: 836mm x 511mm x 632mm (32.9" x 20.1" x 24.9"). Weight: 54kgs (118.8 lbs). The loudspeaker shall be the Turbosound TQ-425. 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

