

QLIGHT™ SERIES ENGINEERING INFORMATION

The TQ-425SP is a self-powered, front loaded vented subwoofer enclosure incorporating integral power amplifier and control electronics. The use of active power amplifier technology ensures an exact match between amplifier and loudspeaker for optimum acoustic output. It offers exceptional ease of use by combining the entire electro-acoustic system in one convenient, easily transportable package.

The TQ-425SP combines with the TQ-440SP enclosure to give a high quality, full range sound reinforcement system ideally suited to all corporate, industrial, theatre and audio visual applications.

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

The power amplifier and control electronics are combined into a single self-contained module which is accessible from the rear of the cabinet, carrying all audio and power connections to the loudspeaker. It includes a high-pass output to the TQ-440SP. Removal and servicing of the amplifier module only requires the removal of four screws and a single multi-way connector.

The power amplifier has been designed to deliver large amounts of power to the loudspeaker drivers. This gives the TQ-425SP the capability to reproduce transients accurately with ample headroom. The drivers are protected from excessive power by limiters built into the module.

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).

Flush handles are provided for easy lifting and carrying, and a pole mount socket is included on the top to allow a TQ-440SP enclosure to be mounted at the correct distance above the subwoofer.

The TQ-425SP is fitted with four heavy duty wheels to enable easy transportation.

Recommended complementary products:
TQ-440SP enclosure



FEATURES

- Integral power amplifier
- Control electronics
- High efficiency

APPLICATIONS

- Corporate / Industrial
- Theatre
- Audio Visual

DIMENSIONS (HxWxD)	836mm x 511mm x 632mm (32.9" x 20.1" x 24.9")	
NET WEIGHT	85 kg (187 lbs)	
COMPONENTS	2 x 15" (381mm) LF drivers	
FREQUENCY RESPONSE¹	45Hz - 200Hz ±4dB	
MAXIMUM SPL	132dB continuous ³ , 138dB peak ⁴	
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	Signal: (2) x XLR 3-pin, wired pin 2 hot; Mains: Neutrik Powercon	
OPTIONS	TurboBlue™ semi-matt textured paint	
POWER AMPLIFIER	TYPE:	Class AB
	POWER OUTPUT:	1100 watts r.m.s. @ 4 ohms
	THD:	typically <0.03%, 20Hz - 20kHz
	NOISE:	-105dB
	INPUT IMPEDANCE:	10kΩ, electronically balanced
	POWER REQUIREMENTS:	230V AC @ 10 amps max or 120V AC @ 20 amps max
SPARES AND ACCESSORIES	LS-1518	15" (381mm) LF loudspeaker
	RC-1518	Recone kit for LS-1518
	MG-425	Replacement foam / metal grille

Notes

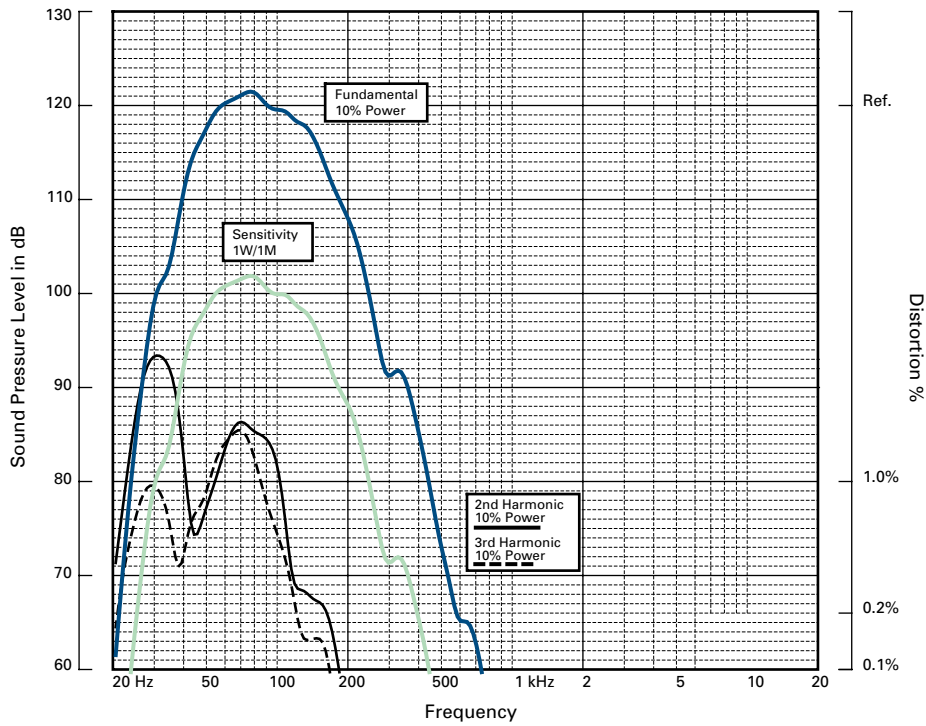
¹Measured on axis

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



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 self-powered type, consisting of two reflex loaded 15" (381mm) low frequency loudspeakers in a vented enclosure. The integral power amplifier and control electronics module shall provide Class AB amplification, frequency splitting and output limiting. 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. 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: 85 kg (187 lbs). The loudspeaker shall be the Turbosound TQ-425SP. 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

