

## NUQ SERIES ENGINEERING INFORMATION

**The B18 is a single 18" bandpass subwoofer enclosure designed for use in portable speech and music sound reinforcement applications.**

The B18 is designed to work in conjunction with a Turbosound loudspeaker management system and Turbosound T series amplifiers. This combination provides the optimum performance from the system as well as offering considerable flexibility to readily adapt to varying venue requirements. NuQ systems can also be controlled over a BVNet network using TurboDrive™ control software.

The B18 consists of a custom 18" neodymium low frequency driver in a bandpass enclosure optimally tuned for extended low frequency response.

The cabinet is constructed from 18mm (3/4") birch plywood, screwed and glued together for maximum strength and rigidity, and it is finished as standard in durable semi-matt black textured paint. Heavy duty corner protectors are fitted, and recessed flush handles are provided for easy lifting and carrying. An integral pole mount socket is fitted to the top of the enclosure to allow two-way cabinets to be mounted at the correct height above the subwoofer.

A rear panel connector plate carries two Neutrik Speakon NL4MP connectors for loop in and loop out connections to additional enclosures.

The B18 can be fitted with optional T-4 heavy duty wheels to aid transportation.



### FEATURES

Bandpass design

High efficiency

Pole mount socket

### APPLICATIONS

Front of house

Theatre

Houses of Worship

Corporate / industrial

<b>DIMENSIONS (HxWxD)</b>	768mm x 574mm x 700mm (30.2" x 22.6" x 27.6")										
<b>NET WEIGHT</b>	65kg (143lbs)										
<b>COMPONENTS</b>	1 x 18" (457mm) LF driver										
<b>FREQUENCY RESPONSE<sup>1</sup></b>	40Hz - 150Hz ±4dB										
<b>POWER HANDLING</b>	600 watts continuous, 1200 watts program Recommended amplifier 1200 watts @ 8 ohms										
<b>SENSITIVITY<sup>2</sup></b>	102dB 1 watt @ 1 metre										
<b>MAXIMUM SPL</b>	130dB continuous <sup>3</sup> , 136dB peak <sup>4</sup>										
<b>REC. CONTROLLERS</b>	Turbosound LMS-D24, LMS-D26										
<b>NOMINAL IMPEDANCE</b>	8 ohms										
<b>CONSTRUCTION</b>	18mm (3/4") birch plywood; rebated, screwed and glued. Finished in black semi-matt textured paint. Eight recessed carrying handles. Integral pole mount socket										
<b>CONNECTORS</b>	(2) Neutrik Speakon NL4MP, wired pin1+: positive, pin1-: negative; pin2+ and pin2-: n/c										
<b>OPTIONS</b>	Optional colour: white textured paint										
<b>SPARES AND ACCESSORIES</b>	<table border="0"> <tr> <td>LS-1814</td> <td>18" (457mm) LF loudspeaker</td> </tr> <tr> <td>RC-1814</td> <td>Recone kit</td> </tr> <tr> <td>T-4</td> <td>Heavy duty wheels (set of four)</td> </tr> <tr> <td>PA-90</td> <td>90cm straight pole</td> </tr> <tr> <td>PA-120</td> <td>120cm straight pole</td> </tr> </table>	LS-1814	18" (457mm) LF loudspeaker	RC-1814	Recone kit	T-4	Heavy duty wheels (set of four)	PA-90	90cm straight pole	PA-120	120cm straight pole
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**Notes**

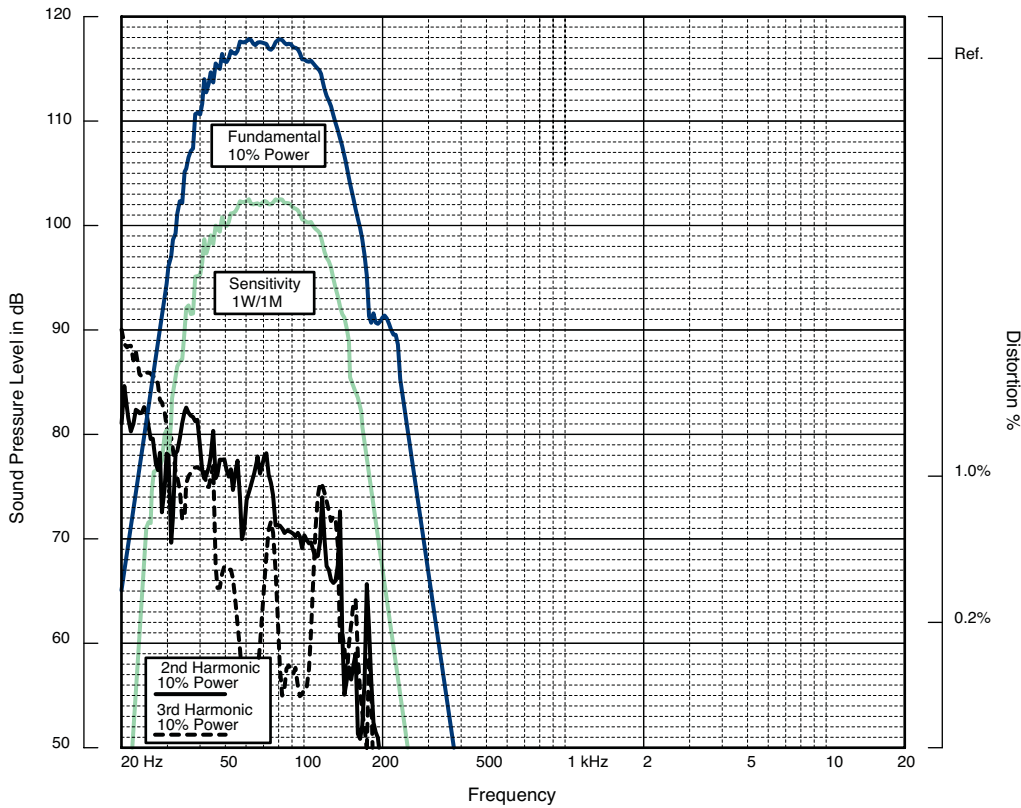
<sup>1</sup>Measured on axis

<sup>2</sup>Average over stated bandwidth

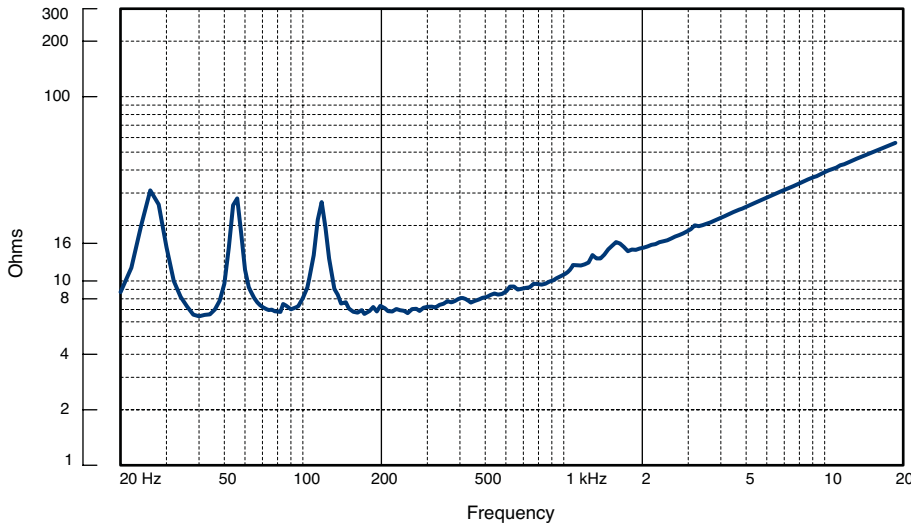
<sup>3</sup>Unweighted diode-clipped pink noise. Measured in a half space environment

<sup>4</sup>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 an unprocessed loudspeaker system in a full 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 system shall be of the bandpass subwoofer type consisting of one 18" (457mm) low frequency loudspeaker. Performance specifications of a typical production unit when used with a recommended digital crossover shall meet or exceed the following: Frequency response, measured with swept sine wave input, shall be flat within  $\pm 4\text{dB}$  from 40Hz to 150Hz. Nominal impedance shall be 8 ohms. Power handling shall be passive: 600 watts continuous, 1200 watts program. Sensitivity, measured with 1 watt input at 1 metre distance on axis, mean averaged over stated bandwidth, shall be 102dB. Maximum SPL (peak) measured with music program at stated amplifier input shall be 136dB. Dimensions: 768mmH x 574mmW x 700mmD (30.2"H x 22.6"W x 27.6"D). Weight: 65 kg (143lbs). The loudspeaker system shall be the Turbosound B18. 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**

