

NUQ SERIES ENGINEERING INFORMATION

The B-15 is a front-loaded single 15" subwoofer enclosure designed for use in portable speech and music sound reinforcement applications.

The B-15 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 B-15 consists of a custom 15" neodymium low frequency driver in compact vented 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. A perforated steel mesh grille backed with reticulated foam protects the drive units. 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. Internal M10 rigging points are fitted on the sides, top and bottom to enable rigging in fixed installations.

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

The B-15 can be fitted with optional T-4 heavy duty wheels to aid transportation.



FEATURES

Compact cabinet

High efficiency

Pole mount socket

M10 rigging points

APPLICATIONS

Theatre

Live music and DJ

Houses of Worship

Corporate / industrial

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|---------------------------------------|--|---------|----------------------------|---------|------------|--------|--------------------|-----|---------------------------------|-------|--------------------|--------|---------------------|-------|-------------|
| DIMENSIONS (HxWxD) | 464mm x 574mm x 620mm (18.3" x 22.6" x 24.4") | | | | | | | | | | | | | | |
| NET WEIGHT | 36.5 kg (80.3 lbs) | | | | | | | | | | | | | | |
| COMPONENTS | 1 x 15" (381mm) LF driver | | | | | | | | | | | | | | |
| FREQUENCY RESPONSE¹ | 45Hz - 120Hz ±4dB | | | | | | | | | | | | | | |
| POWER HANDLING | 400 watts continuous, 800 watts program Recommended amplifier 800 watts @ 8 ohms | | | | | | | | | | | | | | |
| SENSITIVITY² | 100dB 1 watt @ 1 metre | | | | | | | | | | | | | | |
| MAXIMUM SPL | 126dB continuous ³ , 132dB peak ⁴ | | | | | | | | | | | | | | |
| REC. CONTROLLERS | Turbosound LMS-D24, LMS-D26 | | | | | | | | | | | | | | |
| NOMINAL IMPEDANCE | 8 ohms | | | | | | | | | | | | | | |
| CONSTRUCTION | 18mm (3/4") birch plywood; rebated, screwed and glued. Finished in black semi-matt textured paint. Three recessed carrying handles. Integral pole mount socket | | | | | | | | | | | | | | |
| GRILLE | Powder coated perforated steel with acoustically transparent reticulated foam | | | | | | | | | | | | | | |
| CONNECTORS | (2) Neutrik Speakon NL4MP, wired pin1+: positive, pin1-: negative; pin2+ and pin2-: n/c | | | | | | | | | | | | | | |
| FLYING HARDWARE | M10 rigging points for use with M10 eyebolts | | | | | | | | | | | | | | |
| OPTIONS | Optional colour: white textured paint | | | | | | | | | | | | | | |
| SPARES AND ACCESSORIES | <table border="0"> <tr> <td>LS-1526</td> <td>15" (381mm) LF loudspeaker</td> </tr> <tr> <td>RC-1526</td> <td>Recone kit</td> </tr> <tr> <td>MG-B15</td> <td>Replacement grille</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> <tr> <td>EB-10</td> <td>M10 eyebolt</td> </tr> </table> | LS-1526 | 15" (381mm) LF loudspeaker | RC-1526 | Recone kit | MG-B15 | Replacement grille | T-4 | Heavy duty wheels (set of four) | PA-90 | 90cm straight pole | PA-120 | 120cm straight pole | EB-10 | M10 eyebolt |
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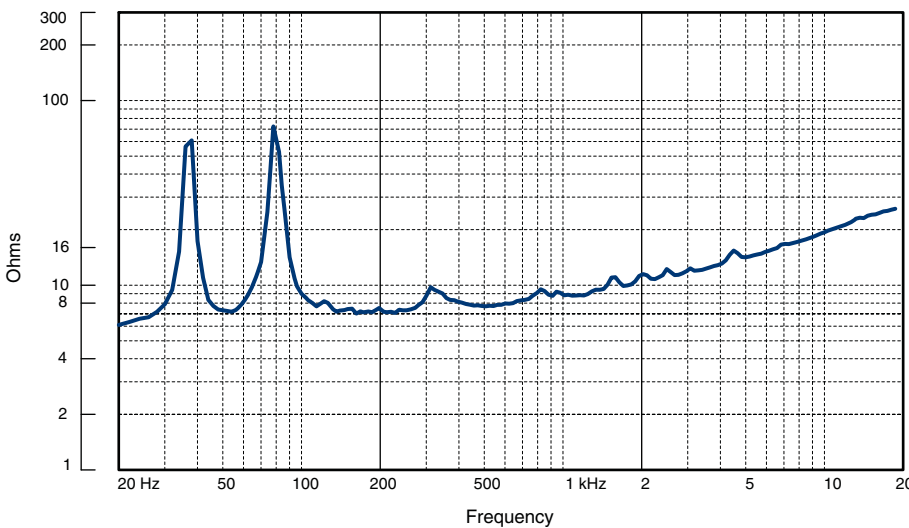
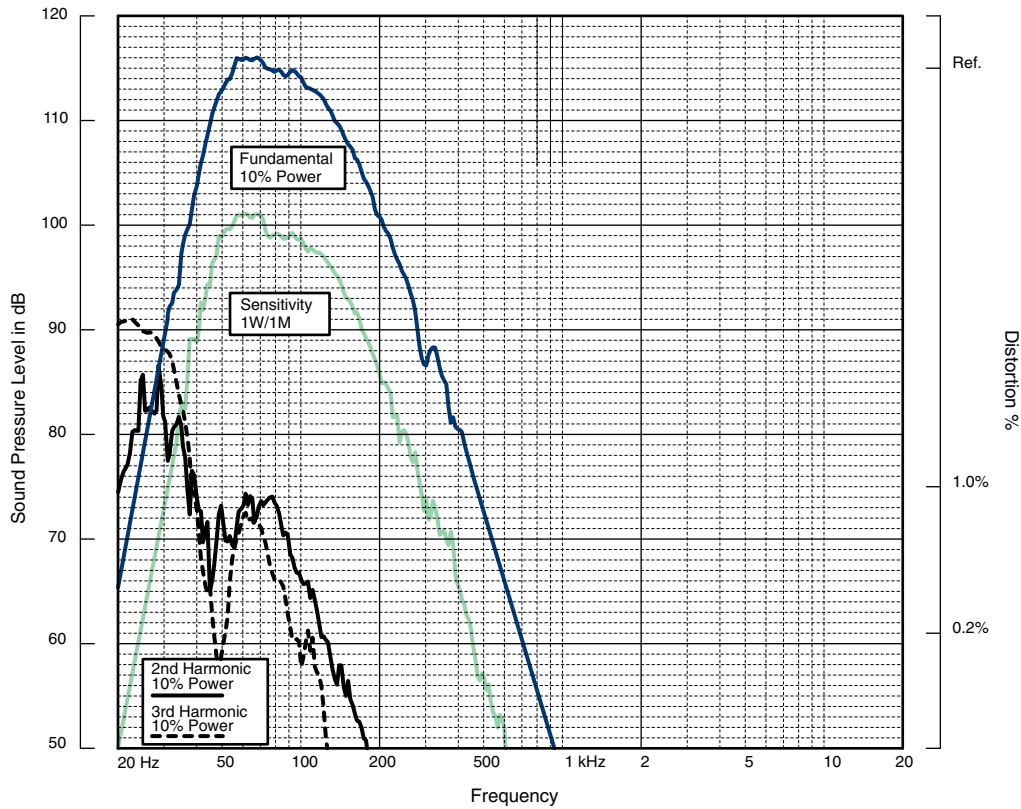
Notes

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



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 subwoofer type consisting of one front-loaded 15" (381mm) low frequency loudspeaker. Performance specifications of a typical production unit when used with a Turbosound LMS series digital loudspeaker management system shall meet or exceed the following: frequency response, measured with swept sine wave input, shall be flat within $\pm 4\text{dB}$ from 45Hz to 120Hz. Nominal impedance shall be 8 ohms. Power handling shall be 400 watts continuous, 800 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 input shall be 132dB. Dimensions: 464mmH x 574mmW x 620mmD (18.3"H x 22.6"W x 24.4"D). Weight: 36.5 kg (80.3lbs). The loudspeaker system shall be the Turbosound B-15. 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

