PQ18B



18" Reflex Loaded Subwoofer for Tour and Live Sound applications Product Features

18" Reflex Loaded Subwoofer for Tour and Live Sound applications

700 Watts continuous, 2,800 Watts peak power

18" low frequency driver with 4" voice coil with FEM Optimized motor and suspensions

Low distortion bass reflex quad flared port design

Flexible cardioid configurations and electronic delay steering provide superior rear rejection and pattern control

Optimized tuning for extended low frequency impact and accurate transient response

15 mm (5/8") & 18 mm (¾") plywood enclosure with hard wearing semi matt black PU paint finish

Seamless integration with Lab Gruppen amplifiers and Lake DSP for a complete system solution

Integral feet secure ground stacking

Integral M20 (3/4" / 20 mm thread) pole mount socket to support satellite speaker configurations

2 x NL4M rear panel connectors for input connection, link and pin swap link

Front-mounted NL4 connector for rear-firing cardioid operation



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The PQ18B is a compact passive single 18" 2,800 Watt (peak) subwoofer that is ideally suited for a broad range of speech and music sound reinforcement applications in both fixed, portable and touring audio systems. The PQ18B is designed to work in conjunction with Lake DSP and Lab Gruppen amplification, providing optimal FOH performance, as well as considerable flexibility to readily adapt to varying venue requirements.

Multiple bass array configurations, and all pre-sets are available to download.



Custom-Engineered Drivers

Turbosound is recognised the world over for designing and building some of the most iconic loudspeakers and subwoofers. We take meticulous care and pride in maintaining that reputation by utilising only drivers designed and specified by ourselves to our exacting standards.



Enclosure Design

The low distortion design utilised in the PQ18B reinforces the low frequency spectrum in program or live music, steep cutoff slopes and Large singular QFP Technology (quad flared port design). Low distortion bass reflex ensures an effective acoustic transition for use with PQ series elements.



Construction and Connectivity

Finished in a highly durable semi-matt black paint, the cabinet is constructed from 15 mm (5/8") and 18 mm (3/4") plywood – and includes a rugged powder coated foam backed perforated braced steel mesh grille. The rear panel connector plate carries industry-standard twist-locking speaker connectors for input, link and pin swap connections to additional enclosures. The front grille also has a twist-locking speaker connector to allow neat cabling when the enclosure is deployed in cardioid mode.



Integration with Lab Gruppen IPX 4800 and PLM+

With the ever-increasing complexity of modern-day sound systems. Seamless integration with the Lab Gruppen IPX4800 and PLM+ is a prerequisite for the PQ series from Turbosound. Our engineers have prepared and meticulously designed a series of presets that will allow the user to achieve the maximum system performance and consistency possible. These can be found within the download section. Future FIR capable platforms from Lab Gruppen will be supported.



Acoustic Simulation Tools

EASE GLL files are provided for the EASE Focus 3 Acoustics Simulation Software, which is available for free download. This allows accurate calculation of acoustic coverage, matching simulation strategy to DSP pre-sets with a selection of traditional forward facing, cardioid and reversed end fire pre-sets.



Architecture and Engineering Specifications

The loudspeaker shall be of the passive subwoofer type, consisting of one 18" (460 mm) LF 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 ±3 dB from 45 Hz to 200 Hz and within -10 dB from 32 Hz to 3 kHz. Nominal dispersion shall be "half space."

Maximum amplifier output power shall be 2,800 Watts peak, Sensitivity, measured on axis, mean averaged over the stated bandwidth, shall be LF: 99 dB, 1 Watt @ 1 metre. Peak level at 1 m under half space conditions using IEC 268-5 pink noise with crest factor 4, with dedicated pre-set, shall be 138 dB.

Dimensions: 520 mm high x 660mm wide x 687 mm deep (20.47" x 25.98" x 27.05"). Net weight: 47.9Kg (105.6 lbs). The loudspeaker system shall be the Turbosound PQ18B. No other loudspeaker shall be acceptable unless submitted data from an independent test laboratory verifies that the above combined performance/size specifications are equalled or exceeded.

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Specification

System

Frequency response (±3 dB) ¹	45 Hz - 200 Hz
Frequency response (-10 dB) ¹	32 Hz - 3 kHz
Nominal dispersion (@ -6 dB points)	Omni
Power handling (IEC) PASSIVE	LF: 700 W continous, 2800 W peak
Sensitivity (1 W @ 1 m) ¹	99 dB
Maximum SPL ³	33 dB (138 dB peak)3
Impedance	8 Ω
Crossover type	Passive
Components	4" Copper Voice Coil, FEM optimized motor and suspension system, double silicon spider 1 x 18" (460 mm) Ferrite LF driver

Notes:

1. Free field conditions. Measured at 1 metre on axis.

2. MT IEC 268 standard with crest factor 6 dB pink noise.

3. Calculated/Peak level at 1m under half space conditions using pink noise with a crest factor of 4 dB, with dedicated pre-set.

Accessories

