

# Stasys 118

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## Key features:

- 1.2 kW AES power handling
- Optimally damped, minimal mass cabinet
- 1 x 4" voice coil 18" neodymium low frequency driver
- 18 mm birch plywood construction

## Applications:

- Large scale touring



The Stasys 118 is a single 18" reflex loaded, low frequency enclosure built around traditional principles but designed with Stasys philosophy and attention to detail.

In order to extract the maximum performance from the Stasys 118 design, the heart of these enclosures was subjected to the same resonance mapping procedures as all other Stasys low frequency models. This practice has dictated the type of materials used around the enclosure, optimised the brace positioning, and minimised destructive nodal conditions. All of this creates structurally superior housing with minimum mass, the least possible amount of cabinet colouration and vastly increased output.

Exhaustive comparative transducer testing and evaluation led to the birth of a new 18" transducer with a high excursion 4" voice coil. The sonic properties of differing cone and surround combinations were studied, as well as differing coil topographies. Flux intensities and out of band abnormalities were also manipulated until the perfect combination was achieved. The marriage of a technologically advanced enclosure with esoteric transducer performance applied with superlative tuning techniques has resulted in a phenomenal package with state-of-the-art performance that has well and truly left tradition behind.

## Specifications

Frequency response	40 Hz - 200 Hz $\pm 3$ dB
Efficiency <sup>1</sup>	98 dB 1W/1m
Crossover points	70 Hz - 160 Hz, 24 dB/oct
Nominal impedance	8 $\Omega$
Power handling <sup>2</sup>	1200 W AES
Maximum output <sup>3</sup>	129 dB cont, 132 dB peak
Driver configuration	1 x 18" LF
Dispersion	Array dependent
Connectors	2 x 4-pole speakON™ NL4
Weight	47 kg (103.6 lbs)
Enclosure	18 mm birch plywood
Finish	Textured 'TourCoat' polyurea
Grille	Perforated steel with foam filter

<sup>1</sup> Measured in half space <sup>2</sup> AES2 - 1984 compliant <sup>3</sup> Calculated

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## Architectural specifications

The loudspeaker system shall be of the sub bass type consisting of one high power 18" (457.2 mm) direct radiating, reflex loaded, low frequency (LF) transducer in a birch plywood enclosure.

The low frequency transducer shall be constructed on a cast aluminium frame, with a treated paper cone, long excursion 101.6 mm (4") voice coil, wound with copper wires on a high quality voice coil former and a neodymium magnet for high power handling and long-term reliability.

Performance specifications for a typical production unit shall be as follows: the usable bandwidth shall be 40 Hz to 200 Hz ( $\pm 3$  dB) and have a maximum on axis SPL of 129 dB continuous (132 dB peak) measured at 1 m using IEC268-5 pink noise. Power handling shall be 1200 W AES at a rated impedance of 8  $\Omega$  with pressure sensitivity of 98 dB measured at 1W/1m. The

system shall be powered by its own dedicated power amplification module with DSP management. The wiring connection shall be via two Neutrik speakON™ NL4 (one for input and one for loop-out to another speaker), to allow for pre-wiring of the connector before installation.

The enclosure shall be constructed from 18 mm multi-laminate birch plywood, finished in a textured polyurethane and shall contain fixture points for a pressed weather-resistant, powder coated steel grille with foam filter to protect the low frequency transducer. The cabinet shall have four handles (two per side) for efficient manual handling. External dimensions of (H) 638 mm x (W) 560 mm x (D) 600 mm (25.1" x 22" x 23.6"). Weight shall be 47 kg (103.6 lbs).

The loudspeaker system shall be a Void Acoustics Stasys 118.

