

DBS 18-2



FEATURES

- The Outline DBS 18-2 is a high-efficiency subwoofer featuring two 18" long-excursion low frequency transducers. It utilises a number of innovative technologies to provide premium electro-acoustic performance, including ultra-low power compression and distortion figures, to reliably deliver very high SPLs over extended periods
- Very high power handling (9600 watts AES peak) and maximum sound pressure level (147 dB SPL peak at 1 metre)
- Integral to the DBS 18-2 design is an example of Outline's innovation in loudspeaker design, namely the 'Decoupled Baffle Subwoofer' assembly. This ingenious design contributes to the structural integrity of the entire cabinet as well as reducing resonance (and thus unwanted colouration) as well as air turbulence noise from the reflex ports
- Specifically designed to be ground-stacked, the cabinet is equipped with sturdy feet to protect it and provide a solid base
- Amplifier connection is made via a Speakon NL4 wired 2-way so that each transducer can be powered by a dedicated amplifier channel. To achieve optimum results from the DBS 18-2 subwoofer Outline recommends the use of the T Eleven amplifier, which will correctly power two cabinets
- Optional trolley-board using a 'stack & strap' method of location - aids handling and transportation

APPLICATIONS

- Designed for use in applications requiring accurate and powerful reproduction of low frequencies at very high levels, its ability to reproduce program material with such integrity makes the DBS 18-2 applicable for either fixed or mobile use, which require energetic low frequency response without stress or equalisation.

DESCRIPTION

The DBS 18-2 is a dual 18" subwoofer enclosure using phase inversion type loading, which, coupled with the use of several innovative loudspeaker technologies, allows it to deliver consistent performance at the highest levels over many years.

The enclosure is tuned to a low frequency by way of a long port with a large surface area. This allows the DBS 18-2 to obtain a wide passband and a considerable extension towards the bottom end of the frequency response. The DBS 18-2's acoustic performance is the result of experience, in-depth analysis and careful design. The inner configuration improves the stiffness-to-weight ratio of the overall structure while the baffle orientation and the woofer placement are designed to minimise internal resonance, dampen box-vibration modes and eliminate completely the usual 'port turbulence' associated with this loading method. The name of this Outline design is 'Decoupled Baffle Subwoofer'.

The DBS 18-2 is primarily intended for large-scale applications, although it is also ideally suited to projects that demand no-compromise audio quality. The DBS 18-2 addresses an increasing demand for accurate, high definition bass reproduction. This product is capable of outstanding electrical to acoustic power conversion but still within a compact package. The performance is very high thanks to the careful choice of the reflex alignment and the construction of the cabinet. The DBS 18-2 has a useable frequency range at -10 dB of from 28 Hz to 160 Hz, while the response is just +/-3 dB from 34 Hz to 107 Hz.

The max sensitivity is 103 dB in half space and the maximum continuous AES power of 2400 W gives 137 dB SPL in half-space, while peak values can reach 147 dB SPL. The DBS 18-2's high quality build finish is constructed from 18 mm (phenolic-glued) Baltic-birch plywood. The outer finish applied is a scratch-resistant, waterproof black paint and the front of the cabinet is protected by an anti-resonant steel grille.

The cabinet has 24 flying points, that makes vertical or horizontal hanging possible by using the appropriate accessories. The enclosure can accommodate an optional trolley-board, for handling and transporting on even or uneven surfaces. Recessed integrated handles in the side panels of the cabinet are used for a positive grip during handling.

Connection to the loudspeaker comes in the form of one Speakon NL4 wired pin 1+: positive, pin 1-: negative for the first transducer and pin 2+: positive, pin 2-: negative for the second transducer.

TECHNICAL SPECIFICATIONS:

FREQUENCY RESPONSE (PROCESSED)

(-10 dB) 28 Hz ÷ 160 Hz
(±3 dB) 34 Hz ÷ 107 Hz

AVERAGE DISPERSION Quasi-omnidirectional

IMPEDANCE (Ω)
Low 2 x 8 Ω (min 6.2 Ω)

SENSITIVITY (dB SPL @ 1W 1m)
Low 103 (half-space)

POWER HANDLING - WATT AES
Low Cont. 2 x 1200 W Peak 2 x 4800 W

MAX SHORT-TERM SPL @ 1 m, half-space * 147 dB SPL

LOUDSPEAKERS AND LOADING

Low 2 x 18" hybrid band-pass loaded woofers

WEIGHT

Single Unit 93.5 kg (206.1 lb)
Shipping (1 unit) 100 kg (220 lb)

DIMENSIONS

Height 605 mm (23.8") 750 mm (29.5")
Width 1124 mm (44.3") 1170 mm (46.1")
Depth 650 mm (25.6") 680 mm (26.8")

* calculated using +10 dB crest-factor signal

MULTIPURPOSE SERIES