



emacoustics

TECHNICAL DATA SHEET

S-18

COMPACT HIGH POWER REFLEX SUBWOOFER

The S-18 is a compact, powerful subwoofer, designed to complement the full range products within the EMS Series for a variety of applications. The optimally-tuned vented enclosure provides excellent transient response and low frequency reproduction without the aid of corrective equalisation.

FEATURES AND BENEFITS

- High power-to-size ratio
- Exceptional frequency and impulse response ensure fast, accurate low frequencies
- 1 x 18" neodymium high-excursion LF drive unit
- Multiple M10 flying points
- M20 threaded pole mount adapter
- Tour-grade castors included
- Protective cover accessories available
- Impact and weather resistant black or white finish as standard
- RAL colour and enhanced weather protection options

APPLICATIONS

- Theatre
- Houses of worship
- Conference, corporate and audio-visual
- Live music
- Nightclub

The compact enclosure is constructed from premium 18mm (3/4") multi-laminate Birch plywood, and houses a single 4.5" voice coil, 18" (457mm) neodymium LF drive unit. The enclosure includes a single M20 threaded pole mount adapter allowing the mounting of EMS Series full range loudspeakers above. Also as standard, the S-18 is supplied with castors for the rear and is fitted with rubber feet underneath and matching recesses on top to allow stable stacking of multiple enclosures. Two Neutrik® speakON™ NL4 connectors are provided for input and enclosure link, and a pair of bar handles allow easy lifting. Lastly a hex-punched stainless steel grille backed with acoustically transparent mesh protects the drive unit from damage which can be quickly removed for service purposes. The enclosure is finished in an impact and weather resistant black or white textured polyurethane finish as standard, however RAL colour matching and weather-protected outdoor installation options are also available.

The S-18 requires an active crossover to function correctly – although the choice of filter points is very wide, allowing the user to tailor the re-



sponse to exactly what is required. Cardioid DSP program settings are also available to create arrays with significant rejection to the rear of the subwoofers, by stacking three enclosures in a block (two facing forwards, one facing backwards).

The S-18 can add low frequency power and extension to systems based around any EM Acoustics full range product, or for full range products from other manufacturers.

The S-18 requires a single amplifier channel, and external DSP for active high/low pass filters and limiters. As such, it is recommended to be used with EM Acoustics' range of Advanced System Amplifiers. It is however possible to use other DSP-enabled amplifiers, or conventional amplifiers with external DSP. Suitable DSP settings are provided on the EM Acoustics website. The amplifier channel should be capable of delivering 1500-2000W RMS into a 4-ohm load. For cardioid arrays, separate amplifier channels are required for the rear-firing subwoofer(s) due to the different processing needed.

ENCLOSURE OPTIONS

S-18 enclosures are available as standard in black or white impact resistant polyurethane finish. Custom RAL colours can be supplied on request; extended lead times and set up costs apply. S-18 enclosures can also be supplied as an outdoor version (OD), finished in the same weather-resistant polyurethane coating, with weather-resistant connector options and other cabinet details bespoke to the customer's request. Custom RAL colours are also available for outdoor options by specific quote. Please contact your local EM Acoustics representative for details.



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TECHNICAL SPECIFICATIONS

ENCLOSURE TYPE:

DIMENSIONS (HxWxD):

NET/SHIPPING WEIGHT:

FREQUENCY RESPONSE¹:

SENSITIVITY²:

DISPERSION³:

DRIVE UNITS:

LOUDSPEAKERS PER AMPLIFIER (maximum for full loudspeaker SPL):

LOUDSPEAKERS PER AMPLIFIER (recommended absolute maximum)⁴:

POWER HANDLING:

MAXIMUM SPL⁵:

NOMINAL IMPEDANCE:

CROSSOVER:

CONNECTORS:

ENCLOSURE:

ENCLOSURE HARDWARE:

GRILLE:

OPTIONS:

ACCESSORIES:

SPARE PARTS

single driver reflex-loaded subwoofer

635 (25) x 590 (22.2) x 650 (25.6) mm/(ins)

51/55kg (112.2/121lbs)

35Hz – 150Hz ±3dB

97dB

Omnidirectional

1 x 18" (457mm) neodymium LF cone drive unit

DQ6: Not recommended, DQ10: 1 per channel, DQ20: 2 per channel

DI06: Not recommended, DI10: Not recommended, DI20: 1 per channel

DQ6: 1 per channel, DQ10: 2 per channel, DQ20: 2 per channel

DI06: Not recommended, DI10: 1 per channel, DI20: 2 per channel

1000W RMS, 2000W program

131dB continuous, 137dB peak

4 ohms

External active

2 x Neutrik® speakON™ NL4

18mm (3/4") multi-laminate Birch plywood – rebated, screwed and glued,

Finished in impact and weather resistant black or white polyurethane

2 x flush bar handles, rubber feet & mating recesses, M20 threaded polemount adapter

Hex-punched stainless steel, backed with acoustically transparent mesh

Colours / weather protection

TC-S18 padded transit cover

S-15/S-18 flybar set

DU-1802 18" (457mm) drive unit

RFG-S18 replacement grille

NOTES ON MEASUREMENT CONDITIONS:

¹Measured on-axis at 2m in an anechoic environment and referenced to 1m. ²Measured in half space at 2m with 4W sine wave input and referenced to 1m. ³Nominal dispersion, measured in an anechoic environment and averaged over stated bandwidth. ⁴These loudspeaker quantities are the recommended maximum, and will not drive the loudspeaker to full output. ⁵Calculated and verified by subjective listening test of familiar program material.

ENGINEERING DRAWING

