



emacoustics

## TECHNICAL DATA SHEET

# S-12

## COMPACT REFLEX SUBWOOFER

**The S-12 is a compact reflex loaded subwoofer intended for a wide variety of mobile and fixed installation applications where size is critical, yet significant output and a wide frequency response are also required. The S-12 is as much at home as a compact FOH subwoofer for small scale live music reinforcement as it is in a theatre, cafe/bar or nightclub installation.**

### FEATURES AND BENEFITS

- Compact size yet significant output
- Ideal low frequency support when size is restricted
- 1 x 12" high-excursion LF drive unit
- Surprising depth and power from a compact enclosure
- Multiple M10 flying points
- M20 threaded polemount adapter
- Rubber feet and stacking recesses
- Impact and weather resistant black or white finish as standard
- RAL colour and enhanced weather protection options

### APPLICATIONS

- Cafés and bars
- Houses of worship
- Conference, corporate and audio-visual

The S-12 is a compact reflex loaded subwoofer designed to extend the bandwidth and increase the headroom of EMS Series loudspeaker models, as well as lend low frequency support in restricted spaces. It consists of a 12" (305mm) high-excursion low frequency driver in a reflex loaded enclosure designed to provide smooth LF roll-off and extended bass response.

The drive unit is housed within a compact, vented enclosure constructed from premium 15mm (5/8") multi-laminate Birch plywood. The S-12 has significant output compared to its footprint, and its compact dimensions enable it to be unobtrusively installed in restricted spaces such as under seating in clubs and bars or flown in ceiling spaces. A total of 16 M10 threaded fixings are incorporated around the enclosure on the top, bottom, sides, and rear for attachment of rigging hardware and safeties. A single flush bar handle, M20 threaded pole mount fitting and feet with matching stacking recesses complete the mechanical offering. The enclosure includes a pair of Neutrik® speakON™ NL4 connectors for input and enclosure link, and 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 enhanced weather-protected outdoor installation options are also available.

The S-12 is designed to provide useful low frequency extension in any application where space is at a premium. The S-12 can support any product, but is especially suitable for reinforcing EMS-41, EMS-51, EMS-61 and EMS-81X loudspeakers, as well as the Reference Series R5.

The S-12 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 1000-1400W RMS into an 8-ohm load.

### ENCLOSURE OPTIONS

S-12 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-12 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.



## TECHNICAL SPECIFICATIONS

### ENCLOSURE TYPE:

DIMENSIONS: (HxWxD): :

NET/SHIPPING WEIGHT:

FREQUENCY RESPONSE<sup>1</sup>:

SENSITIVITY<sup>2</sup>:

DISPERSION<sup>3</sup>:

DRIVE UNITS:

LOUDSPEAKERS PER AMPLIFIER (maximum for full loudspeaker SPL):

LOUDSPEAKERS PER AMPLIFIER (recommended absolute maximum)<sup>4</sup>:

POWER HANDLING:

MAXIMUM SPL<sup>4</sup>:

NOMINAL IMPEDANCE:

CROSSOVER:

CONNECTORS:

ENCLOSURE:

RIGGING & HARDWARE:

GRILLE:

OPTIONS:

Compact reflex loaded subwoofer

360 (14.2) x 530 (20.9) x 500 (19.7) mm/(ins)

29kg/30kg (63.8/66lbs)

45Hz – 150Hz ±3dB

98dB

Omnidirectional

1 x 12" (305mm) LF drive unit

DQ6: 1 per channel, 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: 4 per channel

Di06: 1 per channel, Di10: 1 per channel, Di20: 2 per channel

700W RMS, 1400W program

124dB continuous, 130dB peak

8 ohms

External active

2 x Neutrik® speakON™ NL4

15mm (5/8") multi-laminate Birch plywood

Finished in impact and weather resistant black or white polyurethane

16 x M10 threaded mounting points

single bar handle, rubber feet & mating recesses, M20 threaded pole mount adapter

Hex-punched stainless steel, backed with acoustically transparent mesh

Colours / weather protection

### NOTES ON MEASUREMENT CONDITIONS:

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

## ENGINEERING DRAWING

