



emacoustics

## TECHNICAL DATA SHEET

# S-215

## HIGH POWER REFLEX SUBWOOFER

The S-215 is a compact high-power subwoofer, designed to provide optimum low frequency support in a wide variety of mobile and installation applications. The rugged enclosure houses a pair of reflex-loaded 4" voice coil, 15" (381mm) neodymium LF cone drive units. Like all EM Acoustics products, headroom is key - large amounts of low frequency information can be produced by a surprisingly small and lightweight subwoofer enclosure.

### FEATURES AND BENEFITS

- Medium format reflex subwoofer
- 2 x 15" neodymium high-excursion LF drive units
- Tour-grade castors included
- Protective floor runners and matching stacking recesses
- Protective cover accessories available
- Can be used to form HALO-B ground stacks
- Impact and weather resistant black or white finish as standard
- RAL colour and weather protection options

### APPLICATIONS

- Medium scale live music reinforcement
- Theatre
- Houses of worship
- Conference, corporate and audio-visual
- Theme parks

The S-215 is a compact high power reflex subwoofer, designed to support any EM Acoustics fullrange loudspeaker. It can also be used to assemble HALO-B ground stacks with the GS-HALO-B rigging accessory.

The robust enclosure is constructed from premium 18mm (3/4") multi-laminate Birch plywood – rebated, screwed and glued together. The enclosure is finished in black impact and weather-resistant black or white textured polyurethane as standard, however RAL colour matching as well as enhanced weather protection options are available if required.

Input and link out are provided on Neutrik speakON™ NL4 connectors. The enclosure includes two M20 threaded polemount adapters for mounting fullrange loudspeakers in both portrait and landscape orientations. Runners are provided on the bottom of the enclosure and on one end to protect the paint finish when in use either lying down or stood on-end, and recesses on the top of the enclosure allow stable stacking of arrays. Eight flush bar handles and tour-grade castors are also fitted as standard. The enclosure also features three M8 threaded points in the top face for attachment of the GS-HALO-B ground stacking plate. Lastly,



a hex-punched stainless steel grille backed with acoustically-transparent mesh protects the drive units from damage, which can be quickly removed for service purposes.

The S-215 requires an active crossover to function correctly – although the choice of filter points is very wide, allowing the user to tailor the response to exactly what is required. Cardioid DSP program settings are also available to create arrays with significant rejection to the rear of the subwoofers.

The S-215 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 3000-4000W 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-215 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-215 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:

Medium format reflex subwoofer

### DIMENSIONS (HxWxD): :

550 (21.7) x 772 (30.4) x 752 (29.6) mm/(ins)

### NET/SHIPPING WEIGHT:

62/66kg (136/141lbs)

### FREQUENCY RESPONSE<sup>1</sup>:

40Hz – 150Hz ±3dB

### SENSITIVITY<sup>2</sup>:

100dB

### DISPERSION<sup>3</sup>:

Omnidirectional

### DRIVE UNITS:

2 x 15" (381mm) neodymium LF cone drive units

### LOUDSPEAKERS PER AMPLIFIER (maximum for full loudspeaker SPL):

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

Di06: Not recommended, Di10: Not recommended, Di20: 1 per channel

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

Di06: Not recommended, Di10: Not recommended, Di20: 1 per channel

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

2000W RMS, 4000W program

### POWER HANDLING:

133dB continuous, 139dB peak

### MAXIMUM SPL<sup>5</sup>:

### NOMINAL IMPEDANCE:

4 ohms

### CROSSOVER:

External active

### CONNECTORS:

2 x Neutrik® speakON™ NL4

### ENCLOSURE:

18mm (3/4") multi-laminate Birch plywood – rebated, screwed and glued  
Finished in impact and weather resistant black or white polyurethane

### ENCLOSURE HARDWARE:

8 x flush bar handles, touring runners & mating recesses, tour-grade castors

2 x M20 threaded polemount adapter, 3 x M8 threaded fittings

Hex-punched stainless steel, backed with acoustically transparent mesh

### GRILLE:

Colours / weather protection

### OPTIONS:

TC-S215 padded touring cover

### ACCESSORIES:

DU-1508 15" (381mm) neodymium drive unit

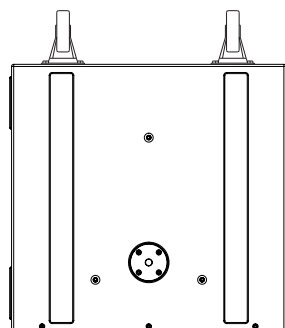
### SPARE PARTS

RFG-S215 replacement grille

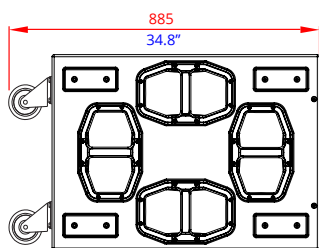
### NOTES ON MEASUREMENT CONDITIONS:

<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.

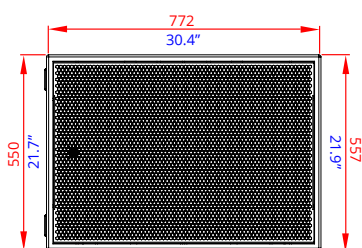
ENGINEERING DRAWING



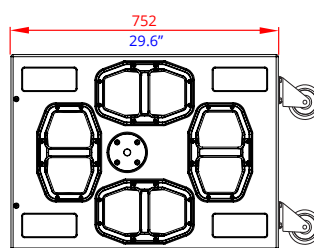
TOP



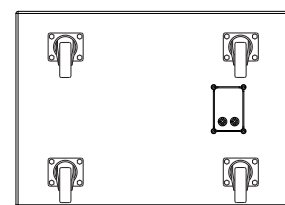
LEFT



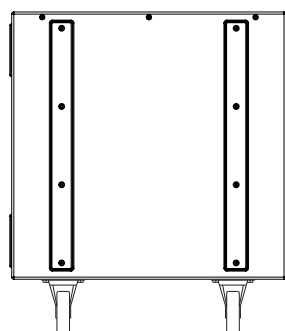
FRONT



RIGHT



REAR



BOTTOM