## TECHNICAL DATA SHEET

The ST-215 is a compact touring subwoofer, intended to support any product within the EM Acoustics range but is an ideal companion to the HALO-B medium format line array. The feature set is optimised for touring applications however the discreet aesthetics mean the ST-215 is equally at home in installations.

#### FFATURES AND BENEFITS

- · Medium format touring-oriented subwoofer
- · Four-point touring flying system
- 2 x 15" neodymium high-excursion LF drive units
- · Mechanically and acoustically compatible with HALO-B
- Impact and weather resistant black, and textured white finishes as standard
- RAL colour and weather protection options
- · Various transport, protection and flying accessories available

#### APPLICATIONS

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

The ST-215 is a compact touring subwoofer, and whilst it is designed to be mechanically and acoustically compatible with the HALO-B system, it is a standalone product in its own right and can be used to support any EM Acoustics product - either in a flown or ground stack configuration.

The compact enclosure houses a pair of 4" voice coil, 15" (381mm) neodymium drive units, in a reflex design with a single low-velocity port to minimise distortion. The drive units' high motor strength gives the ST-215 excellent transient response, and the moving area of the two high-excursion 15" drive units generate significant low frequency extension and overall output. The enclosure is symmetrical, so in both flown and ground stacked configurations one enclosure in every three can be rotated to create a cardioid array. Such arrays offer exceptional low frequency directivity control and significantly reduce the energy radiating to the rear.

The robust enclosure is constructed from premium 18mm (3/4") multi-laminate Birch plywood - rebated, screwed and glued together for maximum strength. The enclosure is finished in a rugged black textured polyure-thane finish or white textured paint as standard, however RAL colour matching and weather-protected outdoor installation options are also available.



The flying hardware has been built with touring flexibility and reliability in mind. The ST-215 uses a 4-point system, and all rigging components retract flush for transit and ground stack use. The ST-215 is mechanically compatible with HALO-B systems or can be flown as a standalone array. Ultra-high tensile steel parts form the core of the 4-point system, meaning arrays of up to 9 elements can be safely assembled with above-regulation safety factors. The mechanical package is completed by a meshbacked stainless steel grille, eight recessed bar handles (four per side), protective stacking runners and mating recesses, an M20 threaded pole adapter and attachment points for the optional castors on the rear.

The ST-215 requires external active high/low pass filters and a single amplifier channel to function correctly - as such it is recommended to be used with the DQ10 or DQ20 advanced system amplifiers. For cardioid arrays, separate amplifier channels are required for the rear-firing subwoofer(s) due to the different processing needed.

Optional accessories include castor sets, multi-enclosure touring wheelcarts, flying grids and padded covers for both single enclosures and multi-enclosure carts.





### TECHNICAL SPECIFICATIONS

ENCLOSURE TYPE: Medium format flyable reflex subwoofer

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

NET/SHIPPING WEIGHT: 73/77kg (161/169lbs) FREQUENCY RESPONSE $^1$ : 40Hz - 150Hz  $\pm$ 3dB

SENSITIVITY2: 100dB

DISPERSION<sup>3</sup>: Omnidirectional, cardioid possible when arrayed DRIVE UNITS: 2 x 4" voice coil 15" (381mm) neodymium LF drive units

LOUDSPEAKERS PER AMPLIFIER CHANNEL DQ6\*: 1 per channel, DQ10\*: 1 per channel, DQ20: 2 per channel

POWER HANDLING: 2000W RMS, 4000W program MAXIMUM SPL4: 133dB continuous, 139dB peak

NOMINAL IMPEDANCE: 4 ohms

RIGGING & HARDWARE:

CROSSOVER: External active, recommended below 120Hz

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 polyurethane, or textured white paint 4-point system, ultra-high tensile steel. Enclosure hardware rated to 9 elements at 10:1

safety factor. 8 flush bar handles, M20 threaded pole adapter, protective runners and

stacking recesses

GRILLE: Mesh-backed perforated stainless steel
OPTIONS: Colours / extended weather protection

ACCESSORIES Touring castor set

FG-HALO-B master flying grid GS-HALO-B ground stack plate WC-T215 transit wheelcart

TC-T215 single enclosure padded touring cover TC-T215-2 dual enclosure padded touring cover TC-T215-3 triple enclosure padded touring cover

SPARE PARTS: DU-1508 15" (381mm) LF drive unit

RFG-S215 replacement grille Pin-0.3125/0.625 ball-lock flying pin

#### 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>Calculated and verified by subjective listening test of familiar program material.

\*Whilst the DQ6 and DQ10 will operate the ST-215, they will not allow the subwoofer to reach its full potential and as such should only be used in low SPL environments.

#### ENCLOSURE OPTIONS

ST-215 enclosures are available as standard in black 3-step impact resistant polyurethane finish, or white water-based Warnex textured paint. Custom RAL colours can be supplied on request; extended lead times and set up costs apply. ST-215 enclosures can also be supplied as an outdoor version (OD), finished in the same black weather-resistant 3-step polyurethane coating, with stainless steel grilles and 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.



# ENGINEERING DRAWING

