TECHNICAL DATA SHEET

The EMS-61 is an extremely compact, powerful loudspeaker intended for a wide variety of applications - from theatre fills and effects, through corporate, A/V and small front-of-house duties, and even extending to ultra-compact stage monitoring. Utilising our latest passive crossover topologies, and the utmost in drive unit technology, this loudspeaker is completely passive yet outperforms many bi-amplified or processed designs.

FFATURES AND BENEFITS

- · Asymmetrical multi-angled cabinet for FOH or stage monitor use
- · Genuine plywood cabinet for sonic benefit over plastic
- 6.5" neodymium LF, 1" exit neodymium HF drive units
- True passive design no corrective DSP required
- Rotatable 90° x 60° waveguide
- · Flexible rigging and mounting options
- Compatible with OmniMount[™] and Powerdrive brackets
- Impact and weather resistant black, and textured white finishes as standard
- RAL colour and weather protection options

APPLICATIONS

- · Corporate and audio-visual
- · Theatrical spot effects
- Fills and delays
- Studio monitoring

The EMS-61 is a two-way passive loudspeaker, using a 2" voice coil, 6.5" (165mm) neodymium low frequency transducer. This low frequency drive unit is coupled via the internal passive crossover network to a 1.7" diaphragm, 1" exit neodymium high frequency transducer. This drive unit loads onto a rotatable 90° x 60° constant-coverage hom, which yields not only consistent response throughout its operating band across the whole coverage pattern but also strong attenuation outside of this pattern. The result is a loudspeaker with extremely consistent and predictable coverage, as well as stunning sonic detail – and all with the ease of use that passive crossover technology brings.

The drive units are housed within a compact, vented enclosure. The robust enclosure is constructed from premium 12mm (1/2") multi-laminate Birch plywood, and is heavily braced to minimise panel reflection. Five M8 threaded fixings are incorporated around the enclosure (one top, one bottom, one on the rear and two on the side) for attachment of optional rigging hardware and safeties. Four M6 threaded fixings on the rear of



the enclosure are compatible with OmniMount™ Series 30 and Power-drive™ Series 75 bracket products.

The enclosure also includes a pair of Neutrik® speakON™ NL4 connectors for input and enclosure link. Lastly, a tough hex-punched grille backed with acoustically transparent fabric protects the drive units from damage. The grille can be quickly removed for service purposes or to rotate the HF waveguide – the orientation of which can be determined without removing the grille. The enclosure is finished in black impact and water-resistant polyurethane or white textured paint as standard, however RAL colour matching and increased weather resistant options are also available.

The EMS-61 requires a single amplifier channel, and should be used with professional power amplifiers capable of delivering 300-500W RMS into an 8-ohm load. For optimal results, the DQ Series Advanced System Amplifiers should be used.





TECHNICAL SPECIFICATIONS

ENCLOSURE TYPE: Two-way passive, reflex loaded

DIMENSIONS (HxWxD) 368 (14.5) x 195 (7.7) x 208 (8.2) mm/(ins)

NET/SHIPPING WEIGHT: 7/8kg (15.4/17.6lbs) FREQUENCY RESPONSE¹: 80Hz - 20kHz \pm 3dB

SENSITIVITY²: 93dB

DISPERSION³: 90° x 60°, rotatable

DRIVE UNITS: 6.5" (165mm) neodymium LF cone drive unit

1" (25mm) exit neodymium HF compression drive unit

LOUDSPEAKERS PER AMPLIFIER DQ6: 4 per channel, DQ10: 4 per channel, DQ20: 4 per channel

POWER HANDLING: 200W RMS, 400W program

MAXIMUM SPL⁴: 118dB continuous, 124dB peak

NOMINAL IMPEDANCE: 8 ohms

CROSSOVER: Asymmetric internal passive CONNECTORS: $2 \times \text{Neutrik} \otimes \text{speakON}^{TM} \text{ NL4}$

ENCLOSURE: 12mm (1/2") multi-laminate Birch plywood – rebated, pinned and glued.

Finished in impact and weather resistant black polyurethane, or textured white paint

RIGGING & HARDWARE: 5 x M8 threaded mounting points

4 x M6 threaded points for OmniMount™ Series 30/Powerdrive™ Series 75 brackets

GRILLE: Hex punched steel backed with acoustically transparent fabric

OPTIONS: Colours/Weather Protection

ACCESSORIES: YK-61v vertical flying yoke
YK-61h horizontal flying yoke

PM-61 35mm pole mount adapter

SPARE PARTS: DU-601 6.5" drive unit

CDU-1001A 1" exit HF compression drive unit

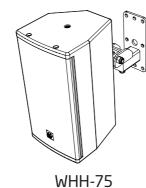
PX-61 passive crossover assembly RFG-61 replacement grille/foam

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. ⁴Calculated and verified by subjective listening test of familiar program material.

RIGGING ACCESSORIES









ENCLOSURE OPTIONS

EMS-61 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. EMS-61 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

