



emacoustics

TECHNICAL DATA SHEET

EMS-61

COMPACT PASSIVE LOUDSPEAKER

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.

FEATURES 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 or white finish 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 horn, 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 Powerdrive™ 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 stainless steel 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 impact and water-resistant black or white polyurethane as standard, however RAL colour matching and enhanced weather protected outdoor options are also available.

The EMS-61 requires a single amplifier channel, and the use of external DSP is recommended for system protection with high 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 EMS-61 requires a single amplifier channel capable of delivering 300-500W RMS into an 8-ohm load.



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:

RIGGING & HARDWARE:

GRILLE:

OPTIONS:

ACCESSORIES:

SPARE PARTS:

Two-way passive, reflex loaded

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

7/8kg (15.4/17.6lbs)

80Hz – 20kHz ±3dB

93dB

90° x 60°, rotatable

6.5" (165mm) neodymium LF cone drive unit

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

DQ6: 4 per channel, DQ10: 4 per channel, DQ20: 4 per channel

DI06: 1 per channel, DI10: 2 per channel, DI20: 3 per channel

DQ6: 4 per channel, DQ10: 4 per channel, DQ20: 4 per channel

DI06: 2 per channel, DI10: 4 per channel, DI20: 4 per channel

200W RMS, 400W program

118dB continuous, 124dB peak

8 ohms

Asymmetric internal passive

2 x Neutrik® speakON™ NL4

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

Finished in impact and weather resistant textured polyurethane

5 x M8 threaded mounting points

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

Hex punched stainless steel backed with acoustically transparent fabric

Custom Colour/enhanced weather protection (OD model)

YK-61v vertical flying yoke

YK-61h horizontal flying yoke

PM-61 35mm pole mount adapter

DU-601 6.5" drive unit

CDU-1001A 1" exit HF compression drive unit

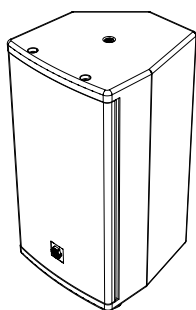
PX-61 passive crossover assembly

RFG-61 replacement grille/fabric

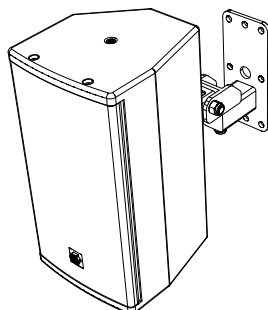
NOTES ON MEASUREMENT CONDITIONS:

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.

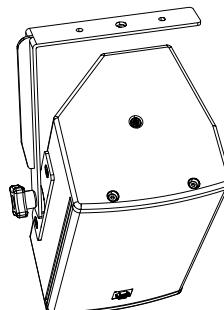
RIGGING ACCESSORIES



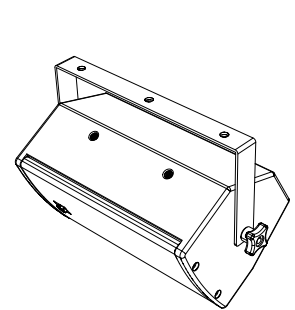
PM-61



WHH-75



YK-61v

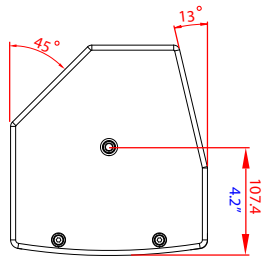


YK-61h

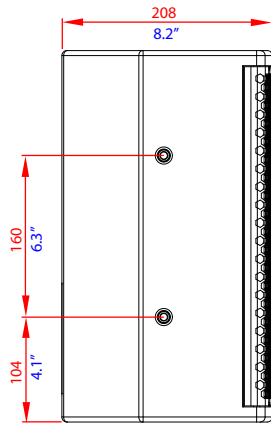
ENCLOSURE OPTIONS

EMS-61 enclosures are available as standard in black or white textured polyurethane finish. 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), with enhanced weather protection features, many bespoke to the customer's request. Please contact your local EM Acoustics representative for details.

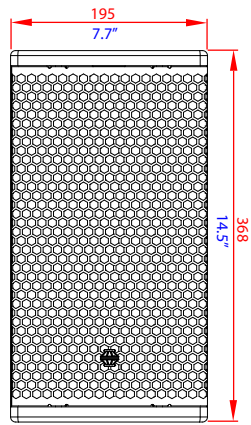
ENGINEERING DRAWING



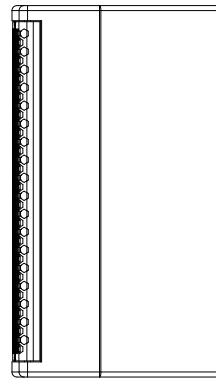
TOP



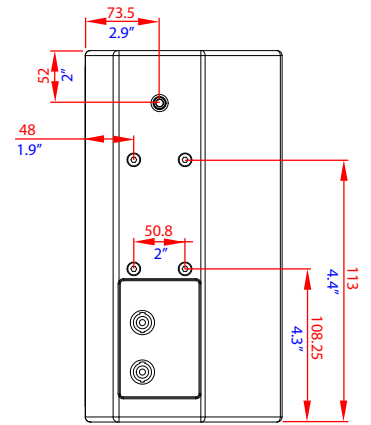
LEFT



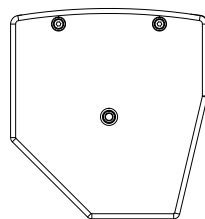
FRONT



RIGHT



REAR



BOTTOM