



EMS-51

ultra compact passive loudspeaker

FEATURES AND BENEFITS:

- signature EM Acoustics passive crossover for unprecedented frequency & phase response
- astonishing LF performance for enclosure size
- compact and lightweight enclosure
- multiple rigging and mounting options

The EMS-51 is an extremely compact loudspeaker intended for a wide variety of applications - any scenario where a compact solution is required, yet whilst still retaining the SPL capability and quality of a professional loudspeaker product. 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.

The EMS-51 is a two-way passive loudspeaker, using a 1.25" voice coil 5" (127mm) low frequency transducer. This low frequency drive unit is coupled via the internal passive crossover network to a 1.1" (28mm) diaphragm, studio-grade soft dome high frequency transducer. The enclosure is an infinite baffle design - unusual for a loudspeaker of this size - which gives a much smoother LF roll off and a much more robust low frequency performance than would be expected from an enclosure of this size. Consequently, in some applications the EMS-51 can be used without subwoofer support for lower SPL requirements.

The drive units are housed within a compact, sealed enclosure. The robust enclosure is constructed from premium 12mm (1/2") multi-laminate Birch plywood, and is braced to minimise panel reflection. Four M8 threaded fixings are incorporated around the enclosure (1 top, 1 bottom and 1 on each side) for attachment of rigging hardware and safeties. The enclosure also includes a pair of Neutrik SpeakON™ NL4MP connectors for input & enclosure link. Lastly, a tough perforated steel grille protects the drive units from damage. The grille can be quickly removed for service purposes. The enclosure is finished in black or white textured paint as standard, however RAL colour matching and weather resistant options are also available.

The EMS-51 is ideal for theatrical spot effects, fill loudspeakers and delays, as well as corporate and A/V use. Due to the discreet appearance, the EMS-51 can also find use in domestic A/V systems and studio monitoring. For ease of use, the EMS-51 comes packaged with both horizontal and vertical mounting yokes.

The EMS-51 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 EM Acoustics AQ-3 power amplifier should be used.

ENCLOSURE TYPE:

DIMENSIONS (HxWxD):

NET/SHIPPING WEIGHT:

FREQUENCY RESPONSE¹:

SENSITIVITY²:

DISPERSION³:

DRIVE UNITS:

POWER HANDLING:

MAXIMUM SPL⁴:

NOMINAL IMPEDANCE:

CROSSOVER:

CONNECTORS:

ENCLOSURE:

RIGGING & HARDWARE:

GRILLE:

OPTIONS:

ACCESSORIES:

SPARE PARTS:

two-way passive, infinite baffle

250 (9.9) x 140 (5.5) x 175 (6.9) mm/(ins)

4.5/5.2kg (9.9/11.7lbs)

80Hz - 20kHz +/- 3dB

89dB

75° conical

5" (127mm) LF cone drive unit

1.1" (28mm) HF soft dome tweeter

200W RMS, 400W program

113dB continuous, 119dB peak

8 ohms

asymmetric internal passive

2 x Neutrik SpeakON™ NL4MP

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

Finished in impact resistant textured paint

4 x M8 threaded mounting points

perforated steel

Colours/Weather Protection

YK-51v vertical flying yoke

YK-51h horizontal flying yoke

DU-501 5" drive unit

SD-1001 1.1" HF soft dome tweeter

PX-51 passive crossover assembly

RG-51 replacement grille

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.

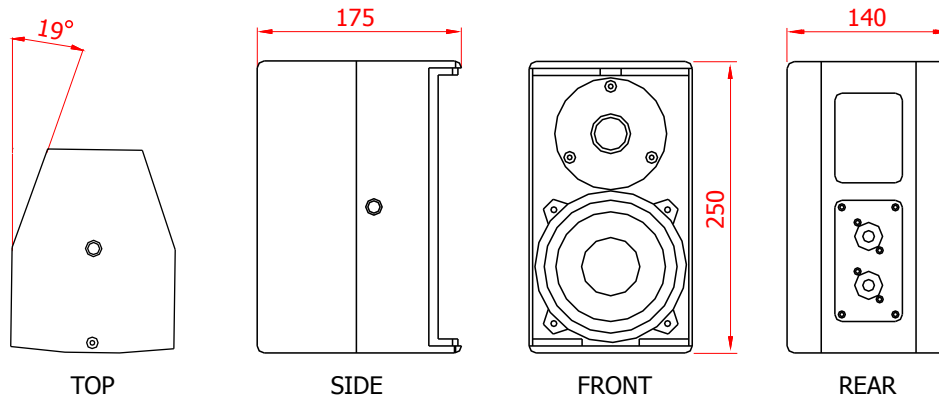
³Nominal dispersion, measured in an anechoic environment and averaged over stated bandwidth

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

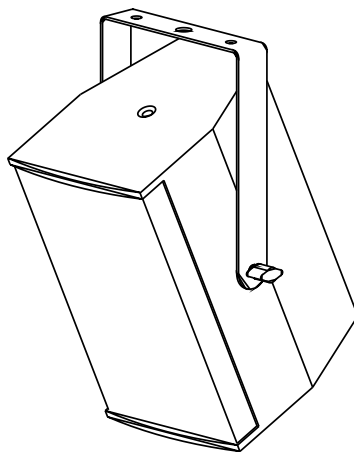
ENGINEERING DRAWING

EMS-51

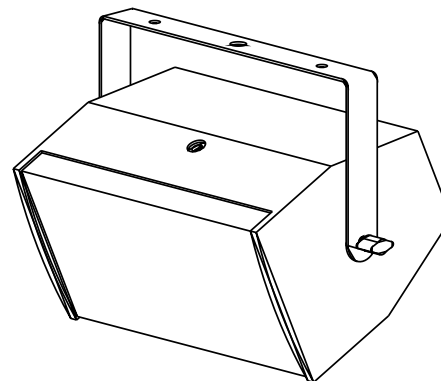
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RIGGING ACCESSORIES



YK-61v



YK-61h

ENCLOSURE OPTIONS

EMS-51 enclosures are supplied as standard in black or white. Any RAL colour can be supplied on request (extended lead time and setup charges apply). Weather protection options are also available to give enhanced protection to the loudspeaker when used outdoors for extended periods of time.