

The EMS-51X is an extremely compact loudspeaker intended for a wide variety of applications. It performs beautifully in any scenario where a compact solution is required and displays the SPL capability and headroom for which EM Acoustics has an unmatched reputation. Utilising our latest crossover topologies and the utmost in drive unit technology, this loudspeaker is completely passive yet outperforms many bi-amplified or processed designs. Sharing the DNA of larger boxes and the consistency of voicing apparent across the entire EM Acoustics range, the 51X will integrate elegantly into any distributed system.

FEATURES AND BENEFITS

- Astonishing LF performance for enclosure size
- Premium plywood cabinet for sonic benefit over plastic
- 5" neo LF/1.1" silk dome HF drive units
- True passive design - no corrective DSP required
- Sealed enclosure gives gentle 12dB/octave LF roll off
- Flexible rigging and mounting options
- Horizontal yoke included
- Impact and weather resistant black or white polyurethane finishes as standard
- RAL colour options

APPLICATIONS

- Theatrical spot effects
- Fills and delays
- Conferences and meetings
- Corporate and audio-visual
- Cafés and bars
- Studio monitoring

Like its predecessor, the EMS-51X is a two-way passive loudspeaker, using a 1.25" voice coil 5" (127mm) neodymium 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-51X can be used without subwoofer support for lower SPL requirements.

The drive units are housed within a compact, sealed enclosure constructed from premium 12mm (1/2") multi-laminate Birch plywood, intelligently braced to

minimise panel deflection. Updated cabinet geometry, 5-axis machined for a modern aesthetic, brings the EMS-51X right up to date. Three M8 threaded fixings are incorporated around the enclosure (one top, one bottom and one on the rear) for attachment of rigging hardware and safeties. The enclosure also includes a pair of Neutrik® speakON™ NL4 connectors for input and enclosure link. Lastly, a hex punched steel grille backed with acoustically transparent fabric protects the drive units from damage as well as providing a smart and discreet appearance. The grille can be quickly removed for service purposes. The enclosure is finished in impact and weather resistant black or white polyurethane as standard, and RAL colour matching options are also available.



The EMS-51X is ideal for fills and delays, theatrical spot effects, and corporate and AV use. Due to its discreet appearance and exceptional performance, the EMS-51X will also find use in high-end domestic AV systems and studio monitoring. For ease of use, the EMS-51X comes packaged the YK-51X horizontal mounting yoke; other mounting and rigging options are available as options.

The EMS-51X 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, amplifiers from within EM Acoustics' own product range should be used.

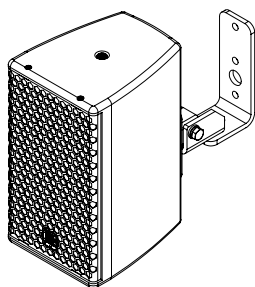
TECHNICAL SPECIFICATIONS

ENCLOSURE TYPE:	Two-way passive, infinite baffle
DIMENSIONS (HxWxD)	250 (9.9) x 140 (5.5) x 169 (6.7) mm/(ins)
NET/SHIPPING WEIGHT:	3.5/4kg (7.7/8.8lbs)
FREQUENCY RESPONSE ¹ :	80Hz – 20kHz ±3dB
SENSITIVITY ² :	89dB
DISPERSION ³ :	75° conical
DRIVE UNITS:	5" (127mm) neodymium LF cone drive unit 1.1" (28mm) HF soft dome tweeter
LOUDSPEAKERS PER AMPLIFIER	DQ6: 4 per channel, DQ10: 4 per channel, DQ20: 4 per channel Di6D: 2 per channel, Di10D: 3 per channel, Di20D: 3 per channel
POWER HANDLING:	200W RMS, 400W program
MAXIMUM SPL ⁴ :	113dB continuous, 119dB peak
NOMINAL IMPEDANCE:	8 ohms
CROSSOVER:	Asymmetric internal passive
CONNECTORS:	2 x Neutrik® speakON™ NL4
ENCLOSURE:	12mm (1/2") multi-laminate Birch plywood – rebated, pinned and glued. Finished in impact and weather resistant black or white polyurethane
RIGGING & HARDWARE:	3 x M8 threaded mounting points
GRILLE:	Hex-punched steel backed with acoustically transparent fabric
OPTIONS:	Colours, connector options YK-51X horizontal flying yoke
ACCESSORIES:	BM-41 ball joint adapter WP-41 wall plate
SPARE PARTS:	WMS50 wall bracket DU-502 5" drive unit SD-1001 1.1" HF soft dome tweeter PX-51X passive crossover assembly RFG-51X replacement grille

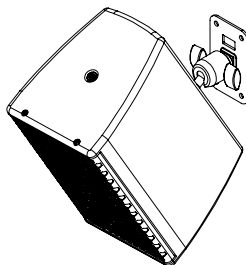
NOTES ON MEASUREMENT CONDITIONS:

¹Measured on-axis at 2m in an anechoic environment and referenced to 1m. ² Measured 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.

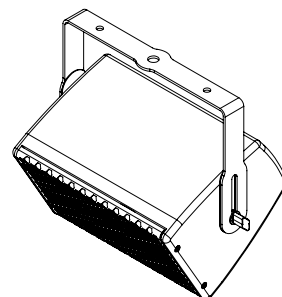
RIGGING ACCESSORIES



WMS50

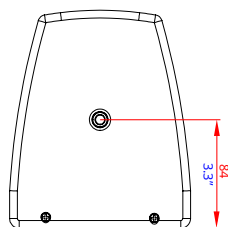


WP-41 & BM-41

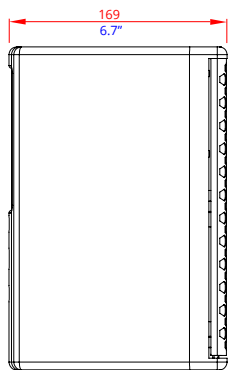


YK-51X

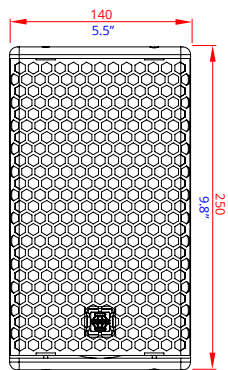
ENGINEERING DRAWING



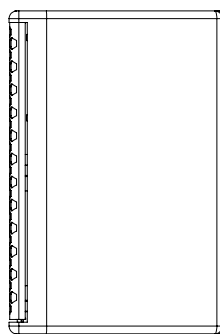
TOP



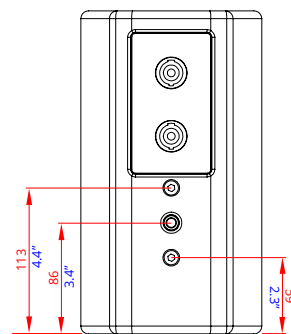
LEFT



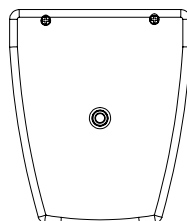
FRONT



RIGHT



REAR



BOTTOM