

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.

## FEATURES AND BENEFITS

- Astonishing LF performance for enclosure size
- Genuine plywood cabinet for sonic benefit over plastic
- 5" 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 and vertical yokes included
- Black and white textured paint as standard
- RAL colour options

## APPLICATIONS

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

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 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 (one top, one bottom and one on each side) for attachment of rigging hardware and safeties. The enclosure also includes a pair of Neutrik® speakON™ NL4 connectors for input and en-



closure 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 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 DQ Series Advanced System Amplifiers should be used.

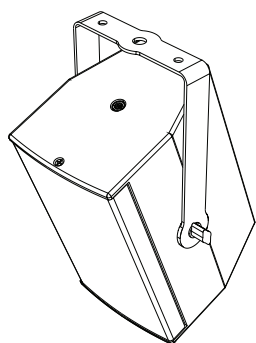
## TECHNICAL SPECIFICATIONS

ENCLOSURE TYPE:	Two-way passive, infinite baffle
DIMENSIONS: (HxWxD): :	250 (9.9) x 140 (5.5) x 175 (6.9) mm/(ins)
NET/SHIPPING WEIGHT:	4.5/5.2kg (9.9/11.7lbs)
FREQUENCY RESPONSE <sup>1</sup> :	80Hz – 20kHz ±3dB
SENSITIVITY <sup>2</sup> :	89dB
DISPERSION <sup>3</sup> :	75° conical
DRIVE UNITS:	5" (127mm) 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
POWER HANDLING:	200W RMS, 400W program
MAXIMUM SPL <sup>4</sup> :	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 resistant textured paint
RIGGING & HARDWARE:	4 x M8 threaded mounting points
GRILLE:	Perforated steel
OPTIONS:	Colours
ACCESSORIES:	YK-51v vertical flying yoke YK-51h horizontal flying yoke
SPARE PARTS:	DU-501 5" drive unit SD-1001 1.1" HF soft dome tweeter PX-51 passive crossover assembly RG-51 replacement grille

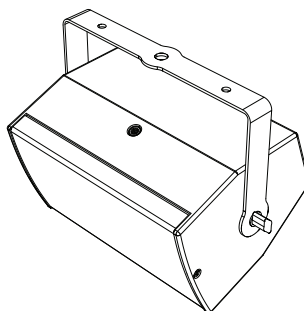
### NOTES ON MEASUREMENT CONDITIONS:

<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.

## RIGGING ACCESSORIES



YK-51v



YK-51h

## ENCLOSURE OPTIONS

EMS-51 loudspeakers are available as standard in black or white textured paint finish. Custom RAL colours can be supplied on request; extended lead times and setup costs apply. Please contact your local EM Acoustics representative for details.

ENGINEERING DRAWING

