



EMS-122/122w passive fullrange loudspeaker

FEATURES AND BENEFITS:

- signature EM Acoustics passive crossover for unprecedented frequency & phase response
- two dispersion options in identical physical enclosure
- rotatable HF for maximum flexibility
- multi-angle enclosure for ease of use
- tour-friendly rigging and mounting options

Intended as a multi-purpose, high power medium format loudspeaker, the EMS-122 & EMS-122w are EM Acoustics' solution to this common requirement. The two loudspeakers are narrow and wide dispersion variants of the same product. Utilising our latest passive crossover topologies, and the utmost in drive unit technology, these loudspeakers are completely passive yet outperform many bi-amplified or processed designs. The EMS-122/122w is ideal for front-of-house duty for small to medium venues, or as a powerful fill loudspeaker for larger systems. The multi-angle enclosure also allows use as a stage monitor if required.

The EMS-122/122w is a two-way passive loudspeaker, using a 3" voice coil 12" (305mm) neodymium low frequency transducer. This low frequency drive unit is coupled via the internal passive crossover network to a 4" (102mm) diaphragm, 1.4" (36mm) exit neodymium high frequency transducer. This drive unit loads onto a constant-coverage horn, which yields not only consistent response throughout its operating band across the whole coverage pattern (60 degrees by 40 degrees for the EMS-122, 90 degrees x 60 degrees for the EMS-122w, both rotatable) 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 15mm (5/8") multi-laminate Birch plywood, and is heavily braced to minimise panel reflection. Incorporated into the top & bottom of the enclosure are a pair of M10 threaded points for attachment of a variety of rigging and flying hardware, and an M8 safety/pull-back point is provided on the rear of the enclosure. A 35mm polemount socket is provided discretely on the underside for stand mounting. The enclosure also includes a flush bar handle on the rear, and a pair of Neutrik SpeakON™ NL4MPR connectors for input & enclosure link. Lastly, a tough hex-punched grille backed with acoustically transparent foam protects the drive units from damage. The grille can be quickly removed to rotate the HF waveguide if required. 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-122/122w requires a single amplifier channel, and should be used with professional power amplifiers capable of delivering 750-1000W RMS into an 8-ohm load. For optimal results, the EM Acoustics AQ-3 or AQ-10 power amplifiers should be used.

ENCLOSURE TYPE:	two-way passive, reflex loaded
DIMENSIONS (HxWxD):	622 (24.5) x 380 (15) x 364 (14.3) mm/(ins)
NET/SHIPPING WEIGHT¹:	27/29kg (59.4/63.8lbs)
FREQUENCY RESPONSE¹:	70Hz – 20kHz +/- 3dB
SENSITIVITY²:	99dB
DISPERSION³:	60 x 40 (EMS-122) or 90 x 60 (EMS-122w), rotatable
DRIVE UNITS:	12" (305mm) neodymium LF cone drive unit 1.4" (36mm) exit neodymium HF compression drive unit
POWER HANDLING:	500W RMS, 1000W program
MAXIMUM SPL⁴:	128dB continuous, 134dB peak
NOMINAL IMPEDANCE:	8 ohms
CROSSOVER:	asymmetric internal passive
CONNECTORS:	2 x Neutrik SpeakON™ NL4MPR
ENCLOSURE:	15mm (5/8") multi-laminate Birch plywood – rebated, screwed & glued. Finished in impact resistant textured paint
RIGGING & HARDWARE:	4 x M10 threaded mounting points (2 top/2 bottom) 1 x M8 threaded mounting point on rear 4 x M8 threaded points for OmniMount Series 60/Powerdrive Series 100 brackets 1 x flush bar handle on rear 1 x 35mm polemount socket
GRILLE:	hex punched steel backed with acoustically transparent foam
OPTIONS:	Colours/Weather Protection
ACCESSORIES:	FC-122v vertical flying cradle VFA-122 variable angle flying bracket FC-122h horizontal flying cradle DFB-122 dual enclosure flying plate set
SPARE PARTS:	DU-1208 12" drive unit CDU-1402 1.4" exit HF compression drive unit RK-1208 recone kit RD-2001 replacement HF diaphragm PX-122 passive crossover assembly (EMS-122) PX-122w passive crossover assembly (EMS-122w) RFG-122 replacement grille/foam

Notes on measurement conditions:

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

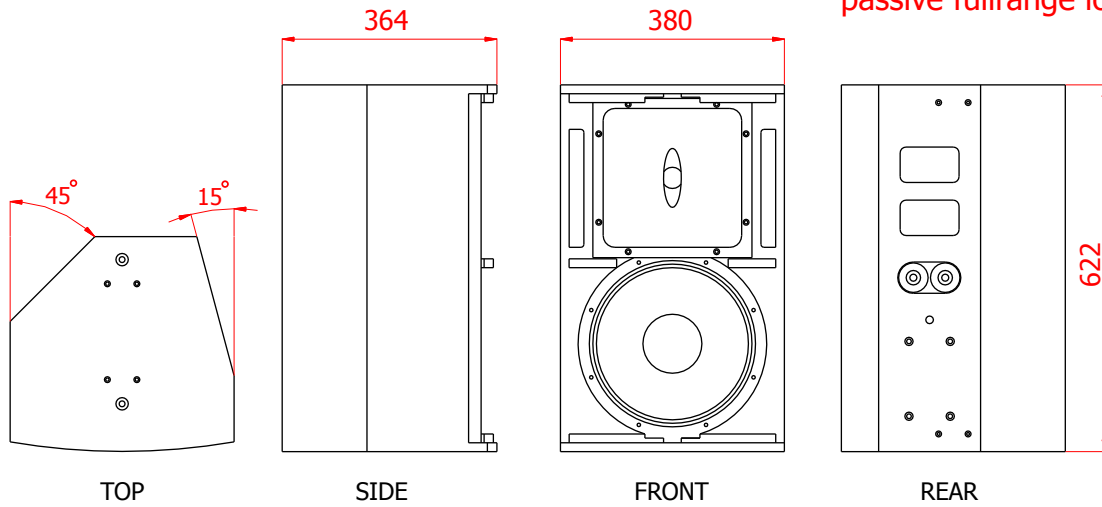
²Measured in half space at 2m with 4W sine wave input and referenced to 1m.

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

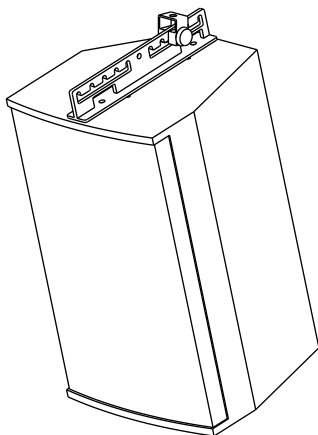
⁴Calculated and verified by subjective listening test of familiar program material.

ENGINEERING DRAWING

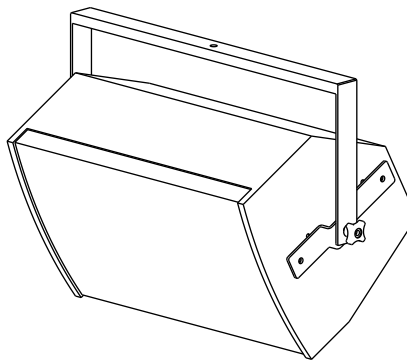
EMS-122/122w
passive fullrange loudspeaker



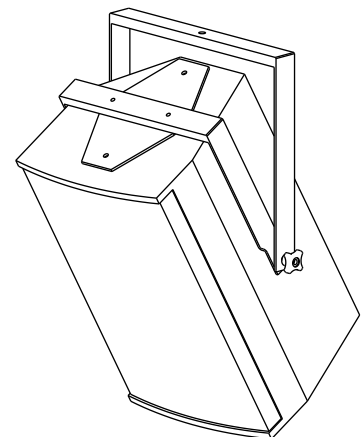
RIGGING ACCESSORIES



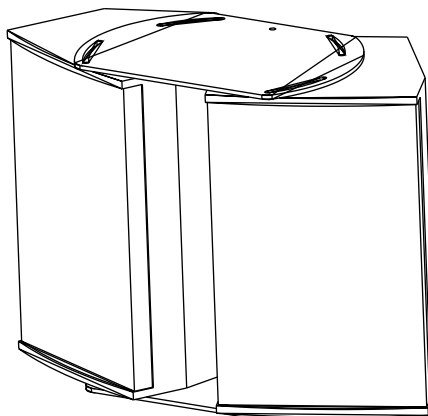
VFA-122



FC-122h



FC-122v



DFB-122

ENCLOSURE OPTIONS

EMS-122/122w 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.