### TECHNICAL DATA SHEET

The M-C12 is the smaller of the two coaxial stage monitors from EM Acoustics – a compact two-way design intended to satisfy the most exacting artist and engineer alike. The M-C12, and the larger companion M-C15 – are intended not only to be world-class stage monitors, but also to suit today's rental market by being genuine multi-purpose loudspeakers.

#### FEATURES AND BENEFITS

- Coaxial design for true point-source performance in compact footprint
- · Precise, controlled HF coverage pattern for high feedback stability
- Signature EM Acoustics passive crossover for unprecedented frequency and phase response
- Concealed polemount and rigging options allow additional use as FOH or installation product

### APPLICATIONS

- Stage monitoring
- Small-to-medium scale FOH use
- · Corporate and audio-visual



The low-profile enclosure contains a 12" (305mm) neodymium LF drive unit with a coaxial 1.3" (33mm) exit HF compression drive unit, linked via the internal passive crossover network. Both the LF and HF drive units share the same magnet assembly, reducing overall weight and enclosure profile — making the M-C12 one of the lowest profile 12" stage monitors on the market today at only 316mm (12.4") tall. The HF drive unit is coupled to a bespoke constant-directivity waveguide, which produces a  $40^{\circ}\text{H} \times 60^{\circ}\text{V}$  dispersion pattern on stage. This pattern ensures presence and clarity for the artist, whilst providing high feedback stability on-stage. When used as a powerful front-of-house loudspeaker, the waveguide produces a  $60^{\circ}\text{H} \times 40^{\circ}\text{V}$  coverage pattern, and for installation applications, with only an Allen key the dispersion characteristics of the M-C12 can be rotated.

The robust enclosure is constructed from premium multi-laminate Birch plywood and is finished in impact and weather-resistant polyurethane. Integral bracing removes unwanted panel vibration and tightens the LF response, whilst large area ports ensure reduced turbulence and associ-

ated port noise at high power. The enclosure contains a pair of M8 threaded mounting points in each end for attaching the optional flying hardware, and a 35mm polemount is hidden discreetly inside one of the handles to allow stand mounting.

The M-C12 is supplied in black as standard, however white and other RAL colour matching options are available if required. The front of the loudspeaker is protected by a rigid 2mm steel grille backed with acoustically transparent fabric and supported by steel braces for additional strength. Two flush handles and protective floor skids complete the hardware package, and a single Neutrik® speakON™ NL4 connector is provided on each end within a sculpted recess for discreet cabling.

The M-C12 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 DQ Series Advanced System Amplifiers should be used.





# TECHNICAL SPECIFICATIONS

ENCLOSURE TYPE: Two-way coaxial passive, reflex loaded

DIMENSIONS (HxWxD) 313 (12.3) x 500 (19.7) x 418 (16.5) mm/(ins)

 NET/SHIPPING WEIGHT:
 21/22.3kg (46.2/49lbs)

 FREQUENCY RESPONSE1:
 65Hz – 20kHz ±3dB

SENSITIVITY<sup>2</sup>: 98dB

DISPERSION<sup>3</sup>: 40°H x 60°V (monitor orientation)

60°H x 40°V (FOH orientation)

DRIVE UNITS: Coaxial 12" (305mm) LF/1.3" (33mm) exit HF with bespoke waveguide LOUDSPEAKERS PER AMPLIFIER DQ6: 1 per channel, DQ10: 2 per channel, DQ20: 4 per channel

POWER HANDLING: 400W RMS, 800W program
MAXIMUM SPL4: 128dB continuous, 134dB peak

NOMINAL IMPEDANCE: 8 ohms

CROSSOVER: Asymmetric internal passive CONNECTORS: 2 x Neutrik® speakON<sup>TM</sup> NL4

ENCLOSURE: 15mm (5/8") multi-laminate Birch plywood – rebated, screwed and glued,

finished in impact and weather resistant black polyurethane

RIGGING & HARDWARE: 2 x flush handles

2 x floor skids

4 x M8 rigging points 35mm polemount

GRILLE: Fabric-backed 2mm perforated steel with additional support

OPTIONS & ACCESSORIES: Colours

FC-MC12 flying cradle

IB-MC12 installation mounting bracket CAD-1201 12"/1.4" coaxial drive unit

RD-C301 replacement HF diaphragm PX-MC12 passive crossover assembly

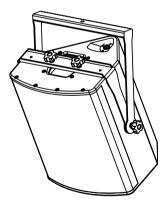
RFG-MC12 replacement grille

## NOTES ON MEASUREMENT CONDITIONS:

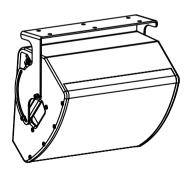
SPARE PARTS:

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.

#### RIGGING ACCESSORIES







IB-MC12

## ENCLOSURE OPTIONS

M-C12 enclosures are finished in black impact resistant polyurethane finish. M-C12 enclosures can be supplied finished in white Warnex water-based textured paint, and custom RAL colours can be supplied on request; extended lead time and setup charges apply. Please contact your EM Acoustics representative for details.



# ENGINEERING DRAWING

