

## TECHNICAL DATA SHEET

The M-12 is the workhorse monitor in the EM Acoustics range. It is a compact, low profile floor monitor designed for any application where accurate artist reference is required. Originally developed in conjunction with Sound by Design in the UK, the M-12 is a perfect match for any monitoring application - it will reproduce the subtlest nuances of a classical performance, or rise up above the loudest guitar rig. Since its introduction in 2004, the M-12 has been used by many of the worlds' top artists and can regularly be found in London's Royal Albert Hall, or on the television show The X-Factor.

## FEATURES AND BENEFITS

- Signature EM Acoustics passive crossover for unprecedented frequency and phase response
- High power to-size-ratio

The enclosure houses a reflex-loaded 4" (102mm) voice coil, 12" (305mm) waterproofed neodymium cone driver, matched via a signature EM Acoustics passive crossover to a 3" (76mm) diaphragm, 1.4" (36mm) exit neodymium HF compression driver coupled to a variable dispersion waveguide. This waveguide produces a coverage pattern of 90°H x 40°V at one metre, narrowing to 50°H x 40°V at three metres. This pattern gives a performer freedom of movement whilst minimizing spill into adjacent microphones.

A common question is how a passive floor monitor can compare with the bi-amplified designs available today. The simple answer is that many months of research into passive technology have produced the M-12 circuitry, which is precisely matched to the loudspeaker drive units. The result is a stunning floor monitor with excellent gain before feedback which will outperform many bi-amplified designs – yet requiring only one amplifier channel and no external processing.

## TECHNICAL SPECIFICATIONS

ENCLOSURE TYPE:	Two-way passive, reflex loaded
DIMENSIONS (HxWxD)	368 (14.5) x 588 (23.1) x 444 (17.5) mm/(ins)
NET/SHIPPING WEIGHT:	26/28kg (57.2/61.6lbs)
FREQUENCY RESPONSE <sup>1</sup> :	65Hz – 20kHz +/- 3dB
SENSITIVITY <sup>2</sup> :	99dB
DISPERSION <sup>3</sup> :	90°H x 40°V (one metre) 50°H x 40°V (three metres)
DRIVE UNITS:	12" (305mm) neodymium LF cone drive unit 1.4" (36mm) exit neodymium HF compression drive unit
POWER HANDLING:	480W RMS, 960W program
MAXIMUM SPL <sup>4</sup> :	130dB continuous, 136dB peak
NOMINAL IMPEDANCE:	8 ohms
CROSSOVER:	Asymmetric internal passive
CONNECTORS:	6 x Neutrik® speakON™ NL4
ENCLOSURE:	18mm (3/4") multi-laminate Birch plywood – rebated, screwed and glued. Finished in impact resistant textured paint
ENCLOSURE HARDWARE:	2 x steel bar handles 4 x rubber feet
GRILLE:	Hex-punched steel backed with acoustically transparent foam
OPTIONS:	Colours/Weather Protection
SPARE PARTS:	DU-1206 12" drive unit CDU-1401 1.4" exit HF compression drive unit RK-1206 recone kit RD-1401 replacement HF diaphragm PX-M12 passive crossover assembly RFG-M12 replacement grille/foam

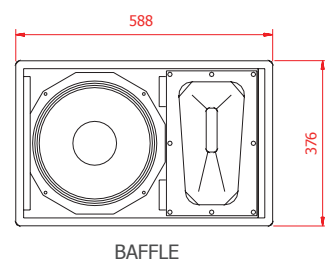
- Variable HF coverage - wide at close range, narrow at farther range

The compact enclosure is constructed from premium 18mm (3/4") multi-laminate Baltic Birch plywood – rebated, screwed and glued together for maximum strength. The enclosure is supplied as standard in black textured paint, however RAL colour matching and weather protection options are available. The enclosure is fitted with steel bar handles and rubber feet for stability on stage. Six (yes, six!) Neutrik® speakON™ NL4 connectors are provided on the front and both ends of the enclosure for neat cable management. A foam backed hex-punched steel grille protects the front of the enclosure from damage and moisture ingress. The M-12 is available as either left or right-handed to create stage pairs.

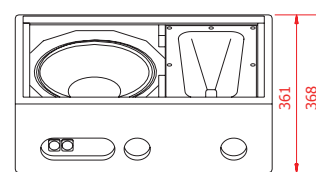
The M-12 requires a single amplifier channel, and should be used with professional power amplifiers capable of delivering 800-1000W RMS into an 8-ohm load. For optimal results, either the DQ Series Advanced System Amplifiers, or the AD or AQ Series amplifiers combined with DSC48 processors should be used.



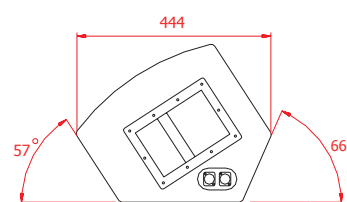
## ENGINEERING DRAWING



BAFFLE



FRONT



SIDE

## NOTES ON MEASUREMENT CONDITIONS:

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.

