



emacoustics

TECHNICAL DATA SHEET

i-C12

COAXIAL PASSIVE INSTALLATION LOUDSPEAKER

The i-C12 is the smaller of the dedicated passive installation loudspeakers from EM Acoustics – loudspeakers intended to provide a high quality solution in fixed installation environments where some of the features popular with “mobile” products are not required. The i-C12 has a frequency response of 65Hz – 18kHz which can be extended by adding any subwoofer from the EM Acoustics product range for a more full range system solution.

FEATURES AND BENEFITS

- Coaxial design for true point-source performance in compact footprint
- True passive design - no corrective DSP required
- Precise, controlled HF coverage pattern for high feedback stability
- Signature EM Acoustics passive crossover for unprecedented frequency and phase response
- Compatible with OmniMount™ and Powerdrive brackets
- RAL colour and enhanced weather protection options

APPLICATIONS

- Live music
- Theatres
- Houses of Worship
- Theme Parks
- Nightclubs

The compact and sleek enclosure contains a 3" (75mm) diaphragm, 1.3" exit HF compression drive unit coaxially loaded by a 12" (305mm) LF drive unit, linked via a signature EM Acoustics internal passive crossover network. Both the LF and HF drive units share the same magnet assembly, reducing overall weight and enclosure profile. The coaxial drive unit arrangement provides a smooth conical 80° dispersion pattern for maximum coverage, allowing the speaker to be deployed in either a vertical or horizontal orientation while still retaining the same dispersion pattern. Optimal reflex tuning extends low frequency response to allow the i-C12 to be used stand-alone for speech or moderate duty music reinforcement applications, or with subwoofers from the EM Acoustics range to further extend LF response.

The robust enclosure is constructed from premium multi-laminate Birch plywood and is finished in impact resistant textured paint. The enclosure contains four M10 exposed-thread rigging points specifically for use with optional horizontal or vertical accessory cradles. Additionally, four M8 threaded points are provided on one of the angled back faces for installation using OmniMount™ Series 60 or PowerDrive Series 100 bracket products. The asymmetrical cabinet shape permits installation closer to

walls or ceilings than a traditional trapezoidal enclosure, and also allows the i-C12 to be conveniently used as a stage monitor with a choice of two wedge angles.

The i-C12 is finished in an impact and weather resistant black or white textured polyurethane as standard, however RAL colour matching and enhanced weather protection options are available. The front of the loudspeaker is protected by a rigid stainless steel grille backed with acoustically transparent fabric for a stylish and discreet appearance. A recessed panel on the rear of the enclosure provides two Neutrik® speakON™ NL4 connectors for input and enclosure link.

The i-C12 requires a single amplifier channel, and the use of external DSP for system protection (high pass filters and limiters) is recommended - as such an efficient solution is one of EM Acoustics' range of Advanced System Amplifiers. Alternative DSP-enabled amplifiers can also be used, or conventional amplifiers with external processing - suitable DSP settings are provided on the EM Acoustics website for this purpose. The i-C12 requires a single amplifier channel that is capable of delivering 750-1000W RMS into an 8-ohm load.





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TECHNICAL SPECIFICATIONS

ENCLOSURE TYPE:

DIMENSIONS (HxWxD)

NET/SHIPPING WEIGHT:

FREQUENCY RESPONSE¹:

SENSITIVITY²:

DISPERSION³:

DRIVE UNITS:

LOUDSPEAKERS PER AMPLIFIER (maximum for full loudspeaker SPL)

LOUDSPEAKERS PER AMPLIFIER (recommended absolute maximum)⁴

POWER HANDLING:

MAXIMUM SPL⁵:

NOMINAL IMPEDANCE:

CROSSOVER:

CONNECTORS:

ENCLOSURE:

RIGGING & HARDWARE:

GRILLE:

OPTIONS :

ACCESSORIES

SPARE PARTS:

Two-way coaxial passive, reflex loaded

560 (22) x 370 (14.6) x 350 (13.8) mm/(ins)

22.6/24.7kg (49.7/54.3lbs)

65Hz – 20kHz ±3dB

97dB

80° conical

Coaxial 12" (305mm) LF/1.3" (33mm) exit HF

DQ6: 2 per channel, DQ10: 3 per channel, DQ20: 4 per channel

Di06: 1 per channel, Di10: 1 per channel, Di20: 2 per channel

DQ6: 3 per channel, DQ10: 4 per channel, DQ20: 4 per channel

Di06: 1 per channel, Di10: 2 per channel, Di20: 3 per channel

400W RMS, 800W program

127dB continuous, 133dB peak

8 ohms

Asymmetric internal passive

2 x Neutrik® speakON™ NL4

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

Finished in impact and weather resistant textured polyurethane

4 x M10 rigging points, 4 x M8 rigging points for OmniMount series 60 / Powerdrive series 100 brackets

Perforated stainless steel backed with acoustically transparent fabric

Custom Colour, enhanced weather protection (OD model)

IBv-C12 vertical flying cradle

IBh-C12 horizontal flying cradle

WHH100 installation wall bracket

CAD-1202 12"/1.3" coaxial drive unit

RD-1202 replacement HF diaphragm

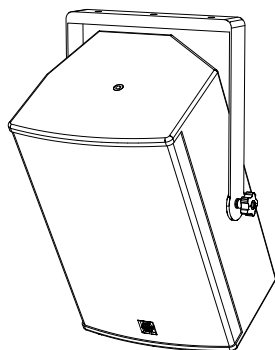
PX-i-C12 passive crossover assembly

RFG-iC12 replacement grille/fabric

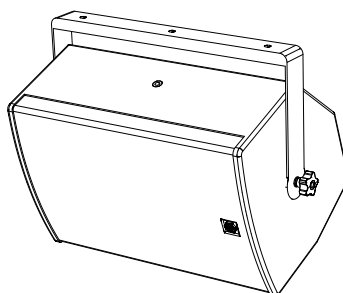
NOTES ON MEASUREMENT CONDITIONS:

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. ⁴These loudspeaker quantities are the recommended maximum, and will not drive the loudspeaker to full output. ⁵Calculated and verified by subjective listening test of familiar program material.

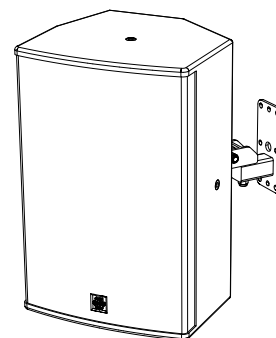
RIGGING ACCESSORIES



IBv-C12 vertical cradle



IBh-C12 horizontal cradle



WHH100 wall bracket

ENCLOSURE OPTIONS

i Series enclosures are available as standard in black or white textured polyurethane finish. Custom RAL colours can be supplied on request; extended lead times and set up costs apply. i Series enclosures can also be supplied as an outdoor version (OD), with enhanced weather protection features, many bespoke to the customer's request. Please contact your local EM Acoustics representative for details.

ENGINEERING DRAWING

