

# ArcM 12

## Key features:

- High power 12" + 1.4" coaxial neodymium transducer
- Two wedge operating modes (stage and nearfield monitoring)
- Integral pole mount for 35 mm diameter poles
- Low profile design for cleaner stage lines
- Ergonomically designed handles for easy manual handling
- External dimensions optimised for truck packing
- Hard-wearing polyurea finish
- Type 80 rear mounting plate for wall or ceiling fixing



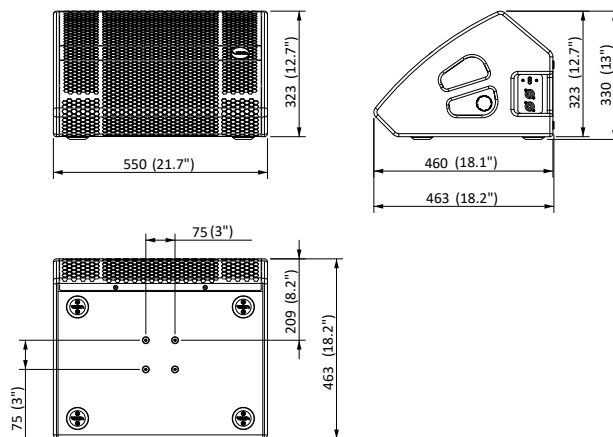
## Applications:

- Bar, club, lounge
- Corporate and AV
- Live music venues
- Stage monitoring

The ArcM 12 has multiple working angles, allowing it to be used as a near field booth monitor or conventional stage wedge, as well as having the ability to be pole mounted or wall mounted for front-of-house purposes. In terms of mobility, measures have been taken to reduce weight, while maintaining an ergonomic design to appease manual handling requirements. Acoustically, FEA analysis has significantly reduced port noise and air distortion. The 12" ArcM 12 is unpowered, allowing it to integrate with touring operators' existing infrastructure.

## Specifications

Frequency response	60 Hz - 18 kHz $\pm 3$ dB
Efficiency <sup>1</sup>	100 dB 1W/1m
Crossover point	1k2Hz (acoustic)
Nominal impedance	1 x 8 $\Omega$ passive, 1 x 8 $\Omega$ (LF) and 1 x 16 $\Omega$ (HF) active
Power handling <sup>2</sup>	500 W AES
Maximum output <sup>3</sup>	130 dB cont, 133 dB peak
Driver configuration	Coaxial 1 x 12" - 1 x 1.4" neodymium
Dispersion	80°H x 80°V
Connectors	2 x 4-pole speakON™ NL4
Height	330 mm (13")
Width	550 mm (21.7")
Depth	463 mm (18.2")
Weight	19 kg (41.9 lbs)
Rigging	Integral top hat, type 80 mounting bracket
Finish	Textured polyurea



<sup>1</sup> Measured in half space <sup>2</sup> AES2 - 1984 compliant <sup>3</sup> Calculated

# ArcM 12

## Architectural specifications

The loudspeaker shall be a passive, two-way, bi-amped system consisting of one high power 12" (304.8 mm) direct radiating reflex loaded low frequency (LF) transducer and 1.4" (35.56 mm) exit diameter (HF) co-axially-mounted neodymium high frequency (HF) compression transducer in a 15 mm birch ply enclosure.

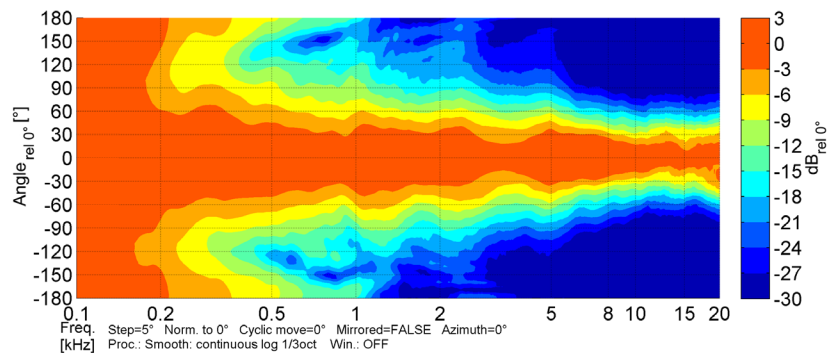
The low frequency transducer shall be constructed on a cast aluminium frame, with a treated paper cone, 88 mm (3.5") voice coil, wound with aluminium wires on a high quality voice coil former, for high power handling and long term-reliability. The high frequency transducer shall be bolted through the rear of the magnet structure belonging to the LF transducer to form a co-axial drive unit. The sound will project through a machined waveguide that exits in the centre of the low frequency transducer to use the 203.2 mm (8") baffle diameter to achieve pattern control and low distortion.

Performance specifications for a typical production unit shall be as follows: the usable on-axis bandwidth shall be 60 Hz to 18 kHz ( $\pm 3$  dB) and shall average 80°

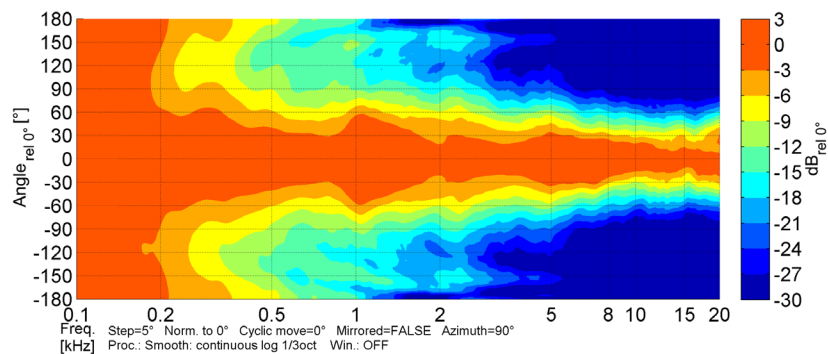
directivity pattern for both horizontal and vertical axis (-6 dB down from on-axis level) from 1 kHz to 12 kHz; maximum SPL of 130 dB continuous, 133 dB peak measured at 1 m using IEC268-5 pink noise. Power handling shall be 500 W AES at a rated impedance of 8  $\Omega$ ; crossover point at 1.2 kHz using a 2nd order filter (12 dB per octave). The system shall be powered by its own dedicated power amplification module with DSP management.

The enclosure shall be of a trapezoidal asymmetrical shape constructed from a 15 mm 13-laminate birch plywood with a textured polyurea finish and shall contain fixture points for a pressed, weather-resistant, powder-coated steel grille with foam filter to protect the transducers. The cabinet shall have an integral pole mount socket and a type 80 mounting point to suit portable and permanent applications. External dimensions of (W) 550 mm x (H) 330 mm x (D) 463 mm (21.7" x 13" x 18.2"). Weight shall be 19 kg (41.9 lbs).

The loudspeaker shall be the Void Acoustics ArcM 12.



Horizontal directivity isobars



Vertical directivity isobars