

Panaray MA12

modular columnar array loudspeaker

Product Overview

The Panaray MA12 is a mid/high-frequency modular line array loudspeaker designed to provide outstanding vocal intelligibility in acoustically demanding spaces. The slim column enclosure blends with almost any décor

Key Features

Twelve 2 ¼-in (57 mm) drivers mounted in a vertical line array deliver wide horizontal coverage with narrow vertical pattern control

Modular design allows stacking of multiple enclosures in a line array configuration to provide increased vertical pattern control which improves “throw” distance and reduces unwanted floor/ceiling reflections.

145° horizontal × 20° nominal coverage for a single module. Vertical coverage varies with number of modules stacked in line array configuration.

Mid/high configuration allows bass management and design flexibility. Use with Bose Professional MB4, MB12, or MB24 modular bass loudspeakers for fullrange reinforcement.

Optional brackets allow easy installation of single-, double- or triple-stack line array modules



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Technical Specifications

SYSTEM PERFORMANCE	
Frequency Response (± 3 dB) ¹	155 Hz – 12 kHz
Frequency Range (-10 dB) ¹	100 Hz – 16 kHz
Nominal Dispersion ²	145° H × 20° V
Recommended High-Pass Filter	125 Hz
Loudspeaker EQ	Required
Overload Protection	PTC / Lamp
Long-Term Power Handling ³	300 W (1200 W peak)
Sensitivity (SPL / 1 W @ 1 m) ⁴	88 dB-SPL
Maximum SPL @ 1 m ⁵	113 dB-SPL (119 dB-SPL peak)
Nominal Impedance	8 Ω
Transformer Taps (70/100 V)	CVT-MA12 transformer available
TRANSDUCERS	
Driver Complement	Twelve (12) 2¼-in (57 mm) high-excursion, mid/high-frequency drivers
PHYSICAL	
Enclosure	Extruded-aluminum sidewalls with steel top & bottom endcaps, all powder-coated
Grille	Powder-coated steel grille
Environmental	Indoor use only
Connectors	Two (2) parallel-wired NL4 Neutrik® Speakon® connectors One (1) two-conductor barrier strip
Suspension/Mounting	Four (4) × M6 threaded inserts (back)
Dimensions (H × W × D)	984 mm × 105 mm × 128 mm (38.8 × 4.2 × 5.0 in)
Net Weight	8.5 kg (19.0 lb)
Shipping Weight	9.4 kg (21.0 lb)
PRODUCT CODES	
Black	040189
White	040188

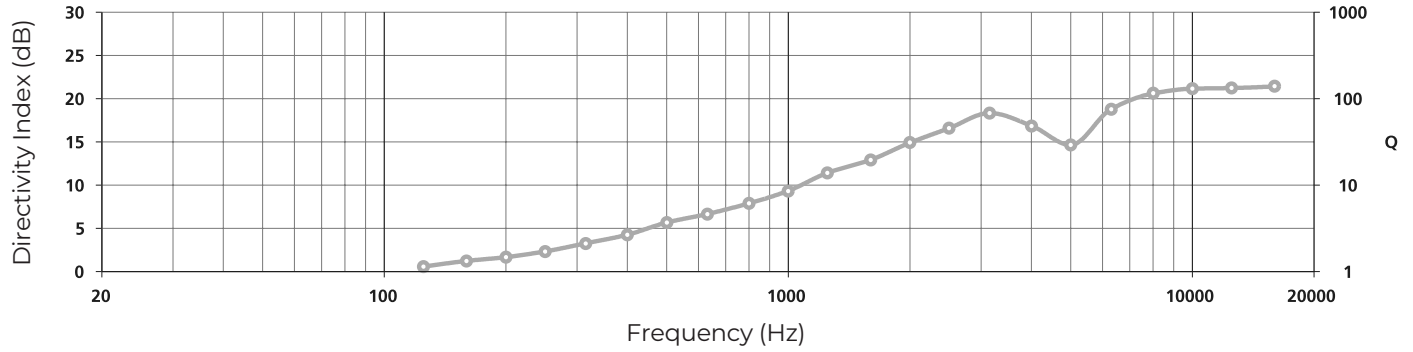
Footnotes

1. Frequency response and range measured on-axis with recommended active EQ in an anechoic environment.
2. Vertical coverage varies by number of modules vertically arrayed and distance from line-source boundary. Use Bose Professional Modeler software for the best prediction.
3. Power handling tested using pink noise filtered to meet IEC 268-5, 6-dB crest factor, 100 hours, with recommended EQ.
4. Sensitivity measured in free field (no boundary-loading gain) with recommended active EQ, referenced to 1 W / 1 m.
5. Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression.

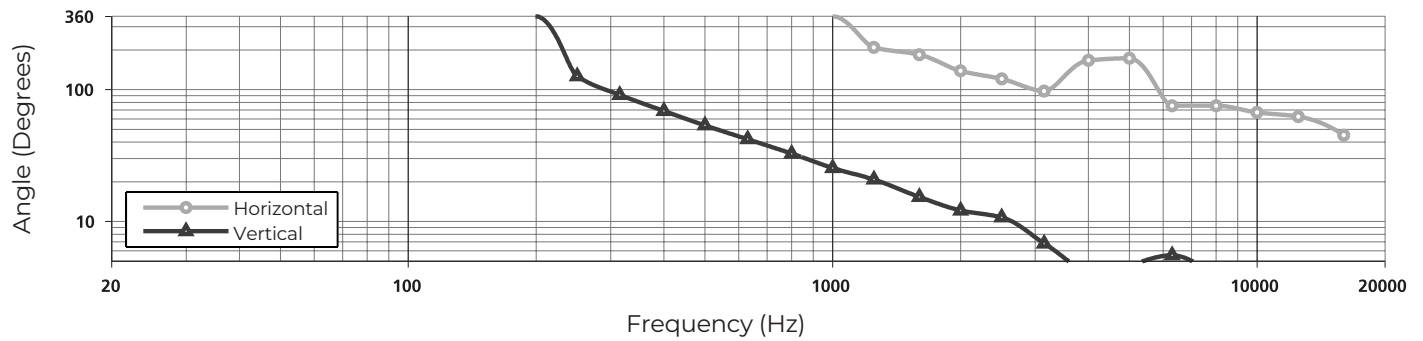
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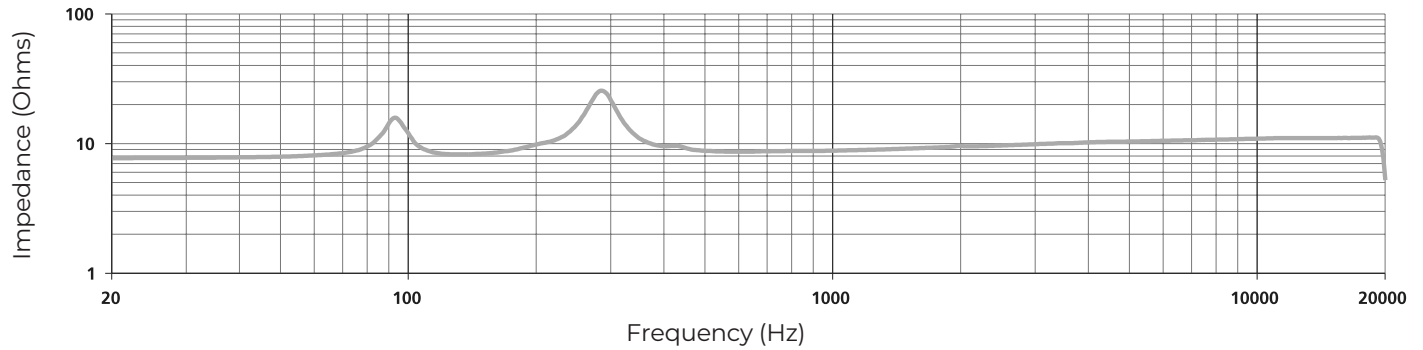
Directivity Index & Q



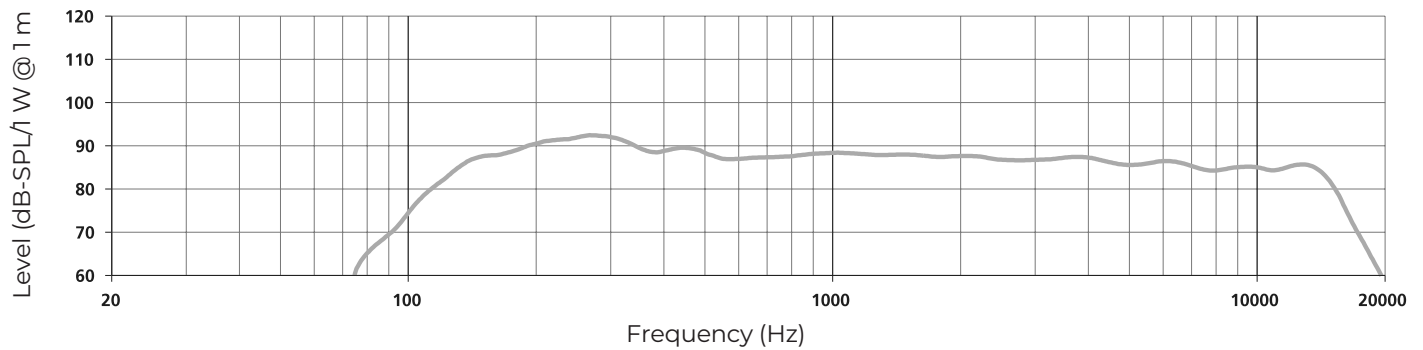
Beamwidth



Impedance



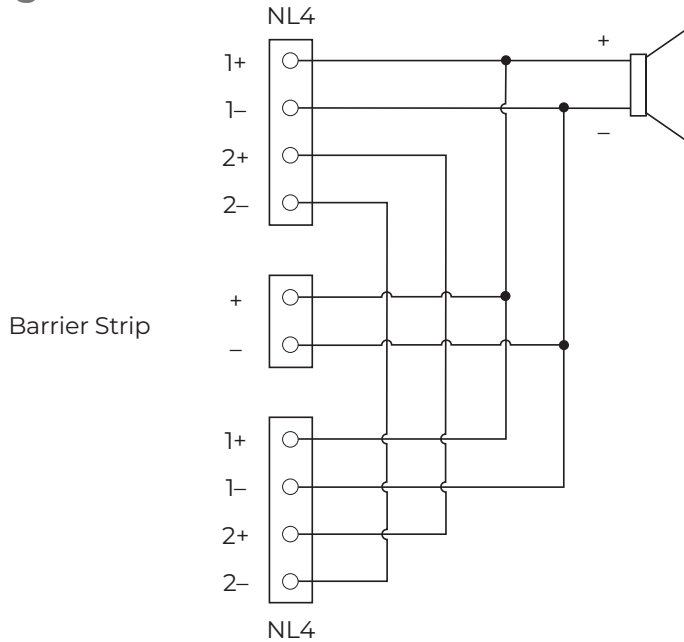
On-axis Response



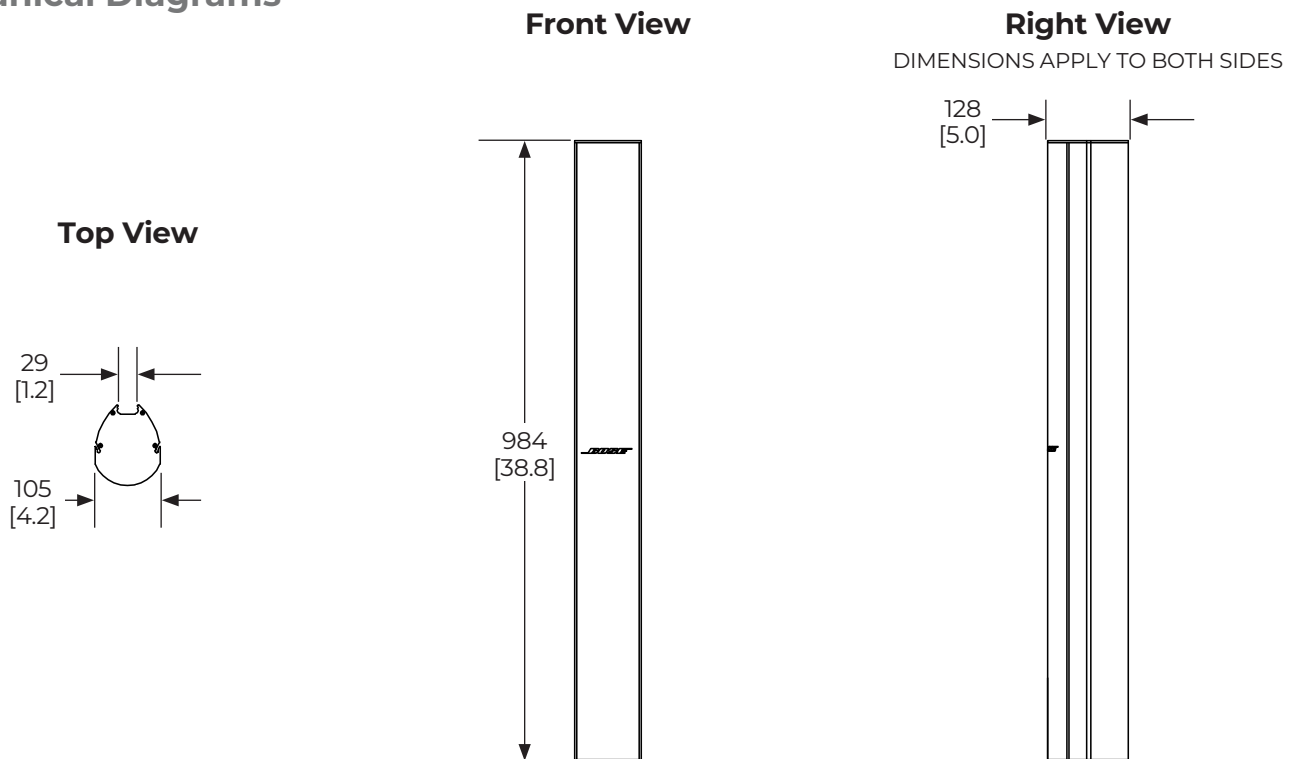
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Wiring Diagram



Mechanical Diagrams¹

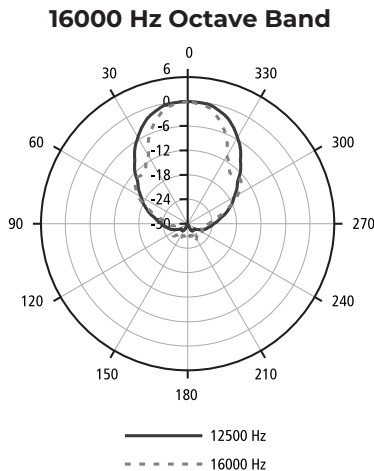
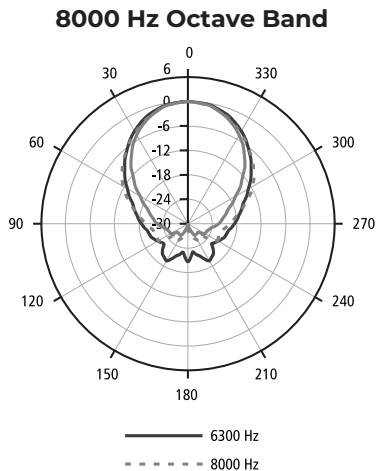
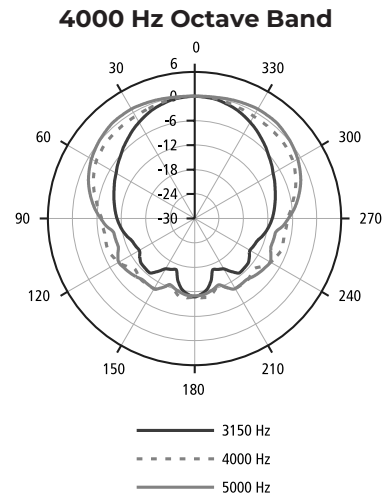
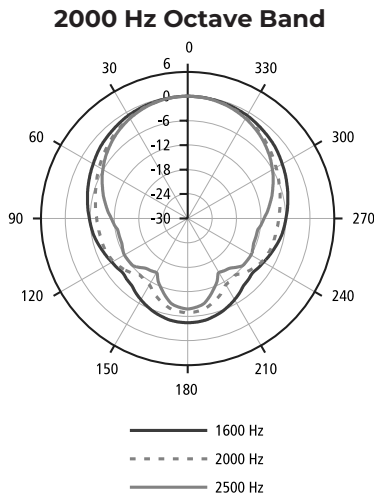
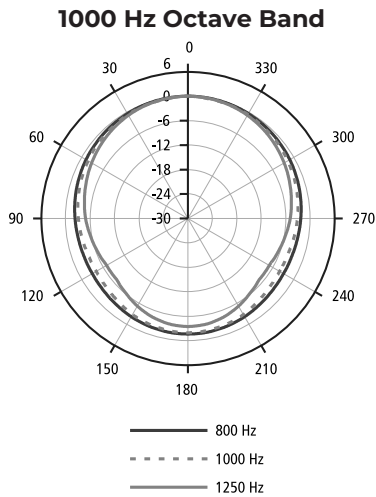
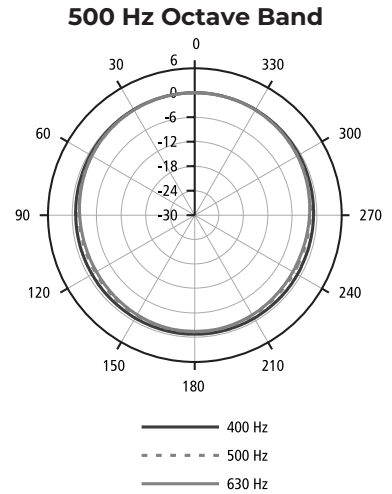
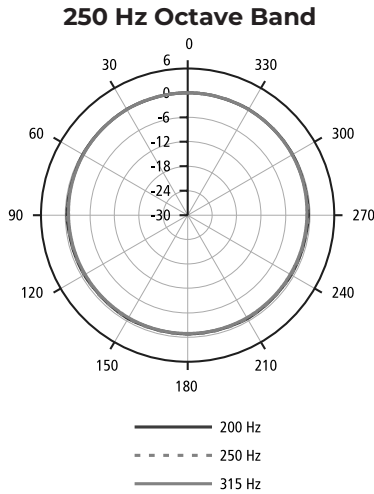
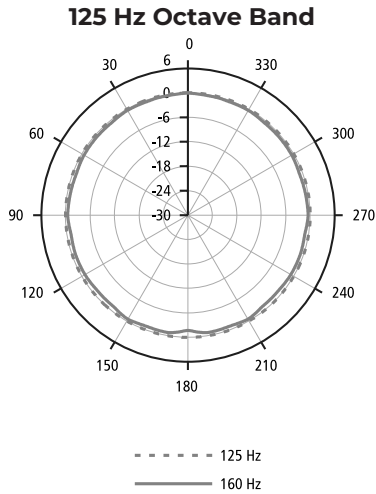


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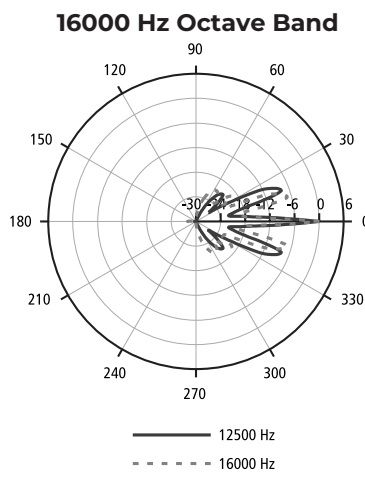
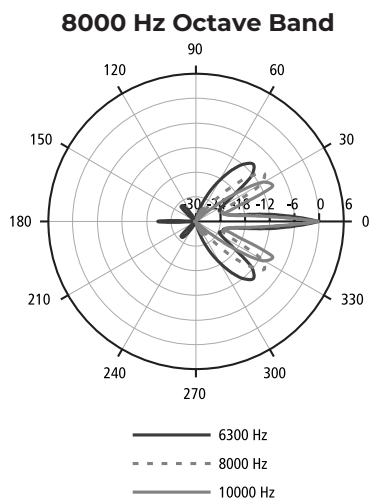
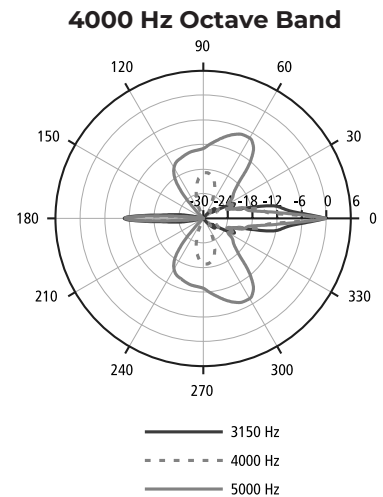
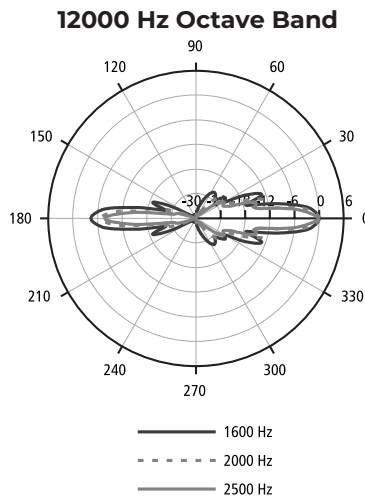
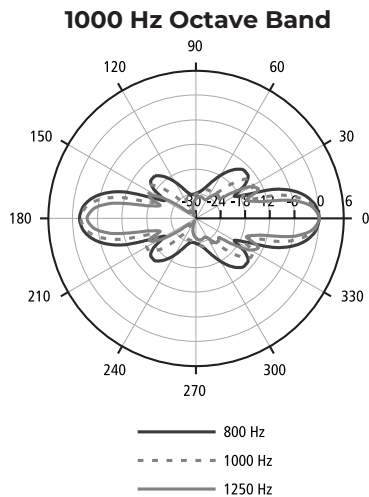
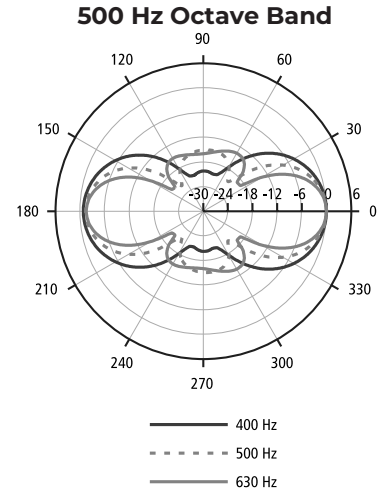
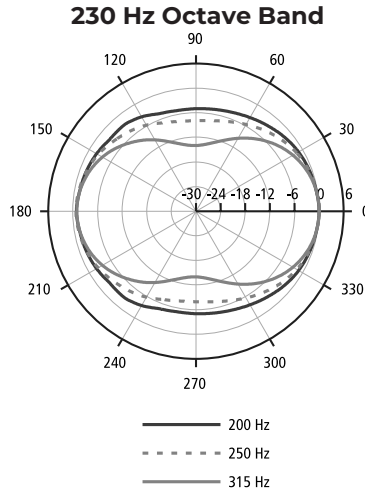
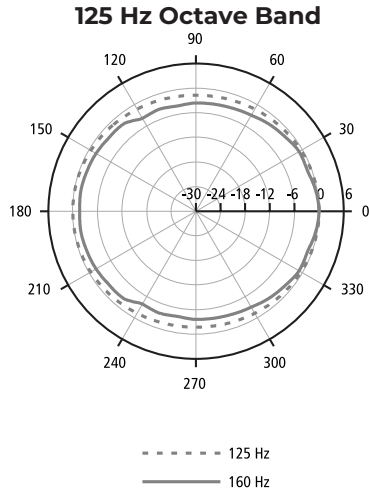
Horizontal Plots



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Vertical Plots



For additional specifications and application information, please visit BoseProfessional.com. Specifications subject to change without notice. 07/2024

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Architects' & Engineers' Specifications

The loudspeaker shall be a multiple driver system with matched active equalization as follows.

The transducer complement shall consist of twelve (12) 2¼-in (57 mm) mid/high-frequency drivers mounted in vertical line array. Each driver shall have a rated impedance of 6.2 ohms and wired in series/parallel, resulting in a composite nominal impedance of 8 ohms.

The nominal horizontal beamwidth of the loudspeaker shall be 145 degrees, and the vertical coverage is a band of constant height. The power handling capacity of the loudspeaker shall be 300 watts continuous pink noise, band-limited from 155 Hz to 12 kHz (± 3 dB).

The loudspeaker shall be provided with a ducted vent system, tuned at 150 Hz. The input connector of the loudspeaker module shall consist of two parallel-wired NL4 Neutrik® Speakon® connectors and one (1) two-conductor barrier strip.

The enclosure of the MA12 loudspeaker module shall be extruded-aluminum sidewalls with steel top and bottom endcaps, all powder-coated. Its outer dimensions shall be 984 mm \times 105 mm \times 128 mm (38.8 in \times 4.2 in \times 5.0 in). Its weight shall be 8.5 kg (19 lb).

The loudspeaker shall be the Panaray MA12 modular line array loudspeaker.