

RoomMatch® 20° vertical asymmetrical DeltaQ™ array loudspeakers for installation



Key Features

- **DeltaQ technology** – the next generation array technology that allows different “Q” (directivity) for each loudspeaker module in the array. Improves sound quality by better matching array coverage to audience areas and distance, with improved phase coherency
- **42 large-format waveguide patterns** – allows designers to customize array coverage to exact venue dimensions to minimize wall reflections and deliver best-in-class sound quality even in venues with difficult acoustics
- **Continuous-Arc Diffraction-Slot (CADS) Manifold** – provides smooth high-frequency array summation and allows choice of 5 vertical-coverage patterns. Select number of array modules based on sound level, low-frequency pattern control and budget requirements, independent of total array vertical coverage
- **Bose EMB2 compression drivers** – deliver the vocal power normally associated with 3-way systems with frequencies from 500 Hz to 16 kHz projected from the large-format waveguides for remarkably consistent coverage and vocal clarity
- **Integrated Rigging** – allows fast installation of arrays with up to 8 full-range modules at 10:1 safety factor
- **Available RMS215 or RMS218 subwoofers** – extend full-range performance to 40 Hz or 25 Hz, in flown or ground stack arrays
- **Available Bose PowerMatch® amplifiers** – configurable to provide optimal power for all RoomMatch modules and subwoofers; includes integrated loudspeaker DSP functions with optional Dante® digital audio network interface



RM284520 / RM452820
RM286020 / RM602820
RM356020 / RM603520

Product Overview

Bose RoomMatch DeltaQ array loudspeakers are designed for permanent installation in the finest performing arts centers, auditoriums, sports arenas, dance clubs and houses of worship, in which the large-format waveguides with choice of 42 coverage patterns can provide best-in-class coverage control, sound quality and vocal clarity even in venues with difficult acoustics.

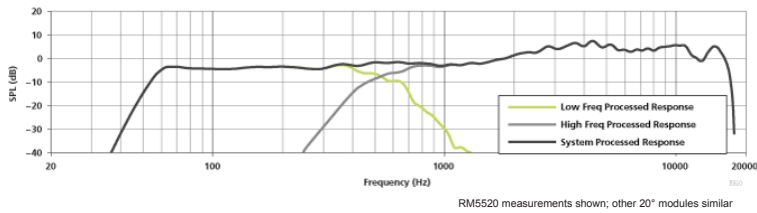
Technical Specifications

Single Module Performance				
Frequency Response (+/-3 dB) ⁽¹⁾	60 Hz - 16 kHz			
Frequency Range (-10 dB) ⁽¹⁾	55 Hz - 16 kHz			
Recommended High-Pass Filter	50 Hz with minimum 24-dB / octave (4th order) slope			
Nominal Coverage Pattern	28°+45° / 45°+28°, 28°+60° / 60°+28°, 35°+60° / 60°+35° horizontal (differs by module) x 20° vertical			
Recommended Crossover	550 Hz (acoustic) requires active external DSP			
	Low Frequency	High-Frequency		
Power Handling, long-term continuous ⁽²⁾	500 W	150 W		
Power Handling, peak	2000 W	600 W		
Sensitivity (SPL / 1 W @ 1 m) ⁽³⁾		RM284520 / RM452820	RM286020 / RM602820	RM356020 / RM603520
		94 dB	109 dB	109 dB
		109 dB	131 dB	130 dB
Calculated Maximum SPL @ 1 m ⁽⁴⁾	121 dB	131 dB	131 dB	130 dB
Calculated Maximum SPL @ 1 m, peak	127 dB	137 dB	137 dB	136 dB
Transducers				
Low Frequency	2 x Bose LF10 ultra-linear 10" woofers (3" voice coil)			
High Frequency	6 x Bose EMB2 extended-mid-band compression driver (2" voice coil)			
Nominal Impedance	4Ω + 8Ω (LF/HF)			
Physical				
Enclosure Material	Baltic birch plywood, engineered plastics, and steel frame			
Finish	Two-part spray polyurethane coating on plywood, black			
Grille	19-gauge (1 mm) perforated steel, powder-coated finish, black			
Environmental	Indoor use only			
Connectors	2 x Neutrik NL4 wired parallel			
Suspension / Mounting	Integrated side-plate rigging hardware; optional array frame acces-			
Dimensions (H x W x D)	509 mm x 993 mm x 598 mm (20.0" x 39.1" x 23.6")			
Net weight	55.8 kg (123 lbs)			
Shipping Weight	81.6 kg (180 lbs) - approximate with wood pallet			

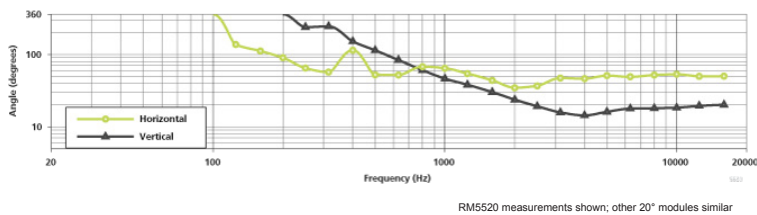
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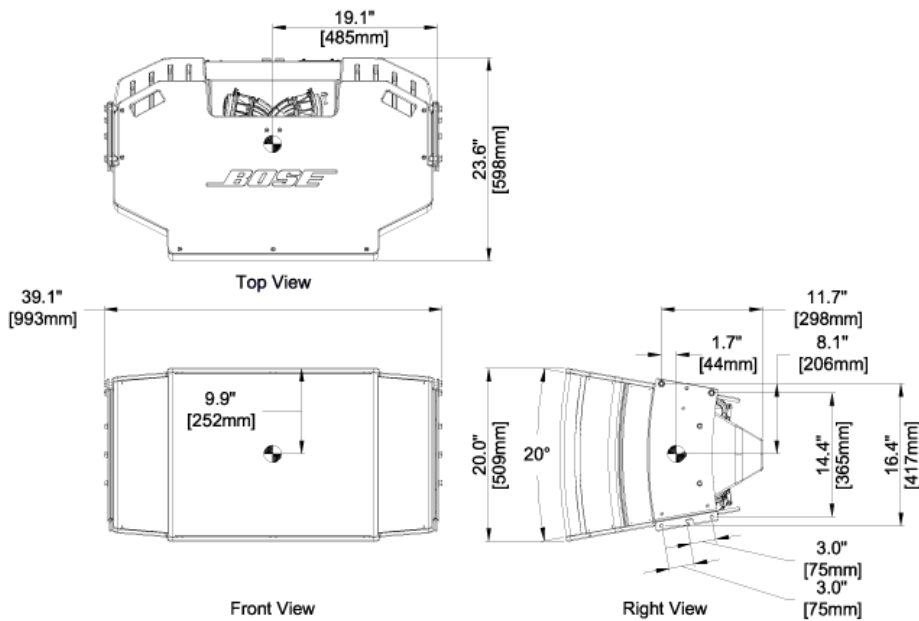
On-Axis Frequency Response



Beamwidth



Mechanical Drawings



Footnotes

1. Frequency response and range measured on-axis with recommended EQ in an anechoic environment.
2. Bose extended-lifecycle test: pink noise, IEC268-5 filtered, 6-dB crest factor, 100-hour duration, with recommended EQ.
3. Sensitivity measured in anechoic acoustic boundary conditions with recommended EQ, referenced to 1W/m.
4. Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression.

For additional specifications and application information, please visit pro.bose.com. Specifications subject to change without notice.