

ArenaMatch AM10

DeltaQ array loudspeaker

Product Overview

Bose Professional ArenaMatch loudspeakers bring proven DeltaQ sound quality and flexibility to outdoor installations — sports stadiums, arenas, outdoor entertainment centers, and more. Featuring an IP55 weather rating, ArenaMatch DeltaQ modules make it easy to create outdoor loudspeaker arrays that bring consistent, intelligible sound to every listener. Nine coverage patterns are available. Choose from modules with 10°, 20°, or 40° vertical coverage and easily swap between 60°, 80°, or 100° horizontal waveguides to build arrays that are lighter, require less installation time, and can lower overall system costs by delivering full coverage with fewer modules.



Shown with grille off

Key Features

Improve sound quality, consistency, and vocal clarity with DeltaQ array technology, which allows directivity, or “Q,” to vary in each module to more precisely match coverage to the audience area

Easily customize horizontal coverage with replaceable waveguides that allow you to further customize coverage and even form asymmetrical patterns for improved acoustic performance in left/right arrays

Deliver high-SPL, long-throw music reproduction and vocal intelligibility with a 14-inch neodymium woofer and six Bose EMB2S titanium-diaphragm neodymium compression drivers

Install outdoors with an IP55 weather rating, three-layer stainless steel grille, water-resistant woofer cone coating, industrial polyurethane exterior coating, and molded input cover

Provide full coverage with fewer modules — 10°, 20°, and 40° modules allow you to create arrays that improve sight lines, reduce weight, and lower system costs by requiring fewer modules compared to conventional arrays

Reduce commissioning time by using 40° modules for point-source applications and 10°, 20° and 40° modules for line arrays — all with the same transducers for consistent tonal balance

Adapt to a variety of configurations — all models ship standard with bi-amp capability, passive crossover, and 70/100V transformer inputs

Streamline the design process by combining with complementary Bose Professional products, such as ArenaMatch Utility zone-fill loudspeakers, PowerMatch amplifiers, and ControlSpace DSPs

Save time during installation using Bose accessory mounting hardware or use the standard M12 threaded inserts to interface with custom array frames

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Technical Specifications

| Single Module Performance | | | | | | | | | |
|--|--|-------------|---------|----------------------------------|-------------|---------|----------|--------|---------|
| Frequency Response (-3 dB) ¹ | 65 Hz to 16 kHz | | | | | | | | |
| Frequency Range (-10 dB) | 55 Hz to 18 kHz | | | | | | | | |
| Nominal Coverage Pattern (H × V) | 60° × 10° (AM10/60) or 80° × 10° (AM10/80) or 100° × 10° (AM10/100) | | | | | | | | |
| Recommended High-pass Filter | 60 Hz with minimum 12 dB / octave | | | | | | | | |
| Crossover | 950 Hz internal passive or external bi-amp (Bose ControlSpace presets) | | | | | | | | |
| 70V/100V transformer tap settings | 70V: 100, 200, 400 W; 100V: 200, 400 W | | | | | | | | |
| | Bose Extended Lifecycle Test ² | | | AES Transducer Test ³ | | | | | |
| | LF (bi-amp) | HF (bi-amp) | Passive | LF (bi-amp) | HF (bi-amp) | Passive | | | |
| Power Handling, long-term continuous | 600 W | 150 W | 750 W | 1000 W | 250 W | 1250 W | | | |
| Power Handling, peak | 2400 W | 600 W | 3000 W | 4000 W | 1000 W | 5000 W | | | |
| | AM10/60 | | | AM10/80 | | | AM10/100 | | |
| | LF | HF | Passive | LF | HF | Passive | LF | HF | Passive |
| Sensitivity (SPL / 1W @ 1 m) ⁴ | 94 dB | 107 dB | 100 dB | 94 dB | 106 dB | 99 dB | 94 dB | 105 dB | 98 dB |
| Calculated max. SPL @ 1 m (Bose power test) ⁵ | 122 dB | 129 dB | 129 dB | 122 dB | 128 dB | 128 dB | 122 dB | 127 dB | 127 dB |
| Calculated max. SPL @ 1 m (2-hour power test) | 124 dB | 131 dB | 131 dB | 124 dB | 130 dB | 130 dB | 124 dB | 129 dB | 129 dB |
| Calculated max. SPL @ 1 m (Bose power test), peak | 128 dB | 135 dB | 135 dB | 128 dB | 134 dB | 134 dB | 128 dB | 133 dB | 133 dB |
| Calculated max. SPL @ 1 m (2-hour power test), peak | 130 dB | 137 dB | 137 dB | 130 dB | 136 dB | 136 dB | 130 dB | 135 dB | 135 dB |
| Transducers | | | | | | | | | |
| Low Frequency | 1 × Bose LF14 neodymium 14-inch woofer (4-inch voice coil) | | | | | | | | |
| High Frequency | 6 × Bose EMB2S titanium-diaphragm, neodymium compression drivers (2-inch voice coil) | | | | | | | | |
| Nominal Impedance | Passive: 8 Ω / Bi-amp: 8 Ω + 8 Ω | | | | | | | | |
| Physical | | | | | | | | | |
| Enclosure Material | Exterior-grade birch plywood | | | | | | | | |
| Finish | Two-part polyurea coating, black | | | | | | | | |
| Grille | Powder-coated perforated stainless steel, acoustic foam, stainless steel mesh | | | | | | | | |
| Environmental | Rated for direct-exposure outdoor installations (IEC 60529: IP55) | | | | | | | | |
| Connectors | Barrier strips: passive in/through, bi-amp, and 70V/100V, with cover | | | | | | | | |
| Suspension/Mounting | 8 × M12 threaded inserts (4 per side); 4 × M8 threaded inserts (2 per side) | | | | | | | | |
| Dimensions (H × W × D) | 409 × 783 × 420 mm (16.1 × 30.8 × 16.5 in) | | | | | | | | |
| Net Weight | 36.3 kg (80 lbs) | | | | | | | | |
| Shipping Weight | 43.5 kg (96 lbs) | | | | | | | | |
| Accessories | U-bracket, array suspension kits, waveguide kits | | | | | | | | |
| Product codes | | | | | | | | | |
| 794042-6650 | ARENAMATCH AM10/80 OUTDOOR LDSPKR 80x10 | | | | | | | | |
| 794042-3350 | ARENAMATCH AM10/60 OUTDOOR LDSPKR 60x10 | | | | | | | | |
| 794042-8850 | ARENAMATCH AM10/100 OUTDOOR LDSPKR 100x10 | | | | | | | | |

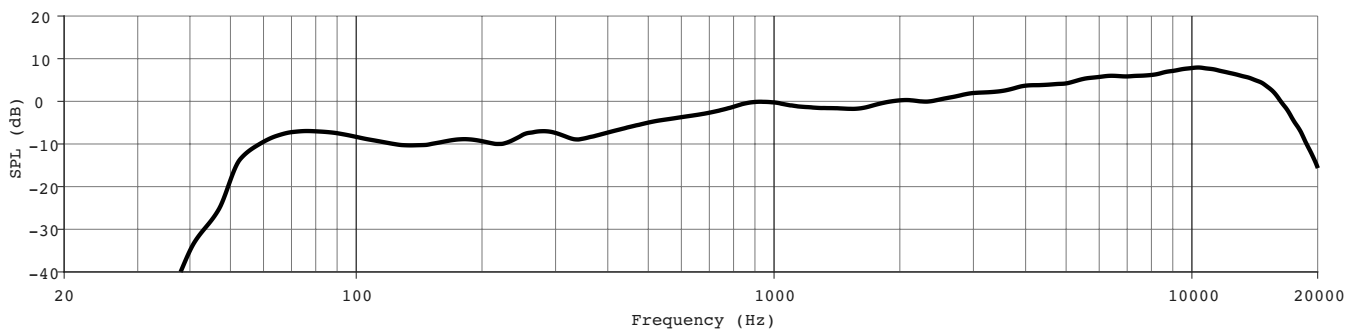
Footnotes

- (1) Frequency response and range measured on-axis in anechoic environment with recommended bandpass and EQ, single module
- (2) Bose extended-lifecycle test using pink noise filtered to meet IEC268-5, 6-dB crest factor, 500-hour duration.
- (3) AES standard 2-hour duration with IEC system noise.
- (4) Sensitivity measured in anechoic environment with recommended bandpass and EQ.
- (5) Maximum SPL calculated using sensitivity and power ratings, exclusive of power compression.

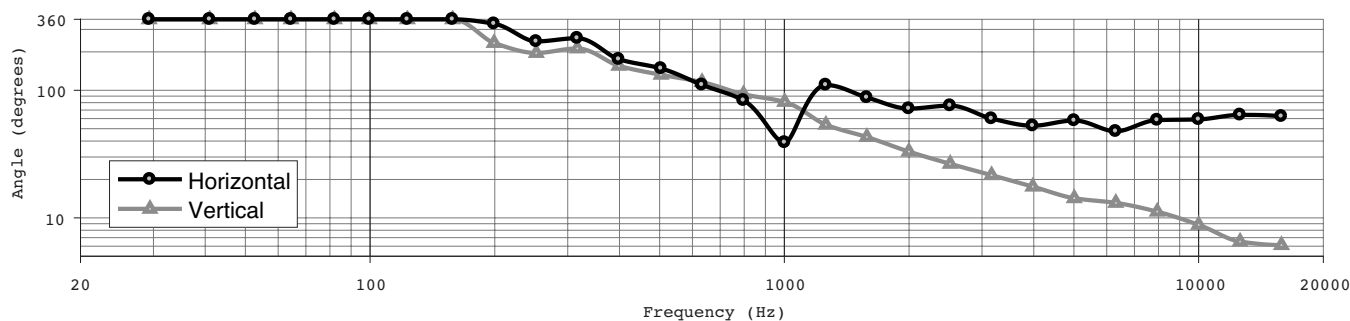
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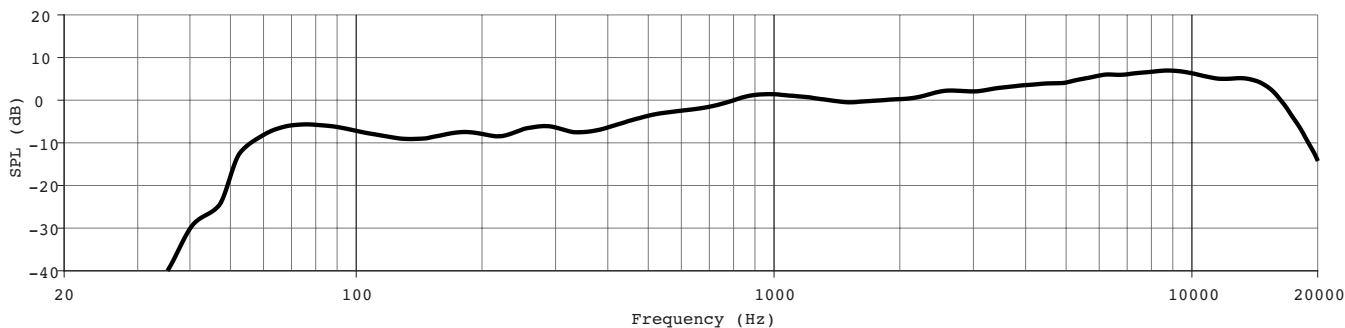
Frequency response (60° waveguide)



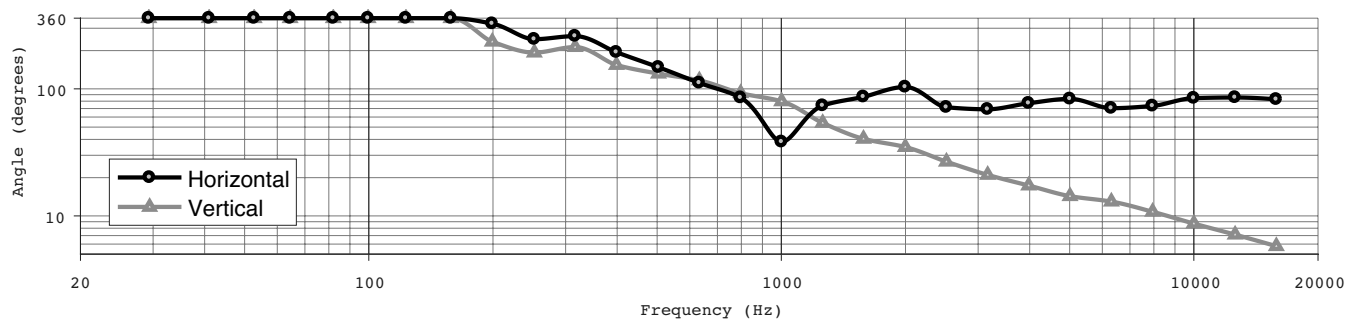
Beamwidth (60° waveguide)



Frequency response (80° waveguide)



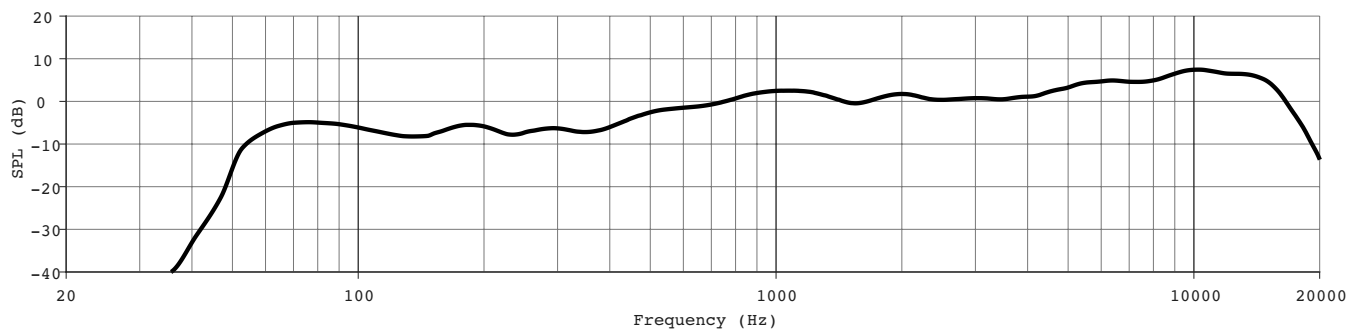
Beamwidth (80° waveguide)



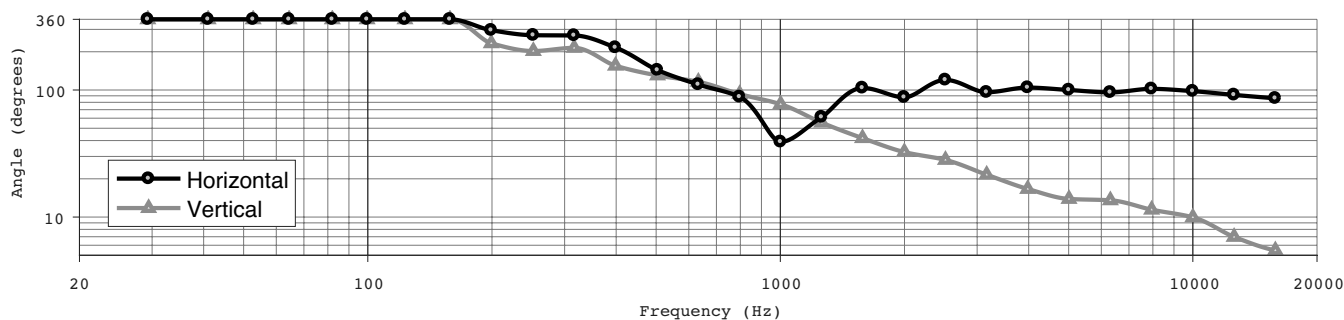
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Frequency response (100° waveguide)

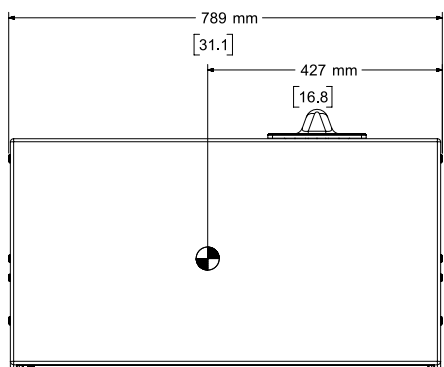


Beamwidth (100° waveguide)

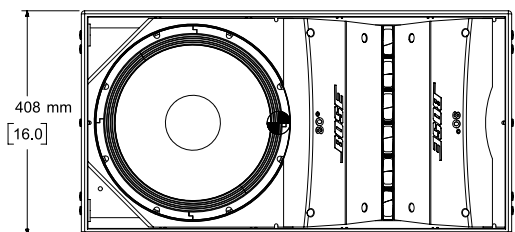
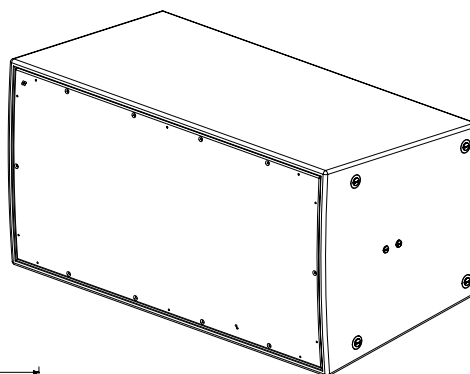


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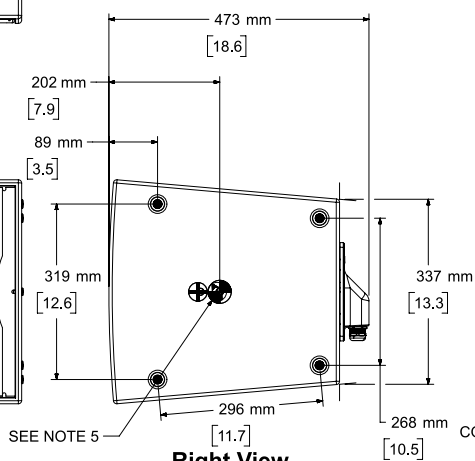
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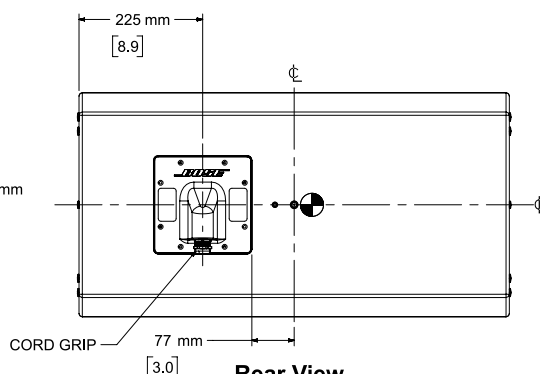
Top View



Front View
GRILLE NOT SHOWN



Right View
DIMENSIONS APPLY TO BOTH SIDES



Rear View

- NOTES:
1. SYMBOL INDICATES CENTER OF GRAVITY
 2. WEIGHT APPROX. 36,3kg/80,0lbs
 3. DIMENSIONS ARE IN MILLIMETERS OVER INCHES
 4. SYMBOL INDICATES M12 THREAD FOR AMMCPLAT
 5. SYMBOL INDICATES M10 THREAD FOR AMUBRKT
 6. SYMBOL INDICATES M6 THREAD FOR AIMING STABILIZATION

For additional specifications and application information, please visit PRO.BOSE.COM.