

DesignMax DM8C

in-ceiling loudspeaker

Product Overview

DesignMax loudspeakers bring outstanding audio and aesthetics to any commercial space. Delivering SPL suitable for foreground music, The 125-watt DesignMax DM8C features a two-way, 8-inch coaxially mounted woofer and a center-firing 1-inch compression driver, delivering 52 Hz - 20 kHz frequency range. The DM8C is installed easily via QuickHold mounting arms. And with both black and white versions available, the DMC is easy to integrate with any décor.



Key Features

Deliver instantly impressive sound with custom Bose drivers — no DSP or EQ required. For even better sound, use select Bose DSPs and amplifiers to enable Bose loudspeaker EQ and SmartBass processing, which expands performance and response at any listening level

Blend into any room design with elegant form factors, minimum-bezel grilles available in black or white, and removable logos

Reduce installation time with the patented QuickHold mounting system, which also reduces strain, hassle, and the chance of product damage

Install easily — includes Euroblock connectors; plenum-rated backcan, tile-bridge, and front-access audio wiring that makes installation and troubleshooting easier

Deliver high SPL for demanding applications, including venues such as ballrooms, concourses, and convention centers

Technical Specifications

| SINGLE LOUDSPEAKER PERFORMANCE | | |
|---|--|------------------------------------|
| Frequency Response (-3 dB) ⁽¹⁾ | 60 – 20,000 Hz | |
| Frequency Range (-10 dB) | 52 – 20,000 Hz | |
| Nominal Coverage Angle ⁽²⁾ | 175° conical | |
| Nominal Coverage Angle (1 - 10 kHz) | 140° conical | |
| | Bose extended-lifecycle test ⁽⁴⁾ | AES transducer test ⁽⁴⁾ |
| Power Handling, long-term continuous | 125 W | 150 W |
| Power Handling, peak | 500 W | 600 W |
| Sensitivity (SPL/ 1W @ 1 m) ⁽³⁾ | 90 dB | 90 dB |
| Calculated Maximum SPL @ 1 m ⁽⁴⁾ | 111 dB | 112 dB |
| Calculated Maximum SPL @ 1 m, peak | 117 dB | 118 dB |
| Crossover | 1.5 kHz (passive 2-way crossover) | |
| Loudspeaker EQ | Not Required, Bose EQ voicing and SmartBass processing available | |
| Recommended High-Pass Protection | 48 Hz with recommended 24 dB / octave filter | |
| Overload protection | Resistor-network power reduction with automatic reset | |
| Transformer taps | 70V: 20, 40, 80, 150 W, bypass 100V: 40, 80, 150 W, bypass | |
| TRANSDUCERS | | |
| Low Frequency | 1 x 8-inch woofer (203 mm) | |
| High Frequency | 1 x 1-inch compression driver, coaxial center-firing (25 mm) | |
| Nominal Impedance | 8 ohms (transformer bypass) | |

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| PHYSICAL | |
|--|---|
| Enclosure Material | Engineered plastics front baffle with integrated steel formed backcan |
| Grille | Magnetically attached perforated steel, powder-coated finish, paintable, with safety-tether |
| Logo | Rotatable, removable |
| Color | Black: RAL 9005, White: Bose Arctic White, similar to RAL 9003, Paintable |
| Environmental / Ingress-Protection | Indoor only |
| Safety Agency | UL-1480A, S5591/ UL Listed, in compliance with UL2043 for plenum-space installation, NFPA70 & NFPA90-A, in accordance with IEC60268-5, ROHS, CE compliant |
| Operating Temperature Range | 0 to 50 °C (32 °F to 122 °F) |
| Connectors | Euroblock 6-pin connector with loop-through, front-baffle mounted. Accepts 18 AWG (0.8 mm ²) to 14 AWG (2.5 mm ²) size wire |
| Wire / Conduit Entry | Single top wire entry point allows for 9.5 mm (3/8 in) conduit |
| Suspension / Mounting | Three (3) QuickHold, spring-loaded mounting arms plus three (3) safety cable locations |
| Product Dimensions (Grille Diameter x Depth) | 409 x 255 mm (16.1 x 10 in) |
| Backcan Dimensions (Diameter x Depth) | 342 x 241 mm (13.5 x 9.5 in) |
| Cutout size [Diameter] | 349 mm (13.75 in) |
| Maximum Ceiling Thickness | 76 mm (3.0 in) |
| Net Weight, Loudspeaker with Grille | 9.57 kg (21.10 lbs) |
| Net Weight, Tile Bridge | 1.0 kg (2.2 lb) |
| Shipping Weight, Single | 12.7 kg (28.0 lb) |
| Included Accessories | Adjustable Tile-Bridge, Template |
| Optional Accessories | Rough-in 6-pack for new construction |
| PRODUCT CODES | |
| 802080-0110 | DESIGNMAX DM8C SINGLE BLK |
| 802080-0210 | DESIGNMAX DM8C SINGLE WHT |

Footnotes

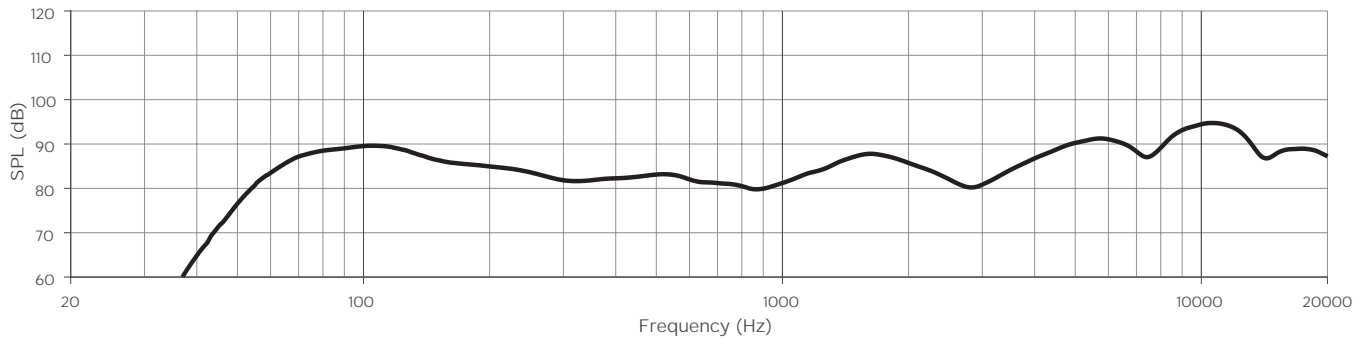
- (1) Frequency response and range measured on-axis in quarter-space (wall/ceiling boundary) environment with recommended EQ
- (2) 1 kHz to 4 kHz average
- (3) Sensitivity measured on-axis in quarter-space (wall/ceiling boundary) environment with recommended EQ
- (4) Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression.
- (5) Bose extended-lifecycle test using pink noise filtered to meet IEC268-5, 6-dB crest factor, 500-hour duration.
- (6) AES standard 2-hour duration with IEC system noise

For additional specifications and application information, please visit PRO.BOSE.COM. Specifications subject to change without notice. 10/2019

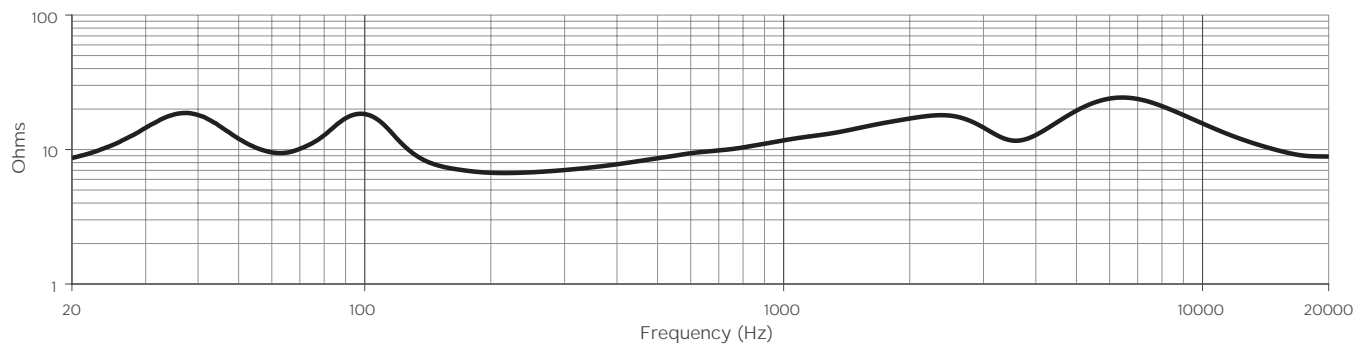
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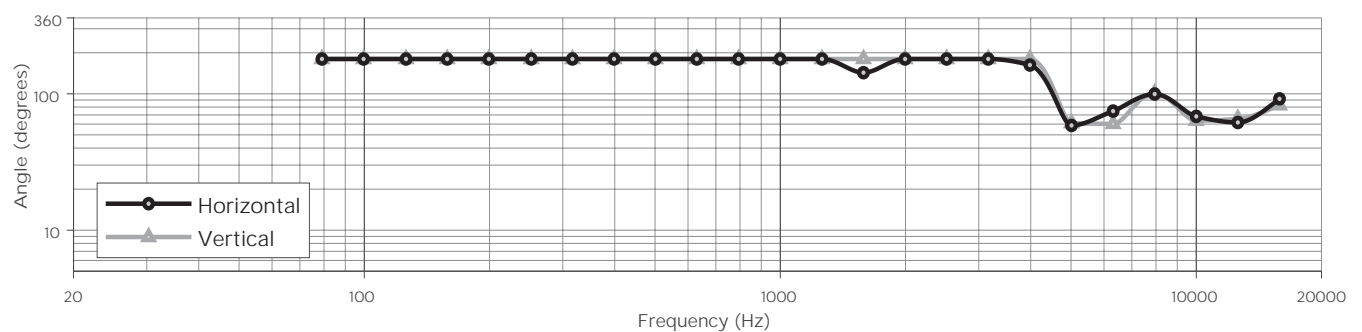
On-Axis Frequency Response (half-space (2 π) with Bose EQ voicing)



Impedance



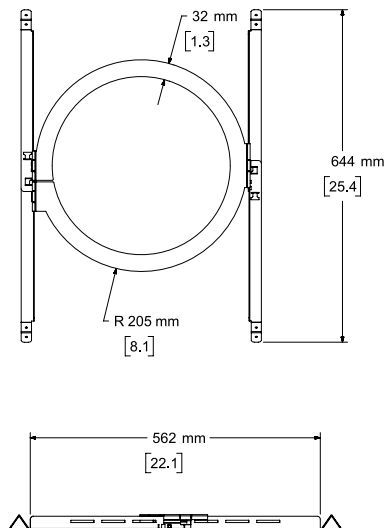
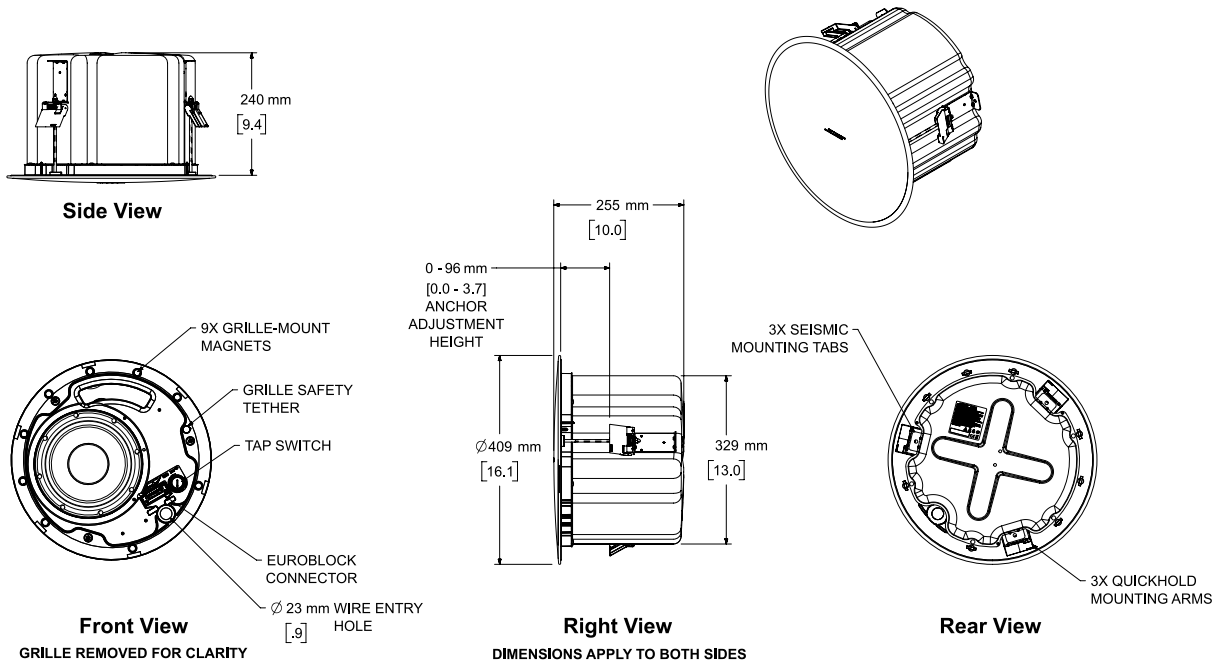
Beamwidth



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Dimensions



- NOTES:
1. DIMENSIONS ARE IN MILLIMETERS OVER INCHES
2. WEIGHT APPROX 9.6kg [21.1lbs]

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