

# 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) <sup>(1)</sup>	60 – 20,000 Hz	
Frequency Range (-10 dB) <sup>(1)</sup>	52 – 20,000 Hz	
Nominal Coverage Angle <sup>(2)</sup>	175° conical	
Nominal Coverage Angle (1 - 10 kHz)	140° conical	
	Bose extended-lifecycle test <sup>(5)</sup>	AES transducer test <sup>(4)</sup>
Power Handling, long-term continuous	125 W	150 W
Power Handling, peak	500 W	600 W
Sensitivity (SPL/ 1W @ 1 m) <sup>(3)</sup>	90 dB	90 dB
Calculated Maximum SPL @ 1 m <sup>(4)</sup>	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: 2.5, 5, 10, 20, 40, 80 W, bypass 100V: 5, 10, 20, 40, 80 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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<b>PHYSICAL</b>	
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	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 °C 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 <sup>2</sup> ) to 14 AWG (2.5 mm <sup>2</sup> ) 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 long travel 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
<b>PRODUCT CODES</b>	
802080-0110	DESIGNMAX DM8C SINGLE BLK
802080-0210	DESIGNMAX DM8C SINGLE WHT

**Footnotes**

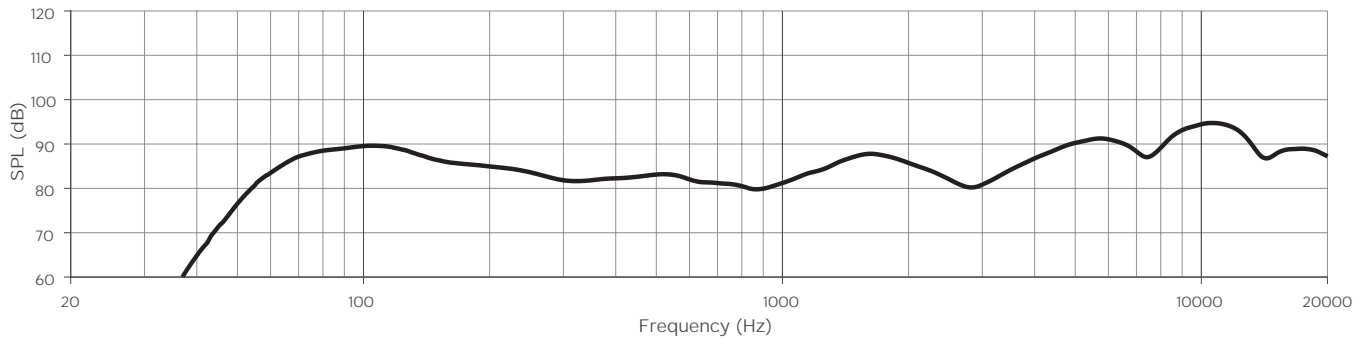
- (1) Frequency response and range measured on-axis in half-space environment with Bose EQ voicing
- (2) 1 kHz to 4 kHz average
- (3) Sensitivity measured on-axis in half-space environment with Bose EQ voicing
- (4) Maximum SPL calculated from sensitivity and power handling specifications, exclusive 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](http://PRO.BOSE.COM).  
Specifications subject to change without notice. 11/2019

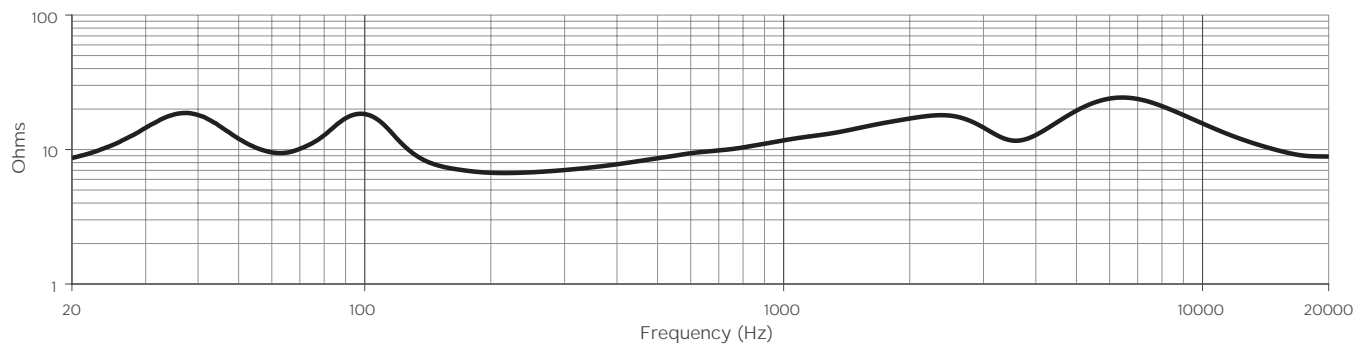
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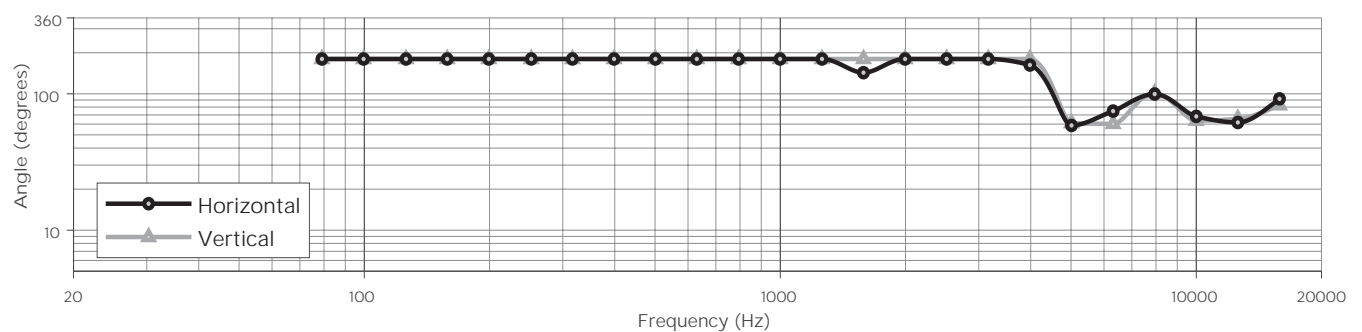
### On-Axis Frequency Response (half-space $2\pi$ ) with Bose EQ voicing



### Impedance



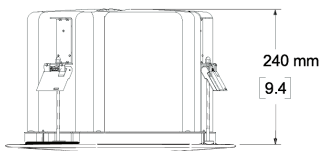
### Beamwidth



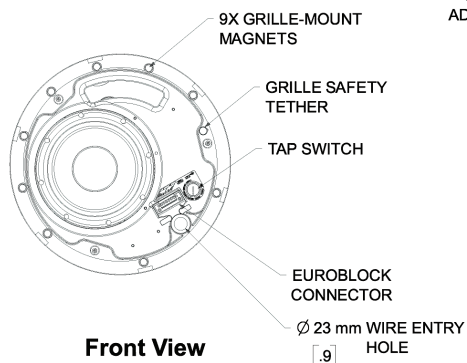
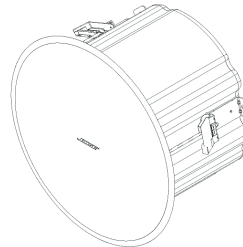
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### Dimensions

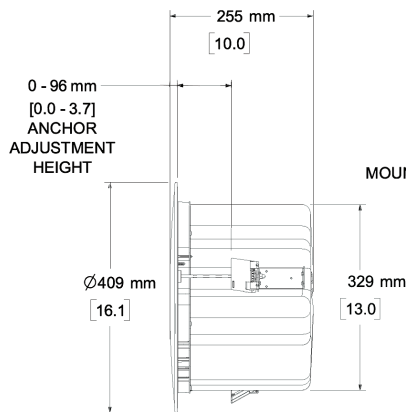


**Side View**



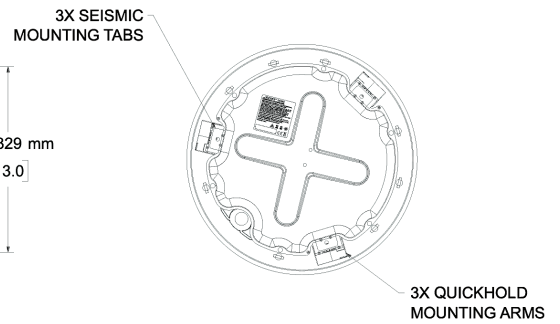
**Front View**

GRILLE REMOVED FOR CLARITY

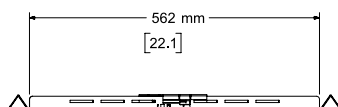
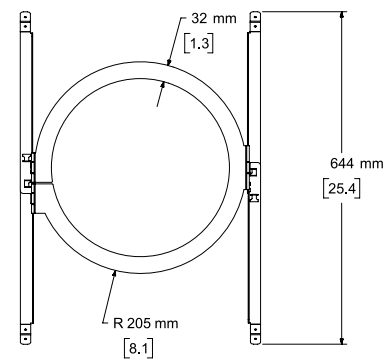


**Right View**

DIMENSIONS APPLY TO BOTH SIDES



**Rear View**



**NOTES:**

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

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