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# DesignMax DM6C

## in-ceiling loudspeaker

#### **Product Overview**

DesignMax loudspeakers bring outstanding audio and aesthetics to any commercial space. The 100-watt DesignMax DM6C loudspeaker features a two-way 6.5-inch woofer and 1.25-inch tweeter coaxially mounted within the Dispersion Alignment system, producing a frequency range of 59 Hz - 20 kHz. The DM6C is ceiling-mounted and installs easily via QuickHold mounting arms. And with both black and white versions available, the DM6C 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

**Ensure a consistent listening experience** throughout the room with the Dispersion Alignment system, which matches the coverage of the woofer to the pattern of the tweeter

**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 connector; plenum-rated backcan, tile-bridges, and front-access audio wiring that makes installation and troubleshooting easier

#### **Technical Specifications**

SINGLE LOUDSPEAKER PERFORMANCE		
Frequency Response (-3 dB) (1)	70 - 20,000 Hz	
Frequency Range (-10 dB) (1)	59 - 20,000 Hz	
Nominal Coverage Angle (2)	145° conical	
Nominal Coverage Angle (1 - 10 kHz)	140° conical	
	Bose extended-lifecycle test (5)	AES component test (6)
Power Handling, long-term continuous	100 W	125 W
Power Handling, peak	400 W	500 W
Sensitivity (SPL/1W @ 1 m) (3)	87 dB	87 dB
Calculated Maximum SPL @ 1 m (4)	107 dB	108 dB
Calculated Maximum SPL @ 1 m, peak	113 dB	114 dB
Crossover	1.7 kHz (passive 2-way crossover)	
Loudspeaker EQ	Not Required, Bose EQ voicing and SmartBass processing available	
Recommended High-Pass protection	60 Hz with recommended 24 dB / octave filter	
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 6.5-inch woofer (165 mm)	
High Frequency	1 x 1.25-inch (32 mm) neodymium dome tweeter, coaxially-mounted	
Technology	Dispersion Alignment System, 197 mm (7.75 in) system diameter	
Nominal Impedance	8 ohms (transformer bypass)	

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PHYSICAL		
Enclosure Material	Engineered-plastics front ba e with integrated steel formed back can	
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-ba e mounted. Accepts 18 AWG (0.8 mm²) to 14 AWG (2.5 mm²) size wire.	
Wire/Conduit Entry	Single top wire entry point for 3/8 in conduit	
Suspension / Mounting	Three (3) QuickHold, spring-loaded long travel mounting arms plus three (3) safety cable tabs	
Maximum Ceiling Thickness	57 mm (2.3 in)	
Backcan Dimensions (Diameter × Depth)	288 × 223 mm (11.3 × 8.8 in)	
Product Dimensions (Grille Diameter × Depth)	356 × 239 mm (14.0 × 9.4 in)	
Ceiling Cutout	292 mm (11.5 in)	
Net Weight, Loudspeaker with grille (single)	6.5 kg (14.3 lb)	
Net Weight, Tile Bridge (single)	0.8 kg (1.8 lb)	
Shipping Weight (pair)	17.7 kg (39.1 lb)	
Included Accessories	Adjustable Tile-Bridge, Template	
Optional Accessories	Rough-in 6-pack	
PRODUCT CODES		
829679-0110	DESIGNMAX DM6C PAIR BLK	
829679-0210	DESIGNMAX DM6C PAIR 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. Specifications subject to change without notice. 11/2019

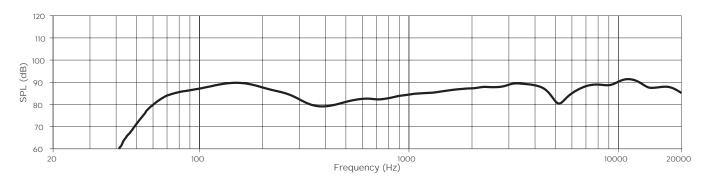
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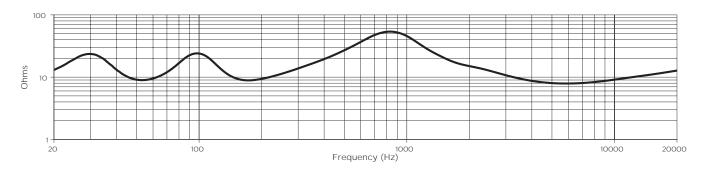
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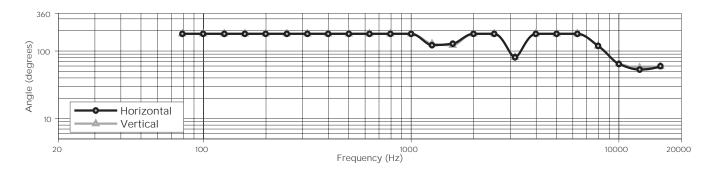
### On-Axis Frequency Response (half-space $(2\pi)$ with Bose EQ voicing)



#### **Impedance**



#### **Beamwidth**



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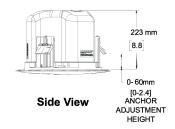


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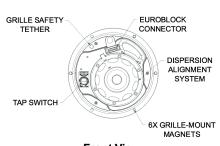
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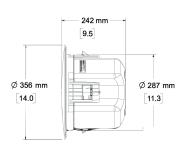
#### **Dimensions**



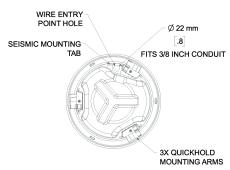




Front View
GRILLE REMOVED FOR CLARITY

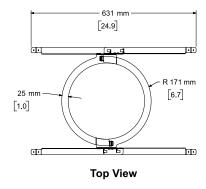


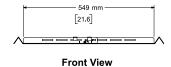
Right View DIMENSIONS APPLY TO BOTH SIDES



**Rear View** 

- NOTES:
  1. DIMENSIONS ARE IN MILLIMETERS OVER INCHES
- 2. WEIGHT 6.50kg [14.3lbs]





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