TECHNICAL DATA

DesignMax DM6C in-ceiling loudspeaker

Product Overview

With coaxial two-way drivers, the 125-watt DesignMax DM6C loudspeaker offers rich lows and clear, intelligible highs — along with premium aesthetics that complement any commercial sound installation. The DM6C features a 6.5-inch woofer and a 1.25-inch coaxial tweeter mounted within the Dispersion Alignment system, delivering a frequency range of 59 Hz – 20 kHz. The in-ceiling DM6C is installed easily via QuickHold mounting arms.

Key Features

Combine DesignMax models to complete any design, big or small — 12 loudspeakers to mix and match, from 2-inch, low-profile models to 8-inch, high-SPL compression-driver loudspeakers and outdoor-rated options

Deliver rich lows and clear, intelligible highs with coaxial two-way drivers — no DSP or EQ required. For even better sound, combine with select Bose Professional DSPs and amplifiers to enable Bose Professional 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 with 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 with industry-standard accessories — all models include Euroblock connectors; in-ceiling models include plenum-rated backcans, tile bridges, and front-access audio wiring that makes installation and troubleshooting easier

Technical Specifications

SINGLE LOUDSPEAKER PERFORMANC	CE		
Frequency Response (-3 dB) ¹	70 – 20,000 Hz		
Frequency Range (-10 dB) ¹	59 - 20,000 Hz		
Nominal Coverage Angle (1 – 4 kHz)	120° conical		
Nominal Coverage (1 – 10 kHz)	125° conical		
	AES transducer test ⁴	Bose Professional extended-lifecycle test 5	
Power Handling, Long-term Continuous	125 W	100 W	
Power Handling, Peak	500 W	400 W	
Sensitivity SPL/1W @1m ²	88 dB	88 dB	
Calculated Maximum SPL @ 1 m ³	109 dB	108 dB	
Calculated Maximum SPL @ 1 m, Peak	115 dB	114 dB	
Crossover	1.7 kHz (passive 2-way cr	1.7 kHz (passive 2-way crossover)	
Loudspeaker EQ	Not required. Bose Professional EQ voicing and SmartBass available.		
Recommended High-Pass Protection	60 Hz with minimum 24	60 Hz with minimum 24-dB/octave filter	
Transformer taps	70V: 2.5, 5, 10, 20, 40, 80 W, bypass		
	100V: 5, 10, 20, 40, 80 W,	100V: 5, 10, 20, 40, 80 W, bypass	





For additional specifications and application information, please visit BoseProfessional.com. Specifications subject to change without notice. 09/2024

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TRANSDUCERS		
Low Frequency	1 × 165 mm (6.5 in) woofer	
High Frequency	1 × 32 mm (1.25 in) neodymium dome tweeter, coaxially mounted	
Technology	Dispersion Alignment System, 197 mm (7.75 in) system diameter	
Nominal Impedance	8Ω (transformer bypass)	
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 (RAL 9003), paintable	
Environmental	Indoor only	
Safety Agency	UL 1480A, UL Listed, in compliance with UL2043 for plenum-space installation, NFPA 70 & NFPA 90A, 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 mm²) to 14 AWG (2.5 mm²) size wire.	
Wire/Conduit Entry	Single top wire entry point knockouts, allows for 9.5 mm (¾ in) conduit	
Suspension/Mounting	Three (3) QuickHold, spring-loaded mounting arms plus three (3) safety cable tabs	
Maximum Ceiling Thickness	57 mm (2.3 in)	
Ceiling Cutout Size	292 mm (11.5 in)	
Product Dimensions (grille diameter × depth)	356 × 239 mm (14.0 × 9.4 in)	
Backcan Dimensions (diameter × depth)	287 × 223 mm (11.3 × 8.8 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 pan (6-pack)	
PRODUCT CODES		
Black	829679-0110 DESIGNMAX DM6C PAIR BLK	
Black (new)	829679-0120 DESIGNMAX DM6C PAIR BLK	
White	829679-0210 DESIGNMAX DM6C PAIR WHT	
White (new)	829679-0220 DESIGNMAX DM6C PAIR WHT	

Footnotes

1.

Frequency response and range measured on-axis in half-space environment with Bose Professional EQ voicing. Sensitivity measured on-axis in half-space environment averaged 100 Hz – 10 kHz using recommended high-pass protection. Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression. 2.

3.

4. AES standard 2-hour duration with IEC system noise.

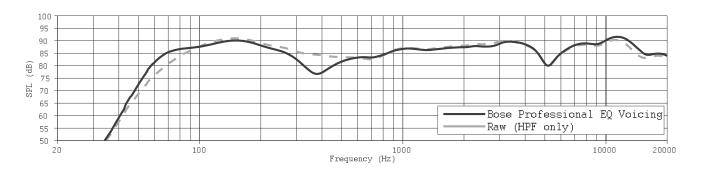
5. Bose Professional extended-lifecycle test using pink noise filtered to meet IEC268-5, 6-dB crest factor, 500-hour duration.

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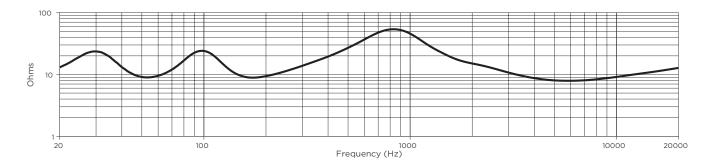
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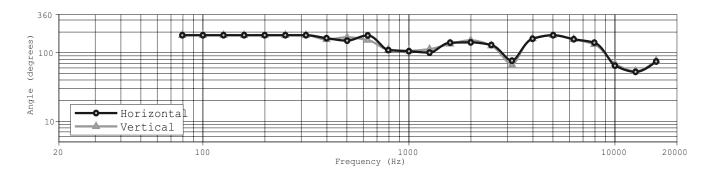
On-axis Response



Impedance



Beamwidth⁶



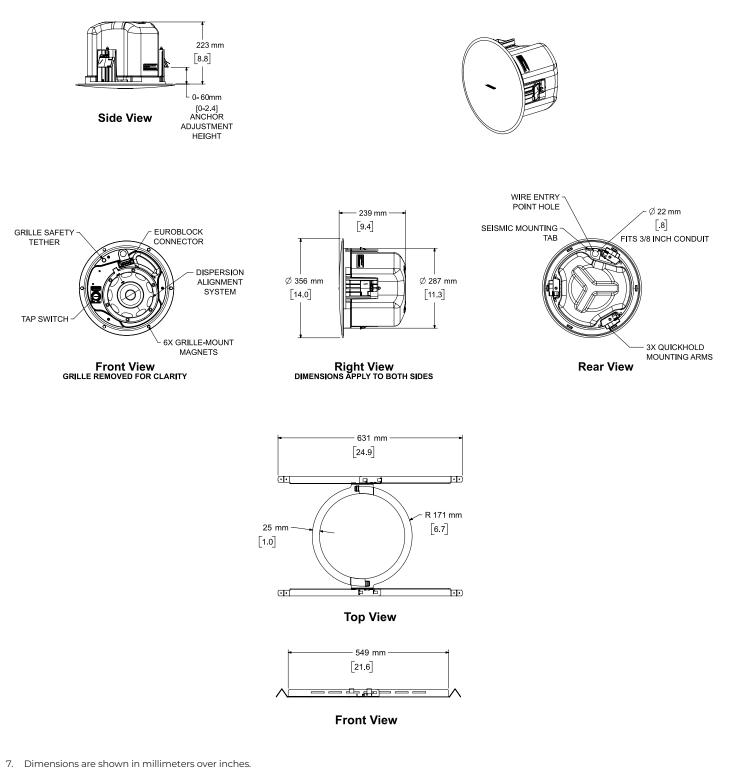
6. Measured in whole-space environment.

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Dimensions⁷



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