TECHNICAL DATA

FreeSpace FS4CE in-ceiling loudspeaker

Product Overview

FreeSpace FS loudspeakers are the next step of our widely trusted line of in-ceiling and surface-mount loudspeakers, offering significant upgrades in durability, design, and ease of installation — all with remarkably consistent tonality. Engineered for high-quality performance in both background music and voice announcement applications, FS loudspeakers are ideal for almost any commercial space. The line includes five loudspeakers, two distinct levels of sound, new mounting options, and a modern aesthetic to match. For those seeking consistent, quality installed sound, FreeSpace FS loudspeakers are the perfect mix of performance and value.

The FS4CE is an in-ceiling model with a full-range 4.5-inch transducer, low frequency range down to 70 Hz, and sensitivity of 88 dB SPL/1W @1m.

Product update: New models are UL 1480A-certified. See the FS4CE product page at **BoseProfessional.com** for details.

Key Features

Maintain consistent tonal quality with shared voicing across all FS models

Hear the best of both — music and voice — with transducers that offer clear voice reproduction and smooth response for background music

Customize systems with confidence using in-ceiling, surface-mount, and pendant-mount options, allowing for tailored mixand-match installations. DesignMax subwoofers and larger models can expand your system design options even further

Blend with more room designs with updated enclosures — available in black and white — that pair modern aesthetics with practical features, including removable logos

Tackle site-specific challenges with the support of a full suite of accessories, designed to handle a wide range of applications and mounting options

Install with ease — all models feature Euroblock inputs and front-baffle input location on in-ceiling models

Support public safety — EN 54-24 for Voice Alarm Systems for Fire Detection and Fire Alarm Systems for Buildings **Bring quality sound to more places with the FS4CE** — rated for outdoor, wet installations

Technical Specifications

SINGLE LOUDSPEAKER PERFORMANCE		
Frequency Response (-3 dB) ¹	80 – 16,000 Hz	
Frequency Range (-10 dB) ¹	70 – 17,000 Hz	
Nominal Coverage Angle (1 – 4 kHz)	145°	
Nominal Coverage (1 – 10 kHz)	115°	
	AES transducer test ⁴	Bose Professional extended-lifecycle test 5
Power Handling, Long-term Continuous	50 W	40 W
Power Handling, Peak	200 W	160 W
Sensitivity SPL/1W @1m ²	88 dB	88 dB
Calculated Maximum SPL @ 1 m ³	105 dB	104 dB
Calculated Maximum SPL @ 1 m, Peak	111 dB	110 dB
Loudspeaker EQ	No Bose Professional EQ required when speaker used for general use. Bose Professional EQ Voicing and SmartBass available. EN 54-24 equalization is required for EN 54-24 use; refer to installation guide for details.	
Recommended High-Pass Protection	70 Hz with minimum 24-dB/octave filter	
ransformer taps 70V: 2.5, 5, 10, 20, 40 W, bypass		/pass
	100V: 5, 10, 20, 40 W, bypass	

For additional specifications and application information, please visit BoseProfessional.com. Specifications subject to change without notice. 10/2024



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TRANSDUCERS		
Full-Range Driver	1 × 4.5-inch woofer (114 mm)	
Nominal Impedance	8 ohms (transformer bypass)	
PHYSICAL		
Enclosure Material	Engineered-plastics front baffle, highly UV fade-resistant, with integrated steel-formed backcan	
Grille	Perforated steel, powder-coated finish	
Logo	Rotatable, removable	
Color	Black (similar to RAL 9005), White (similar to RAL 9003)	
Environmental / Ingress Protection ⁶	Rated for direct-exposure outdoor installations (IP55 per EN 60529; IP33C per EN 54-24). Suitable for use in outdoors in wet locations and suitable for use in plenum locations. Includes weather-resistant input cover. Optional accessory aluminum grille for harsh environments to prevent red corrosion is available.	
Safety Agency	Certification: EN 54-24:2008 for Voice Alarm Systems; UL 1480(A); in compliance with UL 2043 for plenum-space installation. For EN 54-24 specifications, refer to installation guide. EN 54-24 equalization required for EN 54-24 use.	
	Installation: NFPA 70, NFPA 72, CSA C22.1 Section 32	
Operating Temperature Range	-25 °C to 70 °C (-13 °F to 158 °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	Top and side wire entry-point 12.7 mm ($\frac{1}{2}$ in) knockouts allow for 9.5 mm ($\frac{3}{8}$ in) conduit and fittings	
Suspension/Mounting	Three (3) standard mounting arms plus one (1) safety cable tab	
Maximum Ceiling Thickness	38 mm (1.5 in)	
Product Dimensions (Baffle Diameter × Depth)	272 × 172 mm (10.7 × 6.8 in)	
Backcan Dimensions (Diameter × Depth)	220 × 163 mm (8.7 × 6.4 in)	
Ceiling Cutout	249 mm (9.8 in)	
Net Weight, Loudspeaker with Grille (Single)	3.47 kg (7.65 lb)	
Shipping Weight (Pair)	9.05 kg (19.95 lb)	
Included Accessories	Each FS4CE includes one (1) weather-resistant input cover, one (1) cutout template per box	
Optional Accessories	Adjustable tile bridge (6-pack), DesignMax DM2CRI rough-in pan (6-pack), retrofit kit (2-pack), ceramic terminal and fuse kit (10-pack), aluminum grille kit (2-pack)	
PRODUCT CODES		
Black, UL 1480	841156-0310 FREESPACE FS4CE PAIR BLK	
Black, UL 1480A	841156-0320 FREESPACE FS4CE PAIR BLK	
White, UL 1480	841156-0410 FREESPACE FS4CE PAIR WHT	
White, UL 1480A	841156-0420 FREESPACE FS4CE PAIR WHT	

Footnotes

1. Frequency response and range measured on-axis in half-space environment with recommended EQ.

2. Sensitivity measured on-axis in half-space environment averaged 100 Hz - 10 kHz using recommended high-pass protection.

3. Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression.

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.

6. Tested to IP55 per EN 60529 when used in General Purpose Audio applications. Tested to IP33C per EN 54-24 for fire and evacuation notification applications.

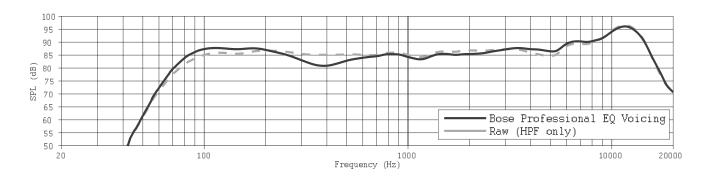
For additional specifications and application information, please visit BoseProfessional.com. Specifications subject to change without notice. 10/2024

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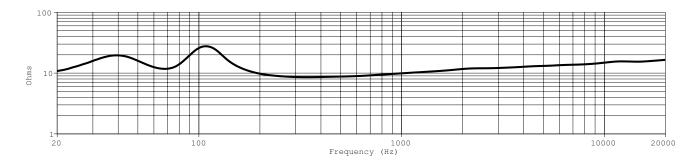
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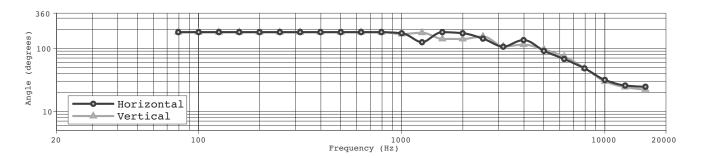
On-axis Response



Impedance



Beamwidth⁷



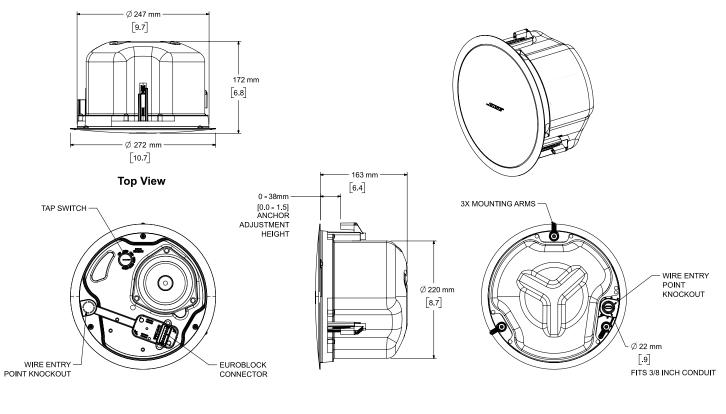
7. Measured in whole-space environment.

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Dimensions⁸



Front View GRILLE AND CAP REMOVED FOR CLARITY Right View DIMENSIONS APPLY TO BOTH SIDES

Rear View

8. Dimensions are shown in millimeters over inches.

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