FreeSpace FS4CE

in-ceiling loudspeaker

PRELIMINARY TECHNICAL DATA

Product Overview

The Bose sound quality you expect. The improvements you need. 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.



Key Features

FS2 models feature a 2.25-inch full-range transducer, low frequency down to 83 Hz, 16-ohm and 70/100V operation while FS4 models feature a 4.5-inch inch full-range transducer, low frequency down to 70 Hz, 8-ohm and 70/100V operation

All speakers offer clear voice reproduction and smooth response for background music, with shared voicing across all FS models

Bring quality sound to more places with the FS2SE, FS4SE, FS4C designed for outdoor wet installation — and the FS2P pendant loudspeaker, perfect for open-ceiling applications.

Create tailored mix-and-match installations using in-ceiling, surface-mount, and pendant-mount options. 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

Install with ease with Euroblock inputs, font baffle-mounted tap settings and audio connections on in-ceiling models, and a full suite of accessories created to handle a wide range of site-specific challenges.

Support public safety — all models are UL 1480 ULC-S541-listed for use in fire alarm and signaling systems in life safety applications

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 (2)	145°	
Nominal Coverage (1 - 10 kHz)	115°	
	Bose extended-lifecycle test (5)	AES transducer test (6)
Power Handling, long-term continuous	40 W	50 W
Power Handling, peak	160 W	200 W
Sensitivity (SPL/1W @ 1 m) (3)	88 dB	88 dB
Calculated Maximum SPL @ 1 m (4)	104 dB	105 dB
Calculated Maximum SPL @ 1 m, peak	110 dB	111 dB
Loudspeaker EQ	Not Required, Bose EQ Voicing and SmartBass available	
Recommended High-Pass Protection	70 Hz with minimum 24-dB/octave filter	
Overload Protection	Resistor-network power reduction with automatic reset	
Transformer taps	70V: 2.5, 5, 10, 20, 40 W, bypass	
	100V: 5, 10, 20, 40 W, bypass	
TRANSDUCERS		
Full-Range Driver	1 x 4.5-inch woofer (114 mm)	
Nominal Impedance	8 ohms (transformer bypass)	



FreeSpace FS4CE in-ceiling loudspeaker

PHYSICAL		
Enclosure Material	Engineered-plastics front baffle, highly UV fade resistant, with integrated steel formed back can	
Grille	Perforated steel, powder-coated finish	
Logo	Rotatable, removable	
Color	Black: similar to Ral 9005, White: similar to Ral 9003	
Environmental/Ingress-Protection	Outdoor iP55 (suitable for use outdoors in wet locations), includes weather resistant input cover	
Safety Agency	Certification: UL 1480, ULC-S541 for Fire Alarm and Signaling Systems Installation: NFPA 70, NFPA 72, CSA C22.1 Section 32, in accordance with IEC60268-5, CE RoHS	
Operating Temperature Range	-25 °C to 70 °C (-13 °F to 158 °F)	
Connectors	Euro block 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 1/2-inch knockouts allow for 9.5 mm (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 x 172 mm (10.7 x 6.8 in)	
Backcan Dimensions (Diameter × Depth)	231 x 163 mm (9.1 x 6.4 in)	
Ceiling Cutout	250 mm (9.8 in)	
Net Weight	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) cut-out template per box	
Optional Accessories	Adjustable Tile-Bridge 6-Pack, DesignMax DM5CRI Rough-in kit 6-pack, Retrofit Kit, Ceramic terminal w/ Fuse kit, Aluminum Grille Kit which prevents red corrosion	
PRODUCT CODES		
841156-0110	FREESPACE FS4CE PAIR BLK	
841156-0210	FREESPACE FS4CE PAIR WHT	

Footnotes

- (1) Frequency response and range measured on-axis in half-space environment with recommended EQ
 (2) 1 kHz to 4 kHz average
 (3) Sensitivity measured on-axis in half-space environment with recommended EQ
- (d) 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. 03/2020

FreeSpace FS4CE

in-ceiling loudspeaker



1000 Frequency (Hz)

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

20

100

10000

20000

FreeSpace FS4CE

in-ceiling loudspeaker

Dimensions



Front View GRILLE AND CAP REMOVED FOR CLARITY

Right View DIMENSIONS APPLY TO BOTH SIDES

NOTES: 1. DIMENSIONS ARE IN MILLIMETERS OVER INCHES 2. WEIGHT APPROX 3.47kg [7.65lbs]

For additional specifications and application information, please visit PRO.BOSE.COM. Specifications subject to change without notice. 03/2020