TECHNICAL DATA

FreeSpace FS2C
in-ceiling loudspeaker

PROFESSIONAL

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 FS2C is an in-ceiling model with a full-range 2.25-inch transducer, low frequency range down to 83 Hz, and sensitivity of 86 dB SPL / 1 W @ 1 m.

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 mix-and-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 — EN54-24 for Voice Alarm Systems for Fire Detection and Fire Alarm Systems for Buildings. UL 1480 UUMW listed for use in fire alarm and signaling systems in life safety applications

Technical Specifications

SINGLE LOUDSPEAKER PERFORMANCE		
Frequency Response (-3 dB) [1]	95 – 16,000 Hz	
Frequency Range (-10 dB) [1]	83 – 19,000 Hz	
Nominal Coverage Angle (1 - 4 kHz)	150°	
Nominal Coverage (1 – 10 kHz)	145°	
	AES transducer test [5]	**Bose extended-lifecycle test [4]**
Power Handling, Long-term Continuous	20 W	16 W
Power Handling, Peak	80 W	64 W
Sensitivity SPL/1W @ 1m [2]	86 dB	86 dB
Calculated Maximum SPL @ 1 m [3]	99 dB	98 dB
Calculated Maximum SPL @ 1 m, Peak	105 dB	104 dB
Loudspeaker EQ	No Bose EQ required when speaker used for general use. Bose EQ Voicing and SmartBass available. EN54-24 Equalization is required for EN54-24 use; refer to FS2P EN54-24 Certified ratings document on pro.bose.com for details.	
Recommended High-Pass Protection	85 Hz with minimum 24-dB/octave filter	
Transformer taps	70V: 1, 2, 4, 8, 16 W, bypass	
	100V: 2, 4, 8, 16 W, bypass	
TRANSDUCERS		
Full-Range Driver	1 x 2.25-inch woofer (57 mm)	
Nominal Impedance	16 ohms (transformer bypass)	

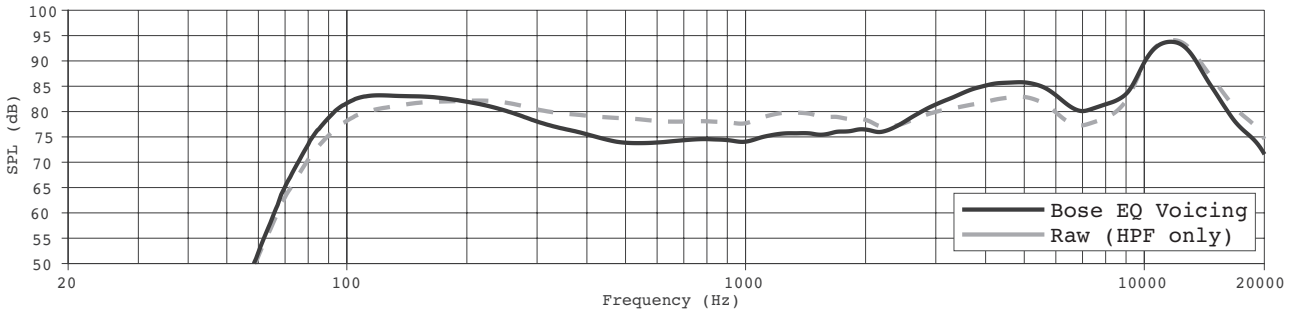
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PHYSICAL	
Enclosure Material	Engineered-plastics front baffle with integrated steel-formed backcan
Grille	Perforated steel, powder-coated finish
Logo	Rotatable, removable
Color	Black (similar to Ral 9005), White (similar to Ral 9003)
Environmental	Indoor only, suitable for use in plenum locations
Safety Agency	Certification: EN54-24:2008 for Voice Alarm Systems, UL 1480 UUMW, CAN/ULC-S541 UUMW7 for Speakers for Fire Alarm and Signaling Systems, in compliance with UL 2043 for plenum-space installation. Installation: NFPA 70, NFPA 72, CSA C22.1 Section 32 For EN54-24 specifications, refer to FS2C EN 54-24 Certified Ratings document on pro.bose.com. EN54-24 equalization required for EN54-24 use.
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^2) to 14 AWG (2.5 mm^2) size wire
Wire/Conduit Entry	Top and side wire entry-point 12.7 mm (1/2 in) knockouts allow for 9.5 mm (3/8 in) conduit and fittings
Suspension/Mounting	Two (2) standard mounting arms plus one (1) safety cable tab
Maximum Ceiling Thickness	38 mm (1.5 in)
Product Dimensions (Baffle Diameter × Depth)	182 × 132 mm (7.2 x 5.2 in)
Backcan Dimensions (Diameter × Depth)	127 × 125 mm (5.0 x 4.9 in)
Ceiling Cutout	160 mm (6.3 in)
Net Weight, Loudspeaker with Grille (Single)	1.63 kg (3.6 lb)
Shipping Weight (Pair)	4.4 kg (9.7 lb)
Included Accessories	Each FS2C includes one (1) cutout template per box
Optional Accessories	Adjustable Tile Bridge (6-pack), DesignMax DM2CRI Rough-in kit (6-pack), Retrofit Kit (2-pack), Ceramic terminal w/ Fuse kit
PRODUCT CODES	
841153-0310	FREESPACE FS2C PAIR BLK
841153-0410	FREESPACE FS2C PAIR WHT

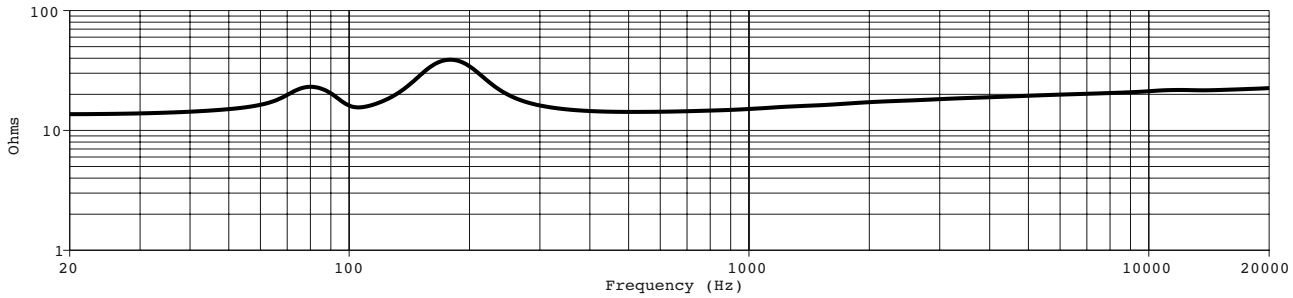
Footnotes
(1) Frequency response and range measured on-axis in half-space environment with recommended EQ
(2) Sensitivity measured on-axis in half-space environment averaged 100 Hz – 10 kHz using recommended high-pass protection
(3) Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression
(4) Bose extended-lifecycle test using pink noise filtered to meet IEC268-5, 6-dB crest factor, 500-hour duration
(5) AES standard 2-hour duration with IEC system noise
(6) Measured in whole-space environment

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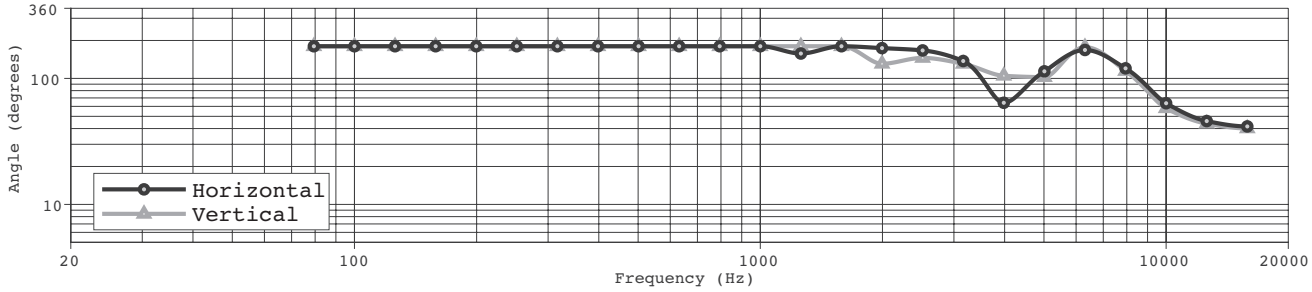
On-Axis Frequency Response



Impedance

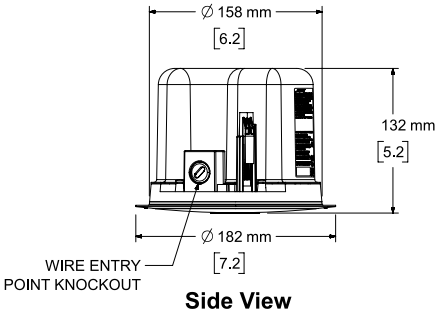


Beamwidth[6]

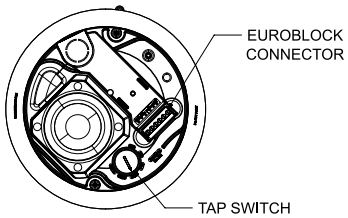


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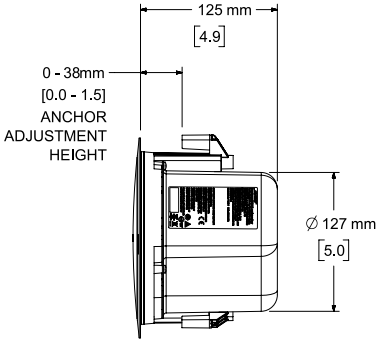
Dimensions



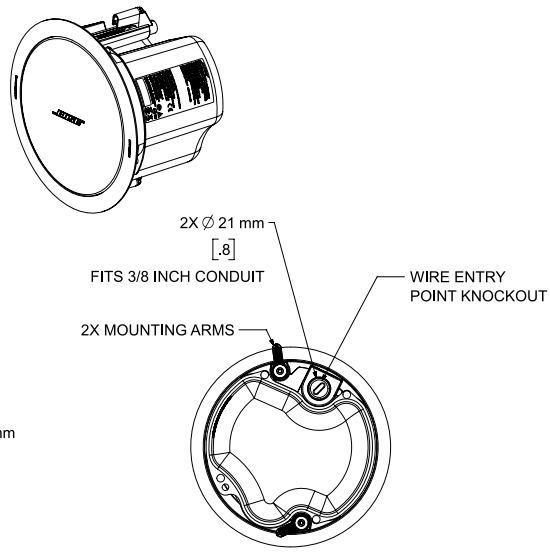
Side View



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 APPROX 1.63kg [3.60lbs]

For additional specifications and application information, please visit PRO.BOSE.COM.
Specifications subject to change without notice. 07/2020