

## TECHNICAL DATA

# FreeSpace FS2C

## 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 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.

**Product update:** New models are UL 1480A-certified. See the FS2C product page at [boseprofessional.com](https://www.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 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

### Technical Specifications

SINGLE LOUDSPEAKER PERFORMANCE		
Frequency Response (-3 dB) <sup>1</sup>	95 – 16,000 Hz	
Frequency Range (-10 dB) <sup>1</sup>	83 – 19,000 Hz	
Nominal Coverage Angle (1 – 4 kHz)	150°	
Nominal Coverage (1 – 10 kHz)	145°	
	AES transducer test <sup>4</sup>	Bose Professional extended-lifecycle test <sup>5</sup>
Power Handling, Long-term Continuous	20 W	16 W
Power Handling, Peak	80 W	64 W
Sensitivity SPL / 1 W @ 1 m <sup>2</sup>	86 dB	86 dB
Calculated Maximum SPL @ 1 m <sup>3</sup>	99 dB	98 dB
Calculated Maximum SPL @ 1 m, Peak	105 dB	104 dB
Loudspeaker EQ	No Bose Professional EQ required when speaker used for general use. Bose Professional EQ Voicing and SmartBass available. EN54-24 equalization is required for EN54-24 use; refer to installation guide for details.	

For additional specifications and application information, please visit [BoseProfessional.com](https://www.boseprofessional.com). Specifications subject to change without notice. 09/2024

## TECHNICAL DATA

# FreeSpace FS2C

## in-ceiling loudspeaker

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
<b>TRANSDUCERS</b>	
Full-Range Driver	1 × 2.25-inch woofer (57 mm)
Nominal Impedance	16 ohms (transformer bypass)
<b>PHYSICAL</b>	
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(A); in compliance with UL 2043 for plenum-space installation. For EN54-24 specifications, refer to in installation guide. EN54-24 equalization required for EN54-24 use. Installation: NFPA 70, NFPA 72, CSA C22.1 Section 32
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 <sup>2</sup> ) to 14 AWG (2.5 mm <sup>2</sup> ) size wire
Wire/Conduit Entry	Top and side wire entry-point 12.7 mm (½ in) knockouts allow for 9.5 mm (⅜ 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 × 5.2 in)
Backcan Dimensions (Diameter × Depth)	127 × 125 mm (5.0 × 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 with fuse kit (10-pack)
<b>PRODUCT CODES</b>	
Black, UL 1480	841154-0310 FREESPACE FS2C PAIR BLK
Black, UL 1480A	841154-0320 FREESPACE FS2C PAIR BLK
White, UL 1480	841154-0410 FREESPACE FS2C PAIR WHT
White, UL 1480A	841154-0420 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. 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.

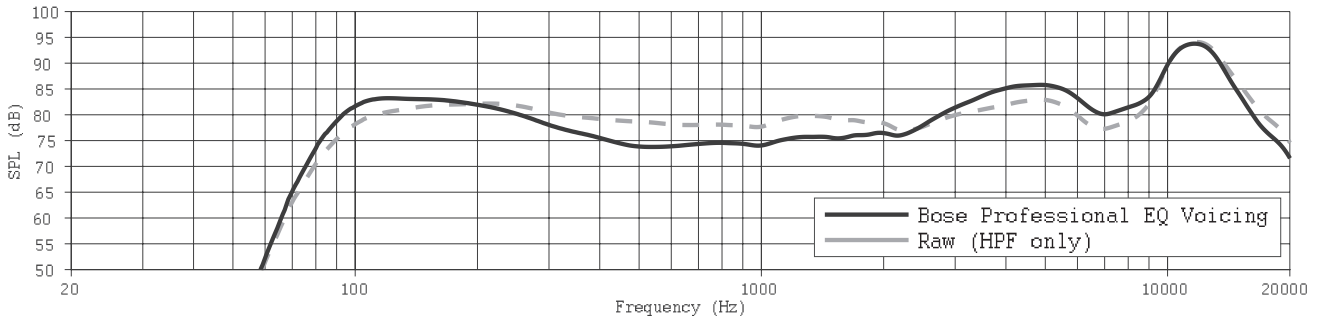
For additional specifications and application information, please visit [BoseProfessional.com](https://www.boseprofessional.com). Specifications subject to change without notice. 09/2024

TECHNICAL DATA

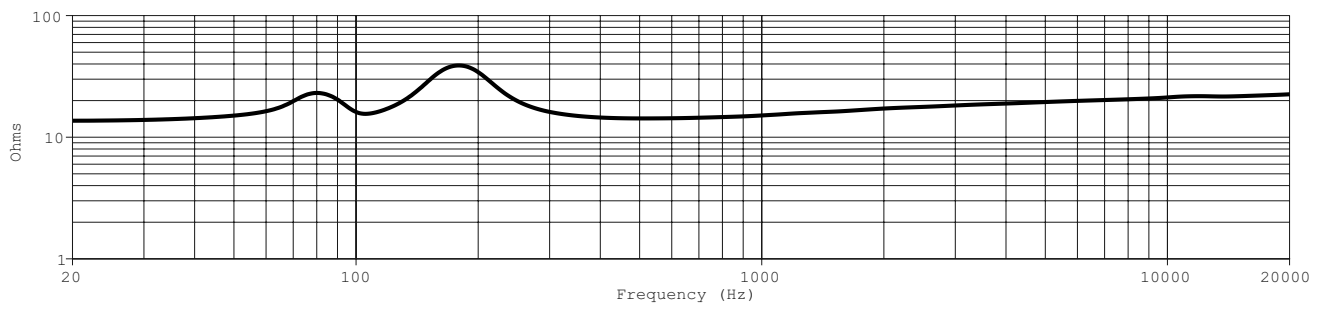
# FreeSpace FS2C

in-ceiling loudspeaker

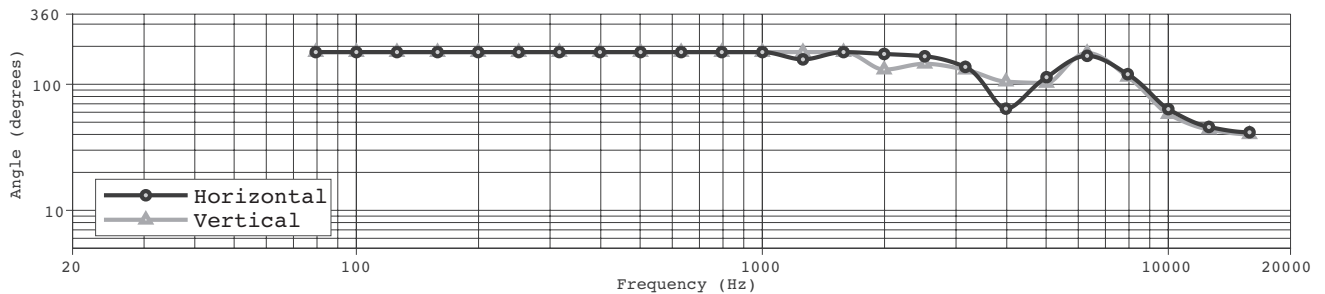
## On-axis Response



## Impedance



## Beamwidth<sup>6</sup>



6. Measured in whole-space environment.

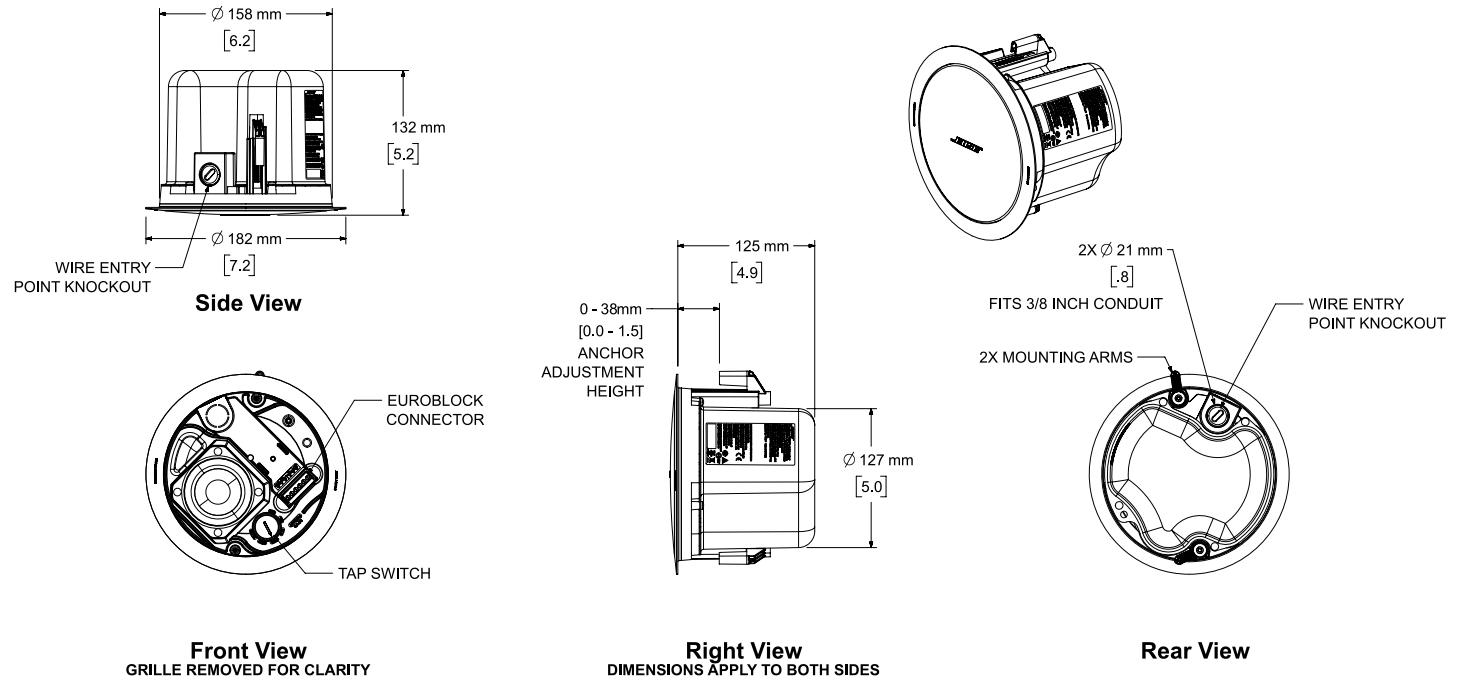
For additional specifications and application information, please visit [BoseProfessional.com](https://www.boseprofessional.com). Specifications subject to change without notice. 09/2024

## TECHNICAL DATA

# FreeSpace FS2C

in-ceiling loudspeaker

### Dimensions<sup>7</sup>



7. Dimensions are shown in millimeters over inches.

Bose is a trademark of Bose Corporation. DesignMax, FreeSpace, and SmartBass are trademarks of Transom Post OpCo LLC. All other trademarks are the property of their respective owners. ©2024 Transom Post OpCo LLC. All rights reserved.

For additional specifications and application information, please visit [BoseProfessional.com](https://BoseProfessional.com). Specifications subject to change without notice. 09/2024