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.

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** — ENS4-24 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
- **Bring quality sound to more places** with the FS4CE — rated for outdoor, wet installations

Technical Specifications

<table>
<thead>
<tr>
<th>SINGLE LOUDSPEAKER PERFORMANCE</th>
<th>AES transducer test (1)</th>
<th>Bose extended-lifecycle test (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Response (-3 dB) (1)</td>
<td>80 – 16,000 Hz</td>
<td>80 – 16,000 Hz</td>
</tr>
<tr>
<td>Frequency Range (-10 dB) (1)</td>
<td>70 – 17,000 Hz</td>
<td>70 – 17,000 Hz</td>
</tr>
<tr>
<td>Nominal Coverage Angle (1 - 4 kHz)</td>
<td>145°</td>
<td>145°</td>
</tr>
<tr>
<td>Nominal Coverage (1 – 10 kHz)</td>
<td>115°</td>
<td></td>
</tr>
<tr>
<td>Power Handling, Long-term Continuous</td>
<td>50 W</td>
<td>40 W</td>
</tr>
<tr>
<td>Power Handling, Peak</td>
<td>200 W</td>
<td>160 W</td>
</tr>
<tr>
<td>Sensitivity SPL / 1W @ 1m (3)</td>
<td>88 dB</td>
<td>88 dB</td>
</tr>
<tr>
<td>Calculated Maximum SPL @ 1 m (3)</td>
<td>105 dB</td>
<td>104 dB</td>
</tr>
<tr>
<td>Calculated Maximum SPL @ 1 m, Peak</td>
<td>111 dB</td>
<td>110 dB</td>
</tr>
<tr>
<td>Loudspeaker EQ</td>
<td>Not required, Bose EQ voicing and SmartBass available</td>
<td></td>
</tr>
<tr>
<td>Recommended High-Pass Protection</td>
<td>70 Hz with minimum 24-dB/octave filter</td>
<td></td>
</tr>
<tr>
<td>Transformer taps</td>
<td>70V: 2.5, 5, 10, 20, 40 W, bypass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100V: 5, 10, 20, 40 W, bypass</td>
<td></td>
</tr>
</tbody>
</table>

**TRANSUDERS**
- **Full-Range Driver** | 1 × 4.5-inch woofer (114 mm)
- **Nominal Impedance** | 8 ohms (transformer bypass)
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## PHYSICAL

<table>
<thead>
<tr>
<th>Enclosure Material</th>
<th>Engineered-plastics front baffle, highly UV fade-resistant, with integrated steel-formed backcan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grille</td>
<td>Perforated steel, powder-coated finish</td>
</tr>
<tr>
<td>Logo</td>
<td>Rotatable, removable</td>
</tr>
<tr>
<td>Color</td>
<td>Black (similar to Ral 9005), White (similar to Ral 9003)</td>
</tr>
</tbody>
</table>

### Environmental/Ingress Protection (6)

- Rated for direct-exposure outdoor installations (IP55 per EN60529; IP33C per EN54-24). Suitable for use in outdoor 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

- For EN54-24 specifications, refer to FS4CE EN 54-24 Certified Ratings document on pro.bose.com. EN54-24 equalization required for EN54-24 use.

### Operating Temperature Range

-25 °C to 70 °C (-13 °F to 158 °F)

### Connectors

- Euroblock 6-pin connector with loop-through, mounted on top. Accepts 18 AWG (0.8 mm²) to 14 AWG (2.5 mm²) size wire. Includes input cover.

### 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

- Three (3) standard mounting arms plus one (1) safety cable tab

### Maximum Ceiling Thickness

38 mm (1.5 in)

### Product Dimensions (Baffle Diameter × Depth)

<table>
<thead>
<tr>
<th>Backcan Dimensions (Diameter × Depth)</th>
<th>Ceiling Cutout</th>
<th>Net Weight, Loudspeaker with Grille (Single)</th>
<th>Shipping Weight (Pair)</th>
<th>Included Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>272 × 172 mm (10.7 × 6.8 in)</td>
<td>249 mm (9.8 in)</td>
<td>3.47 kg (7.65 lb)</td>
<td>9.05 kg (19.95 lb)</td>
<td>Each FS4CE includes one (1) weather-resistant input cover, one (1) cutout template per box, Adjustable Tile Bridge (6-pack), DesignMax DM2CRI Rough-in Pan (6-pack), Retrofit Kit (2-pack), Ceramic Terminal and Thermal Fuse Kit (10-pack), Aluminum Grille kit (2-pack)</td>
</tr>
</tbody>
</table>

### Optional Accessories

- Adjustable Tile Bridge (6-pack), DesignMax DM2CRI Rough-in Pan (6-pack), Retrofit Kit (2-pack), Ceramic Terminal and Thermal Fuse Kit (10-pack), Aluminum Grille kit (2-pack)

### PRODUCT CODES

- 841156-0310 FREESPACE FS4CE PAIR BLK
- 841156-0410 FREESPACE FS4CE PAIR WHT

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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. Tested to IP55 per EN60529 when used in General Purpose Audio applications. Tested to IP33C per EN5 54-24 for fire and evacuation notification applications.
7. Measured in whole-space environment.
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On-Axis Frequency Response

Impedance

Beamwidth\(^7\)
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Dimensions

Front View
GRILLE AND CAP REMOVED FOR CLARITY

Right View
DIMENSIONS APPLY TO BOTH SIDES

Rear View

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. 07/2020