

# FreeSpace® DS 16F loudspeaker



## Key Features

- **Full-range** loudspeaker with a single 2.25" (57 mm) driver in a ported enclosure to deliver a 140° conical coverage pattern and clear, intelligible music and speech reproduction for flush-ceiling or pendant-mount applications
- **Integrated multi-tap transformer** with innovative thumb wheel adjustment for easy-to-change tap setting from underneath the loudspeaker grille
- **Shared voicing** across entire FreeSpace DS product family enables DS 16, DS 40 and DS 100 loudspeakers to be integrated on the same system and maintain consistent tonal quality
- **Can be combined** with either surface- or flush-mount FreeSpace 3 Acoustimass® module for extended bass response
- **Supported** by a suite of accessories, including ceiling-mount bracket, adjustable tile bridge, pendant-mount kit and square grille



TECHNICAL DATA SHEET

## Product Overview

The Bose® FreeSpace DS 16F is the entry-level member of the DS loudspeaker family. It is a high-performance, full-range, flush-mount loudspeaker designed for background music and speech reproduction in a wide range of installed applications. The DS 16F features a wide, even 140° conical pattern and frequency range down to 80 Hz.

## Technical Specifications

System Performance	
Frequency Response (+/-3 dB) <sup>1</sup>	95 Hz - 17 kHz
Frequency Range (-10 dB) <sup>1</sup>	80 Hz - 19 kHz
Nominal Dispersion	140° conical
Recommended High-Pass Filter	80 Hz high-pass filter
Loudspeaker EQ	Recommended
Long-Term Power Handling <sup>2</sup>	16 W (64 W peak)
Sensitivity (SPL / 1 W @ 1 m) <sup>3</sup>	84 dB SPL
Maximum SPL @ 1 m <sup>4</sup>	96 dB SPL (102 dB SPL peak)
Nominal Impedance	8 Ω (transformer bypassed)
Transformer Taps (70/100 V)	70 V: 1 W, 2 W, 4 W, 8 W, 16 W 100 V: 2 W, 4 W, 8 W, 16 W
Transducers	
Driver Complement	2.25" (57 mm) full-range driver
Physical	
Enclosure	PC/ABS
Grille	Powder-coated steel grille
Environmental	Indoor use only
Connectors	Three-terminal barrier strip. Optional accessory available for use when ceramic connector and thermal fuse are required. Wire gauge: 18 AWG (0.8 mm) to 14 AWG (2.0 mm)
Suspension / Mounting	Three integrated quick-install mounting arms. Three mounting points at the rear of the enclosure for use with optional accessory pendant mount kit. Safety cable attachment: .35" (8.9 mm) diameter hole on junction box
Dimensions	Outer flange diameter: 9.4" (239 mm) Depth: 6.9" (176 mm) Ceiling hole diameter: 8.0" (203 mm)
Ceiling Thickness (Maximum)	1.5" (38 mm)
Net Weight	4.4 lb (1.9 kg)
Shipping Weight	6.0 lb (2.7 kg)
Product Code	
Black	043053
White	043054

### Footnotes:

- <sup>1</sup> Frequency response and range measured on-axis with recommended active EQ in an anechoic environment.
- <sup>2</sup> Power handling tested using pink noise filtered to meet IEC 268-5, 6 dB crest factor, 100 hours, with recommended EQ.
- <sup>3</sup> Sensitivity measured in free field (no boundary-loading gain) with recommended active EQ, referenced to 1W/1m.
- <sup>4</sup> Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression.