

F1 Model 812

flexible array loudspeaker

Product Overview

The Bose F1 Model 812 Flexible Array Loudspeaker is the first powered portable loudspeaker that lets you control its vertical coverage pattern. Simply push or pull the array into position to create “Straight,” “C,” “J,” or “Reverse-J” coverage patterns. And once set, the system automatically changes the EQ to maintain optimum tonal balance for each coverage pattern. So whether you’re playing at floor level, on a stage, or facing raked seats or bleachers, you can now adapt your PA to match the room.

Engineered with a flexible array of eight high-output mid/high drivers, a high-powered 12-inch woofer, a lower crossover point and 1,000-watt amplifier, the loudspeaker delivers high SPL performance while maintaining vocal and midrange clarity that’s dramatically better than conventional loudspeakers.

Key Features

FLEX array technology: Flexible baffle design that can be configured into four unique shapes (“Straight,” “C,” “J” or “Reverse-J”), allowing the customer to choose the best possible coverage pattern for the application

Vertically oriented 8-driver mid/high line array, with each driver mounted on a custom 100° waveguide, helps deliver wide, consistent coverage

12-inch high-performance LF driver provides strong low-frequency output

Bi-amplified design with 2 high-output, Class-D amplifiers to separately power the FLEX array 12-inch LF driver

2 input channels with independent volume controls and Line Level/Mic switch on Channel 1



Applications

- Bands of all styles
- Solo musicians
- Mobile DJs
- Houses of worship
- Schools and universities
- Resorts and hospitality venues
- Business presentations

TECHNICAL DATA

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Technical Specifications

SYSTEM PERFORMANCE	
System Type	Self-powered, 2-way
Frequency Response (± 3 dB)	55 Hz – 14 kHz
Frequency Range (-10 dB)	48 Hz – 16 kHz
Nominal Dispersion	100° H \times 40° V (C-position)
Maximum SPL @ 1 m	132 dB-SPL (peak)
Crossover Frequency	600 Hz acoustic 4 th -order Butterworth
AMPLIFICATION	
System Power	1000 W
Distortion at Rated Power	0.1% max (30 Hz – 15 kHz)
System Limiter	Dynamic limiter
Power Indicator	Blue LED (system on)
TRANSDUCERS	
Driver Complement	8 \times 2¼ in mid-high drivers; 1 \times 12 in LF
CHANNELS	
Signal Indicators	Power/fault, limit, front LED, signal input
Input Connections	Channel 1: XLR balanced: Pin 1 (GND), Pin 2 (+), Pin 3 (-) Channel 2: ¼-in TS/TRS, ⅛-in TS/TRS, (2) RCA
Controls	Volume level, signal input select, front LED function select, EQ select, power on/off
ADDITIONAL CONNECTIONS	
Line Output	XLR balanced
AC Mains	IEC connector
PHYSICAL	
Enclosure	High-impact composite materials
Grille	Powder-coated perforated steel grille
Dimensions (H \times W \times D)	665 \times 334 \times 373 mm (26.1 \times 13.1 \times 14.6 in)
Net Weight	20.2 kg (44.5 lb)
POWER SUPPLY VOLTAGES	
Universal	AC power rating: 100–240 V, 50/60 Hz, $\pm 20\%$, 200 W max

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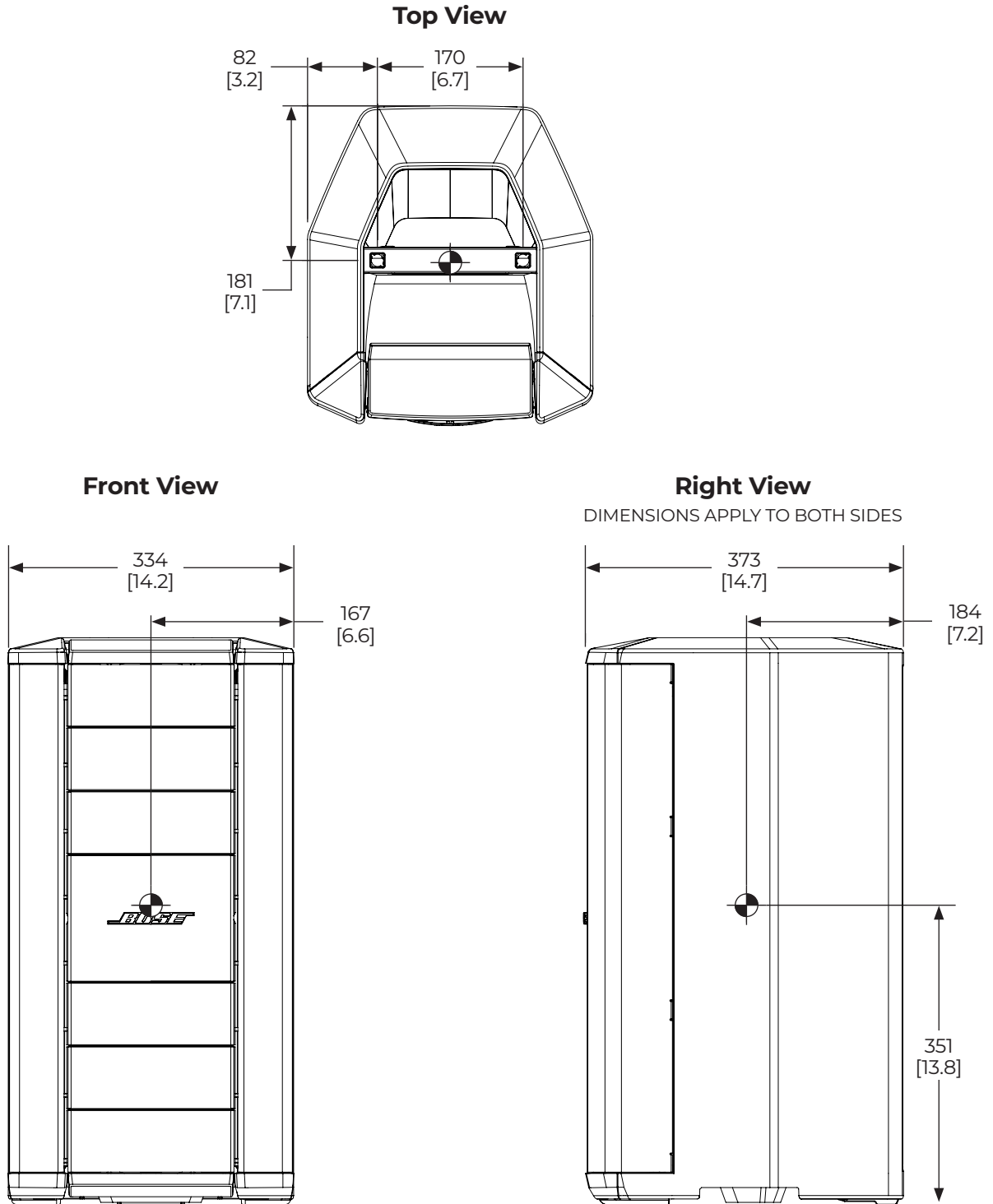
Front Panel

1. **POWER/FAULT:** Indicates power/fault status
Blue = power on
Red = fault condition
2. **LIMIT:** Amber = system limiting
3. **FRONT LED:** Selector switch that controls LED.
POWER enables front LED to indicate power status.
LIMIT engages a limiting display on the front LED.
OFF turns off the front LED.
4. **EQ**
FULL RANGE allows the loudspeaker to function without high-pass filtering.
WITH SUB engages a high-pass filter when using the loudspeaker with the F1 Subwoofer.
5. **LINE OUTPUT:** Balanced XLR line output provides a mix of Input 1 and 2. Can be used to daisy-chain speakers together.
6. **POWER:** On/off switch
7. **AC:** Input connector
8. **SIGNAL/CLIP:** Displays the input signal status in color.
9. **VOLUME:** Adjusts channel volume.
10. **SIGNAL INPUT:** Selector switch sets input sensitivity for input type. Connector accepts XLR or 1/4-in cable connections.
MIC selects sensitivity for mic inputs (dynamic or self-powered mics only). Use only when a mic is connected directly to the input.
LINE selects sensitivity for line-level inputs, for example, from a mixer or DJ controller.
11. **RCA connectors:** analog stereo input for audio sources such as DVD players, VCR players, video game consoles, DJ mixers, keyboards and other instruments
12. **1/4-in phone connector:** Provides analog input for guitars and other instruments. Accepts TRS balanced or TS unbalanced cables.

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Mechanical Diagrams¹



1. DIMENSIONS ARE SHOWN IN MILLIMETERS OVER INCHES.

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For additional specifications and application information, please visit [Bose.com](https://www.bose.com). Specifications subject to change without notice. 09/2023