

# F1 Model 812

## Flexible Array Loudspeaker



### Key Features

- FLEX array: Bose®
- 2-channel integrated mixer: 2 inputs with independent level controls accommodate XLR, 0.25-inch and RCA connectors



TECHNICAL DATA SHEET

### 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.

System Performance		
System Type	Self powered, two-way	
Frequency Response (-3 dB)	52 Hz - 15.5 kHz	
Frequency Range (-10 dB)	43 Hz - 20 kHz	
Nominal Dispersion	100° H x 40° V (C-position)	
Maximum SPL @ 1 m	126 dB SPL (132 dB SPL peak)	
Crossover Frequency	600 Hz 4th order Butterworth	
Amplification		
System Power	1000 W	
Distortion at Rated Power	0.1% Max (30 Hz - 15 kHz)	
System Limiter	Dynamic limiter	
Transducers		
Driver Complement	8 x 2.25" mid-high drivers; 1 x 12" LF driver	
Channels		
	Channel 1	Channel 2
Front Power Indicator	Blue LED: system on	Blue LED: system on
Rear Indicators	POWER/FAULT, LIMIT, FRONT LED, SIGNAL INPUT	POWER/FAULT, LIMIT, FRONT LED, SIGNAL INPUT
Input Connections	XLR /1/4" XLR: Pin 1 (GND), Pin 2 (+), Pin 3 (-)	1/4" TS/TRS, (2) RCA
Channel Gain	-Infinity to +34 dB (Line), -Infinity to +54 (MIC)	-Infinity to +26 dB (RCA), -Infinity to +20 dB (1/4")
Maximum Input Signal	+24 dBu (Line), +18 dBu (MIC)	+10 dBu (RCA), +20 dBu (1/4" Unbalanced), +24 dBu (1/4")
Input Impedance	2.2 kΩ (MIC), 10 kΩ (Line)	10 kΩ (1/4"), 10 kΩ (RCA)
Controls	Volume level, Signal input select, Front LED function select, EQ	Volume level, Signal input select, Front LED function select, EQ
Additional Connections		
Line Output	XLR balanced	
AC Mains	IEC Connector	
Physical		
Enclosure	High impact composite materials	
Grille	Powder-coated perforated steel grille	
Dimensions (H x W x D)	664.66 mm x 334.3 mm x 372.5 mm (26.1" x 13.1" x 14.6")	
Net Weight	20.18 kg (44.5 lbs)	
Power Supply Voltages		
Universal	AC power rating: 100-240 V, 50 / 60 Hz +/- 20 %, 200 W max	

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### Inputs and Outputs

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**
  - FULLRANGE 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 ¼" cable connections
11. **MIC**

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### Mechanical Drawings

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