

# SUB1

## POWERED BASS MODULE



(Grille removed)

### Product Overview

A powered, portable bass module, the Sub1 subwoofer combines with virtually any portable PA and delivers low-end performance down to 40 Hz. Its unique 7" × 13" high-excursion RaceTrack driver allows for an ultra-slim enclosure, delivering performance that rivals a traditional 12" woofer without the cumbersome size, freeing up room in your vehicle and on the stage. Compared to the Sub2 subwoofer, Sub1 is the more compact subwoofer option for the Bose L1 Pro32 system, combining seamlessly via single-cable SubMatch connectivity. You can stack multiple Sub1 subwoofers for even more low end — or to unleash Cardioid Mode for directional bass. With a Sub1, you get a subwoofer that goes virtually anywhere and effortlessly fills out your sound.

### Key Features

**Add powerful bass to your portable PA system** with low-end range down to 40 Hz

**Go from vehicle to venue easily with a slim design** featuring a unique 7" × 13" high-excursion RaceTrack driver; performance that rivals a conventional 12" woofer with a smaller footprint

**Stack multiple Sub1 subwoofers** for even more bass or unleash Cardioid Mode for focused, directional performance that steers the bass out front and decreases feedback

**Combine seamlessly with Bose L1 Pro32 portable line array** via proprietary SubMatch connectivity, which delivers both power and audio over a single cable

**Pair with other powered loudspeakers** via line input and output with selectable crossover modes, plus integrated threaded pole mount for use with Bose S1 Pro PA and more

## Technical Specifications

<b>Preliminary</b>	<b>System Performance</b>	
	Model Name	Sub1
	System Type	Self-powered bass module
	Frequency Response (-3 dB) <sup>1</sup>	40 Hz to 180 Hz
	Frequency Range (-10 dB)	32 Hz to 250 Hz
	Nominal Vertical Coverage Pattern	0°
	Nominal Horizontal Coverage Pattern	Omnidirectional (with -10 dB rear rejection in Cardioid mode)
	Calculated Maximum SPL @ 1 m, continuous <sup>2</sup>	118.6 dB
	Calculated Maximum SPL @ 1 m, peak <sup>2</sup>	124.6 dB
	Crossover	200 Hz
	<b>Transducers</b>	
	Low Frequency	1 × RaceTrack low-frequency driver 7" × 13"
	Low Frequency Voice Coil Size	2"
	Driver Protection	Dynamic limiting
	<b>Amplification</b>	
	Type	Class D
	Low Frequency Amplifier Channel	480 W
	Cooling	Convection cooling
	<b>Onboard Mixer</b>	
	Channels	Two
	Channel 1 & 2 Input: Audio Type	Combination XLR or ¼" TRS connector (mic/instrument/line)
	Channel 1 & 2 Input: Impedance	100 KΩ
	Channel 1 & 2 Input: Channel Gain	+10 dB to +45 dB; from input to driver, controlled by volume control
	Channel 1 & 2 Input: Max Input Signal	+24 dBu
	Channel 1 & 2 Output: Audio Type	XLR connector, line-level, full-frequency bandwidth
	SubMatch Input: Audio Type	Bose proprietary multi-pin cable
	SubMatch Thruput: Audio Type	Bose proprietary multi-pin cable
	LED Indicators	Standby, Phase/Pattern selection, Input EQ selection, Output EQ selection, Signal/Clip Indicator
	<b>AC Power</b>	
	AC Power Input	100-240 VAC (±20%, 50/60 Hz)
Input: Electrical Type	IEC, SubMatch	
Initial turn on inrush current	14.9 A at 120 V; 29.3 A at 230 V	
Inrush current after AC mains interruption of 5 s	5.8 A at 120 V; 32.0 A at 230 V	

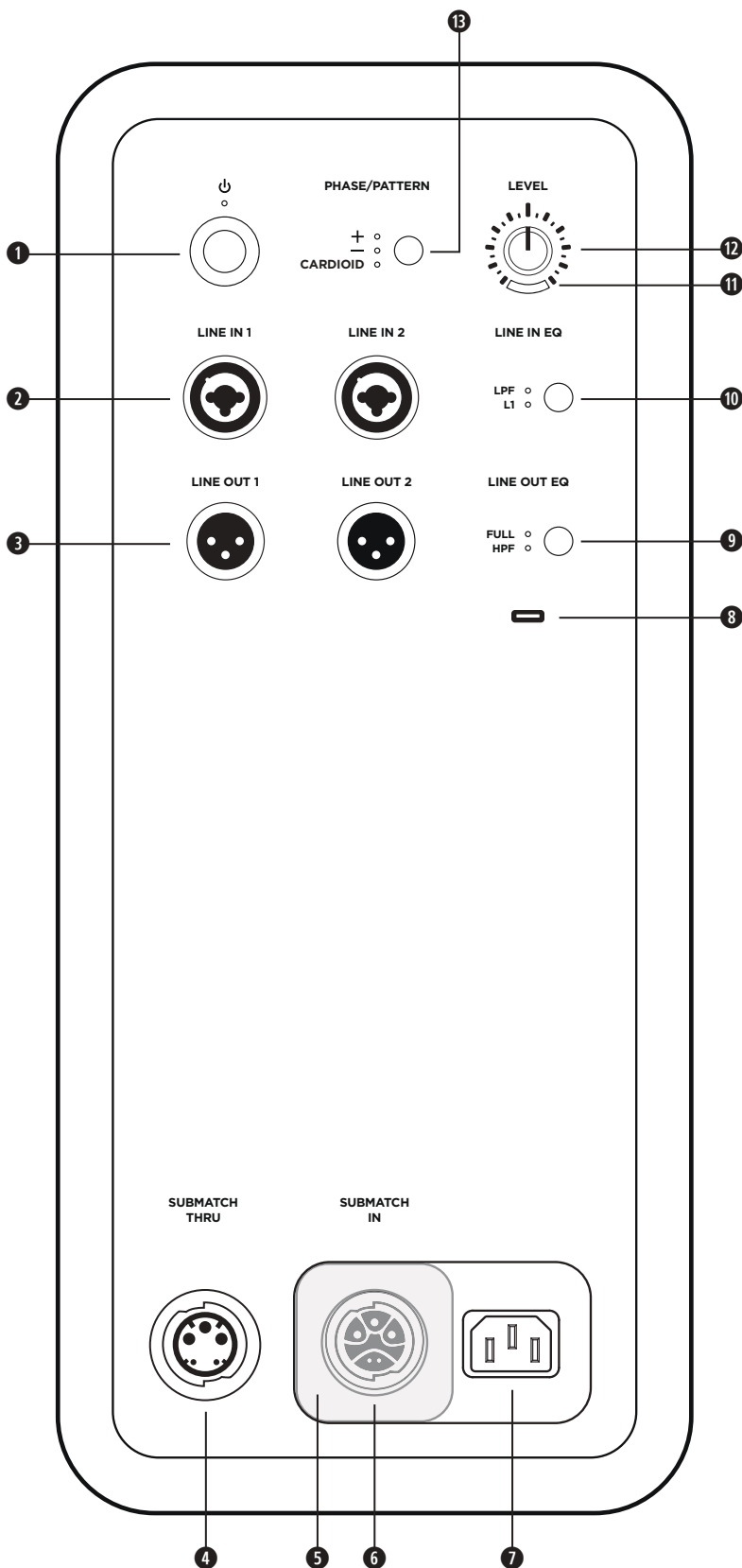
## Technical Specifications

<b>Preliminary</b>	<b>Enclosure</b>	
	Color	Black
	Enclosures Material	High-impact polypropylene, birch plywood
	Grille Material	Powder-coated perforated steel
	Product Dimensions (H × W × D)	533 × 260 × 529 mm (21.0 × 10.2 × 20.8 in)
	Shipping Dimensions (H × W × D)	620 × 620 × 330 mm (24.41 × 24.41 × 12.99 in)
	Net Weight <sup>3</sup>	15.5 kg (34.1 lbs)
	Shipping Weight	18.0 kg (39.6 lbs)
	Warranty Period	2 years
	Included Accessories	IEC power cord, slip cover
	Optional Accessories	Sub1 Roller Bag, Adjustable Speaker Pole, SubMatch Cable
	<b>Product Part Numbers</b>	
	840918-1100	SUB1 POWERED BASS MODULE,120V,US
	840918-2100	SUB1 POWERED BASS MODULE,230V,EU
	840918-3100	SUB1 POWERED BASS MODULE,100V,JP
	840918-4100	SUB1 POWERED BASS MODULE,230V,UK
	840918-5100	SUB1 POWERED BASS MODULE,230V,AU
	840918-5130	SUB1 POWERED BASS MODULE,230V,INDIA
	856985-0110	PREMIUM ROLLER BAG,SUB1,BLACK
857172-0110	SUBMATCH CABLE,BLACK	
857000-0110	SPEAKER STAND,SUB POLE,BLACK	

### Footnotes

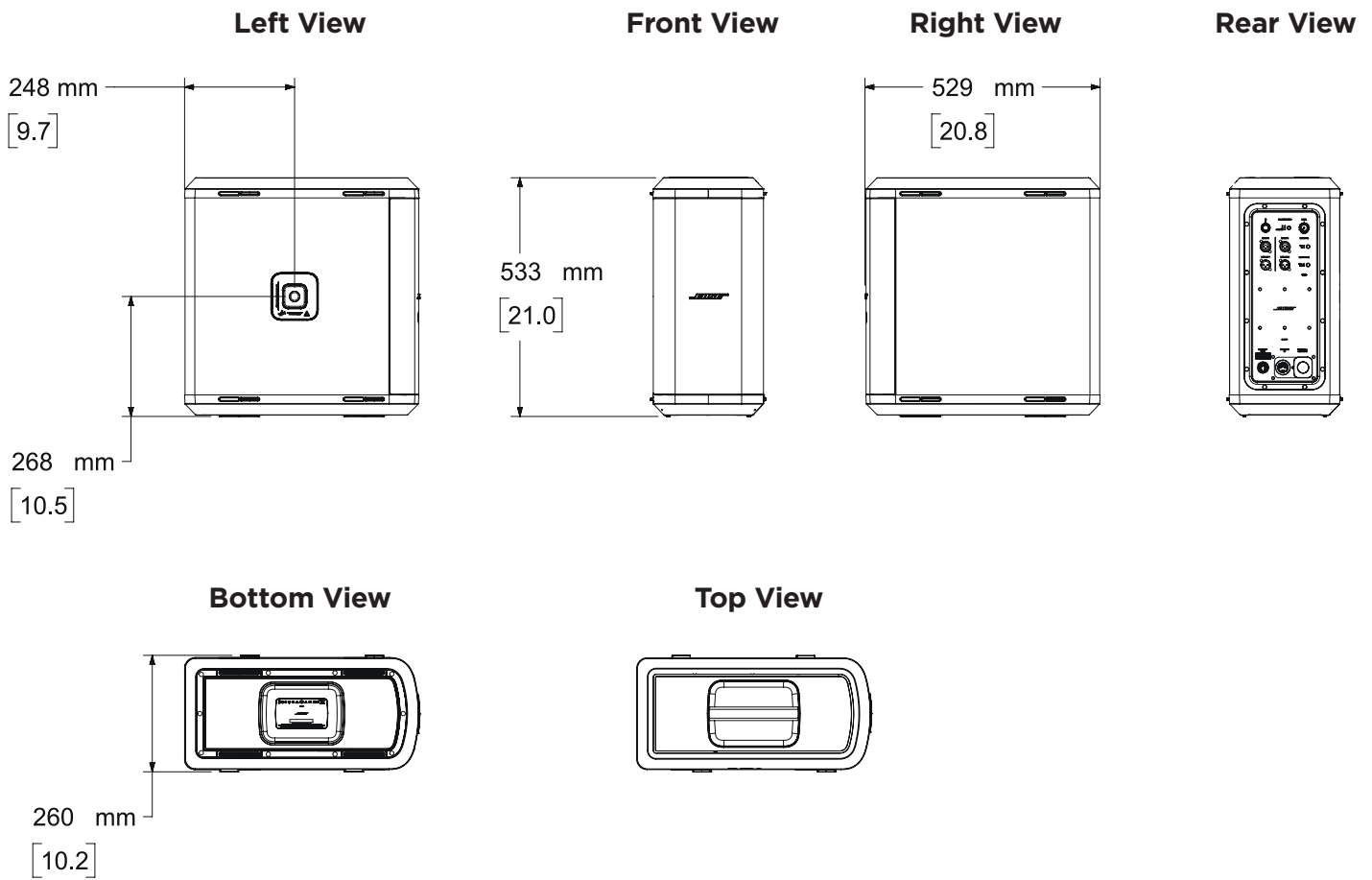
- (1) Frequency response and range measured on-axis in anechoic environment with recommended bandpass and EQ.  
 (2) Maximum SPL calculated using sensitivity and power ratings, exclusive of power compression.  
 (3) Net weight excludes slip cover and power cord.

## Connections and Controls



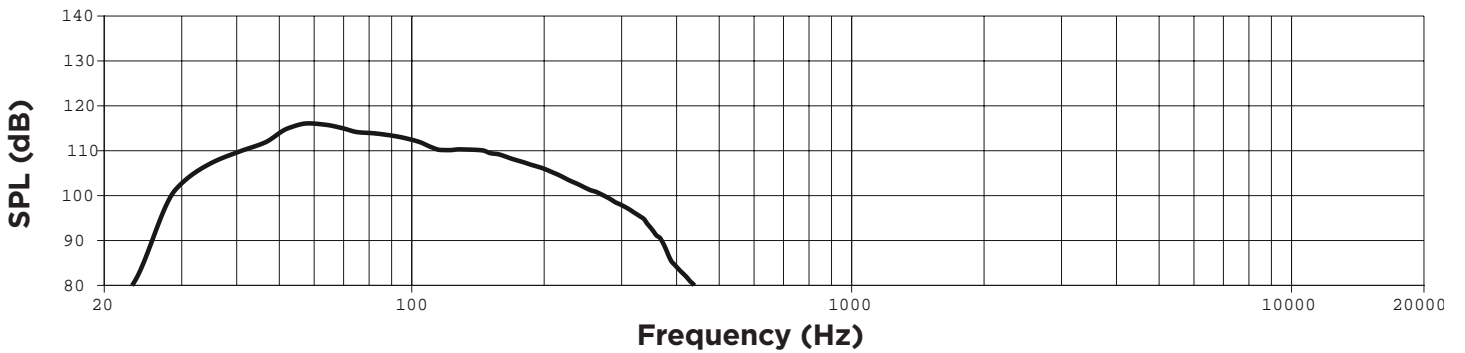
- 1 Standby Button:** Press the button to power on the Sub. The LED will illuminate white while the Sub is on.
- 2 Line Inputs:** Analog input for connecting an L1 Pro or other line-level audio source. Compatible with XLR, TRS balanced, and TS unbalanced cables.
- 3 Line Outputs:** Use an XLR cable to connect the line-level output to a loudspeaker.
- 4 SubMatch Thruput:** Connect an additional Sub bass module with a SubMatch cable. Up to two Sub1 or Sub2 powered bass modules can be powered by a single L1 Pro32 via SubMatch connection.
- 5 Power Input Cover:** Prevents simultaneous use of the **SubMatch Input** and **Power Input**. Slide the cover to reveal the power input that is needed for setup.
- 6 SubMatch Input:** Connect the Sub to an L1 Pro32 with a SubMatch cable.
- 7 Power Input:** IEC power cord connection.
- 8 USB Port:** USB-C connector for Bose service use and firmware updates.  
**Note:** This port is not compatible with Thunderbolt 3 cables.
- 9 Line Output EQ:** Select between **FULL** bandwidth or a multi-purpose HPF when using **Line Outputs**. Press the button to switch EQ settings. The corresponding LED will illuminate white while selected.
- 10 Line Input EQ:** Select between an optimized EQ for an L1 Pro or a multi-purpose LPF when using **Line Inputs**. Press the button to switch EQ settings. The corresponding LED will illuminate white while selected.
- 11 Signal/Clip Indicator:** The LED will illuminate green when a signal is present and will illuminate red when the signal is clipping or the Sub is entering limiting. Reduce the level or signal volume to prevent signal clipping or limiting.
- 12 Level Control:** Adjust the level of audio output. The **Level Control** does not affect the **Line Outputs**. The 12 o'clock position is recommended when in use with an L1 Pro32.
- 13 Phase/Pattern Button:** Adjust the polarity of the Sub. Press the button to switch polarity. The corresponding LED will illuminate white while selected. Also allows access to Cardioid mode when using two identical Sub modules.

## Product Dimensions



## Performance

### Frequency Response (On-Axis)



## Architect and Engineer Specification

The sub shall be a single-driver, subwoofer with internally-supplied power amplification and active equalization for multiple operating modes as follows:

The sub shall consist of a modular 7" x 13" (177 mm x 330 mm) RaceTrack low-frequency driver mounted in a ported bass enclosure.

The nominal horizontal beamwidth of the loudspeaker shall be omnidirectional, with a -10 dB rear rejection when in Cardioid mode. The nominal vertical coverage shall be 0°. The power amplification for transducers shall be supplied by an integral single-channel onboard amplifier providing 480 W for the low-frequency transducer.

The onboard digital mixer shall consist of two input channels. Each input channel shall provide two combination XLR or ¼" TRS connectors (line-level) with selectable equalization presets for low-pass filter and L1 optimization. Each input channel shall also provide an XLR balanced line-level connector with selectable equalization presets for full bandwidth, high-pass filter, and S1 Pro optimization. The digital mixer shall provide master output level control and phase/pattern control for positive polarity, negative polarity, and Cardioid mode. The sub shall provide multi-pin SubMatch input and output connectors to receive power from L1 Pro32 and send power to another Sub1/Sub2 with a Bose SubMatch cable.

The enclosure of the sub shall be constructed of high-impact polypropylene and birch plywood. The sub shall provide a pole-mount M20 threaded insert for use with the Bose Sub1/Sub2 Adjustable Speaker Pole. The sub shall provide four interlocking feet on each side for stacking with one other Sub1.

The sub's dimensions shall be 21.0" H x 10.2" W x 20.8" D (533 mm x 260 mm x 529 mm). Its net weight shall be 34.1 lbs (15.5 kg).

The sub shall be the Bose Sub1 portable powered bass module.

## Safety and Regulatory Compliance

The Sub1 powered bass module complies with the following standards:

- UL/IEC/EN62368-1 Audio/Video, Information and Communication Technology Equipment
- Ecodesign Requirements for Energy Related Products Directive 2009/125/EC
- Radio Equipment Directive 2014/53/EU
- CAN ICES-3 (B)/NMB-3(B)
- FCC Part 15 Class B

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