



BOSE SUB2 POWERED BASS MODULE Instruction Manual

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PROFESSIONAL
PRELIMINARY TECHNICAL DATA
SUB2
POWERED BASS MODULE



(Grille removed)

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Product Overview

A powered, portable bass module, the Sub2 subwoofer combines with virtually any portable PA and delivers low-end performance down to 37 Hz. It's unique 10" x 18" high-excursion neodymium RaceTrack driver allows for an ultra-slim enclosure, delivering a performance that rivals a traditional 15" woofer without the cumbersome size, freeing up room in your vehicle and on the stage. Compared to the Sub1 subwoofer, Sub2 is the more powerful subwoofer option for the Bose L1 Pro32 system, combining seamlessly via single-cable SubMatch connectivity. You can stack multiple Sub2 subwoofers for even more low-end — or to unleash Cardioid Mode for directional bass. With a Sub2, you get a subwoofer that easily fits onstage — and effortlessly fills up the dance floor.

Key Features

Add powerful bass to your portable PA system with a low-end range down to 37 Hz
Go from vehicle to venue easily with a slim design featuring a unique 10" x 18" high-excursion neodymium RaceTrack driver; a performance that rivals a conventional 15" woofer with a smaller footprint
Stack multiple Sub2 subwoofers for even more bass or unleash Cardioid Mode for focused, a 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

System Performance	
Model Name	Sub2
System Type	Self-powered bass module
Frequency Response (-3 dB) ‘	37 Hz to 180 Hz
Frequency Range (-10 dB)	29 Hz to 260 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’	123.8 dB

Calculated Maximum SPL @1 m. peak	129.8 dB
Crossover	200 Hz
Transducers	
Low Frequency	1 x RaceTrack low-frequency driver 10' x 18'
Low-Frequency Voice Coil Size	3'
Driver Protection	Dynamic limiting
Amplification	
Type	Class D
Low-Frequency Amplifier Channel	1000 W
Cooling	Convection cooling
Onboard Mixer	
Channels	Two
Channel 1 & 2 Input: Audio Type	Combination XLR or 1/4" TRS connector (mic/instrument/line)
Channel 1 & 2 Input: Impedance	100 KO
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
Sub Match Input: Audio Type	Bose proprietary multi-pin cable
Sub Match Thruput: Audio Type	Bose proprietary multi-pin cable
LED Indicators	Standby. Phase/Pattern selection, Input EQ selection, Output EQ selection, Signal/Clip Indicator
AC Power	
AC Power Input	100-240 VAC ($\pm 20\%$. 50/60 Hz)
Input: Electrical Type	IEC. sub match
Initial turn on inrush current	152 A at 120 V: 28.6 A at 230 V
Inrush current after AC mains interruption of 5s	2.6 A at 120 V: 6.1 A at 230 V

Enclosure	
Color	Black
Enclosures Material	High-impact polypropylene, birch plywood
Grille Material	Powder-coated perforated steel
Product Dimensions (H x W x D)	694 x 317 x 551 mm (27.3 x 12.5 x 21.7 in)
Shipping Dimensions (H x W x D)	660 x 385 x 790 mm (25.98 x 15.16 x 31.10 in)
Net Weight ¹	23.0 kg (50.7 lbs)
Shipping Weight	27.7 kg (61.0 lbs)
Warranty Period	2 years
Included Accessories	IEC power cord, slipcover
Optional Accessories	Sub2 Roller Bag, Adjustable Speaker Pole, SubMatch Cable
Product Part Numbers	
840917-1100	SUB2 POWERED BASS MODULE,120V,US
840917-2100	SUB2 POWERED BASS MODULE,230V,EU
840917-3100	SUB2 POWERED BASS MODULE,100V,JP
840917-4100	SUB2 POWERED BASS MODULE,230V,UK
840917-5100	SUB2 POWERED BASS MODULE,230V,AU
840917-5130	SUB2 POWERED BASS MODULE,230V,INDIA
856986-0110	PREMIUM ROLLER BAG.SUB2,BLACK
857172-0110	SUB MATCH CABLE, BLACK
857000-0110	SPEAKER STAND,SUB POLE,BLACK

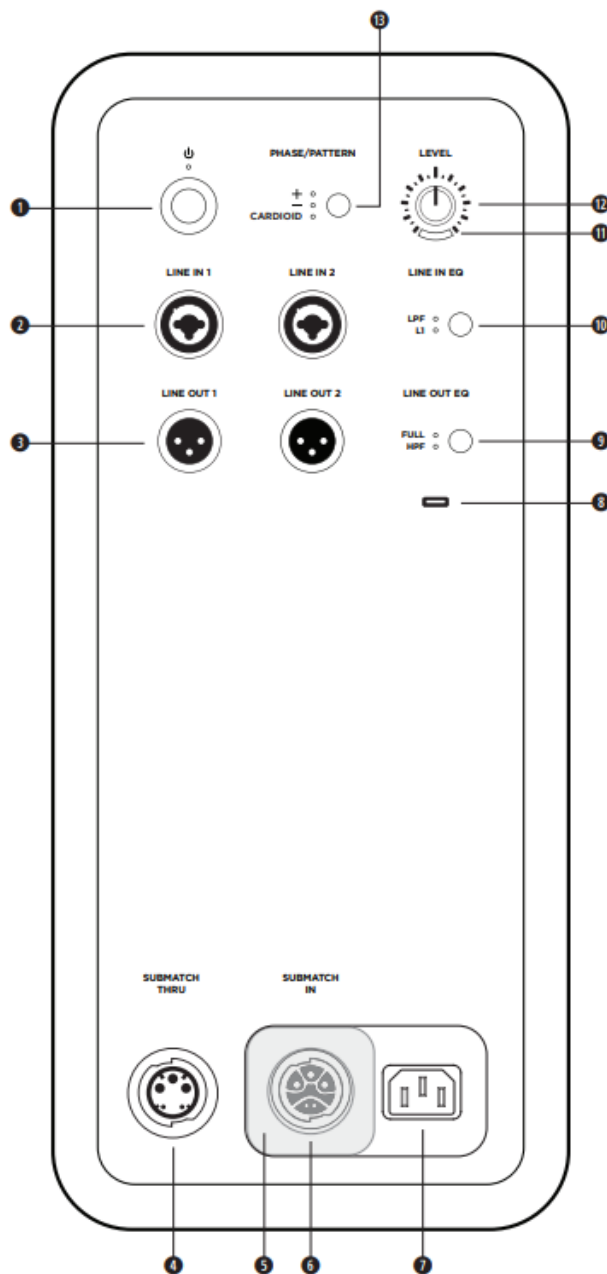
Footnotes

(1) Frequency response and range measured on-axis in an anechoic environment with recommended bandpass and EQ.

(2) Maximum SPL calculated using sensitivity and power ratings, exclusive of power compression.

(3) Net weight excludes slipcover and power cord.

Connections and Controls

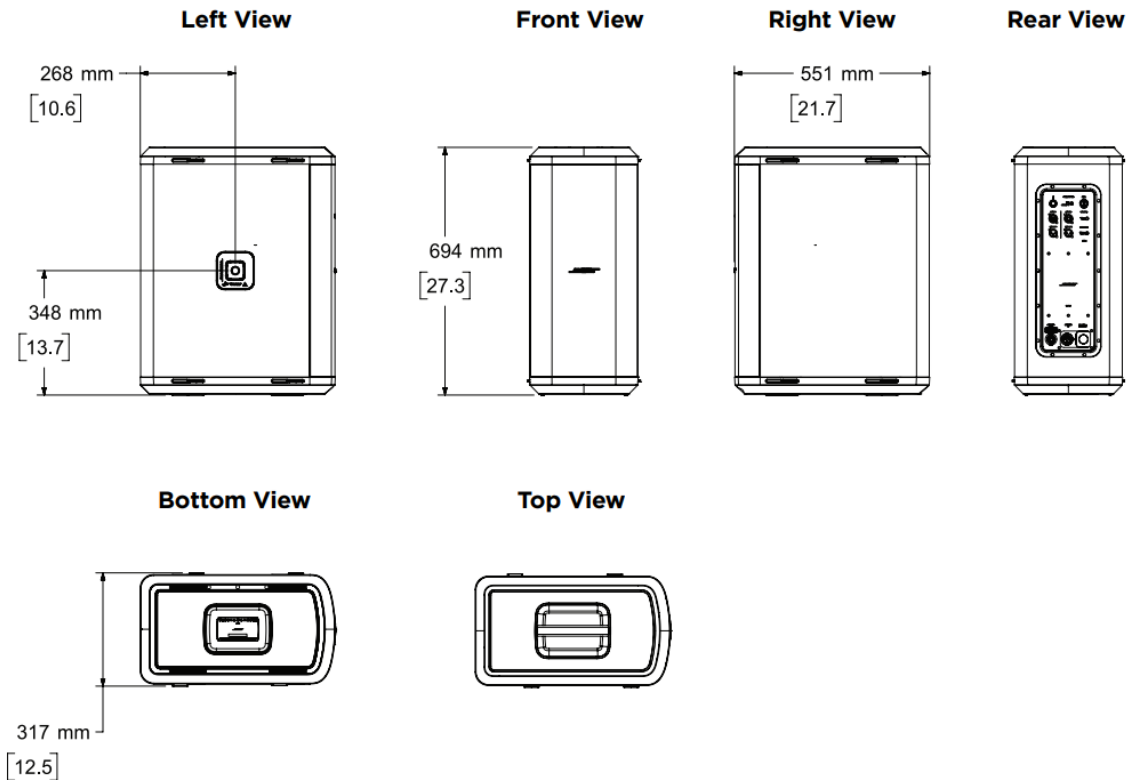


1. **Standby Button:** Press the button to power on the Sub. The LED will illuminate white while the Sub is on.
2. **Line Inputs:** Analog input for connecting an L1 Pro or another line-level audio source. Compatible with XLR, TRS balanced, and TS unbalanced cables.
3. **Line Outputs:** Use an XLR cable 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 a 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 multipurpose LPF when using Line Inputs. Press the

button to switch EQ settings. The corresponding LED will illuminate white while selected.

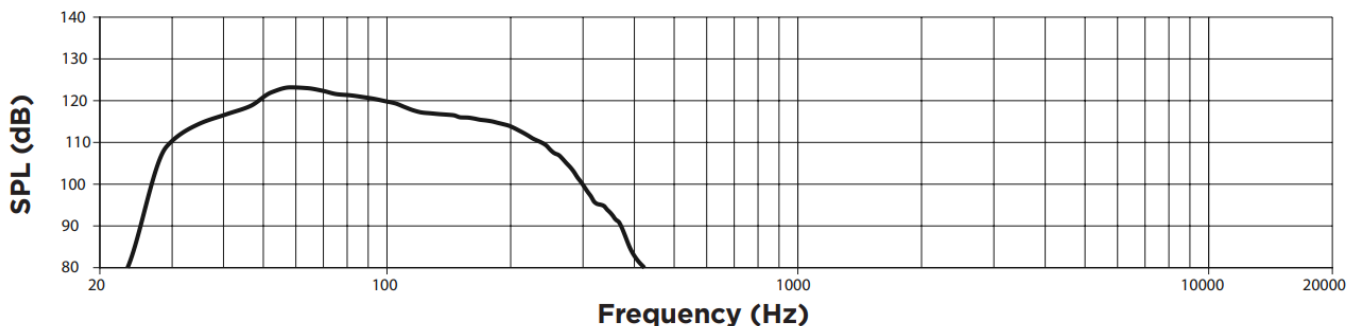
11. **Signal/Clip Indicator:** The LED will illuminate green when a signal is present and will illuminate red when the signal is clipping or the Sub is entering limiting. Reduce the level or signal volume to prevent signal clipping or limiting.
12. **Level Control:** Adjust the level of audio output. 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.

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 10" x 18" (254 mm x 457 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 1000 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 1/4" 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 the 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 Sub2.

The sub's dimensions shall be 27.3" H x 12.5" W x 21.7" D (694 mm x 317 mm x 551 mm). Its net weight shall be 50.7 lbs (23.0 kg).

The sub shall be the Bose Sub2 portable powered bass module.

Safety and Regulatory Compliance

The Sub2 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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For additional specifications and application information, please visit [PRO.BOSE.COM](https://pro.bose.com).

Specifications are subject to change without notice. 6/2021

[PRO.BOSE.COM/L1](https://pro.bose.com/L1)

Documents / Resources

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References

- [Bose Professional](#)
- [L1 Pro Portable Line Array Systems | Bose Professional](#)