Control® SB-2

Professional Series – Dual-Coil Subwoofer With Stereo Inputs



Key Features:

- Component: 250 mm (10 in) transducer with dual voice coil
- Stereo inputs with high-pass outputs for satellite speakers
- Slot-load vented bandpass design
- Complements full-range Control Contractor Series systems
- High Sensitivity: 100 dB, 1W, 1 m



The Control SB-2 provides low frequency reinforcement in subwoofer/satellite systems. The Control SB-2 is ideal for foreground music and music/paging systems in restaurants, retail establishments, theme bars, music cafes, health clubs, and other indoor applications.

The unique slot-load vented design provides acoustic low-pass filtering. Compared to traditional bandpass subwoofers, the SB-2 offers superior musical clarity and bass impact.



The satellite outputs are highpass filtered, reducing overall system distortion by eliminating the need for the satellite speakers to reproduce frequencies in the low bass range. The satellites operate more efficiently, maintaining excellent midrange clarity and realism in music and paging. The high-pass filtering also allows a greater number of satellite speakers to be paralleled in the system by increasing the impedance the amplifier sees in the subwoofer range. The stereo inputs are 8 ohms each.

The combination of the satellite high-pass filtering, the acoustic slot-load filtering and a built-in 2nd order low-pass crossover network results in smoother overall system frequency response and virtually eliminates the "muddiness" typical of other subwoofer/satellite systems by reducing frequency overlap in the low midrange.

Specifications:

System	
Frequency Range (-10 dB)	38 Hz – 160 Hz
Continuous Program Power Capacity ¹	340W (both inputs driven) 170W (each input) x 2
Sensitivity ²	100 dB (1W @ 1m) at corner junction (pi/2 loading) 97 dB, at two boundary junction (pi loading)
Nominal Impedance	8 ohms per input; 4 ohms total with both inputs paralleled.
Network Filter to Subwoofer	12 dB/oct low-pass (per input), 160 Hz
Acoustic Filtering	6 dB/oct low-pass filtering via slot-load design, 80Hz
Network Filter to Satellite Outputs	6 dB/oct high-pass (per output)
Satellite Impedance	4Ω load per Satellite Output recommended
Optimum System Configuration	Four JBL Control 23 satellite speakers (two on each SB-2 satellite output) provide optimum sensitivity balance and impedance loading, resulting in full-range 38 Hz $-$ 22 kHz system performance. Broadband impedance is 4Ω per input x 2 channels.
Transducers	
Driver	250 mm (10 in) long-throw with dual voice coils

Physical	
Terminations	Spring terminals, accepts banana plugs. Left In, Right In, Left Satellite Out, and Right Satellite Out
Enclosure Material	Particle Board
Dimensions (H x W x D)	394 x 585 x 343mm (15.5 x 23.0 x 13.5 in)
Net Weight	19.1 kg (42 lbs)
Shipping Weight	22.7 kg (50 lbs)
Installation Accessories	» MTC-SB2W for installing SB-2 onto a wall or into a corner » MTC-SB2C for suspending SB-2 from ceiling

¹ Continuous program is a conservative expression of the system's ability to handle normal speech and music program material and is defined as 3 dB greater than the continuous pink noise rating (AES pink noise from 30 Hz – 300 Hz with a 6 dB crest factor, for 100 hours continuously).

JBL continually engages in research to produce improvement. New materials, production methods, and design refinements are introduced into existing products without notice as a routine expression of this philosophy. For this reason, any current JBL product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated.

 $^{^2}$ Sensitivity rated in the subwoofer band, from 60 Hz - 90 Hz, both inputs driven 1/2W each (1W total). Sensitivity with 1W to each input is 3 dB higher.

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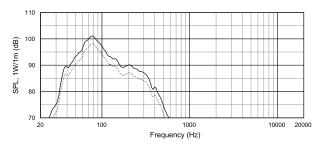
Professional Series – Dual-Coil Subwoofer With Stereo Inputs



The Control SB-2 incorporates a long-excursion 250mm (10in) transducer providing usable output to 38 Hz. Dual voice coils on the transducer allow the single cabinet to reproduce subwoofer frequencies for both the left and right channels while maintaining channel separation in the satellites.

Subwoofer placement can be used as a tool for adjusting output sensitivity to match that of the satellite speakers and the requirements of the application. Positioning the SB-2 at the junction of three boundaries

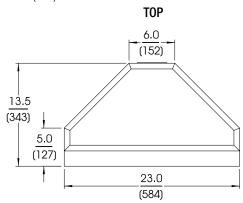
Frequency Response:

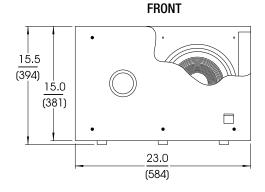


Measured with distance referenced to 1W total, 1m at two-boundary junction (pi loading, dotted line) and at three-boundary junction (pi/2 loading, solid line)

Mounting Dimensions:

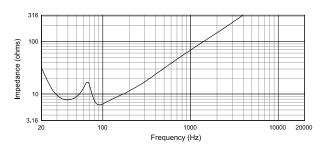
Dimensions in inches (mm)





(i.e. - at a floor/wall/wall or ceiling/wall/wall junction) yields maximum output sensitivity for use with high sensitivity satellites or for subwoofer-heavy applications. Placement at the junction of two boundaries (i.e. - floor/wall, ceiling/wall or wall/wall) reduces the subwoofer level by 3 dB. Placement in the middle of a single boundary (i.e., wall, floor or ceiling) further reduces subwoofer output sensitivity by another 3 dB, to match with less efficient or higher impedance satellite systems. The Control SB-2 is not weather resistant and should not be used outdoors.

Impedance:



Impedance per SB-2 input

BACK

