



Applications

Live Sound Reinforcement
Dance Clubs
Entertainment Venues
Theaters
Houses of Worship
Cruise Ships

Features

Component of S2-System

Stacks with S2-CX-P | S2-A Sub

LF Device: (1) 21 in (533.4mm)

High Output

Bandpass Design

Integrated Dolly (Sold Separately)

Durable Polyurea Coating

(2) EP-8 Connectors
& (1) 2-Position Terminal Strip

General Description

The Clair Brothers S2-B SUB is one of two subwoofers in the S2 system. The S2-B Sub is bandpass sub-low frequency loudspeaker designed to provide additional punch in the 60-100Hz bass reinforcement region. Designed to be a part of the S2 stack system pairing with the S2-A Sub, both form the low frequency component of the stack that serves as a physical base for the S2-CX-P 15" Coaxial Mid/Hi frequency cabinet.

Its design is specifically aimed for ground stack applications with an emphasis on smooth yet high SPL reproduction of electronic dance music and mastered source material. The physical dimensions of approximately 90cm tall and 60 cm wide by 75cm deep make it very amenable to transport in Euro transporter type vehicles, making it a sleek and powerful system for events that will fit in one mid-sized professional vehicle. It is easily transported and handled with its wheel dolly board (sold separately) and its integral 4x handles.

The high performance 21" woofer provides 100 dB SPL for a 1 watt input measured at 1 meter, with usable in-room frequency response down to 30Hz. Its compact size enables the box to be placed in permanent applications without being obtrusive.

The S2 System is wired with a single cable from amplifier technique – all subs have 8 conductor wiring

pass through to allow the S2-A Sub, S2-B Sub and S2-CX-P to operate with jumper cable connections between cabinets with the single stack.

As with all Clair Brothers products, the S2-B Sub is constructed of the finest Baltic birch plywood. A rugged polyurea coating is applied to withstand the most demanding conditions.

The speaker grille is constructed of a durable 14 gauge steel which is powder coated and backed with a high grade reticulated foam. Grille options are available depending on aesthetic preference:

- Black acoustically transparent fabric covering the outside.
- Hexagonal perforations with foam backing.

Recommended System Configuration:

S2-CX-P (2x) – 2-Way Passive 15in Coaxial (60°Hx40°V)

S2-B Sub (2x) – 21in Bandpass Subwoofer

S2-A Sub (2x) – 21in Reflex Subwoofer

S2-Rack (1x) – (1x) CB-PLM12K44 amp + (1x) CB-PLM20K44 amp

S2-B SUB



Audio Specifications

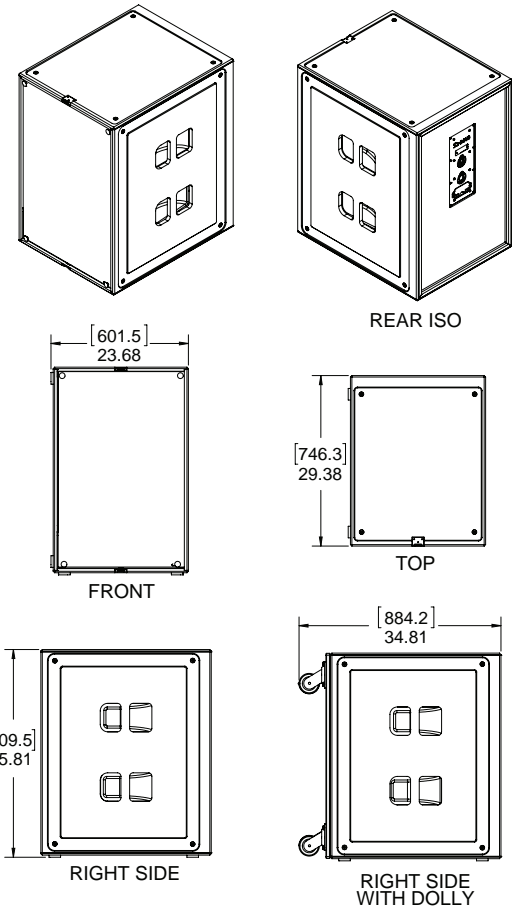
Loudspeaker Type	Mobile	Single Driver Bandpass Subwoofer
Frequency Response	Single Cabinet	37Hz–100Hz (+/- 2dB) (-10dB Point) 30Hz
Recommended Power Amplifiers		CB-PLM20K44
Compatible Products		S2-A Sub, S2-CX-P
Prediction Software		Clair GLL/AFMG Ease Focus™ Array
Processing, Configuration & System Optimization Software		Lake Controller® with Clair DSP, WiFi System Control
Sensitivity (1 Watt @ 1 Meter)	LF	102 dB SPL
Maximum Output	Peak	137 dB SPL
Drivers	LF	(1) 21 in (533.4mm)
Nominal Impedance	LF	8 Ohms
Power Handling	Peak	3400W
	Cont.	1700W
Input Connection		(2) EP-8 Connectors (1 Male, 1 Female) & (1) 2-Position Terminal Strip

Mechanical Specifications

Enclosure	Shell	18mm Baltic Birch
	Finish	Black Polyurea Coating
Grille		Powder Coated, 14 Gauge Steel
Grille Finish	Standard	- Acoustically Transparent Fabric Covered
	<i>*Optional</i>	- <i>*Hexagonal Perforations with Foam Backing</i>
Dimensions	Height	35.81 in (909.5mm)
	Width	23.68 in (601.5mm)
	Depth Cabinet alone	29.38 in (746.3mm)
	Depth with Dolly	34.81 in (884.2mm)
Weight		178 lbs (80.7kg)
Shipping Weight		198 lbs (89.8kg)

Note: All wattage figures are calculated using the rated nominal impedance.

Clair Brothers products are designed to perform optimally by utilizing factory recommended proprietary DSP settings.



S2-B Sub EP-8 Pin Configuration

PIN	USE	PIN	USE
1	Wired Thru	5	Wired Thru
2	Wired Thru	6	Wired Thru
3	Low (-)	7	Wired Thru
4	Low (+)	8	Wired Thru

Architect and Engineer Specifications

The loudspeaker shall be a subwoofer system containing a total of one 21" driver in a bandpass-chamber vented enclosure. Power handling capacity shall be 1700 watts RMS nominal and 3400 watts RMS peak. The low frequency driver shall be 21" diameter capable of handling 1700 watts of pink noise with a 6 dB crest factor for 8 hours (as per EIA RS-426-A standard). The pass-band frequency range shall be, at minimum, 37–100Hz with -10dB at 30Hz. The single 21" transducer shall have a 4.5" diameter edge-wound copper ribbon voice coil with a well-vented magnet structure. The motor assembly shall have high thermal capacity and low thermal power compression characteristics. The enclosure shall be constructed of 18mm, 13-ply Baltic birch and be finished with black polyurea. The loudspeaker shall be 35.81" H x 23.68" W x 29.38" D and weigh 178 lbs (80.7kg). The loudspeaker system shall be the Clair Brothers S2-B Sub speaker.