



# SB15P

**SELF-POWERED  
COMPACT  
SUBWOOFER**

## APPLICATIONS

The SB15P (Sub Bass 15" Powered) is the companion subwoofer for L-ACOUSTICS 108P and 112P self-powered coaxial loudspeakers. Featuring a front-loaded fifteen-inch transducer loaded in an optimum-sized/-tuned vented enclosure, the SB15P combines the convenience of self-powered performance with the power of digital signal processing.

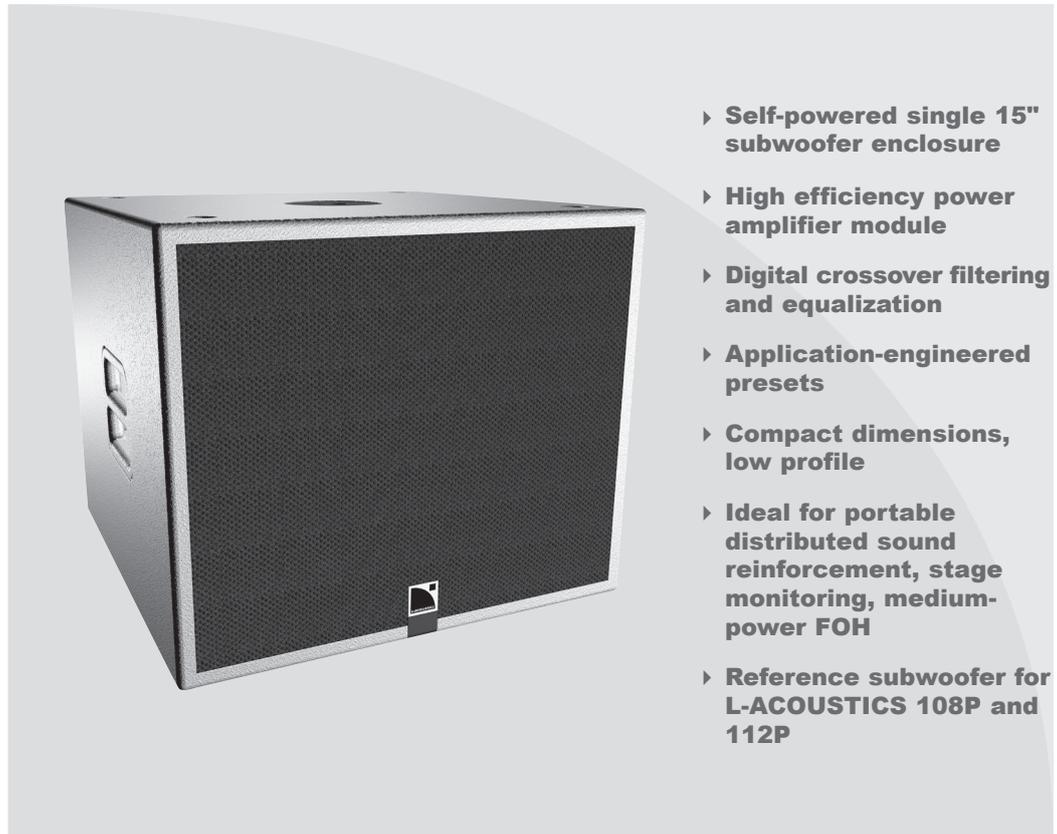
Ideal for portable sound reinforcement or stage monitoring, the SB15P provides plug-and-play ease of operation given its 1000 W amplifier module and dedicated on-board digital signal processing with application-engineered presets.

The 15" component employed in the SB15P features elevated power handling and excursion capability along with reduced distortion and thermal power compression. Advanced component performance is complemented by integral power amplification and protection to provide exceptional SPL output and secure operation. Optimized tuning provides an ideal combination of temporal accuracy, bass articulation, musicality and low end definition that only a front loaded subwoofer can provide.

The compact dimensions of the SB15P provide a high degree of flexibility for installations where space is at a premium. Typical applications include portable distributed sound reinforcement for theatre, congress centre, concert hall, trade show, corporate A/V, houses of worship, club, conference room, multimedia installations or television. The SB15P is also ideal for stage monitoring applications such as compact side fill, keyboard or drum fill monitoring. For studio or nearfield monitoring, the SB15P can be used with 108P enclosures in stereo, 5.1 or 7.1 configurations.

A built-in pole mount socket is provided as standard, facilitating the creation of a compact FOH system when the SB15P is used with 108P or 112P enclosures. An adjustable U bracket is available as an optional rigging accessory (for ceiling, wall, scaffold or truss mounting), adding a unique degree of versatility for fixed installation.

## L-ACOUSTICS PROFESSIONAL SOUND SYSTEM



- ▶ **Self-powered single 15" subwoofer enclosure**
- ▶ **High efficiency power amplifier module**
- ▶ **Digital crossover filtering and equalization**
- ▶ **Application-engineered presets**
- ▶ **Compact dimensions, low profile**
- ▶ **Ideal for portable distributed sound reinforcement, stage monitoring, medium-power FOH**
- ▶ **Reference subwoofer for L-ACOUSTICS 108P and 112P**

## SPECIFICATIONS

L-ACOUSTICS specifications are based on measurement procedures which produce unbiased results and allow for realistic performance prediction and simulation. Some of these specifications may appear conservative when compared with other manufacturer's specifications. All measurements are conducted under free field conditions and scaled to a 1 m reference distance unless otherwise indicated.

### ACOUSTICAL PERFORMANCE

<b>Frequency Response</b>			
Operating Bandwidth	45 - 100 Hz ( $\pm$ 3 dB)		
Usable Low Frequency	40 Hz (- 10 dB)		
<b>System Sensitivity<sup>1</sup></b>			
-21 dBu (.071 Vrms)	93 dB SPL	45 - 200 Hz	
<b>System Output<sup>2</sup></b>			
	<b>SPL</b>		
One enclosure	121 dB (continuous)	131 dB (peak)	
Two enclosures	127 dB (continuous)	137 dB (peak)	
Four enclosures	133 dB (continuous)	143 dB (peak)	

### Speakers

1 x 15" weather-resistant loudspeaker (4" voice coil)

### ELECTRICAL PERFORMANCE

<b>Input</b>	
Type	Electronically balanced (pin 2 hot)
Max Input Level	+12 dBu (gain potentiometer at 0 dB position)
<b>DSP</b>	
Sampling	24 bit / 48 kHz
Dynamic Range	> 105 dBA
<b>Amplifier</b>	
Output Power	1 x 1000 W (8 ohms)
Gain	32 dB

<sup>1</sup> System Sensitivity provides the equivalent 1W/m SPL output averaged over the system operating bandwidth (gain potentiometer set to 0 dB)

<sup>2</sup> Array data gives the continuous unweighted SPL output of the system under half conditions, referenced to 1 m including preset equalization

### Enclosure

- Height 445 mm 17.5 in
- Width 520 mm 20.5 in
- Depth 520 mm 20.5 in
- Weight (net) 36 kg 79.4 lbs
- Shipping Weight 38 kg 83.8 lbs
- Shipping Dims 650 x 530 x 610 mm 25.6 x 20.9 x 24 in
- Connectors: 2 x XLR, 2 x PowerCon (input, loop thru)
- Material: 18 and 24 mm Baltic birch plywood
- Finish : Maroon-gray™
- Grill : Black epoxy perforated steel with acoustically transparent, technically-advanced grille cloth
- Rigging : Integral pole mount support, adjustable U-bracket accessory available
- Safety : Insert for attachment of an I-Bolt

### Additional Equipment

- L-ACOUSTICS 108P, 112P loudspeakers

## ARCHITECT SPECIFICATIONS

The loudspeaker system shall contain a single 15-inch loudspeaker component, front-loaded in an optimally-tuned and vented enclosure suitable for subwoofer applications. Usable frequency response shall be 45 to 100 Hz with less than  $\pm 3$  dB variation and -10 dB response at 40 Hz. Loudspeaker ports shall be of large area dimension in order to minimize port non-linearity and turbulence effects.

The fifteen-inch transducer employed in the enclosure shall have a 4-inch (100 mm) diameter edgewound copper ribbon voice coil, 18 mm (0.71 in) peak excursion capability, diecast aluminum frame, massive vented magnet structure and high thermal capacity. The loudspeaker component shall function with low thermal power compression, long term reliability and low distortion output.

The loudspeaker system shall contain internal digital processing electronics and power amplification. The power amplifier shall provide 1000 W continuous (1 kHz, 0.5% THD) into 8 ohms with thermal protection, short-circuit/overload output protection, clip and RMS signal limiting. Integral digital signal processing shall provide crossover filtering and system equalization for use of the enclosure in conjunction with additional self-powered 2-way coaxial enclosures. Four application-engineered presets shall be selectable via rear-panel push button switch.

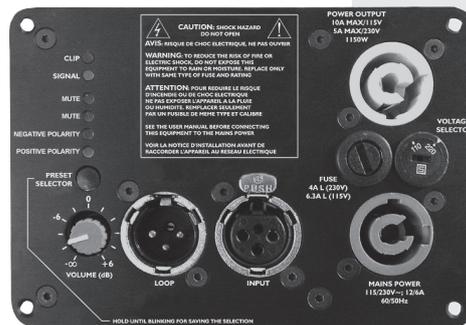
Connection to the loudspeaker shall be made via two parallel XLR connectors and gain shall be controllable via rear panel potentiometer. AC power connectors shall be PowerCon type and 115V or 230V operation shall be selectable via rear panel slider switch.

The cabinet shall be constructed of 18 mm (0.7 in) baltic birch and be internally braced with steel corner plates and joints that are sealed, screwed and rabbeted in order to remain free of vibration at extreme sound pressure levels. Dimensions shall be 445 mm (17.5 in) high, 520 mm (20.5 in) wide and 520 mm (20.5 in) deep and enclosure weight shall be 36 kg (79.4 lbs). The finish shall be maroon-gray high resilient paint. The front of the enclosure shall be protected by a black powder-coated, 1.5 mm (0.06 in) thick steel grill that is covered with acoustically-transparent grille cloth.

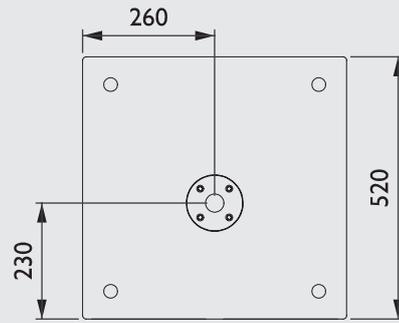
Two recessed handles shall be located on the sides of the enclosure for handling purposes. The enclosure shall have a 36-mm (1.42 in) diameter pole mount socket mounted on the top side. When used in conjunction with a bottom attachment plate, the pole mount socket shall function with a U-bracket accessory for rigging the enclosure in either horizontal or vertical orientations with continuous angular adjustment.

The subwoofer system shall be the L-ACOUSTICS SB15P.

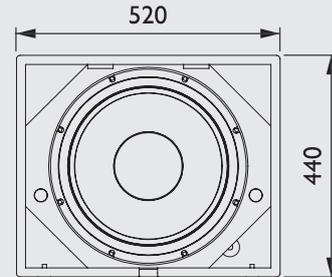
The loudspeaker system shall be the L-ACOUSTICS I08P or I12P.



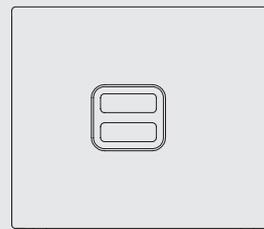
Rear panel closeup of amplifier / dsp module



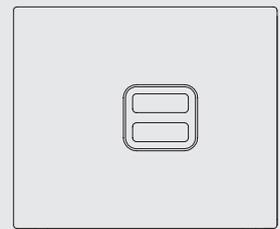
TOP



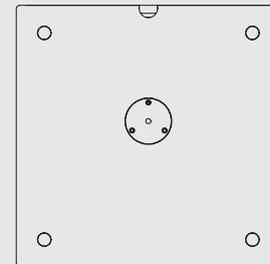
FRONT



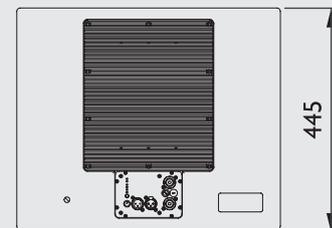
LEFT SIDE



RIGHT SIDE



BOTTOM



REAR

SCALE 1:15

(Dimensions in mm)

## ACCESSORIES

**ETRI5P:** Adjustable U Bracket for ceiling, wall, truss or scaffold mounting of the SB15P. One end of the ETRI5P mates with the integral pole mount socket of the enclosure and the pivoting swing arm is attached to the enclosure via the tilt adjustment knob (which then allows for continuous rotation of the loudspeaker within the U bracket).

Specifications subject to change without notice

Specs SB15P I006

[www.l-acoustics.com](http://www.l-acoustics.com)