



SB118

**HIGH POWER
SUBWOOFER**

APPLICATIONS

The L-ACOUSTICS® SB118 is a companion subwoofer for the L-ACOUSTICS MTD and XT loud-speaker lines. With power handling capacity of 600 Wrms (2400 Wpeak) and response to 32 Hz, the SB118 is the answer for applications requiring exceptional low end impact from a highly compact, low profile enclosure.

Important design criteria in the development of the SB118 were maximum SPL output combined with extended low frequency response from an enclosure as compact as possible. Dual-chamber vented, band-pass loading provided the answer.

The 18" component employed in the SB118 features high power handling capacity combined with low distortion and thermal power compression, all of which contribute to the output SPL performance while at the same time providing precise bass definition and excellent musicality.

Due to its highly compact format with minimum front baffle dimensions and critically damped tuning, multiple SB118 enclosures couple effectively both physically and acoustically to provide optimum low end impact.

Designed for high performance touring, the optimally-reduced front dimensions of the SB118 allow for the creation of compact-sized subwoofer arrays. The SB118 is highly suitable for front-of-house (FOH) use in theatres, clubs or multi-purpose venues and provides an excellent solution for corporate events. As standard, the SB118 includes a built-in pole mount socket that facilitates the creation of a compact FOH system when used with MTD or XT enclosures.

When combined with the I15FM floor monitor or MTD/XT enclosures, the SB118 is ideal for stage monitoring applications such as keyboard, side fill or drum fill monitoring due to its discrete, visually unobtrusive profile.

For permanent installation, the compact dimensions of the SB118 provide a high degree of flexibility when space is at a premium.

For use of the SB118 with the MTD line, subwoofer signal processing is provided by L-ACOUSTICS LLC analog controllers. Alternatively, OEM factory presets for approved digital processors are available for use of the SB118 with the L-ACOUSTICS XT line.

L-ACOUSTICS PROFESSIONAL SOUND SYSTEM



▶ **Single 18" subwoofer enclosure**

▶ **Dual-chamber, vented bandpass design**

▶ **High power handling, high efficiency, low thermal compression**

▶ **Compact, low profile, optimally-reduced front dimensions**

▶ **Integral rigging for flown applications**

▶ **Designed for touring or fixed installation**

▶ **Reference subwoofer for L-ACOUSTICS MTD and XT lines**

▶ **Signal processing via L-ACOUSTICS LLC analog controllers (MTD line) or OEM factory presets for approved digital processors (XT line)**

▶ **Optimized for 32 - 160 Hz bandwidth**

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 will appear very 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.

Frequency Response

Frequency Response	35 - 100 Hz (± 3 dB)	(3W preset)
Usable Low Frequency	32 Hz (-10 dB)	
Recommended filtering	80 Hz to 160 Hz	(4th order low pass filter)
	26 Hz	(4th order high pass filter)

Sensitivity¹

(2.83 Vrms @ 1m)	97 dB SPL	35 - 160 Hz
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Power Rating²

(Long Term)			Amplification (Recommended)	Impedance (Nominal)
70 Vrms	600 Wrms	2400 Wpeak	1200 W	8 ohms

Array³

	SPL	
One enclosure	125 dB (cont)	131 dB (peak) (3W preset)
Two enclosures	131 dB (cont)	137 dB (peak)
Four enclosures	137 dB (cont)	143 dB (peak)

Components

LF	1 x 18" loudspeaker (4" edgewound copper ribbon voice coil, diecast aluminum basket, massive vented magnet structure, high thermal capacity)
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¹ Sensitivity is the average SPL measured over the component's rated bandwidth

² Power rating displays the long term RMS power handling capacity using pink noise with a 6 dB crest factor over the component's rated bandwidth

³ Array data gives the continuous unweighted SPL output of the system under half space conditions, referenced to 1 m, including preset equalization

Enclosure

- Width 800 mm 31.5 in
- Height 442 mm 17.4 in
- Depth 820 mm 32.3 in
- Net Weight 63 kg 138.6 lbs
- Connectors : 2x 4-pin Neutrik speakon
- Material : 18 mm, 24 mm Baltic birch plywood
- Finish : Maroon-gray™
- Grill : Black epoxy perforated steel with acoustically transparent foam
- Rigging : Integrated flying hardware and handles

Additional Equipment

- L-ACOUSTICS LLC analog controllers (for use with MTD line)
- OEM factory presets for approved digital processors (for use with XT Line)
- L-ACOUSTICS LA 24a or LA 48a power amplifiers

ARCHITECT SPECIFICATIONS

The loudspeaker system shall contain one eighteen inch loudspeaker component, loaded in a dual-chamber vented bandpass configuration suitable for subwoofer applications. Power handling capacity shall be 600 Wrms long term (2400 Wpeak) at a nominal impedance of 8 ohms. Usable frequency response shall be 40 Hz to 160 Hz (± 3 dB) with -10 dB response at 32 Hz referenced to the average level of the usable response. The eighteen inch transducer employed in the enclosure shall have a weatherproof cone body, 4-inch (100 mm) diameter edgewound copper ribbon voice coil, 10 mm (0.39 in) peak excursion capability, diecast aluminum basket, massive vented magnet structure and high thermal capacity.

The loudspeaker enclosure shall be constructed of 18 mm (0.70 in) and 24 mm (0.94 in) baltic birch and be internally braced with joints that are sealed, screwed and rabbeted in order to remain free of vibration at extreme sound pressure levels. Dimensions shall be 442 mm (17.4 in) high, 800 mm (31.5 in) wide and 820 mm (32.3 in) deep and the enclosure weight shall be 63 kg (138.6 lbs). The finish shall be maroon-gray and 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 10 mm (0.4 in) thick acoustically transparent foam.

The loudspeaker enclosure shall have two recessed flytrack sections mounted on both sides of the enclosure for rigging purposes. Four recessed handles shall be located on the sides of the enclosure and a front mounted dolly board shall attach to the enclosure using two locking pins and two front baffle mounted dolly locator studs. The enclosure shall have a 36-mm (1.42 in) diameter pole mount socket mounted on the top side.

The loudspeaker system shall be used with a dedicated analog controller that provides optimum signal band limiting and equalization for use of the loudspeaker system in conjunction with additional passive 2-way or active 2-way enclosures. Alternatively, the loudspeaker shall be used with an approved digital processor with OEM factory presets for 3-way operation in conjunction with additional active 2-way enclosures.

The loudspeaker system shall be the L-ACOUSTICS SBI118.

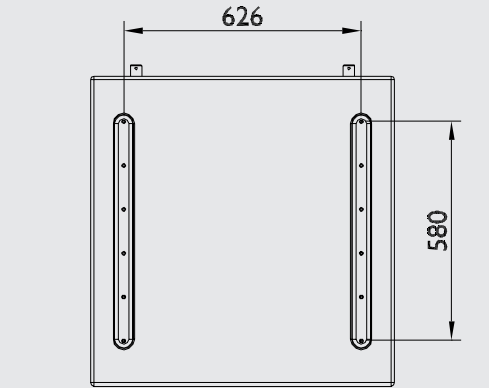
The analog controller shall be the L-ACOUSTICS LLC112b-st when the loudspeaker system is used in conjunction with the L-ACOUSTICS MTD112b.

The analog controller shall be the L-ACOUSTICS LLC115b-st when the loudspeaker system is used in conjunction with the L-ACOUSTICS MTD115b operated in passive mode.

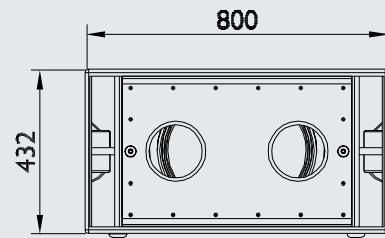
The analog controller shall be the L-ACOUSTICS LLC115b-2w when the loudspeaker system is used in conjunction with the L-ACOUSTICS MTD115b operated in active mode.

ACCESSORIES

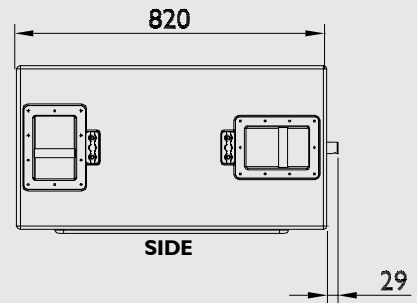
- SBI118PLA:** SBI118 dolly board (optional for fixed installation)
- SBI118COV:** Protective cover
- PION2:** Double stud Aeroquip fitting to ring (for use with side-mounted flytrack sections)



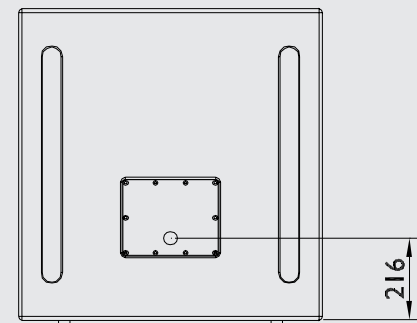
BOTTOM



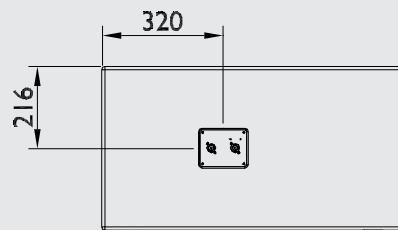
FRONT



SIDE



TOP



REAR

SCALE 1:20

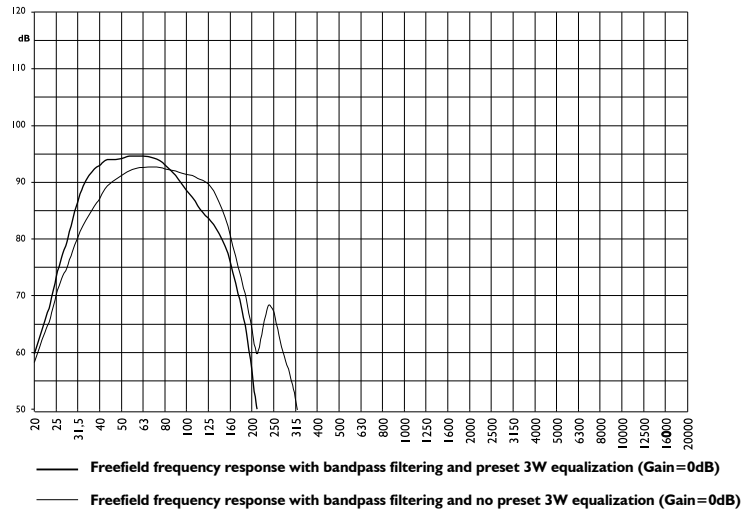
(Dimensions in mm)



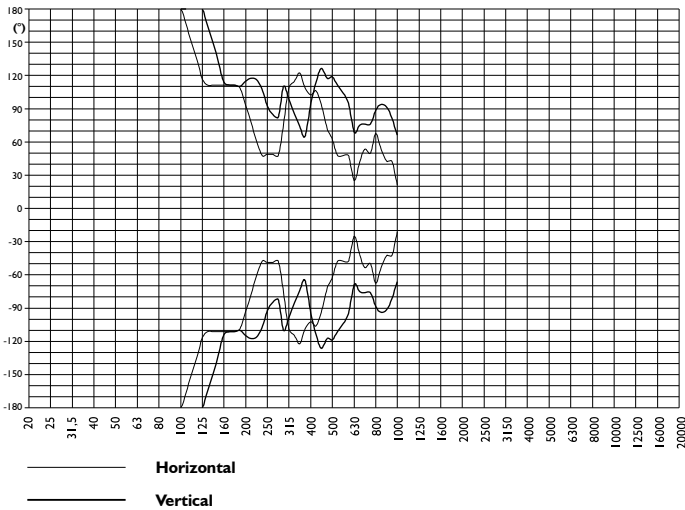
SB118

PERFORMANCE
DATA

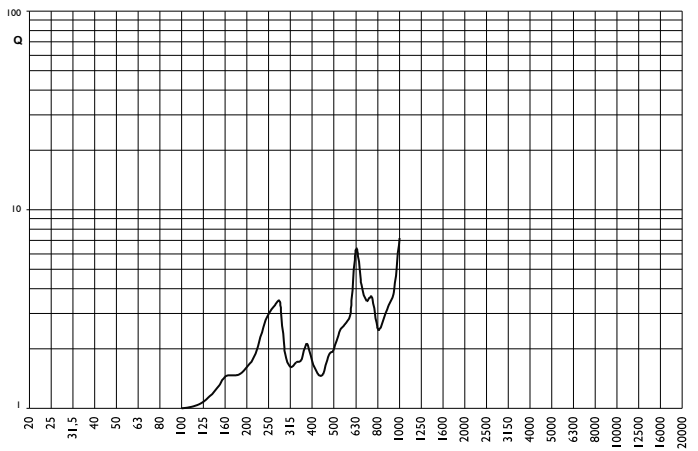
FREQUENCY RESPONSE



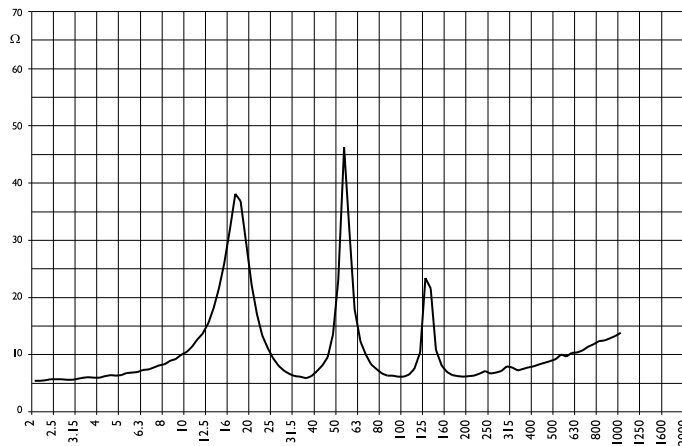
BEAMWIDTH (-6dB)



DIRECTIVITY FACTOR Q



IMPEDANCE



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