SB115

COMPACT SUBWOOFER

APPLICATIONS

The L-ACOUSTICS® SB115 is a companion subwoofer for the L-ACOUSTICS MTD and XT loudspeaker lines and features a front-loaded fifteen-inch transducer loaded in an optimally-sized and tuned vented enclosure. With power handling capacity of 250 Wrms (1000 W peak) and response to 40 Hz, the SB115 is the answer for applications requiring additional low frequency extension from a compact enclosure.

The SB115 provides low end extension and upper mid bass articulation combined with high power handling and efficiency. Due to its compact design and critically damped tuning, multiple SB115 enclosures couple effectively while providing the bass definition and musicality that only a front loaded subwoofer can provide.

The compact dimensions of the SB115 provide a high degree of versatility for installations where space is at a premium. Typical applications include distributed subwoofer systems for club, theatre, conference room or multimedia installations. An adjustable U bracket is available as an accessory, allowing the SB115 to be flown and thus adding a unique degree of flexibility for fixed installation.

When used with MTD112b, MTD115b or 115FM enclosures, the SB115 is ideal for a stage monitoring applications such as sidefill, keyboard or drum fill monitoring. When operated in conjunction with the MTD108a enclosure, the SB115 is highly suitable for corporate (A/V) applications.

For use of the SB115 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 SB115 with the L-ACOUSTICS XT line.

L-ACOUSTICS PROFESSIONAL SOUND SYSTEM

- **Single 15" subwoofer enclosure**
- **Front-loaded, optimized bass reflex design**
- **High power handling, low thermal compression**
- **Compact dimensions, low profile**
- **Designed for touring or fixed installation**
- **Suitable for use with all L-ACOUSTICS MTD or XT enclosures**
- **Signal processing via L-ACOUSTICS LLC analog controllers (MTD line) or OEM factory presets for approved digital processors (XT line)**
- **Optimized for 40 - 200 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	45 - 100 Hz (± 3 dB)		(3W preset)
Usable Low Frequency	40 Hz (-10 dB)		
Recommended filtering	100 to 200 Hz	(4th order low pass filter)	
	40 Hz	(4th order high pass filter)	

Sensitivity[1]

(2.83 Vrms @ 1m)	94 dB SPL	45 - 200 Hz

Power Rating[2] / Amplification / Impedance

Power Rating (Long Term)			Amplification (Recommended)	Impedance (Nominal)
45 Vrms	250 Wrms	1000 Wpeak	500 W	8 ohms

Array[3] / SPL

One enclosure	120 dB (cont)	126 dB (peak)	(3W preset)
Two enclosures	126 dB (cont)	132 dB (peak)	
Four enclosures	132 dB (cont)	138 dB (peak)	

Components

LF 1 x 15" weatherproof loudspeaker
(3" edgewound copper ribbon voice coil, diecast aluminum basket, massive vented magnet structure, high thermal capacity)

[1] Sensitivity is the average SPL measured over the system'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 system'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	440 mm	17.3 in
• Height	580 mm	22.8 in
• Depth	425 mm	16.7 in
• Net Weight	29 kg	63.9 lbs
• Shipping Weight	33 kg	72.8 lbs
• Shipping Dims	655 x 500 x 570 mm	25.8 x 19.7 x 22.4 in

- Connectors : 2x 4-pin Neutrik speakon
- Material : 18 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 LA15a or LA17a power amplifiers

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. Power handling capacity shall be 250 Wrms long term (1000 Wpeak) at a nominal impedance of 8 ohms. Usable frequency response shall be 45 to 200 Hz (± 3 dB) with -10 dB response at 40 Hz referenced to the average level of the usable response. The fifteen-inch transducer employed in the enclosure shall have a 3-inch (75 mm) diameter edgewound copper ribbon voice coil, weatherproof cone body, diecast aluminum frame, massive vented magnet structure and high thermal capacity.

The loudspeaker enclosure 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 580 mm (22.8 in) high, 440 mm (17.3 in) wide and 425 mm (16.7 in) deep and the enclosure weight shall be 29 kg (63.9 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.

Two recessed handles shall be located on the sides of the enclosure for handling purposes. Four recessed attachment locations shall be provided (two on the top and bottom sides) for rigging the enclosure with an adjustable U bracket.

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 SB115.

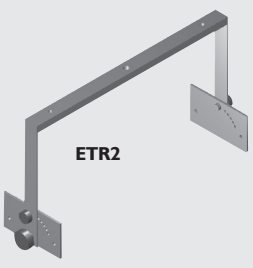
The analog controller shall be the L-ACOUSTICS LLC112b-st when the loudspeaker system is used in conjunction with the L-ACOUSTICS MTD112b.

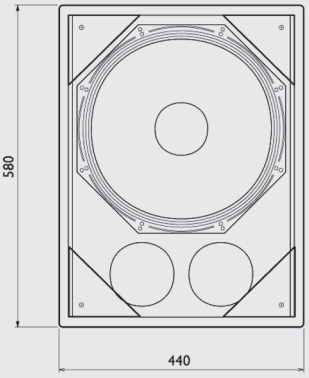
The analog controller shall be the L-ACOUSTICS LLC115b-st when the loudspeaker system is used in conjunction with the L-ACOUSTICS MTD115b operated in passive mode.

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.

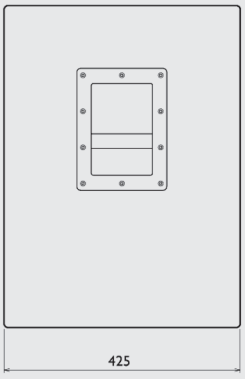
ACCESSORIES

ETR2 : An adjustable U Bracket for wall or scaffold mounting of the SB115. A bracket mount plate is first attached to the 4 mount locations provided on the enclosure (2 each on the top and bottom sides).The U bracket is then attached to the mount plate using two threaded knobs - one for attachment of the bracket, one for tilt of the enclosure.

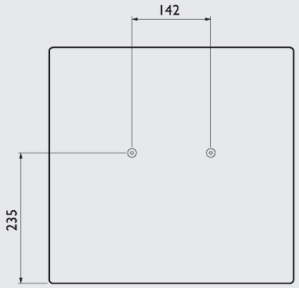




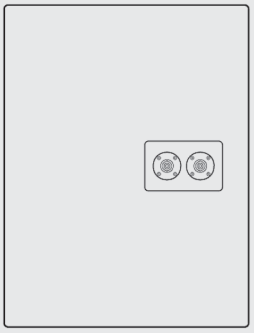
FRONT



SIDE



TOP



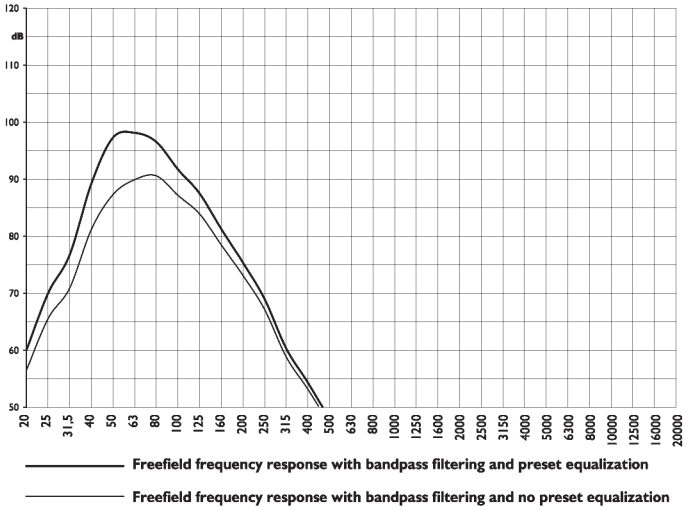
REAR

SCALE 1:15

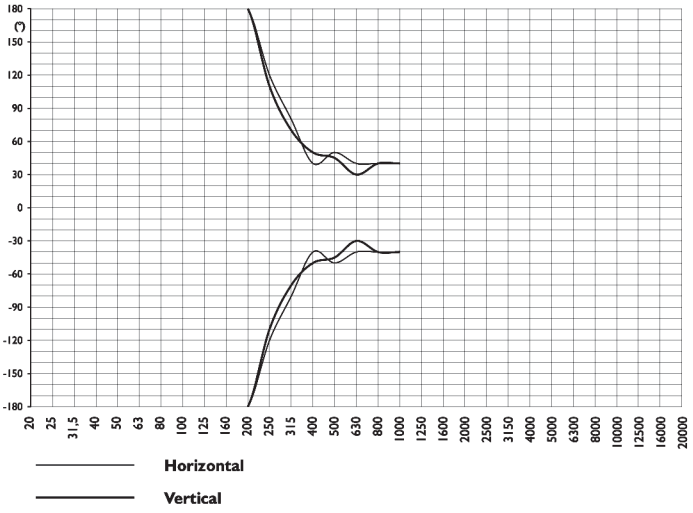
SB115

PERFORMANCE DATA

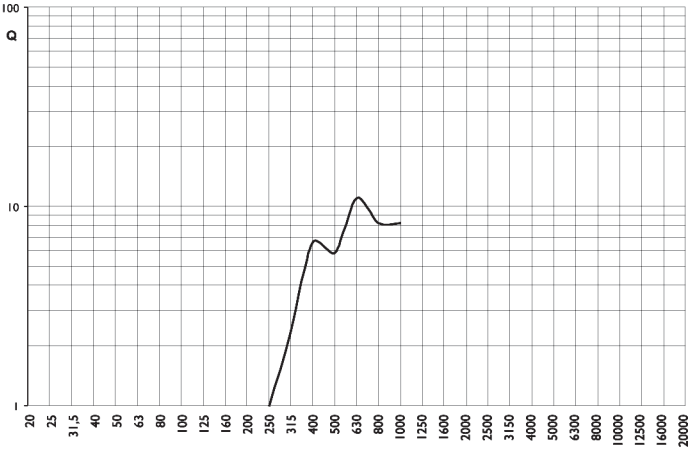
FREQUENCY RESPONSE



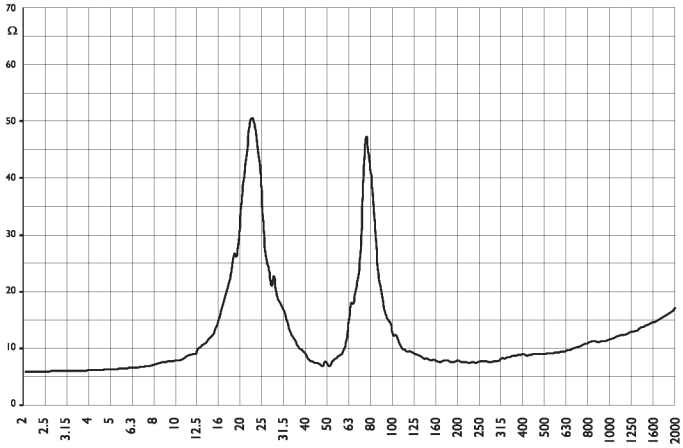
BEAMWIDTH (-6dB)



DIRECTIVITY FACTOR Q



IMPEDANCE



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