



112P

**SELF-POWERED
COAXIAL
LOUDSPEAKER**

APPLICATIONS

The 112P combines the significant advantages of L-ACOUSTICS® coaxial point source technology with the convenience of self-powered performance and the power of digital signal processing.

Ideal for multi-purpose, portable sound reinforcement, the 112P features advanced loudspeaker components powered by a 1000 W amplifier module with dedicated on-board digital signal processing. Four application-engineered presets are available (FILL, FRONT, MONITOR, X-OVER), complementing the considerable flexibility of the 112P by providing convenient, plug-and-play ease of operation.

Featuring a 1.4" exit compression driver coaxially-loaded by a 12" transducer, the 112P provides coherent point source radiation with 90-degree axi-symmetric directivity (identical horizontal, vertical and axial coverage). Due to the coaxial component configuration, power response is free of the polar lobing effects typical of traditional horn / woofer combinations.

The net result is natural, studio monitor sound quality - ideal for proximity fill use or portable distributed sound reinforcement in theatre, congress centre, concert hall, trade show, corporate A/V, house of worship, club, or television applications. When used with the L-ACOUSTICS SB15P self-powered subwoofer, the 112P is also highly suitable for side fill, drum monitoring or medium format front-of-house (FOH) applications.

Due to its compact, wedge-shaped enclosure format, the 112P provides an exceptionally high performance floor monitor solution. Excellent image and coverage stability is obtained due to the coaxial configuration and the performer experiences a generous, homogeneous coverage pattern without the subjective impression and potential feedback problems of listening to a separate horn / woofer combination.

To facilitate installation, pole mount sockets are included as standard and optional rigging accessories include an adjustable U-bracket (for ceiling, wall, scaffold or truss mounting).

L-ACOUSTICS PROFESSIONAL SOUND SYSTEM



- ▶ **Self-powered, two-way enclosure (12" LF, 1.4" HF)**
- ▶ **High power coaxial driver assembly**
- ▶ **Coherent point source radiation (90° axi-symmetric directivity)**
- ▶ **High efficiency power amplifier module**
- ▶ **Digital system equalization (FILL, FRONT, MONITOR, X-OVER presets)**
- ▶ **Suitable for portable distributed sound reinforcement, floor monitoring, medium-power FOH**

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

Frequency Response

Operating Bandwidth	60 - 18k Hz (± 3 dB)	FILL preset
Usable Bandwidth	50 - 20k Hz (- 10 dB)	

System Sensitivity¹

-21 dBu (.071 Vrms)	96 dB SPL	60 - 18k Hz	FILL preset
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Nominal Directivity (-6dB)²

90° (± 20°)	Axi-symmetric
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System Output³

	SPL		
One enclosure	121 dB (continuous)	131 dB (peak)	FILL preset
	119 dB (continuous)	129 dB (peak)	X-OVER preset

FILL preset provides flat frequency response under freefield conditions
X-OVER preset applies a 100 Hz high pass filter and a 3 dB high frequency shelving eq contour

Speakers

LF 1 x 12" weather-resistant loudspeaker (3" voice coil)
HF 1 x 1.4" exit compression driver (titanium diaphragm, 3" voice coil, coaxial assembly)

ELECTRICAL PERFORMANCE

Input

Type	Electronically balanced (pin 2 hot)
Max Input Level	+12 dBu (gain potentiometer at 0 dB position)

DSP

Sampling	24 bit / 48 kHz
Dynamic Range	> 105 dBA

Amplifier

Output Power	1 x 1000 W (8 ohms)
Gain	32 dB

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

² Directivity is averaged over the 1-10 kHz range

³ System Output is the unweighted SPL output referenced to 1 m under freefield conditions, including preset equalization

Enclosure

- Height 540 mm 21.3 in
- Width 416 mm 16.4 in
- Depth 390 mm 15.4 in
- Floor monitor angle 30° (wrt vertical)
- Weight (net) 32 kg 70.5 lbs
- Shipping Weight 35 kg 77.1 lbs
- Shipping Dims 615 x 470 x 465 mm
24.2 x 18.5 x 18.3 in
- Connectors: 2 x XLR, 2 x PowerCon (input, loop thru)
- Material: 18 and 30 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

Additional Equipment

- L-ACOUSTICS SB15P subwoofer

ARCHITECT SPECIFICATIONS

The enclosure shall be a self-powered, two-way, coaxial full range loudspeaker containing one direct radiating, bass reflex-loaded, weather-resistant 12-inch low frequency transducer and one 1.4-inch exit, 3-inch voice coil diameter, titanium alloy diaphragm compression driver. The cone body of the low frequency component shall provide pattern control loading for the compression driver and yield a 90-degree conical directivity pattern that is axi-symmetrical. As a full range system, the frequency response shall be 60 Hz to 18 kHz with less than ± 3 dB variation and the usable bandwidth shall be 50 Hz to 20 kHz (-10 dB).

The loudspeaker system shall contain internal digital processing electronics and a mono-bridged power amplifier that 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 corrective component and system equalization. Four presets shall be selectable via rear-panel push button switch with the following characteristics: FILL shall have nominally flat frequency response when the loudspeaker is used under freefield conditions; FRONT shall have +3 dB low and high frequency shelving characteristics under freefield conditions; MONITOR shall have nominally flat response under half-space loading conditions; X-OVER shall provide a 100 Hz high pass filter and +3 dB high frequency shelving characteristics for use of the loudspeaker with additional subwoofer enclosures.

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.

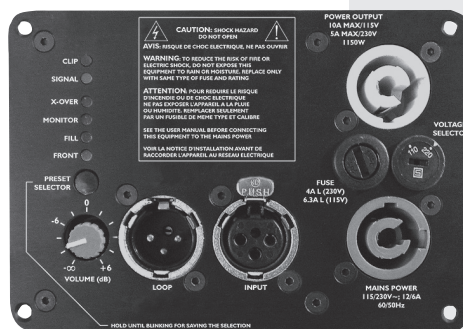
The enclosure shall have a truncated wedge shape with a curved front profile. Dimensions shall be 54 cm (21.3 in) high, 41.6 cm (16.1 in) wide and 39 cm (15.4 in) deep. When used on its rear side, the front baffle of the enclosure shall be oriented at a 30 degree angle with respect to vertical, allowing the enclosure to be used as a floor monitor. Enclosure weight shall be 32.2 kg (70.9 lbs). Cabinet construction shall consist of 30 mm (1.18 in) and 18 mm (0.70 in) Baltic birch plywood with internal steel bracing and joints that are sealed, screwed and rabbeted. 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.

The loudspeaker shall have 36 mm (1.42 in) diameter pole mount sockets mounted on the top and bottom sides. Pole mount sockets shall function with a U-bracket accessory for rigging the enclosure in either horizontal or vertical orientations and provide angular adjustment with 10-degree resolution. A liftbar accessory shall function with either of the pole mount sockets and provide five attachment points for rigging purposes.

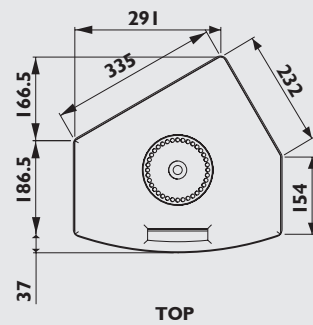
The loudspeaker system shall be the L-ACOUSTICS I12P.

The subwoofer system shall be the L-ACOUSTICS SB15P.

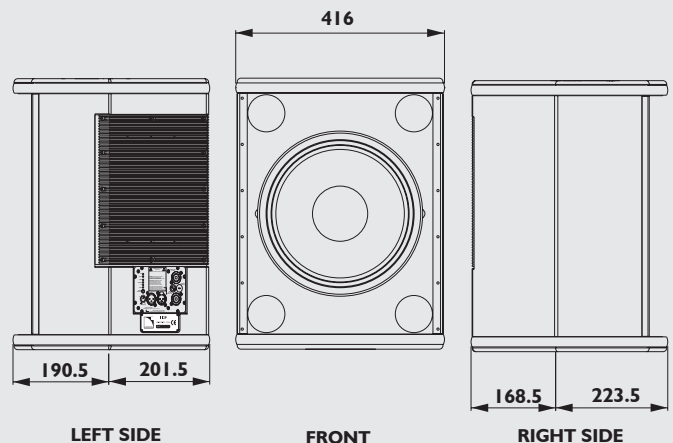
Detailed measurement data and architect specifications are available for download on: <http://www.l-acoustics.com>



Rear panel closeup of amplifier / dsp module



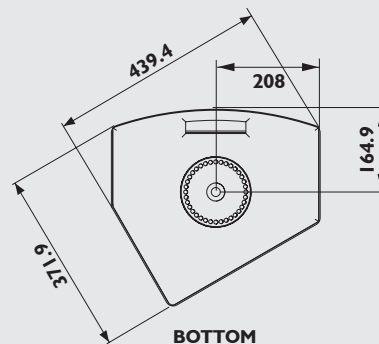
TOP



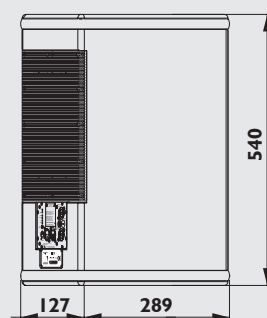
LEFT SIDE

FRONT

RIGHT SIDE



BOTTOM



REAR

SCALE 1:15

(Dimensions in mm)

ACCESSORIES

ETRI12XT: Adjustable U-Bracket for ceiling, wall or scaffold mounting of the I12P in either horizontal or vertical orientations.

XTLIFTBAR: Allows for single point rigging of the I12P with 5 pick points available for tilt adjustment.

Specifications subject to change without notice

Specs I12P 0106

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