

# LAB 15

## FEATURES

- 15" long-throw woofer cone with NdFeB (Neodymium Iron Boron) magnet and 100 mm voice coil
- Highly ingenious acoustic design that ensures top performance: a hybrid waveguide indirect radiation system able to completely recover low frequency sound pressure emitted from the rear of its 15" woofer.
- Deep, very clean low frequencies, due to a pulse response with a very low ripple
- Built to be used alone or in multiples, with the utmost reduction of space occupied in relation to its output and SPL achieved
- Easy transport when used with mobile rigs, and fits easily into any permanent installation
- Attractive look that fits perfectly into any type of surroundings or décor
- Original design with a square footprint: two stacked cabinets form an exact cube
- The cabinet is internally braced to ensure the utmost sturdiness, free from harmful sound "colouring" due to resonance; an optional trolley with sturdy smooth-running wheels facilitates transport, even on relatively uneven surfaces.



## APPLICATIONS

- No-nonsense use in "live" concerts of all sizes, floor or stage mounted and combined with other units of the same type for sound reinforcement of low frequencies.
- High-quality permanent installations in theatres, clubs, indoor sports arenas; an ideal combination for all Outline loudspeaker systems.
- Four stacked units stand just 1.72 metres high, but form a compact high powered array that is ideal for sound reinforcement in large indoor or outdoor areas.

## DESCRIPTION

LAB 15 is a loudspeaker system suited to high-quality sound reinforcement of low frequencies. It comprises a NdFeB 15" long-throw woofer magnet and 100 mm voice coil.

Loading is a hybrid waveguide indirect radiation system able to completely recover low frequency sound pressure emitted from the rear of its 15" woofer by meaning an increase in sensitivity of 6dB (SPL). In other words, with the same input voltage, this system gives an additional 6dB over the entire low frequency band compared to the same speaker used in a closed cabinet and, on average, an additional 3dB compared to what the same speaker would give at low frequencies if used with a horn-loaded, reflex or band-pass system. The fact that the sound is generated by two masses of air moved by a single diaphragm, with a great advantage for attack velocity in the transitory frequencies, results in deep, very clean low frequencies.

LAB 15 has a useable frequency range at -10 dB of 33 Hz to 174 Hz while the response is just +/- 3dB from 42Hz to 160Hz.

The max sensitivity is 101 dB in half space and the max. continuous AES power 1.000W gives 131 dB SPL (137 peak).

**LAB 15 has an original design with a square footprint:** two stacked cabinets form an exact cube; it's built in sturdy phenolic-glued 15 mm Baltic birch plywood to ensure total weather protection. Among the optionals available, a trolley ensures fast handling and efficient protection of the front of the enclosure against impacts. The black external finish is in special high quality wear and weather-resistant paint. The front of the cabinet is protected by an anti-resonant steel grille covered with sound-transparent foam. Twelve strategically positioned integral handles facilitate handling.

## LAB 15 SP

Also available the version Self Powered featuring the same above performances through a PWM power amplifier module (AMDF1K-01) fit inside.

## TECHNICAL SPECIFICATIONS:

<b>FREQUENCY RESPONSE</b>	(-10 dB) (±3 dB)	33Hz – 174Hz 42Hz – 160Hz
<b>AVERAGE DISPERSION</b>	Quasi – Omnidirectional	
<b>IMPEDANCE (Ohms)</b>	Nominal	6
<b>MAX SENSITIVITY (dB SPL 1W 1m)</b>	101 (Half – space)	
<b>POWER - WATTS AES</b>	Cont. 1000	Peak 4000
<b>MAX DB SPL (peak @ 1 m)</b>	Cont. 131	Peak 137

<b>CONNECTORS</b>	NL4FC 1+ - 1-	
<b>LOUDSPEAKERS AND LOADING</b>	LF	1x15" NdFeB, 100 mm voice coil
<b>WEIGHT (KG)</b>		
Net (gross)	52(60)	
<b>DIMENSIONS (CM)</b>		
Height (with packing)	43(50)	
Width (with packing)	86 (93)	
Depth (with packing)	86 (93)	

# MULTIPURPOSE SERIES