

HPL (Code 2968)

High Precision Loudspeaker



Overview

The HPL High Precision Loudspeaker is an active high-end speaker pair from HEAD acoustics, which comes very close to the principle of a perfect sound converter, making it ideal for playback in listening studios.

Compared to conventional wood enclosures, its construction is much more massive and virtually free from resonance and vibration. The front and back sides are made of massive aluminum. The socket contains an additional spring-based absorber system.

The 3-way system is equipped with high-end, low-tolerance drivers as well as integrated amplifier modules with a power of 500 W per channel, allowing the complete system to deliver a maximum sound pressure level of 119 dB(A) with less than 3 % of nonlinear distortion.

For adjusting to a specific listening studio, an individual equalization filter can optionally be created and installed on a *labO2* or *labO2-V1* high-end equalizer.

Features

Active 3-way speaker pair for professional listening studios

- Vibration-free enclosure and optimally matched electronics
- Perfect sound reproduction due to high spatial resolution, neutrality, and accuracy while maintaining maximum naturalness
- Built-in DSP for broadband level and phase correction
- Well suited for playback of transient noises
- Optional: Adjusting the tone color with the *labO2* or *labO2-V1* equalizer

- Easy installation of mounting fixtures on the back side

Drivers

- 310 mm (12 ¼") high-power low-range driver with aluminum membrane
- 105 mm (5") low-midrange driver with cellulose membrane
- 30 mm fabric dome speaker with waveguide

Electronics

- 3-way amplifier technology with 500 W @ 230 V total power output
- Low idle/stand-by power consumption

Enclosure

- Seamless body made of resonance-free, cast PolyGrade™ polymer concrete
- Front and back side made of massive, CNC-milled aluminum plates
- Socket with 8 Hz spring absorber system

The - optional - *labO2* equalizer is used to adjust the playback to a specific listening studio. The speakers are connected directly to the symmetric XLR outputs.



Scope of supply

- HPL (Code 2968)
2 x High Precision Loudspeaker
- 2 x mains cable
- 2 x CXX II.10 (Code 5177-10)
Cable AES/EBU
XLR 3-pin, male ↔ XLR 3-pin, female, 10 m (32.8')
[analog: *labO2/labO2-V1* ↔ HPL]

Accessories (optional)

- HSC VIII.1 (Code 2969)
Transport box
(27.5 kg / 60.6 lb)
- *labO2* (Code 3731)
2-channel playback equalizer with
Line outputs and USB interface
- Instead of the *labO2*, the *labO2-V1*
equalizer can be used, which
provides an additional output for
an equalized headphone:
labO2-V1 (Code 3731-V1)
2-channel playback equalizer with
Line outputs, headphone connector,
and USB interface

(optional)

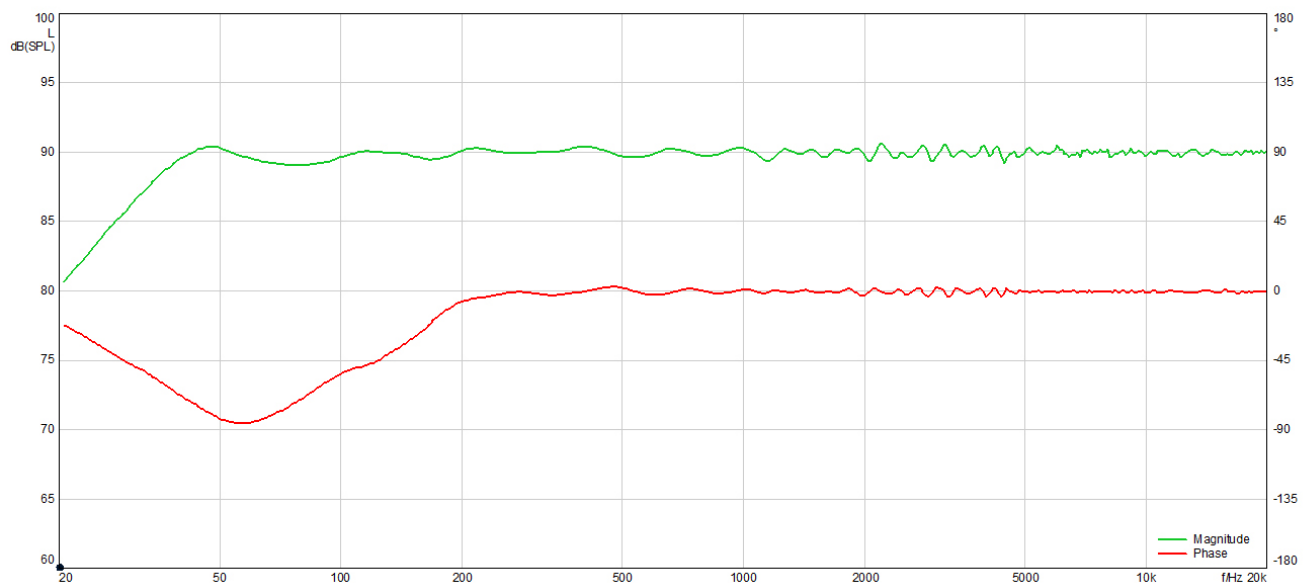
- CLX X.1 (Code 3797-1)
AES/EBU adapter cable
LEMO 8-pin ↔ XLR 3-pin, male /
XLR 3-pin, female, 1 m (39")
[digital: *labO2/labO2-V1* ↔ HPL
via 2 x CXX II.10]



Playback equalizer *labO2-V1*

Technical Data

Input voltage:	85 V AC to 265 V AC / 45 to 65 Hz
Power consumption	
Stand by:	0.5 W
Idle:	17 W
Maximum:	500 W
Total power output:	500 W @ 230 V 430 W @ 120 V
Transmission range:	30 Hz to 24.000 Hz
Sound pressure (at 3 % distortion):	119 dB(A) (12 dB crest factor, 1 m)
Separating frequencies:	350 Hz / 2550 Hz
Connectors:	XLR in (analog or digital / AES/EBU) XLR out (digital / AES/EBU) USB (for service settings only) Stereo jack (3.5 mm, control input) Power input (IEC 60320 C13 socket)
Weight/pair:	156 kg (344 lb)
Dimensions/each speaker:	425 mm x 235 mm x 1050 mm (BxTxH) / 16.7" x 9.2" x 41.3" (WxDxH)
Operating temperature:	10 °C to 40 °C (50 °F to 104 °F)
Storage temperature:	5 °C to 50 °C (41 °F to 122 °F)



HPL: Amplitude and phase response vs. frequency in a low-reflection environment.