HEAD acoustics®
Ebertstraße 30a
52134 Herzogenrath
Tel.: +49 2407 577-0
Fax: +49 2407 577-99
eMail: info@head-acoustics.de
Web: www.head-acoustics.de

DATA SHEET

HSW II.1 (Code 2952)

HEAD Subwoofer

for high-quality playback in a vehicle environment (e.g. in the SoundCar from HEAD acoustics)

Overview

The HSW II.1 is a subwoofer from HEAD acoustics, which is especially suitable for playback in a vehicle environment.

For example, for a substantiated judgment of vehicle noise in the SoundCar from HEAD acoustics, it is necessary to include the low-freqency airborne sound components in the realistic playback of an acoustic driving scenario. That way, the sound balance is as authentic as possible and the subjective judgments of the driving noise can be put on a solid basis.

This is made possible by the HSW II.1, which can be easily installed in the trunk due to its relatively compact dimensions.

The construction principle of the HSW II.1 is based on the proven bandpass housing with two drivers working in push/pull operation. The HSW II.1 has an optimized efficiency factor. The emission characteristics of the HSW II.1 are omnidirectional, which means that the emitted sound power is independent of direction.

In combination with the high-end power amplifier, the HSW II.1 forms an optimal playback system.

Features

- Subwoofer for high-quality playback, in particular for low-frequency airborne sound components
- Depending on the application, a low bass play back in the range of 10 -120 Hz is possible
- Direction-independent sound emission
- Rugged bandpass housing with two drivers in push/pull operation
- Closed housing for optimal protection of the membranes
- Compact size for easy and quick installation in a vehicle environment
  (e.g. in the trunk of the SoundCar from HEAD acoustics)
- High-end power amplifier included
- Adjustable input voltage range for high-end power amplifier

Application

- Realistic playback of soundscapes in a vehicle environment
  (e.g. the SoundCar from HEAD acoustics or the mobile variant of the HEAD 3D Simulation System H3S)

Standard Delivery Items

- HSW II.1 (code 2952)
  HEAD Subwoofer
- High-end power amplifier
- Speakon cable 2 x 10 m (33 ft)
- CXX II.1 (code 5177-1)
  2 x cable AES/EBU XLR 3-pin, male <-> XLR 3-pin, female, 1 m (3.28 ft)

The high-end power amplifier DC 3 of KMT is developed in a class-h-technology with bipolar final transistors. The operation modes fullrange, top and bass can be selected per channel. The separation frequency amounts 120 Hz with 24 dB edge steepness.

Technical Specifications of HSW II.1 Subwoofer

Nominal load:	2 x 120 W_{RMS}
Nominal impedance:	2 x 8 Ohm
Frequency response (free field):	(-10 dB) 35 – 120 Hz
Frequency response (vehicle with suitable filtering):	(-6 dB) 10 – 100 Hz
Housing principle:	Band-pass
Height:	500 mm (19.68“)
Width:	360 mm (14.17“)
Depth:	380 mm (14.96“)
Weight:	31 kg (68.3 lb)

Technical Specifications of DC 3 Power Amplifier

Power (sine) at 8 Ohm:	2 x 200 W
Power (sine) at 4 Ohm:	2 x 285 W
Power (sine) at 2 Ohm:	2 x 310 W
Power (sine) at 4 Ohm bridged:	1 x 580 W
Frequency response:	20 – 20,000 Hz
Slew rate:	30 V/μs
Total distortion:	0.01 %
Attenuation factor at 8 Ohm / 1 kHz: 250	
Signal to noise ratio:	> 100 dB
Input impedance symm.:	20 kOhm
Channel separation:	> 65 dB
Input sensitivity:	Constant gain 33 dB / 1 V
Input connectors:	XLR
Output connectors:	Speakon
Height:	1 rack unit (88 mm, 3.5“)
Width:	482 mm (19“)
Depth:	358 mm (14.1“)
Weight:	8.5 kg (18.7 lb)