



#### Features

- Head-shoulder unit with ICP measurement microphones
- Connection to frontends recommended by HEAD acoustics
- Low inherent noise
- Equalization options: ID, FF, DF, USER, LIN (no equalization). During the recording the signals can be equalized either with the

*lab*HSU frontend for example or with the recording module of ArtemiS suite. Furthermore, the equalization can be carried out afterwards by using the analysis software ArtemiS suite.

- TEDS TEDS data can be read by means of labHSU, HEADlab and Compact systems, and SQuadriga III, for example
- Calibratable with pistonphon
- Threaded mounting platform on the top side of the HSU III.2 head for attaching e.g. the laser pointer TLP
- 3/8" tripod socket on the bottom of the HSU III.2 head

# Connections to front ends from HEAD acoustics

- Binaural frontend labHSU (stand-alone/frontend mode)
- HEAD*lab* input modules
  - labHSU
  - labV6HD
  - labV6 / labVF6
  - labV12 / labV12-V1 / labV12-V2
  - labM6
  - labCF6
- Mobile recording and playback systems
  - SQuadriga III
  - SQobold
  - SQuadriga II

# DATA SHEET

### HSU III.2 (Code 1391)

Head-shoulder unit with ICP microphones

## Overview

The head-shoulder unit HSU III.2 is an artificial head with ICP microphones for aurally-accurate, binaural recordings. HSU III.2 allows recordings including the characteristics of human hearing perception. Furthermore, HSU III.2 is calibratable and directly ready for use.

Like a conventional standard microphone the HSU III.2 is connected via BNC with a recommended front end and this way it also gets the necessary power supply.

The calibration of the high-quality ICP microphones can be carried out any time with a pistonphone.

- Compact systems
- labCOMPACT12
- labCOMPACT24
- Binaural, digital equalizer BEQ II
- BrakeOBSERVER front end MMF III.0

#### Connections to other front ends

• DATaRec 4 series



# Scope of supply

- HSU III.2 (Code 1391) Head-shoulder unit with ICP measurement microphones
- 2 x CBB I.2 (Code 1175-2) cables BNC ↔ BNC, 2 m (78.74")
- SBH I (Code 1315) Stand base
- Screwdriver (for HSU ears)
- Manual
- DVD: Equalization & Documentation, individual HSU III.2 equalization included

#### Accessories

- HSC IV (Code 1524) Carrying case
- HMT II Code 1962) Height-adjustable tripod
- HSM V (Code 1520) Seat Mount Adapter

# **Technical Data**

### Accessories

- HTB VI (Code 1574) HEAD Torso Box
- HWS (Code 1960) Wind screen for outdoor recordings
- TLP (Code 1967) Triaxial laser pointer

#### Adapters for connecting HSU III.2 to front ends from HEAD acoustics

- labV12 / labV12-V1 / labV12-V2 / labCOMPACT12 / labCOMPACT24 / MMF III.0:
  - CDB II.1 (Code 3556)
    Breakout cable D-Sub 25-pin ↔
    6 x BNC male, 1 m (39.3")
  - CDB X.1 (Code 3792)
    Breakout cable D-Sub 25-pin ↔
    6 x BNC female, 1 m (39.3")

#### Adapters for connecting HSU III.2 to front ends from HEAD acoustics

- labM6:
  - CBL X.01 (Code 3791-01)
    Adapter cable, 7-pin LEMO ↔
    BNC, 10 cm (3.94")
- SQuadriga III / SQobold / SQuadriga II: HSU III.2 can directly be connected to the BNC inputs. For connecting HSU III.2 to the headset inputs the adapter CLB I.3 is required.
  - CLB I.3 (Code 9848) Adapter LEMO 14-pin ↔ 2 x BNC, female, 20 cm (7.9")

## **Recording software**

• ArtemiS suite Recorder Data Acquisition Module, ASM 04 (Code 5004)

nterface	2 x BNC
Microphones:	2 x 1/2" microphones (permanently polarized)
Frequency response:	3.5 Hz to 20 kHz (±2 dB)
Sound pressure level (max.):	135 dB <sub>SPL</sub> (<3 % distortion at 1 kHz)
Dynamic range:	119 dB
Inherent noise, incl. impedance converter (acoust.):	15.5 dB <sub>spl</sub> (A), typ. (without equalization)
Sensitivity (typ.):	50 mV/Pa, nominal
Power supply:	18 V to 30 V
Power input (per channel):	2 mA to 10 mA
Impedance converter	
Distortion factor with sinus 1 kHz:	<0.01 %, 1 kHz, electr. at 0 dB(V)
Nominal output impedance (typ.):	<110 Ohm
Input impedance converter, short-circuit inherent noise (typ.):	-110 dB(V)
THD+N (electr.) at 1 kHz (sinus 50 %) signal level at -2 dB(V):	-91 dB(V)
Thread mounting platform:	M6
Tripod socket:	UNC 3/8"
Dimensions:	450 mm x 400 mm x 180 mm (WxHxD) (17.72" x 15.75" x 7.09"
Weight:	4.3 kg (9.48 lb)
Operating temperature:	0 °C to 50 °C (32 °F to 122 °F)
Storage temperature:	-20°C to 70°C (-4 °F to 158 °F)
Radiated emission according to:	EN 61326-1 (equipment class B)
Radiated immunity according to:	EN 61326-1
Safety according to:	EN 61010-1
Physical dimensions of the head designed according to Please note: Without HEAD Torso Box, some dimension	TU P.58, table 1 and comparable to ANSI 3.36, table 1. ns in P.58, table1 are not applicable.

The monaural frequency responses comply with ITU P.58, table 4 and to those that can be derived from ANSI 3.36, table 3.

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