



MSA II on HMS II.3

Description

MSA II is a symmetrical microphone array with eight microphones. On either side, there are four microphone arms. The four microphone arms on each side have different lengths. When mounted to an artificial head, the microphones on either side record at different positions close to the artificial ears. Because of the spread recording positions, the entire sound field around the artificial ears is captured. That makes MSA II crucial for realistic background noise recordings which play back during test measurements of binaural applications.

Recordings from MSA II are applicable for playback with the background noise simulation systems 3PASS *lab* or 3PASS *flex*. For appropriate playback, MSA II – in conjunction with the hardware platform *labBGN* – is required for the automated digital equalization of the background noise simulation systems.

In case of mobile recordings, MSA II connects to the mobile measurement system SQuadriga III via HEADlink cable.

Applications

Recording of background noises and equalization of background noise simulation systems for testing:

- (ANC) headphones / headsets
- Hearing aids
- Other binaural applications

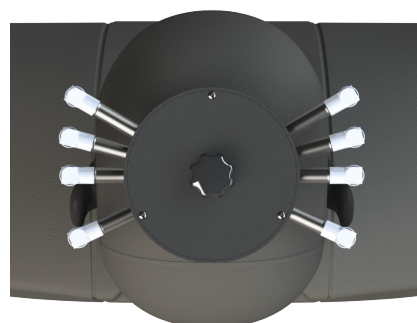
General requirements

Hardware

- **Head and torso simulator**
 - **HMS II.3-33 (Code 1230.1)**, HEAD measurement system with pinna type 3.3, artificial mouth and torso box
 - **HIS L (Code 1231)**, Impedance simulator for left ear including microphone
Please contact HEAD acoustics for compatibility with third party HATS.
- **labBGN (Code 6486)**, ACQUA*lab* hardware platform for background noise

Software

- **3PASS lab (Code 6990)**, background noise simulation system
- or
- **3PASS flex (Code 6995)**, background noise simulation system



Top view of symmetrical array MSA II

DATA SHEET

MSA II (Code 6487.2)

8-Channel Microphone Surround Array, Symmetrical

Overview

MSA II is a microphone array for recording three-dimensional sound scenarios close to both ears of an artificial head. The array of the microphones is symmetrical and fits to the standardized head and torso simulator HMS II.3 (acc. to ITU-T P.58). Due to their position and symmetrical arrangement, the microphones record the sound field around the artificial ears. Hence, it is particularly suitable for the recording of background noises for binaural applications.

Key features of MSA II:

- Symmetrical microphone array for recording background noises close to both ears of an artificial head
- Recording of individual background noises for use with 3PASS *lab* / 3PASS *flex*
- Automated digital equalization with 3PASS *lab* / 3PASS *flex*

Delivery items

MSA II (Code 6487.2) comprises the following components:

- Array with eight microphones
- Standard mounting adapter
- Calibration adapter
- Adapter (M6 <> 3/8")
- Lock washer (M6)
- Lock washer (3/8")
- CLL X.10 (Code 3780-10) 10 m HEADlink connection cable
- Carrying case
- Manual

Accessories

- **MA MSA (Code 6488)**, MSA mounting adapter for Brüel & Kjær® HATS 4128-C / 4128-D
- **SB MSA (Code 6489)**, MSA Stand Base
- **HMT III (Code 1961)**, Height adjustable tripod

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