



Options

- Binaural head measurement microphone with ICP® preamplifiers and condenser measurement microphones
- Connection to multi-channel front ends with ICP® inputs (e.g. SQuadriga, BEQ II, SQuLab II and III)
- Low inherent noise
- Calibratable with pistonphone
- Ear cones for the ear canal entrances
- Variable, individually adaptable frame system for optimal wearing comfort

Applications

- Mobile, binaural measurements without artificial head



The BNC connectors of the BHM III.3

BHM III.3

For aurally accurate binaural recordings where no artificial head can be used for some reason, the calibratable and extremely low-noise head microphone BHM III.3 is the ideal sensor.

BHM III.3 supports all characteristics of human hearing perception. It is worn like a headphone, and the user himself takes over the acoustic function of the artificial head. From the ear cones placed in the ear canal entrance, the sound is transmitted to the two high-quality ICP® microphones.

A calibration is possible at any time using a calibration adapter (included) and a pistonphone.

DATA SHEET

BHM III.3 (code 1303)

Binaural HEAD Microphone, ICP® version

Mobile ICP® head microphone for binaural recordings

Overview

BHM III.3 is a binaural head microphone designed for making aurally accurate measurements in places where no artificial head can be used. This is the case, for example, for recordings at the driver's position in a moving vehicle.

Recommended front ends:

- SQuadriga (Code 1369)
Mobile four-channel USB front end with internal flash memory®
- SQuLab II (Code 3500) / SQuLab III (Code 3503)
Mobile multichannel analysis system for sound and vibration analysis
- BEQ II.1 (Code 1347)
Binaural, digital equalizer with 24-bit technology and USB port
- OctoBox+ (Code 3311)
8-channel front end with USB port
- DATaRec-Series



BHM III.3 and SQuadriga

Technical specification - BHM III.3 only:

Microphone:	1/2" measurement microphone
Free field sensitivity (nominal):	50 mV / Pa
Free field frequency range:	3.5 Hz to 20 kHz, DIN EN 60 651
Sound pressure level limit:	135 dB _{SPL} (< 3 % distortion at 1 kHz), with SQuadriga max. 126 dB _{SPL}
Dynamic range:	120 dB
Nominal output impedance:	< 100 Ohm
Operating current:	2 – 10 mA, nom. 4 mA
Start-up time:	1 min.
Inherent noise:	15 dB(A)
Magnetic field influence (80 A/m, 50 Hz):	< 22 dB
Operating temperature range (< +/- 0,5 dB):	-25 to +70 °C (-13 to 158 °F)
Temperature coefficient:	≤ 0.01 dB/K
Static pressure coefficient:	1 x 10 ⁻⁵ dB/Pa
Humidity limits:	r. h. < 100 %, no condensation allowed
Connector:	BNC
Weight:	345 g (0.76 lb)

Standard delivery items:

- ICP® head microphone BHM III.3 (Code 1303)
- 10 ear cones, 2 mounted
- Calibration adaptor to connect a pistonphone
- Suit case HSC II (Code 1378)
- Manual
- Documentation and Equalization CD, BHM III.3 equalization incl.