

Audiometric Bone Conductor – the standard for audiometric diagnostic

Product Information

The BHM BC-1 audiometric bone conductor is developed, fabricated and hand assembled by BHM in Austria. It is based on state-of-the-art bone conduction technology and specialist know-how from BHM, the leading company of bone conduction hearing aids. BC-1 comes with a 2 meter long integrated fixed cable. Ultrasonic welding of the housing parts ensures special robustness and protection against environmental influences such as moisture and sweat. A customized headband complying with the audiometry standard is available. In addition, BC-1 is compatible with the existing metallic headband for Audiometry.

BHM knows the importance of these devices for customers, and therefore practice its best every day.

Features

- 2 m integrated fixed cable
- 6.35 mm mono jack plug
- Suitable headband
- Meets the international Audiometry standard
- Biocompatible material
- ISO and ANSI compliant
- 3 year warranty
- Compatible with the existing metallic headband for Audiometry
- No external metal parts – best protection against electro static discharge
- A plastic headband with rotatable clip (60 degrees) is available too

Parts

BC-1 Audiometric Bone Conductor

BC-1 Headband

Article numbers: on request

Compliance Standards

- IEC 60645-1:2017 – Electroacoustics – Audiometric equipment
Part 1: Equipment for pure-tone and speech audiometry
- ANSI/ASA S3.6-2018 – American National Standard Specification for Audiometers
- ISO 389-3:2016 – Acoustics – Reference zero for the calibration of audiometric equipment
Part 3: Reference equivalent threshold force levels for pure tones and bone vibrators
- IEC 60318-6:2007 – Electroacoustics – Simulators of human head and ear
Part 6: Mechanical coupler for the measurement of bone vibrators
- ANSI/ASA S3.13-1987 (R2012) – American National Standard
Mechanical coupler for measurement of bone vibrators



Symbolic photo

**Meets
the golden
standard!**

Technical Data Sheet

Electrical data

- Impedance 10 Ohm @ 1 kHz
- Sensitivity 114 dB re. 1 μ N @ 1 V_{rms} and 1 kHz

Mechanical data

- Weight approx. 20 g (without cable)
- Dimensions Length: 29.6 mm
Width: 18.4 mm
Height: 19.8 mm
- Housing material ABS polymer
- Connection Fixed cable with mono jack plug

Measuring conditions

- Artificial Mastoid Bruel & Kjaer 4930 with static force 5.4 N
- Compensation for the transmission through the Artificial Mastoid via post processing of all measurements
- THD measured at the levels required by the audiometry standard

Total Harmonic Distortion

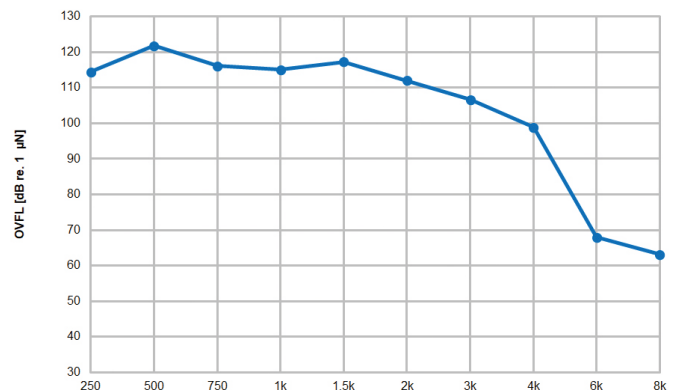
Frequency [Hz]	250	500 – 750	1k	1.5k – 8k
Hearing Level [dB]	20	50	60	60
THD [%] typ.	2.5	<1.1	<1.1	<0.3
THD [%] max.	5.0	2.0	2.0	1.0

Warnings

- This class of equipment is allowed in domestic establishments when used under the jurisdiction of a health care professional.
- BC-1 may only be used with certified audiometers.
- BC-1 is intended for diagnostic and clinical use by audiologists and other trained health care professionals in testing the hearing of their patients.
- No parts may be eaten, burnt, or in any way used for purposes other than the applications defined above.
- Clean the device between patients with a disinfectant wipe for hearing systems, earmolds or spectacles. Afterwards wipe dry with a clean and soft cloth.

- This device is covered by the Directive 2012/19/EC on waste electrical and electronic equipment (WEEE). The device can be disposed of as normal electronic waste, according to local regulations.

Output Vibratory Force Level @ 1 V_{rms}



Audiometric Calibration

Frequency [Hz]	mV	dB re. 1 mV
250	460.1	53.3
500	68.8	36.8
750	45.7	33.2
1k	26.6	28.5
1.5k	11.1	20.9
2k	12.3	21.8
3k	26.4	28.4
4k	65.4	36.3
6k	498.5	53.9
8k	589.3	55.4

Required input voltage for BC-2LD (10 Ohm impedance) to provide force levels 40 dB HL \pm 3.0 dB above threshold (RETVFL) based on ISO and ANSI standards.



Changes may be done without any notice in order to improve product performance.

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