



AUDIOLOGY
PRODUCTCATALOGUE

2026





eABR USB



DEMO DEMO

eABR USB
3045

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eAUDIO^{USB}

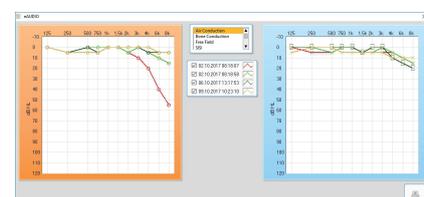
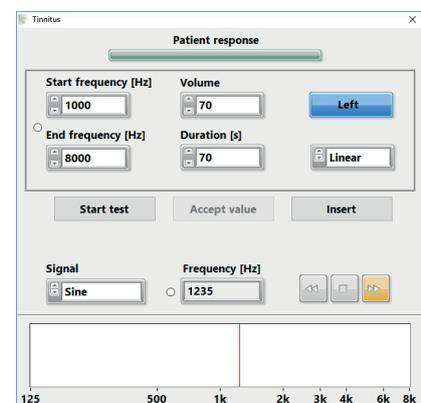
The new dimension for computer pure tone and speech audiometry

The eAUDIO^{USB} is a modern computer based audiometry system designed for daily work. Based on state of the art electronics the eAUDIO^{USB} creates new standards in 2 channel audiometry.

Standardised diagrams are integrated into a clearly structured interface to ensure optimal use of the system.

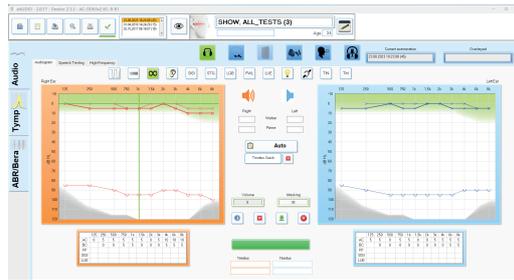
- Air conductor:
 - Radioear DD65 V2
 - 125 - 8000 Hz
 - 10 ... 120 dB nHL

 - HDA 300 / DD450
 - 125 - 16000 Hz
 - 10 ... 110 dB nHL
- Bone conductor:
 - B81 (up to 85 dB nHL)
- 3 active freefield channels
- 2 line out channels
- Microphone in and out
- 2 line in
- Patient response
- grandiose design allows wall or desk mounting
- USB 2.0

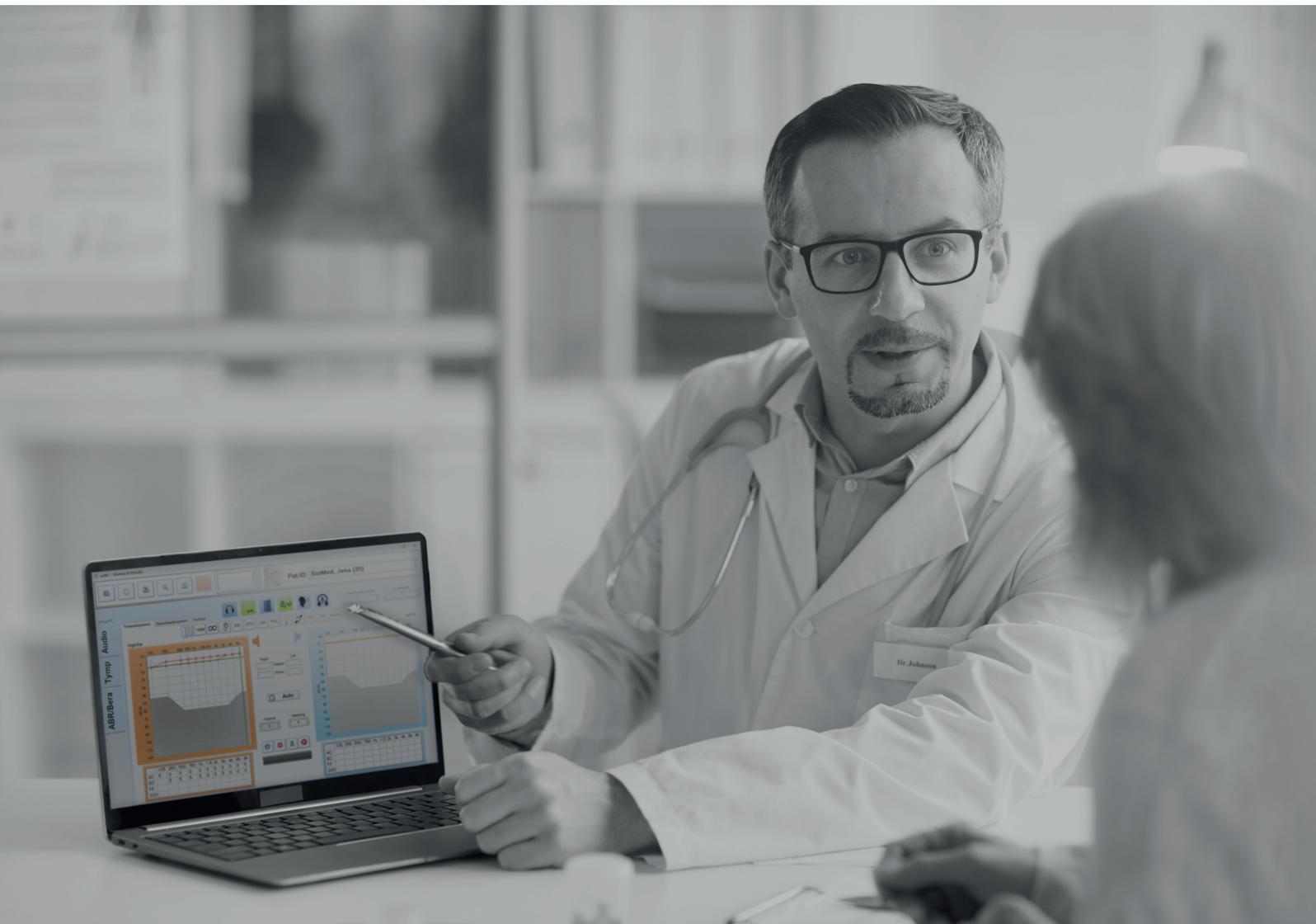
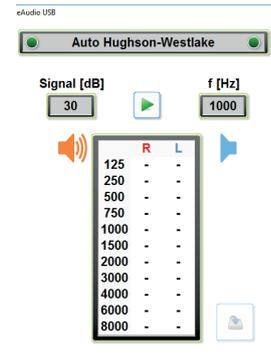


Overlay all data

- Test signals:
 - Manual, continuous and pulsing
 - Masking signals:
 - narrow band noise, white noise, SSN
 - Threshold exceeding tests:
 - SISI test
 - Luescher - Zwislocki test
 - Langenbeck test
 - Stenger test
 - Fowler test
 - Multiple speech tests possible
 - Automatic calibration function
- Speech in noise
 - Age-dependend normative values
 - Tinnitus tone selector up to 16 KHz
 - Tinnitus masking
 - Overlay function for all test
 - use of different transducers possible
 - compatible with Windows 11

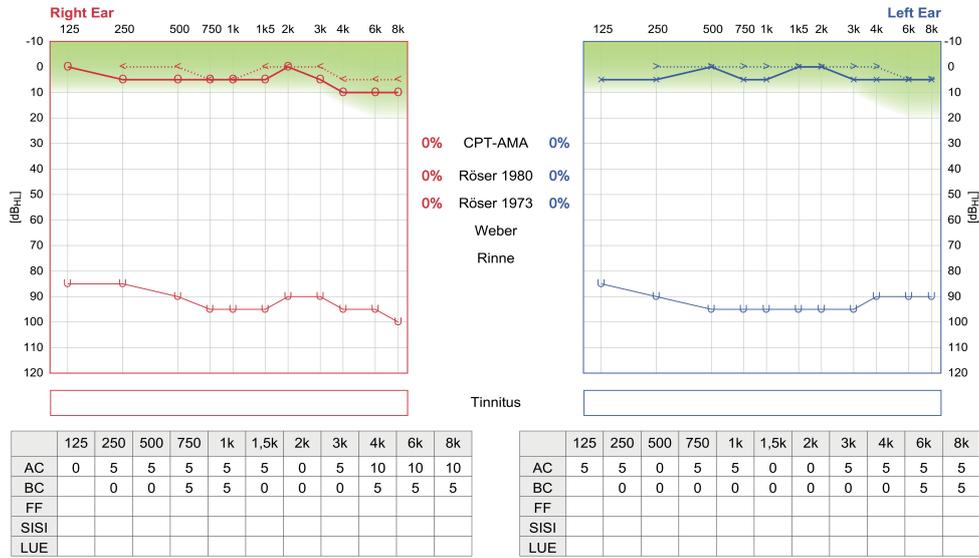


eAUDIO^{USB} is available as a diagnostic and clinical version.

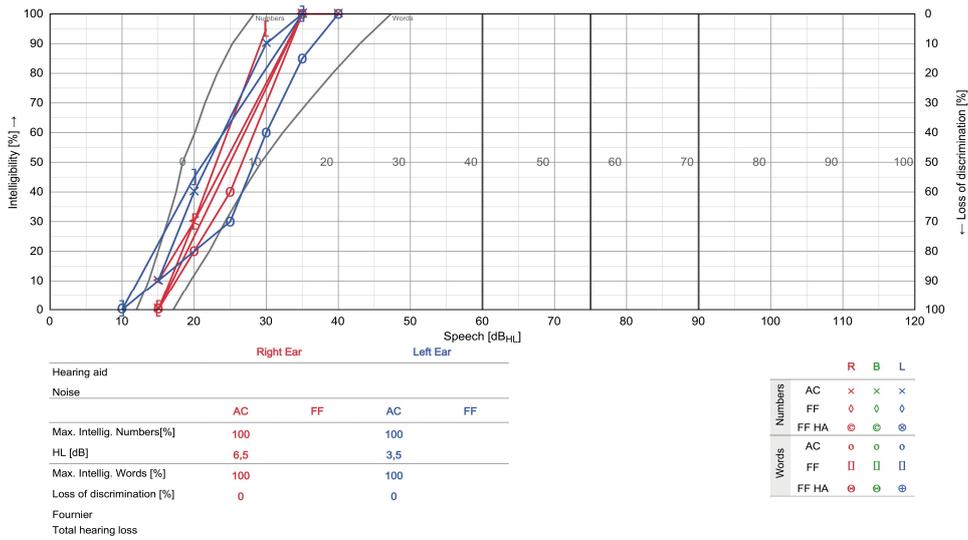




Audiogram



Speech Testing



Examiner:

23.08.2023 18:25
 Version: 2.0.17



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e-AUDIO USB



eTYMP^{USB}

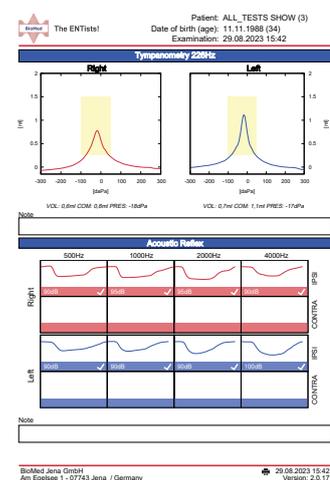
Middle Ear Analyzer

The eTYMP^{USB} is a computer based middle ear analyzer for practical routine and clinical applications.

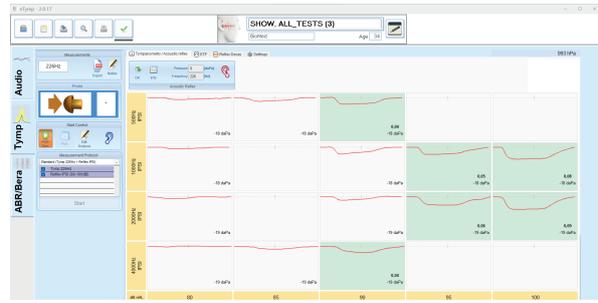
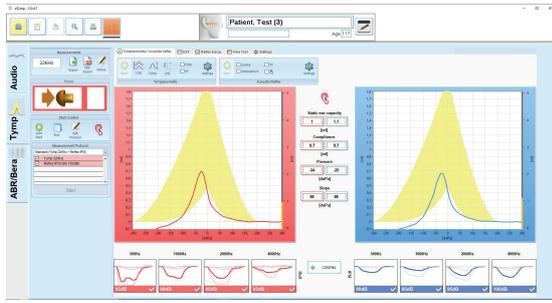
The eTYMP^{USB} offers the possibility to create user-defined test protocols by combining different tests from the test battery into one test flow. For instance you can create a simple screening procedure and a more in-depth evaluation.

The device is characterized by its compact, functional and attractive design.

- Tympanometry with 226 Hz (standard), 678 Hz, 800 Hz (by request) and 1000 Hz
- Acoustic reflex threshold testing - ipsilateral, contralateral, freefield* and nonacoustic*
- Reflex decay testing - ipsilateral and contralateral
- Eustachian tube function (ETF) testing with intact and perforated tympan. membran
- Triggered measurement of acoustic reflex caused by direct stimulation of the cochlear implant (CI)
- Scientific test mode
- Automatic altitude correction for exact admittance values
- All relevant calibration values are stored in the probe
- Robust acoustic reflex detection
- Small and lightweight probe, easy to clean
- Various trigger functionality over decoupled input and output.
- Continuous measurement
- Easy and Expertmode
- USB 2.0



*optional



Software - eAUDIO^{USB}

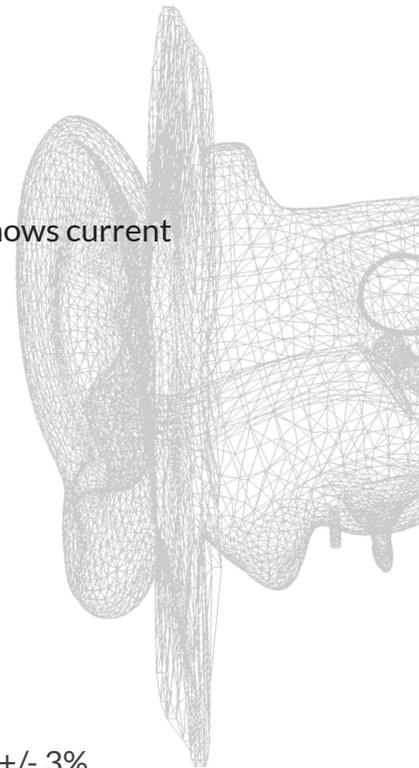
The heart of the device beats in the computer. As a part of eAUDIO software all functions can be easily accessed. The device can be controlled manually or in a complete time saving automatic mode. With the eAUDIO^{USB}, eABR^{USB} and eOAE a modern diagnostic center can be build and all relevant data be seen at a glance. The eAUDIO software is integrated in the eDM - Diagnostic Manager.

FREE ONLINE UPDATE OF THE SOFTWARE!



Admittance Measurements

- Probe tone frequencies: 226 Hz , 678 Hz, 1000 Hz +/- 1%
(800 Hz @ 75 dB on request)
- Probe tone intensities: 85, 80, 75 dB SPL +/-3dB.
- THD+N: Less then 4% (acoustical measured)
- Pressure range: +400 ... -600 daPa.
- Pressure accuracy: +/-5% oder 10 daPa
- Compliance range: 0.1 ... 6.0 ml (8.0 ml on request)
- Compliance accuracy +/-5% oder 0.1 ml
- Pump velocity: 100-400 daPa/sec.
- Pump control: Automatic/manual
- Compliance unit: Equivalent air volume [ml]
or mmho
- Number of curves: 1 per page, overwriting
- LED function: Six colors and blinking LED shows current device and probe state



Acoustic reflex

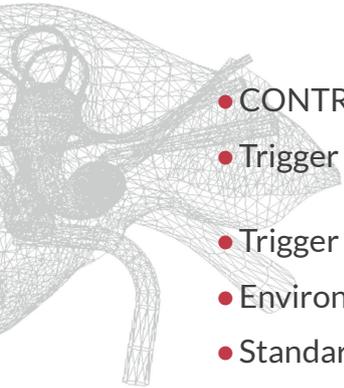
- IPSI pure tone: 500,1000, 2000 und 4000 Hz +/- 3%
- IPSI intensity: Max. 110 dBHL +/- 3dB
- CONTRA-pure tone: 500,1000, 2000 und 4000 Hz +/- 3% + user defined stimulus
- CONTRA intensity: Max. 120 dBHL +/- 3dB
- CONTRA head phone: DD45 Contra
- THD+N: Less then 5% (acoustical measured)
- Min. intensity: 40 dBHL
- Measurement: Automatic or manual
- Automatic test: 5 dB/10 dB steps per frequency
- Manual test: unlimited curves per frequency and ear
- Stimulus Duration: 0.4..1.5 seconds (Reflexdecay 60s)

Eustachian Tube Function

- Perforated ear drum: Active and passive tube opening (Valsalva maneuver)
- Intact ear drum: Williams test (3 curves per ear)

General

- Size (LxHxW): 310mmx105mmx250mm
- Weight: ca. 1500 g
- Probe Weight: 4g
- Power consumption: max. 20 W
- Interface: Isolated USB 2.0
- Test types: Tympanometry, Acoustic Reflex Threshold, Reflex Decay, Eustachian Tube Function (intact and perforated)
- CONTRA output: 6,35 mm
- Trigger input: 3,5 mm, optocoupler 5KV, Ifd=5-20 mA intern limited
- Trigger output: 3,5 mm, optocoupler 5KV, open collector
- Environmental: 10°C...40°C, max. 90% Humidity
- Standards: DIN EN 60645-5
DIN EN 60601-1
EWG 93/42 EEC



All BioMed Jena products are developed and produced in Jena, Germany.



eABR^{USB}

2 channel modul for measuring
not only auditory evoked potentials

The eABR^{USB} – small like a remote control- is the mobile full routine device for acoustic evoked potentials.

The eABR^{USB} combines newest state of the art electronics with an easy to use interface. This ensure best results in routine and clinical use.

**Auditory evoked
potentials (BERA, ASSR)**

**Vestibular evoked myogenic
potentials (c- and oVEMP)**

The eABR^{USB} has hardware encoded head and in ear phones. The device automatically selects the right calibration values. With the ability to create custom test protocols, the routine is simplified.

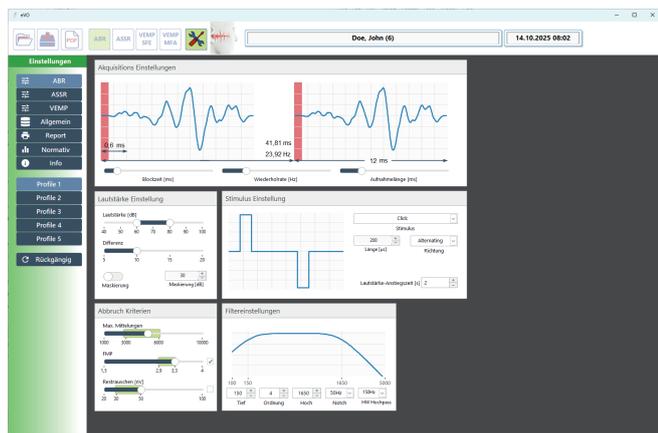
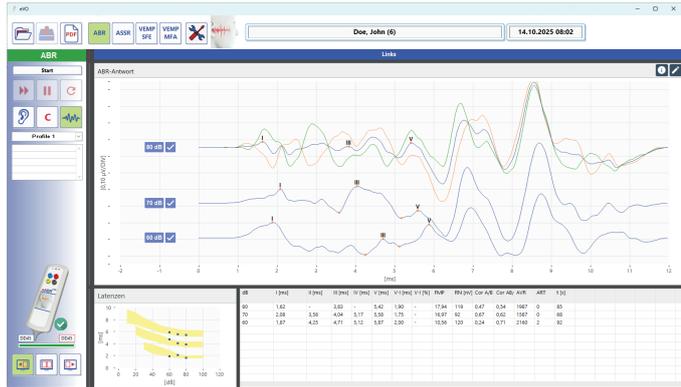
The eABR^{USB} also has an vestibular modul for c- and oVEMP testing*.

*optional

- AC-Phones:
 - Radioear DD 45 shielded
 - Radioear IP 30 Bera
 - Click, Burst, Chirp
 - Click: Pos., Neg. Alt.
 - Masking: Noise
 - ADC:
 - 2 Kanal 24 Bit, 48KHz
 - CMR > 130 dB @ 50 Hz/60HZ
 - Up to 10.000 Sweeps
 - USB 2.0 - bus powered
 - EN 60645-7:2010
 - Compatible with Windows 11
- Automated assistance functions:
 - Automatic electrode impedance control
 - Automatic gain control (AGC)
 - Automatic artefact rejection
 - Automatic stop function
 - 24 Bit conversation
 - Free definable protocols
 - e.g. Treshhold-BERA
 - c- and oVEMP*
 - easy to use curve handling
 - automated coupler detection
 - Automatic PDF Export
 - Lifetime free online software update

* Optional





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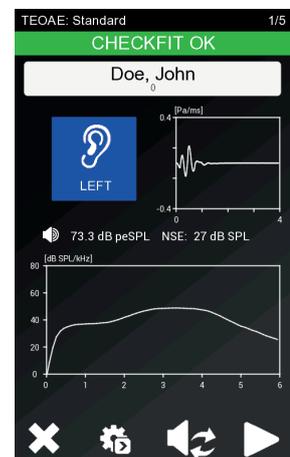


eOAE

Hand held TEOAE+DPOAE device

When an acoustic signal hits the auditory system, the inner ear sends back a very quiet sound, the otoacoustic emissions. A distinction is made between transitory otoacoustic emissions (TEOAE) and distortively produced otoacoustic emissions (DPOAE).

Both TEOAE and DPOAE can be measured with the eOAE device. A special screening mode is implemented for performing screening examinations on newborns.





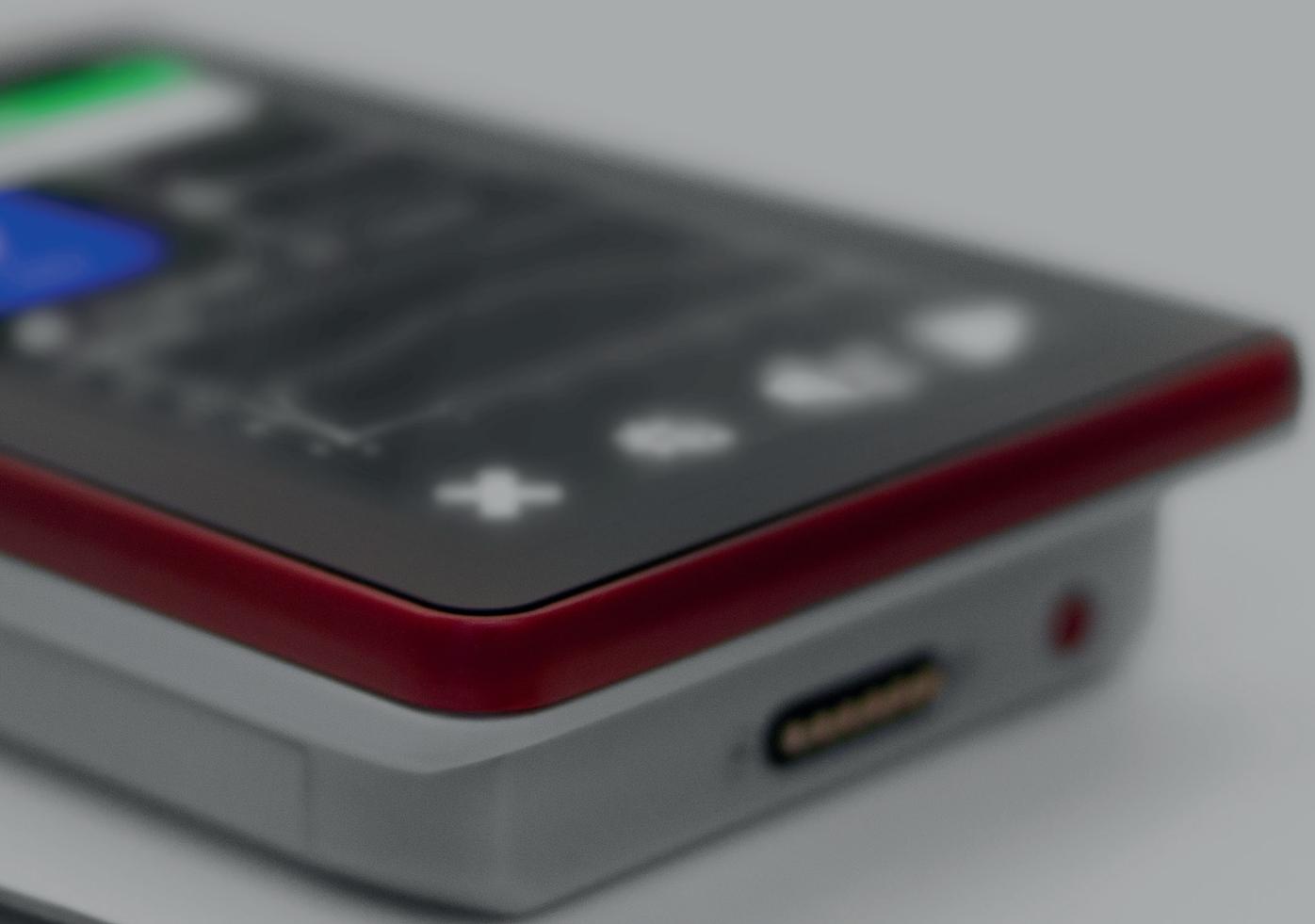
- **TEOAE**
User defineable stop criteria
4 adjustable profiles
Display as time graph or
frequency diagram
All parameters at a glance
- **DPOAE**
4 adjustable profiles
Display as DP-Gramm and Table
- **Screening**
Method TEOAE/DPOAE
- **Screening PTA**
DD65V2 head phone
125Hz-8KHz @ 100 dB HL
- Easy cleaning of the probe parts
- Good disinfectability through
touch screen
- Optional printer available
- Clear measurement data
management also on the device
- QWERTZ keyboard for convenient
data input on the device
- Capacity for 10.000 tests
- Full integration into the eDM -
Diagnostic Manager
- Easy charging via docking station
- PC Software for remote operation
- complies with DIN EN 60645-6

Device specifications

- Samplerate: 48 KHz
- ADC resolution: 24 Bit
- Display: 5" touch display
- Weight: 320 gramm
- Battery: 3880 mAh, 400 tests min.
- Head phone output for masking
- Dimensions: 141x97x27 mm
- **Optional printer**
- Type: thermal printer
- Paper width: 57,5 mm
- Resolution: 8 p/mm, 384 p/line

Probe specifications

- Type: TEOAE and DPOAE
- Stimulus:
TEOAE: nonlinear Clicks
DPOAE: pure tone f1:f2 = 1:1,2
- Frequency range:
TEOAE 1-4 KHz
DPOAE: 0.5-12 KHz
- Level:
TEOAE 40-90 dB peSPL
DPOAE 40-70 dB SPL
- Probe cable length: 1,5 m





AudioBox

4 to 6 channel free field amplifier

The **AudioBox** is a modern computer controlled free field amplifier for connecting up to 6 passive speakers. The 6 output channels can be assigned to 4 input channels. Each input channel can be individually calibrated with up to 50 positions (125 Hz, 250 Hz etc.).

Furthermore, the device has, on customer request, 6 signal channels with which an event can be displayed.

The **AudioBox** can be used to extend a conventional audiometer for lateralisation analysis or pediatric audiometry.

Technical specification

- 4 Inputs max. 5 V
- 6 Outputs with 100 W each
- Isolated USB 2.0 interface
- API for C/C++, C#, Delphi, Labview
- Windows software
- medical power supply



AudioControl

The special keyboard for Audiometry

This special keyboard was developed for an ergonomic Audiometry operation. With 2 sliders the volume levels of tone and masking can be controlled. 16 touch buttons ensure absolutely silent operation.

This keyboard works with **eAUDIO^{USB}** software.

For OEM applications the keyboard can easily be integrated via a HID Joystick interface.



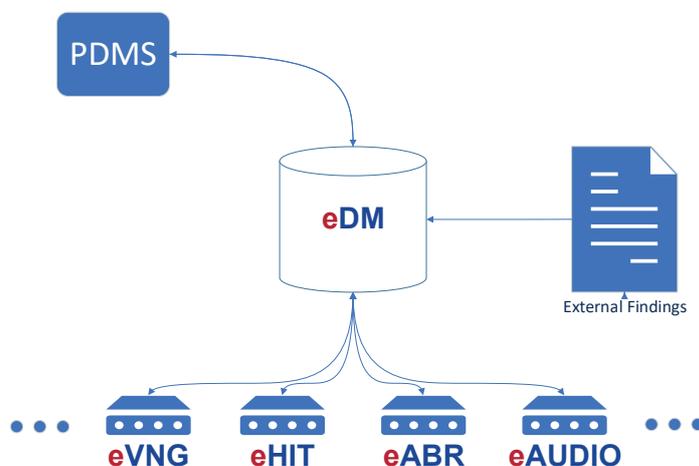
eDM

Diagnostic Manager

The **eDM** makes the daily work more efficient and easy at the same time.

The **eDM** is the optimal solution for measuring, visualizing, managing and storing ENT data, acquired by BioMed Jena devices.

All different tests can be easily accessed. To optimize the workflow a measurement schedule for each patient can be created. Also the **eDM** is able to import PDF documents from other sources.



Remote support as simple as possible - start the remote control software „Anydesk“ directly from **eDM**.

eHIT^{USB} eDVA^{USB} eABR^{USB} eTYMP^{USB} eVEMP^{USB} eSVV
 KALORistar^{CT} eAUDIO^{USB} eOAE eVNG^{USB} ePOSTURO^{USB}



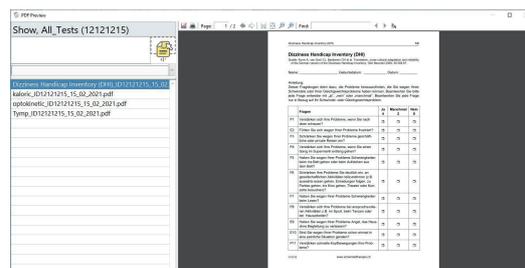
Feature highlight of eDM - Diagnostic Manager

One software for all BioMed Jena devices

- Only one patient database
- Easy and quick data preview
- Configurable overview for all measurements
- Easy data administration (one for all)
- External PDF import / Automatic PDF export
- User profiles with independent settings for each user



MEASUREMENT SCHEDULE



EASY IMPORT OF EXTERNAL FILES

Network support

- Create measurement schedule for every patient
- No storage limits - Firebird database
- No workplace licence
- GDT interface included, HL7 on request



- 1997 Founded by Prof. Dr.-Ing. Lutz Herrmann and Dipl. Ing. René Schüler
- 1998 Start of the vertigo diagnostic line as an OEM developer and manufactory
- 2004 Production start of the own brand: the „e“ line with the **eVNG**
- 2008 First VNG system with USB 2.0 and 100 Frames/s binocularly data acquisition
eVNG^{USB}
- from 2011 Full solution of vestibular diagnostics with all products: **eHIT^{USB}**,
KALORistar, **eVEMP^{USB}** and **KALORistarlet**
- 2015 **ePOSTURO**, **eDVA^{USB}** and manual pendula test (MPT)
- 2016 **eMANAGER**, **eFRENZEL^{USB}**, **eAUDIO^{USB}** and **eABR^{USB}**
- 2017 **eTYMP^{USB}** and move to new location „Am Egelsee 1“ in Jena
- 2018 Redesign of our famous Airirrigator KALORistar Arctic
- 2019 Development of the **eEMG** data logger and signal processor
- 2020 Further Development of the **KALORistar** to **KALORistar^{CT}**
- 2021 Release of the **eDM** and **eOAE**
- 2022 **25 years BioMed Jena GmbH - 25 years of development and progress**
- 2023 Development of new ABR/ABR module for **eOAE**
- 2024 Opening of the office in Bogotá, Colombia
- 2025 Start of construction work on the new company extension



Publishing Information

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