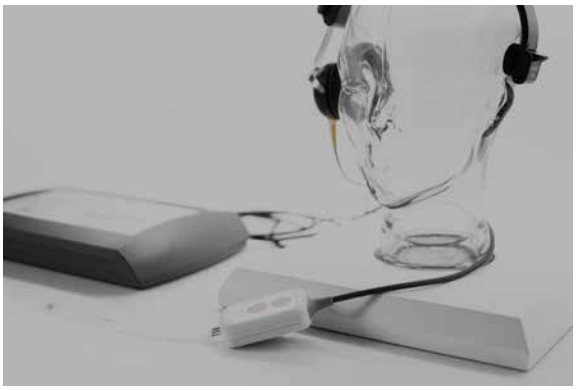
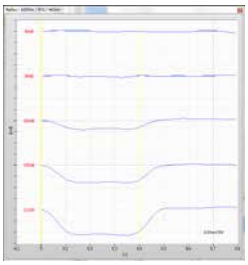
The **eTYMP**[USB] is a computer based middle ear analyzer for practical routine and clinical applications.
The **eTYMP**[USB]- offers the possibility to create user-defined test protocols by combining different tests from the test battery into one test flow. For instance you can create a simple screening procedure and a more in-depth evaluation.
The device is characterized by its compact, functional and attractive design.

eTYMP[USB] - Middle Ear Analyzer

- » Tympanometry with 226 Hz (standard), 678 Hz and 1000 Hz
- » Acoustic reflex threshold testing - ipsilateral, contralateral and freefield
- » Reflex decay testing - ipsilateral and contralateral
- » Eustachian tube function (ETF) testing with intact and perforated tymp. membran
- » Small and lightweight probe, easy to clean
- » Various trigger functionality over decoupled input and output.
- » USB 2.0

- » Triggered measurement of acoustic reflex caused by direct stimulation of the cochlear implant (CI)
- » Automatic altitude correction for exact admittance values
- » All relevant calibration values are stored in the probe

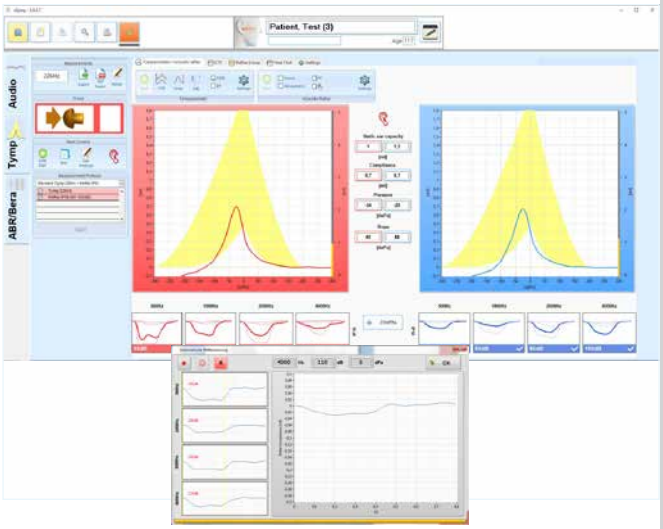




Software - eAUDIO

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] and the **eABR**[USB] a modern diagnostic center can be build and all relevant data can be seen at a glance.

Free online update of the software!



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eTYMP[USB]

Middle Ear Analyzer

Rev. 02/2023 Rev05

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eTYMP USB

Middle Ear Analyzer

Admittance Measurements

» Probe tone frequencies:	226 Hz , 678 Hz, 1000 Hz +/- 1%
» Probe tone intensities:	85, 80, 75 dB SPL +/-3dB.
» THD+N:	Less then 4% (acoustical measured)
» Pressure range:	+400 ... -600 daPa.
» Pressure accuracy:	+/-5% or 10 daPa
» Compliance range:	0.1 ... 6.0 ml
» Compliance accuracy:	+/-5% or 0.1 ml
» Pump velocity:	100-350 daPa/sec.
» Pump control:	Automatic/manual
» Compliance unit:	Equivalent air volume [ml] or mmho
» LED function:	Six colors and blinking LED shows directly current device and probe state.

Acoustic Reflex

» IPSI signal:	500,1000, 2000 and 4000 Hz +/- 3% + custom frequencies, BBN
» IPSI intesity:	Max. 110 dBHL +/- 3dB
» CONTRA signal:	500,1000, 2000 and 4000 Hz +/- 3%, BBN
» 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 second (Reflexdecay 10s)

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
» Weight Probe:	12g
» 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 Germany.