



The Power of **Choice** in Newborn Hearing Screening

The ABaer System is an all-in-one ABR, DPOAE & TEOAE screener — providing unsurpassed flexibility in hearing screening & data management



The ABaer Hearing Screener Provides Flexible Solutions For Meeting Program Requirements & Achieving Continuous Quality Improvement Goals

All-IN-ONE ABR, DPOAE & TEOAE SCREENING SYSTEM

ABR Technology

Utilizes proprietary Point Optimized Variance Ratio (POVR) Algorithm

- Developed by the House Ear Institute, a leader in auditory research since 1846
- Efficient screening
 - Test automatically stops if the probability of achieving a PASS result is very low
- Statistically proven
 - 99.96% theoretical statistical bilateral sensitivity
 - 95% specificity

Distortion Product Otoacoustic Emissions (DPOAE)

- High sensitivity for cochlear hearing loss
- Frequency specific screening: 2, 3, 4, and 5 kHz
- Fast test times
 - Approximately 10 seconds per ear
- In-the-ear stimulus calibration and ear probe stability check prior to testing

Transient Evoked Otoacoustic Emissions (TEOAE)

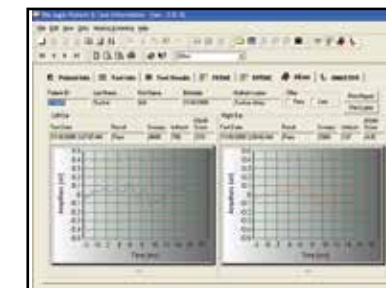
- High sensitivity for cochlear hearing loss
- Testing frequency range: 1.2 to 3.5 kHz
- Fast test times
 - Approximately 10 seconds per ear
- Ongoing ear probe stability check throughout the test

Multiple Technology Configurations

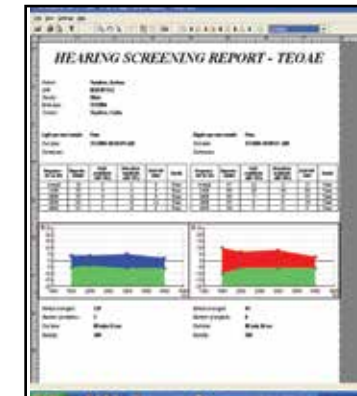
- ABR, DPOAE, TEOAE technologies are available in different combinations
- Ideal for one-stage, two-stage or combined screening protocols

FAST & SIMPLE OPERATION

- Keyboard/mouse functions provide easy navigation
- Colored, graphical displays guide you easily through the screening process
- Patient ABR waveforms are available for viewing
- Automated pass/refer results
- Pre-set screening parameters
 - no user adjustments necessary
- Tutorial videos provide helpful tips on how to conduct a screen

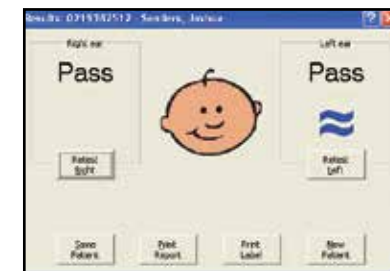


Waveforms available for viewing



Customizable Patient Report

- Export results to personal computer via CD or USB
- Barcode reader available for input of medical record numbers



Automated PASS Result

FLEXIBLE DATA TRANSFER & DATA MANAGEMENT

- Stores an expanded set of patient demographic data
- User-definable data entry fields are available to meet program requirements
- Provides customizable reports for parents & physicians
- Access to screening database & statistical reports can be restricted to authorized individuals via password
- Includes built-in data management software
- Compatible with 3rd party data management systems such as OZ SIMS & Hi*Track

BUILT-IN CONTINUOUS QUALITY IMPROVEMENT

- Generates statistical reports on program outcome measures
 - Hospitals can monitor the effectiveness of their screening program on an ongoing basis

CONVENIENT SCREENING WORKSTATION

- Cart allows easy transport of ABaer System to different locations
- Spacious drawer & basket are available for storing screening supplies

*Trusted Reliability.
Flexible Innovation.
Proven Excellence.*



The ABaer Hearing Screening System includes:

- ABaer screener with panel PC or laptop computer
- Screening cart
- Data management software (built-in)
- Electrode (patient) cable
- OAE probe (optional for ABR, included with OAE)
- Insert earphones with adapters
- Deskjet printer (optional)
- Seiko label printer (optional)
- Supply starter kit
- Instruction materials

ORDERING INFORMATION

ITEM	PART NUMBER
ABaer, Laptop PC, ABR, Label Printer	001342
ABaer, Laptop PC, ABR, Regular "PC" Printer	001343
ABaer, Laptop PC, ABR, Label Printer, OAE Probe	001344
ABaer, Laptop PC, ABR, Regular "PC" Printer, OAE Probe	001345
ABaer, Laptop PC, ABR, DPOAE Label Printer	001346
ABaer, Laptop PC, ABR, DPOAE, Regular "PC" Printer	001347
ABaer, Laptop PC, ABR, TEOAE, Label Printer	001348
ABaer, Laptop PC, ABR, TEOAE, Regular "PC" Printer	001349
ABaer, Laptop PC, ABR, DP & TEOAE, Label Printer	001350
ABaer, Laptop PC, ABR, DP & TEOAE, Regular "PC" Printer	001351

Specifications:

PHYSICAL

ABaer interface device:

Dimensions: 7.6 x 4.0 x 1.7 inches
19.4 x 10.1 x 4.4 cm (H x W x D)

Weight: 14 oz. (400 grams)

POWER SUPPLY 6 v DC

ABR DATA ACQUISITION

Analysis Time (window length) 21.33 msec
A/D Resolution 16 Bit
Artifact Rejection >13 uV
Points Per Trace 256
Electrode Montage Forehead to Test Ear or Forehead to Nape of Neck (dependent on transducer choice)

ABR AMPLIFIERS

Channels 1 Optically Isolated
Gain x30,000
High Pass Filter 100 Hz
Low Pass Filter 1500 Hz
CMR Ratio >110 dB, at 50/60 Hz
Impedance Test Internal, 1000 Hz sine wave

ABR STIMULUS

Type 100 µs click
Polarity Alternating
Rate 37.1/sec
Intensity 35 dB nHL default (option for 30 or 40 dB nHL as an alternative)

ABR TRANSDUCER CHOICES

ABaer Probe (OAE-type)
Insert Earphones with in-the-ear tips
Insert Earphones with Halo Ear Muffin®
TDH-39 headphones

COMPUTER

System requires PC with dedicated USB and Windows® XP Professional operating system.
Bio-logic supplied PC specifications are available upon request.

CART

Five-caster cart accommodates ABaer module, laptop or panel PC, deskjet printer, isolation transformer and supplies.

SAFETY

Designed to meet the following standards:
IEC 60601-1 Class II
UL 2601-1
CSA-C22.2 No. 601.1
AAMI-ES1

Contact your local customer service representative for more information
NOTE: Specifications are subject to change without notice.



Hearing Screening



Thermoregulation



Jaundice Management



Newborn Brain Injury



Tracking and Follow-Up



Nursery Essentials

Natus...Where Babies Come First.™

natus

Natus Medical Incorporated
www.natus.com

Visit our NERVE Center® education portal at nervecenter.natus.com

US Patent NO: 6196977

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