the truly automated all-in-one hearing screener

ONLY THE ECHO-SCREEN® HEARING SCREENER COMBINES ADVANCED TEOAE, DPOAE AND AABR® TECHNOLOGIES WITH FULLY AUTOMATED RESULTS AND COMPLETELY STANDARDIZED, PRE-SET SCREENING PARAMETERS.
FULLY AUTOMATED RESULTS WITH FIXED SCREENING PARAMETERS

All results are based on the same standardized, objective criteria:

- Automatic pass/refer results that require no interpretation
- Preset screening parameters that cannot be adjusted

Minimizes the risk of user error and test variability

TEOAE, DPOAE AND AABR® TECHNOLOGIES WITH PATENTED BINOMIAL STATISTICS ALGORITHM

Transient Evoked Otoacoustic Emissions (TEOAE)

**Trusted by clinicians for more than ten years:**

- Able to screen for even a mild hearing loss
- Testing frequency range: 1.5 to 3.5 kHz
- Performance validated in numerous clinical studies:
  - High sensitivity & specificity
  - minimizing false pass & false refer results

Distortion Product Otoacoustic Emissions (DPOAE)

- Frequency specific screening: 2, 2.5, 3.2, and 4 kHz

AABR® Technology

- Necessary for detecting auditory neuropathy
- Choice of ear tips or ear couplers available for screening
- Testing frequency range: 2 to 4 kHz

Robust signal detection

- Artifact rejection system distinguishes between external noise and actual patient response
- Fast test times
  - TEOAE: approximately 20 seconds
  - DPOAE: approximately 30 seconds
  - AABR technology: approximately 2 minutes
The Echo-Screen system utilizes proprietary AOAE® & AABR® technologies
Automated Results for TEOAE, DPOAE & ABR Screening Techniques

The Echo-Screen system meets all of your hearing screening requirements:

PERFECT FOR ANY PROTOCOL & BUDGET

• 17-key design provides convenient entry of patient information
  – Multiple T (TEOAE), D (DPOAE), and A (AABR) technology combinations available
  – Included Natus data management software allows data transfer to a PC

• 5-key design provides simple screening with no data entry
  – TEOAE or DPOAE technology options are available
  – Natus data management software allows transfer of results to a PC

• Ideal for one or two-step screening protocols
• Meets JCIH, AAP, and NCHAM requirements for surveillance screening of newborns and infants

FAST, FLEXIBLE & EASY TO USE

• Graphic display shows statistical result pattern
• Keypad allows fast data entry
• Ear probe is lightweight and easy to clean
• Battery is exchangeable – provides approximately ten hours of testing
• Many language options are available

References on file at Natus

LOW REFER RATES

• Reduces the number of repeat tests
• Eliminates unnecessary follow-up and tracking

FULLY AUTOMATED RESULTS AND SCREENING PARAMETERS

• Minimizes risk of user error and test variability
• Reduces training time for new users
WIRELESS DATA TRANSFER & DATA MANAGEMENT

• Echo-Screen Plus (17-key) configuration:
  – Stores up to 250 screening records
  – Wireless printing of screening results
  – Data transfer to and from a PC via Natus data management software
  – Export compatibility with a variety of third party data management systems

• Echo-Screen Basic (5-key) configuration:
  – Stores up to 50 screening records
  – Printing of screening results via serial cable
  – Transfer of screening results to a PC via Natus data management software

The Echo-Screen Plus System (17-key) includes*:

• Echo-Screen device
• Carrying case
• Ear tip accessory box
• Ear probe cable
• ABR cable (AABR configurations only)
• Two rechargeable batteries and charger
• Instructional materials (on CD)
• Natus data management software (on CD)

*Y Probe cable and label printer purchased separately. Y Probe cable designed for use with Echo Couplers (AABR configurations only)

The Echo-Screen Basic System (5-key) includes*:

• Echo-Screen device
• Hard top carrying case
• Ear tip and accessory box
• Ear probe cable
• One rechargeable battery and charger
• Instructional materials (on CD)
• Natus data management software (on CD)
Weight
Echo-Screen incl. battery pack and probe: 550g (1.2 lbs)

Size
Echo-Screen incl. battery pack: 230 x 95 x 53 mm (9.06 x 3.74 x 2.09 inches)

Battery
6V 1500mAh NiMH, exchangeable

Charger
Charge time approx. 2 hrs.

Power Consumption
1.2 W max

Power Management
Auto backlight control, auto switch off, 2-level battery voltage sense, battery saver

Display
H x W = 3.96 x 5.87 cm (1.56 x 2.31 inches)

Data Memory
128 KB built-in flash memory, unlimited storage time

Interfaces
RS232 up to 115 kbps, infrared (optional modem feature available)

Operating Time
> 10 hrs with fully charged battery

Storage Temperature Range:
0 – 40°C (32 – 104°F)

Operation Temperature Range:
5 – 35°C (40 – 95°F)

Humidity:
20-80 % REL.

Device Class
2a (according to Council Directive 93/42/EEC Appendix IX)

Applied Standards
German “Medizinprodukte Gesetz” (MPG) (2002)
EN ISO 9001 (2000)
EN 13485 (2000)
EN 60601-1 + A1 + A2 (1996)
EN 60601-1-2 (2002)

Note: Specifications are subject to change without notice.

Ordering Information

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<td>ECHO-SCREEN PLUS (DPOAE)</td>
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<td>ECHO-SCREEN PLUS (AABR)</td>
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*Choice of different language configurations are offered with each Echo-Screen system.
Contact your local customer service representative for more information.