

Ordering information

| Item | Part Number |
|---|-------------|
| Echo-Screen Plus (TEOAE) | 010127T |
| Echo-Screen Plus (DPOAE) | 010127D |
| Echo-Screen Plus (AABR) | 010127A |
| Echo-Screen Plus (TEOAE & AABR) | 010127TA |
| Echo-Screen Plus (TEOAE & DPOAE) | 010127TD |
| Echo-Screen Plus (DPOAE & AABR) | 010127DA |
| Echo-Screen Plus (TEOAE, DPOAE, & AABR) | 010127TDA |
| ES TS Set (TEOAE) | 010127TS |
| ES DS Set (DPOAE) | 010127DS |

*Choice of different language configurations are offered with each Echo-Screen system. Contact your local customer service representative for more information.

Technical specifications

| | |
|-------------------------------------|---|
| Weight | Echo-Screen including 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 | 100 - 240 V AC +/- 10% 50 - 60 Hz, 200 mA 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 |
| Operating time | > 10 hrs with fully charged battery |
| Display | 128 x 64 dot graphic LCD w/ switchable backlight 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) |
| Storage temperature range: | 0 - 40°C (32 - 104°F) |
| Operation temperature range: | 5 - 35°C (40 - 95°F) |
| Humidity: | 20-80 % rel. |
| Device class | Ila (according to Council Directive 93/42/EEC Appendix IX) |
| Applied standards | EN 60601-1 + A1 + A2 EN 60601-1-2 EN 60601-2-26 EN 60601-2-40 |

Note: Specifications are subject to change without notice.

Echo-Screen®

Hearing Screener

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

Distortion Product Otoacoustic Emissions (DPOAE)

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

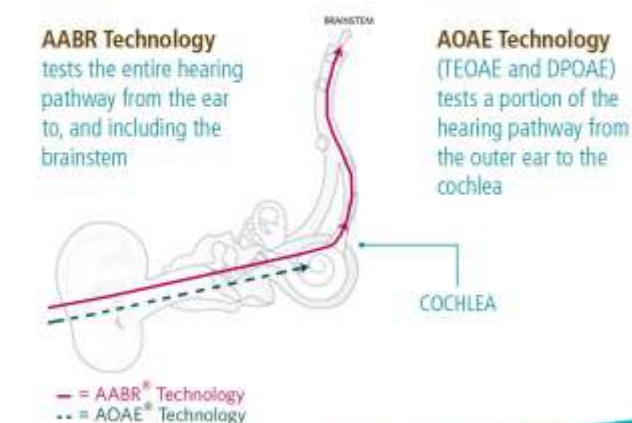
AABR Technology

- Necessary for detecting auditory neuropathy¹
- Optimized for screening newborns
- 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 averages 20 seconds
 - DPOAE averages 30 seconds
 - AABR technology averages 2 minutes



The Echo-Screen system utilizes proprietary AOA^E and AABR technologies

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



Perfect for any protocol and 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 infants¹

Low refer rates

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

Fast, flexible and 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

Fully automated results and screening parameters

- Minimizes risk of user error and test variability
- Reduces training time for new users

¹ References on file at Natus



Echo-Screen Plus
(17-key) configuration



Echo-Screen Basic
(5-key) configuration

```
ECHO SCREEN TDA +
NoID 04/14 02:10
No Name 04/14 02:10pm
00.00.0000 OUT-Pat.
Examiner:
DPOAE Result
Right ear
06.05.04 12:34
PASS
(L2=50dB SPL)
2000Hz: PASS
2500Hz: PASS
3200Hz: PASS
4000Hz: PASS
Comment:
```

Printout of DPOAE Result



Automated TEOAE PASS Result



Wireless data transfer and 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)

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PASS
Time: | . . . . .
AABR: | . . . . .
EEG: | . . . . .
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Wt 10kΩ
Rd 10kΩ
35dB
MENU ..... OK ..... BACK
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AABR Test Display