



GSI AUDIOscreener⁺

OAE AND ABR HEARING SCREENING



Setting The Clinical Standard





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The Problem

Hearing loss is the most common birth defect in the United States, affecting one million children (up to five of every thousand babies born). Yet most hearing-impaired children are not identified until 1 to 3 years of age – which is well beyond the critical period (6 months) for healthy speech and language development. In addition, 3 out of 4 children experience otitis media (ear infections-the most common illness in babies and young children) by the time they are 3 years of age. An ear infection can cause temporary hearing, speech and language problems. If left untreated, these problems can become permanent. However, if a hearing-impairment is identified and treated in its early stages, studies have shown that the child's speech and language skills will be comparable to his or her normal-hearing peers. For these reasons, hearing screening at birth and routinely throughout childhood is extremely important.

The Solution

The Solution Is Routine Hearing Screening With OAE And ABR Technology

Recent improvements in hearing screening standards have led to the advancement of hearing screening technology. Otoacoustic Emissions (OAE) and Auditory Brainstem Response (ABR) have become the standard of care for hospital newborn hearing screening programs. In addition, more and more physician offices are using the technology to screen children of all ages.



The GSI Audioscreener+ Provides the Best Solution for Hearing Screening With OAE and ABR

- **DPOAE, ABR and TEOAE**
- **Simple to Use Interface**
- **Objective Screening**
- **Time and Cost Savings**
- **High-Volume Screening**
- **Portability and Versatility**



Setting The Clinical Standard

Technical Features

OAE Software Features:

- DPOAE and TEOAE available for complete OAE screening
- Automatic operations for quick and easy screening
 - Probe fit and calibration
 - 5 frequency pairs available – DPOAE
 - 5 frequency bands available – TEOAE
 - Pass criteria set to NIH 2000 protocol (configurable)
- Programmable test frequencies for more highly trained personnel (i.e. audiologist)
- Environmental settings *Noisy, Normal or Quiet* – for the most accurate results
- Real-time graphic test progress is available for monitoring
- Simple and detailed test reports are available for accurate reporting
- All test information is saved and stored for easy retrieval

ABR Software Features:

- Automatic operations for quick and easy screening
 - Impedance test
 - Probe fit and calibration
 - Testing of up to 8 stimulus conditions per test
 - Pass criteria set to NIH 2000 protocol (configurable)
- Ability to create a latency intensity function
- Manual peak V scoring
- Manual threshold search
- Real-time graphic test progress is available for monitoring
- Click and tone pip stimulus available
- Stimulus rate of 32 to 62 stimuli per second
- Stimulus level of 0 to 98 dB SPL



It is now recognized that early intervention is critical to speech and language development in hearing-impaired infants and children. Available interventions include fitting a hearing aid before six months or performing a cochlear implant as early as one year of age. Selection of the proper plan requires accurate, detailed information about the hearing loss. This makes it critical that hearing clinicians have an objective, reliable method for measuring hearing loss in neonates and infants. **Hearing screening with OAE and ABR is the first step to early intervention.**

Setting The Clinical Standard

For over 60 years Grason-Stadler (GSI) has been "Setting The Clinical Standard" in Audiometry, Tympanometry and hearing healthcare diagnostics. Far more than a tagline, it is embedded in our corporate DNA and is the driving force behind everything we do.

Market feedback confirmed that GSI is seen as the Clinical Standard. It also established the three attributes most identified with the GSI brand; Quality, Reliability, User-Friendly.

Quality

Quality was by far the most frequently used word by our partners to describe the company and the brand. Product quality has been a hallmark of the GSI brand over the years, and remains the predominant association people have with the company to this day.

Reliability

Reliability, durability, longevity, trustworthiness. GSI products exceed industry expectations regarding reliability. It has become another way of defining the organization and a proven benefit of a partnership with GSI.

User-Friendly

As hearing healthcare technologies have developed, the vast number of potential features can become quite overwhelming. This is why GSI has always worked closely with our Partners to identify and prioritize what product functionality is most important to them, how it should be conveyed, and what will provide maximum user and patient benefit.



Benefits

Three Models

Choose the model to fit the screening needs of your hospital, office, or practice – OAE Only (includes DPOAE and TEOAE), ABR Only, Combination unit.

Requires No Interpretation of Data

Only a single button push is necessary to initiate an OAE or ABR screening, producing a quick and clear Pass or Refer result.

Objective and Accurate Screening

Perform objective and accurate hearing screening that has been clinically proven to be highly specific and sensitive with a minimal refer rate.

Time Savings

OAE screening only takes 20 seconds per ear – saving valuable testing time while producing an additional cost-saving benefit.

Portability And Versatility

The GSI AUDIOscreeener+ is a handheld, battery-operated hearing screening device designed to test newborns, children, adults and all difficult-to-test patients.

High-Volume Screening

The GSI AUDIOscreeener+ is designed for use by minimally trained staff (i.e. technician or volunteer), allowing for rapid and easy high-volume screening across multiple locations.

Probes Or Comfort Cups™

The GSI AUDIOscreeener+ can be used to perform an ABR test with probes inserted into the patient's ear canal or with the GSI COMFORT CUPS secured over the patient's ear.

Wireless Data Transmittal

Up to 300 patient records can be wirelessly transmitted to and from a desktop computer via an infrared port. This results in clear, concise, easy-to-read, full page reports.

Total Screening Accuracy

Real ear calibration for OAE and ABR promotes total screening accuracy, unlike competitor systems whose stimuli can vary by many dB.

Reduce The Incidence Of False Positives

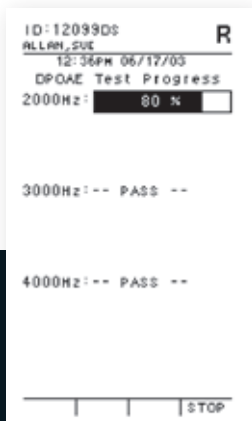
Limited OAE and ABR diagnostic data is gathered to help ensure that no child with a hearing impairment goes undetected and to reduce the incidence of false positives (children with normal hearing who receive Refer results). Data can be read by a staff audiologist or be emailed to a consulting audiologist.

Unparalleled Customer Service

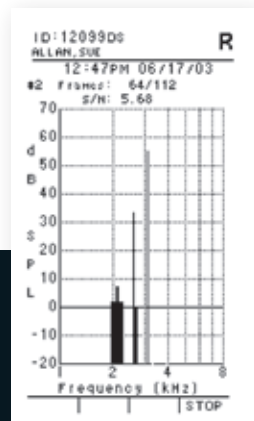
The GSI AUDIOscreeener+ is supported by more than 60 years of customer service as well as technical support.



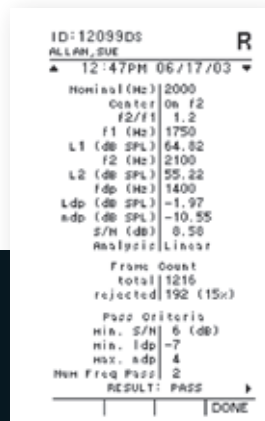
DPOAE Test Progress



Graph DPOAE Test Progress



Numeric DPOAE Results





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