



OAE Screening

precision

The OtoRead is a fast, automatic handheld OAE instrument for testing newborn babies, children and adults.

Several test protocols are available using either TE or DP. Actual test results along with a Pass or Refer indication are available on the display as well as in print from a thermal printer. The user has a choice of two different lengths of cable from the unit to the probe, providing great flexibility to accommodate a variety of testing situations. Tests may even be performed with the unit resting in its cradle.



OtoRead

- Efficient baby screening and diagnostic testing

Applications

The OtoRead is ideal for newborn hearing programs. Because the OtoRead is so flexible, the newborn program manager can establish a defined protocol that can be followed by any trained individual. All that is required is a proper seal at the ear canal and pressing a single button to initiate the test. The printed results reveal a Pass or Refer and the actual data can be reviewed by the program administrator. The OtoRead is also suitable for an ENT or audiology clinical setting. Expanded protocols allow up to 6 frequency evaluations extending out to 12kHz with the Distortion Product model. A transient test signal with standard or custom pass/refer criteria is also available. With this flexibility the OtoRead can be used as a full diagnostic instrument to evaluate ototoxicity, difficult to test patients, occupational hearing loss onset and functional hearing loss cases.

The instrument

The OtoRead has a sleek, ergonomic design which makes it easy to hold and administer a test. It uses a superior noise rejection algorithm and a quick, accurate ear canal calibration to maximize the quality of your test results. A simple four arrow keypad in conjunction with a display screen lets the user easily move through the tests, review data, setup various test protocols and change basic settings. It even has memory for storing up to 50 tests. The handy OtoRead cradle is used to store the instrument and to transfer data to a PC or printer. Tests can even be run while it rests in the cradle. The OtoRead is powered by standard alkaline batteries so you can have unrestricted movement and go from room to room as you see different patients.

The database

The optional OtoRead database software provides the means for permanently storing the test results, viewing results and then generating a professional report on standard 8 ½" X 11" paper. The print format displays the results in a colorful and concise manner providing a report traditionally only available on more expensive devices. The database program also has an interface for Hi-Track and OZ, two of the most commonly used newborn hearing screening management software programs.

Reimbursement

Otoacoustic emissions testing is reimbursable using the proper CPT codes. There is a "screening" code and a "diagnostic" code. They are:

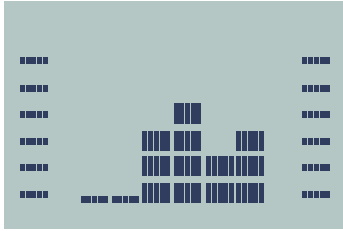
92587: Evoked otoacoustic emissions; limited (single stimulus level, either transient or distorted products).

92588: Comprehensive or diagnostic evaluation (comparison of transient and/or distortion product otoacoustic emissions at multiple levels and frequencies).



The OtoRead is also suitable for adult testing





Testing ongoing

LEFT EAR
Noisy
←L TEST R→
↓ REVIEW

Noisy test environment

RIGHT EAR
Pass
←L TEST R→
↓ REVIEW

Pass recommendation

LEFT EAR
Refer
←L TEST R→
↓ REVIEW

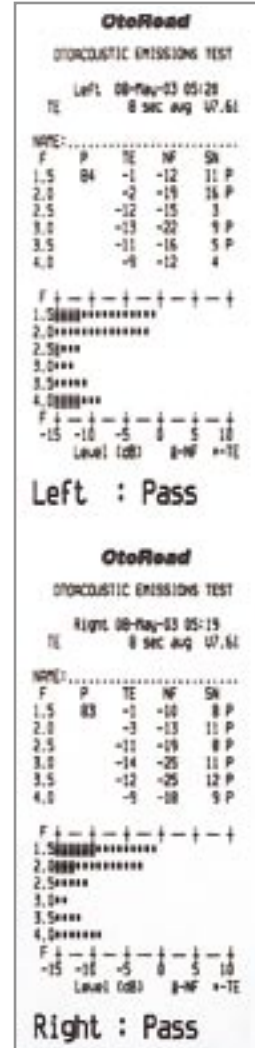
Refer recommendation



The OtoRead allows the use of extension cables and can thus be used handheld or can lay beside the patient.



Printout DPOAE



Printout TEOAE

The printer

A fast and quiet thermal printer is standard issue with the OtoRead. A simple interface from the cradle to the printer will transfer all of the test data within seconds. The test data is easy to read and will give a Pass or Refer indication for each ear.

The probe

The OtoRead has a small and lightweight probe insert with a removable cone. This allows for quick cleaning or replacement should it become clogged with debris from the ear canal. The probe is also detachable with an extension cable so the instrument can be set up for the convenience of the user.

General Technical Specifications

Standards:

Safety: EN60601-1
 EMC: EN60601-1-2
 Audiometer: EN 60645-3

Medical CE-mark:

The CE-mark indicates that Interacoustics A/S meets the requirements of the Annex II of the Medical Device Directive 93/42/EEC. Approval of the quality system is made by TÜV – identification no. 0123.

Test Specifications:

Measurement Type:
 Otoacoustic Emissions.

Frequency Range:

DPOAE:
 1.5, 2, 2.5, 3, 3.5, 4, 5, 6, 8, 10, 12 kHz.
 TEOAE:
 0.7, 1, 1.4, 1.5, 2, 2.5, 2.8, 3.5, 4 kHz.

Stimulus Intensity:

40 to 70 dB SPL (DPOAE).
 83 dB SPL (TEOAE).

Maximum Output (Protection):

90 dB SPL.
 (This level is well within OSHA permissible limits of 90 dBA for 8 hours).

Microphone System Noise:

-20 dB SPL @ 2 kHz (1 Hz bandwidth).
 -13 dB SPL @ 1 kHz (1 Hz bandwidth).

Probe Cables:

Standard: 30 cm,
Extension cable: +100 cm / 39 inches
Extension cable: +200 cm / 79 inches.

Instrument Specifications:

Power Supply:
 (4) AA/UM-3/R6 - alkaline (6V total)

Battery Life:
 Approximately 300 tests.

Display:
 LCD-display 4 line x 10 character.

Instrument Weight:
 300 g/ 10.6 oz. including batteries.

Printer Specifications:

Type:
 Thermal dot matrix line printer.

Speed:
 >10 lines per second.
 Full printout both ears approx. 7 sec.

Operating Noise:
 <50 dB SPL.

Power Supply:
 External power supply
 100-240V, 50/60 Hz, 0.8 A.

Weight:
 845 g/1.9 lbs. including power supply.

Paper:
 Thermal roll - 57 mm/2.25" wide.

Language Options:

English, German,
 French, Spanish.

Versions:

Several versions of the OtoRead are available, using either TE, DP or both, and with testing up to 6 frequencies per ear.

	DP	TE
Screener (1 fixed protocol)	4 bands 2-5 kHz	6 bands 1.5-4 kHz
Standard (1 fixed protocol, 1 customizable protocol)	6 bands 1.5-12 kHz	6 bands 700-4 kHz

	DP + TE	
Combo (2 fixed protocols, 2 customizable protocols for DP and TE - a total of 4 protocols))	6 bands 1.5-12 kHz	6 bands 700-4 kHz



Parts Included with the OtoRead:

Handheld unit (OtoRead) including probe cord
 Cradle
 Printer including power supply and power cable
 Printer Cable
 Carrying Bag
 Probe cord for extension (100 cm/39 inches)
 2 Thermal printer paper rolls
 Box of 146 eartips (12 sizes)
 4 probe tips
 4 AA/UW3/R6 Alkaline Batteries
 Operation / CE manual

Optional Parts:

Database Software

Interacoustics USA

Phone: 1-800 947 6334
 Fax: 1-952-903-4100
 E-mail: info@interacoustics-us.com
 Web: www.interacoustics.com
 Mail: 7625 Golden Triangle Drive
 Eden Prairie, MN 55344

