

Pediatric Hearing Screening Products

by Maico Diagnostics



EroScan Pro Pictured



*The Hearing Screening
Essentials for Testing
Children*

www.maico-diagnostics.com



The Digital Pilot Test

The Digital Pilot Test is an audiometer unlike any other. Now you can easily screen children as young as three years old and be confident of getting accurate, reliable results.



- Select Picture Audiometry with enhanced digital sound clarity
- CPT code reimbursement (CPT code 92583)
- Test English or Spanish speaking children
- Use the manual pure-tone audiometer for older children
- Large LCD display screen
- Optional printer

Select Picture Audiometry

The Digital Pilot Test screens children as young as three years old by presenting the hearing test as an interactive game. As a game, the test is easy for children to understand. As a test, the procedure gives you unmistakable responses for accurate results. You can even see the test progress on the LCD screen.

English or Spanish Word Lists

- 10 sentences presented at descending decibel levels

ENGLISH

"POINT TO THE BATHTUB."

(50 dB)

"SHOW ME THE AIRPLANE."

(40 dB)

"WHERE IS THE HOTDOG?"

(30 dB)

"POINT TO THE SAILBOAT."

(20 dB)

"SHOW ME THE CUPCAKE."

(15 dB)

OR

SPANISH

"MUÉSTRAME EL ANILLO."

(50 dB)

"DÓNDE ESTÁ LA CABEZA."

(40 dB)

"INDÍCAME EL CORREO."

(30 dB)

"MUÉSTRAME LA MUÑECA."

(20 dB)

"DÓNDE ESTÁ EL SOMBRERO."

(15 dB)

The Hearing Test Children Love to Take

Digital Pilot Test

It's as simple as looking at the pictures. The child listens to 10 sentences presented at descending decibel levels. After each sentence, the child points to the corresponding picture on the picture board, and you record the result.

Pure Tone Audiometry

The Digital Pilot Test is also a complete pure-tone audiometer which can be used to screen older children. With manual screening, you can choose the speed at which you present the tones. Easy fingertip operation gives you the flexibility to choose the frequency and hearing levels. Results can be recorded on the included score pads.

Standard Accessories

- TDH headphones
- Monitor phone
- Two large picture boards (*one English, one Spanish*)
- Two small picture boards (*one English, one Spanish*)
- Two score pads (*one English, one Spanish*)
- Operation manual
- One year limited warranty

Optional Printer

While the Digital Pilot Test includes a scorepad to manually keep track of the test results, you also have the option of purchasing the Pilot printer. The printer is connected by just one cable to the



Pilot Test and is small enough to hold in your hand. Print select picture audiometry results in seconds and you can choose between numerical data or picture format (shows each picture and its result). When performing an audiogram, the test can be printed in table or audiogram format.

Technical Information

Pure tone frequencies: 250, 500, 750, 1000, 1500, 2000, 3000, 4000, 6000, 8000 Hz

Pure tone decibel range: adjustable in 5 dB steps, -10 dBHL to 100 dBHL

Speech decibel range: 15, 20, 25, 30, 35, 40, 45, 50 dBHL

CPT Codes

92583_____Select Picture Audiometry

92552_____Pure tone audiometry (threshold); air only

Specifications subject to change without notice

ONE YEAR LIMITED WARRANTY: This warranty is extended to the original purchaser of the instrument, by Maico, through the Distributor from whom it was purchased. The warranty covers defects in material and workmanship for a period of one year from date of delivery of the instrument to the original purchaser. Accessories which are purchased from Maico at the same time as the instrument are warranted for one year from the date of purchase. For additional information contact your Maico Distributor.



Race Car[®] Tympanometer

The only tympanometer specifically designed to capture and keep your young patient's attention.



Race Car[®] Tympanometer

- Visual "Race Car" distraction and multi-media entertainment holds the child's attention during the test
- Choose the Tympanometer or the Tympanometer/ Audiometer combination
- Perform a tympanogram with ipsilateral reflex
- Quick, quiet internal printer

The Race Car Tympanometer or the Race Car Tympanometer/Audiometer

Hearing screening can be difficult. A child who is uncooperative can be a time consuming challenge. The Race Car Tympanometer provides a visual distraction that captures the child's attention so you can create and maintain the proper seal for an accurate tympanogram. The entire test takes place while the patient watches the car accelerate across the screen to the finish line.

An accurate tympanogram with ipsilateral reflex is ready to review or print in seconds. The Race Car Tympanometer is also available as a Tympanometer/Audiometer combo.



Successfully Screen Young Children in Seconds

Technical Information

TYMPANOMETRY MODE

Probe Frequency: 226 Hz,
1000 Hz (optional) \pm 3%

REFLEX MODE

Reflex Tones: 500, 1000, 2000, 4000 Hz

AUDIOMETRY MODE

Frequencies: 125 to 8000 Hz

Level: -10 to 90 dBHL



Specifications subject to change without notice

Visual Race Car and Multimedia Software Program



ERO•SCAN - OAE Test System

The EroScan Pro is a device that can fit any practice whether you perform hearing screening (protocol of 4 frequencies) or diagnostic testing (protocol up to 10 frequencies) using DPOAE, TEOAE, Tympanometry or all three.



Otoacoustic Emissions (OAEs)

Otoacoustic emissions are sounds that are produced by the cochlea (outer hair cells) and can be measured in the ear canal. When sound passing through the ear canal reaches the cochlea, the vibration stimulates thousands of tiny hair cells. This creates a byproduct that can be detected and measured: otoacoustic emissions.

OAEs only occur in a normal cochlea with normal hearing sensitivity. If there is damage to the outer hair cells, which produces hearing loss, then OAEs will not be present. In general, OAEs will be present if hearing is at 30 dB or better.

Results are displayed as PASS or REFER

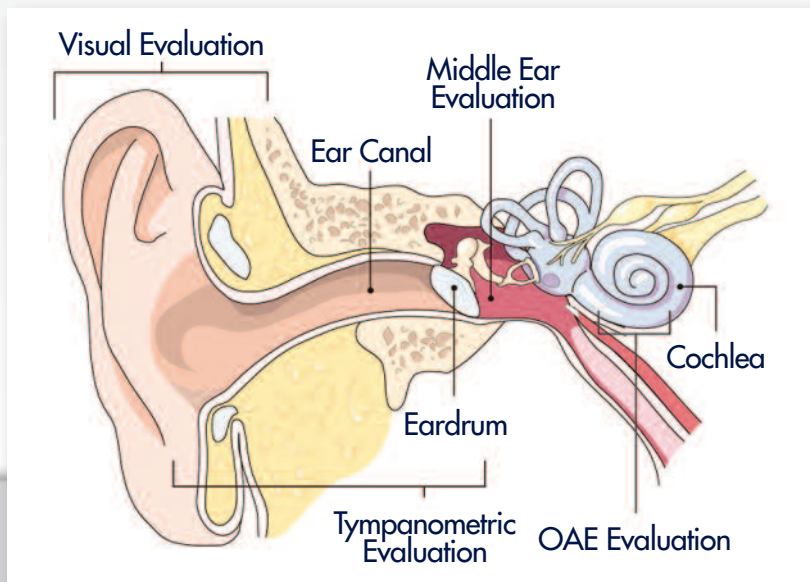
No need for interpretation. The equipment is automated and will provide easy-to-read and easy-to-interpret results. Trained staff can perform the test.

Test is Completely Objective

No response from the patient is necessary. Easily test uncooperative or non-English-speaking patients.

Accurate Results

The patented EroScan Pro noise algorithm allows for reliable testing in up to 70 dB SPL of background noise – fewer false REFER results.



Handheld OAE-Tympanometry Combination System

Pediatricians

Hearing loss is not always identified by newborn screening. Pediatricians are the first professionals the parents approach with concerns about their child's hearing. Since hospital-based and private practice pediatricians screen infants and young children for hearing loss and middle ear disorders, incorporating OAEs into this routine testing can be greatly beneficial.

This procedure is also beneficial in assessing children that cannot be tested by conventional means. For example, pure tone audiometry requires a response from the child which may be an unrealistic expectation and time-consuming.

How Tympanometry Fits Into Your Practice

A tympanogram provides documented results of middle ear function that can assist with the visual otoscopic exam. An impedance measurement provides a method to diagnose and monitor disorders that could lead to permanent hearing loss, which is critical especially when working with children.

Uses of Tympanometry in the Clinic:

- Objective documentation of reduced eardrum movement (i.e., fluid or wax)
- Monitor chronic middle ear fluid
- Monitor PE tube function
- Confirm tympanic membrane perforation
- Monitor Eustachian tube function



As a non-invasive test, tympanometry can quickly and easily be performed on patients of any ages, from infants to adults. The objectivity of tympanometry means the results are accurate based on the calculations - they are not dependent upon a response from the patient.

Advantages of Tympanometry:

- Middle Ear evaluations
- Objective test method
- Test patients of any age
- Documented test results
- Print to thermal paper, PDF, or 8.5 x 11 PC printer
- Customizable settings and protocols
- Optional patient management database
- Sequenced protocols permit a full test battery

Conforms to IEC 601-1.

ERO•SCAN is a trademark of ETYMOTIC RESEARCH, INC. Printed in the USA

U.S. Patent #5,954,669; 6,299,584; 6,702,758; 6,056,698; 6,331,164; 7,050,592; 7,269,262,164 Other Patents Pending

INNOVATION, CONTINUITY, RELIABILITY,

MAICO Product Line:

- Screening Audiometers
- Diagnostic Audiometers
- Middle Ear Analyzers
- OAE Test Systems
- PC Compatible Products

This brochure contains only a small segment of the comprehensive product portfolio of MAICO. To find out more about other solutions, please contact us at:

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