

# NEWBORN HEARING SCREENING

## Medical Instruments

Pursuant of  
Philippine Republic Act  
(R.A.) 9709

Department of Health  
A.O. 2010-0020

Recognized  
and Accredited by:



Item No. 701145  
**MAICO ERO•SCAN®**  
Plus  
OAE Test System  
Otoacoustic Emission Technology



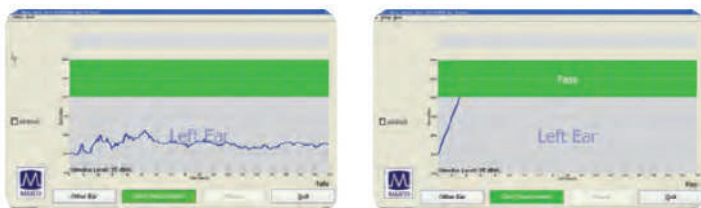
Item No. 701174  
**MAICO MB 11**  
**BERaphone® Screener**  
AABR Test System  
Automated Auditory  
Brainstem Response Technology

# MAICO MB 11 BERAphone®

## AABR Test System

- Automatic, Reliable ABR-screening Results
- Innovative BERAphone design given cost saving integrated electrodes
- CE-Chirp-Stimulus / Impedance Check for fast results
- Automatic Impedance Check indicates impedance conditions
- PC Connectivity for Power / Data Transfer

### User-friendly software



The special evaluation software performs the test automatically and the Pass or Refer Result will show within a few seconds.



Item No.  
701174

## ERO•SCAN® Plus OAE Test System

- Performing screening and diagnostic testing with TEOAE and / or DPOAE
- Fast automatic test with Pass / Refer and graphical test result
- Sharp, colored organic LED Display
- Direct evaluation via value and bar diagram
- Up to 12 frequencies displayed within the device, DPOAE up to 12kHz
- High noise immunity for operation in normal clinical environment
- Lightweight, small earprobe
- Environmentally friendly due to long life, rechargeable battery
- Bluetooth® communication to optional printer and PC
- Evaluation of results in PC
- Multiple, easily selected language options



Item No.  
701145

# NEW LIFE, NEW SYMPHONY, ASSURED EARLY FOR EVERY FILIPINO CHILD.

## Why screen via AABR method?

Screening with auditory brainstem response is a direct test of the entire auditory pathway up to the brainstem. It also detects auditory neuropathy and other neural defects which cannot be found with OAE measurements.

With the MB11 BERAphone® you get automatic ABR at the speed and cost of OAE measurement and with very high sensitivity and specificity.



## Why Use 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:

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.

**PASS** test results mean OAEs were detected. If there is damage to the outer hair cells producing a mild hearing loss OAEs may not be present. The test result is **REFER** and the patient may be at risk for possible communication handicaps and can benefit from further diagnostic assessment.



For specifications, accessories and optional softwares see back page.

# SPECIFICATIONS



## MB11 BERAprone

Item No.  
701 174

Number of channels	1
<b>Screening</b>	
Stimulus type	CE-Chirp stimulus TM
Stimulus rate	93/s
Stimulus levels	35 dBHL
Display	Normal mode test result (Pass/Refer/Abort), test diagram, signal quality display, traffic light for impedance test.
Signal quality check	By signal quality bar (EEG) AABR-Algorithm patented FSS-test (fast steady state)
Sensitivity	> 99.9 %
Specificity	> 96.7%
Standards	IEC 601-1, BF according to medical directive 93/42/EEC, CE 0124
Power supply	USB-Port 5V DC max. 400 mA
Environmental Conditions	+15... + 35 C / + 59... + 95°F (operation) +5... + 50 C / +41... + 122°F (storage) Maximum humidity 75% (operation) Maximum humidity 90% (storage)
Speaker	Integrated, dynamic wideband speaker (8)
Electrodes	Reusable, stainless-steel electrodes with gel protectors
Preamplifier	Integrated, 87 dB Amplification (23.000x)
Weight	300g
<b>Instrument</b>	
(MB 11 Box)	
Power Supply	via USB port of computer
Power Consumption	max. 400 mA
Weight	165 g
Dimensions	W x D x H: 12 x 9 x 3 cm

### Standard Accessories

MB 11 Box  
Measuring Probe  
Cradle  
Carrying Case  
Software  
Electrode Gel  
USB Cable  
User Manual

### Optional Accessories

	Item No.
Label Printer	801 793
<b>Consumables</b>	
Stainless Steel Electrodes (1pc)	894 132
Stainless Steel Electrodes for Pre-Matures (1pc)	894 153
Gel Protection for Electrodes (1 set of 3 pcs)	894 170
Electrode Gel, Bottle 250ml	801 086



## ERO•SCAN® Plus

Item No.  
701 145

<b>Probe</b>	
Measurement type	TEOAE or DPOAE
Frequency range	2 to 5 kHz (DPOAE), 1, 5 to 4 kHz (TEOAE)
Stimulus intensity range	40 to 70 dB SPL
Microphone system noise	-20 dB SPL @ 2 kHz (1 Hz BW)
Power supply	Lithium-ion rechargeable
Battery life	minimum 1000 test per charge
Probe weight	28 g
Display	OLED display, 4-button keypad
Dimensions	1.0 m
<b>Printer (optional)</b>	
Printer type	Thermal dot matrix
Speed	50 to 80 mm/second
Operating noise	> 50 dB SPL
Power supply	7.4 V lithium battery
Printer weight	197 g
<b>General</b>	
Standards	IEC 601-1, according to medical Directive 93/42/EEC, FDA 510 (k) #980533
PC-interface	USB micro

### Standard Accessories

Device with rechargeable battery  
Ear Tip Set (110 pcs)  
Replacement Probe Tips  
Carrying Bag  
PC Software including database  
Power Supply

*Innovation.  
Continuity.  
Reliability.*