

## MASTER II

Multiple Auditory **ST**eady-State  
Evoked Response

### The Physiologic Audiogram

Utilize statistical analysis to quickly, objectively and accurately estimate hearing thresholds across the speech range

MASTER II can be added as a complement to your Bio-logic Navigator<sup>®</sup> Pro System

- An Intuitive user interface, common to the Bio-logic Navigator Pro family
- One and two channel options
- A patient database that is shared with Bio-logic Navigator Pro applications
- Expanded automated data collection stopping rules
- Supports PDF software to facilitate EMR transfer
- Real-time playback of records as displayed during active collection

# Bio-logic MASTER II – Multiple Auditory **ST**eady-**S**tate **E**voked **R**esponse

## Fast. Accurate. Objective.

Bio-logic MASTER II is a must have addition to the clinical electrophysiological test battery for rapid multiple frequency threshold assessment in:

- Infants and young children
- Children or adults with special needs
- Workers' compensation cases

### The MASTER II program offers:

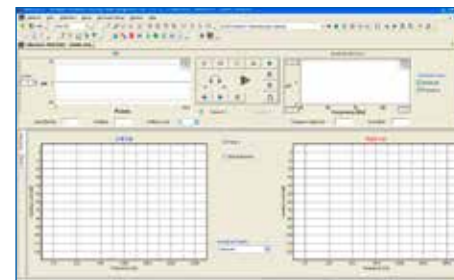
- Patented ASSR technology that obtains objective frequency-specific auditory threshold information
- Simultaneous testing of up to 4 frequencies per ear<sup>1</sup>
- View real-time EEG and the response spectrum
- Easy monitoring of on going test results – tables and graphs on the collection screen clearly display the response amplitude and noise floor
- Printing of physiological audiogram with air conduction, bone conduction and soundfield data on the same audiogram
- User-defined stopping rules to automatically halt collection for individual frequencies based on the number of sweeps, noise levels, and/or statistical criterion (p-value) as well as the ability to stop individual frequency collections manually
- Choice of montage using Cz to Nape or Cz to Mastoids
- Masking is available for bone conduction or unilateral hearing loss<sup>2</sup>
- Option for higher stimulus intensities (up to 119 dBHL) than available with standard AEP for threshold estimation in children and adults with profound hearing loss



Create your own protocols and sequences



View data details during collection and stop individual frequencies when response significance is achieved



View simple estimated "audiogram" display during collection

## Why Auditory Steady State Response (ASSR)?

- ASSR is an important addition to the audiology test battery; complementing the tone burst ABR in the estimation of frequency specific hearing thresholds<sup>3</sup>
- ASSR provides an objective approach to testing infants, young children and individuals unable or unwilling to provide reliable behavioral responses

## Why MASTER II?

- The original patented ASSR multiple frequency technology
- MASTER II software utilizes your existing Navigator Pro hardware and components
- MASTER II shares the same database with other Navigator Pro programs. Test your patient with ABR and ASSR without re-entering demographics or changing electrode montages
- MASTER II protocols are customizable allowing the audiologist to modify stimulus and recording parameters including carrier frequencies, modulation type and modulation frequencies
- MASTER II utilizes the f-ratio, for the most accurate prediction of behavioral thresholds, even in normal to mild hearing loss cases<sup>4</sup>
- Weighted averaging in MASTER II improves accuracy and shortens test time<sup>5</sup>
- Support for the audiologist learning ASSR is available on demand with our recorded eSeminars at [www.natus.com/nervecenter](http://www.natus.com/nervecenter)



1. John M.S., Purcell D.W., Dimitrijevic A., & Picton T.W. (2002) Advantages and caveats of recording steady-state responses to multiple simultaneous stimuli. *Journal of American Academy of Audiology*, 13:256-259.  
 2. Jeng, F.C., Brown, C., Johnson, T., & Vander Werff, K. (2004) Estimating Air-Bone Gaps Using Auditory Steady State Responses. *Journal American Academy of Audiology*, 15:67-78.  
 3. John M.S., Dimitrijevic A., & Picton T.W. (2002) Auditory Steady-State Responses to Exponential Modulation Envelopes. *Ear & Hearing* 23(2): 106-117.  
 4. Dimitrijevic, A., John M.S., van Roon, P., Purcell, D.W., Adamonis, J., Ostroff, J., Nedzelski, J.M., and Picton, T.W. (2002) Estimating the audiogram using multiple auditory steady-state responses. *Journal of the American Academy of Audiology*, 13(4):205-24.  
 5. John M.S., Dimitrijevic A., & Picton T.W. (2001) Weighted averaging of steady-state responses. *Clinical Neurophysiology* 112:555-562.

## The Bio-logic Navigator Pro family of products

### AEP

Standard auditory evoked potentials including ABR, ECoChG, MLR, ALR, P300 and EABR

### Scout®

Full range of OAE test capability including DPOAE, TEOAE and I/O functions

### ABaer®

Newborn hearing screening system including ABR, DPOAE and TEOAE

### MASTER® II

Multiple Steady-State Evoked Response (ASSR) technology

### ENoG

External SEP stimulator option supports electroneuronography

### VEMP\*

EMG rectification for Vestibular Evoked Myogenic Potential test

\*not available in the U.S

Windows® 7 and XP compatibility



Scout



ABaer



MASTER II



ENoG



VEMP



**Special Olympics**  
Natus Medical incorporated  
is an Official Healthy Hearing  
Sponsor of Special Olympics