

M·A·S·T·E·R II

Multiple **A**uditory **S**teady-State **E**voked **R**esponse

The Physiologic Audiometer



New & Improved Software Version

- Updated user interface
- Two channel option
- Patient database shared with other Bio-logic applications
- Expanded automated data collection stopping rules
- Enhanced patient reports



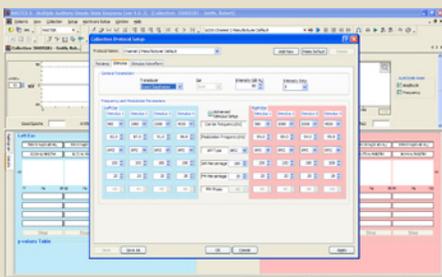
Fast. Accurate. Objective.

M•A•S•T•E•R II

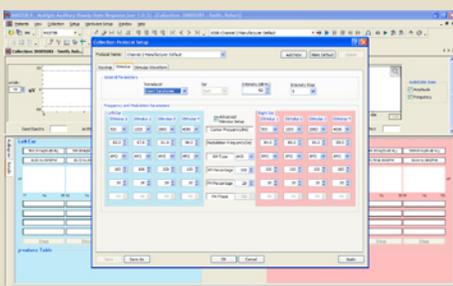
Multiple Auditory **S**teady-State **E**voked **R**esponse



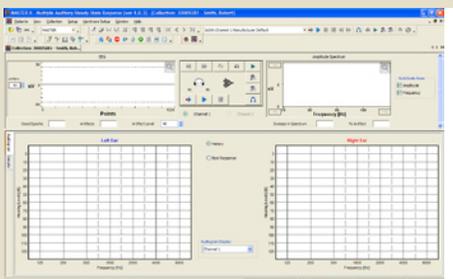
M•A•S•T•E•R II provides an objective measure of a patient's hearing thresholds for workers' compensation evaluation.



Create your own protocols and sequences



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



View simplified "audiogram" display during collection

M•A•S•T•E•R II is a must have addition to the clinical electrophysiological test battery especially when testing patients for whom behavioral audiometry may be unreliable, such as:

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

M•A•S•T•E•R II program offers:

- Patented technology that obtains frequency-specific auditory threshold information¹
- Test 8 frequencies at the same time resulting in data collection that is 3 times faster²
- View real-time EEG and the response spectrum
- Easy tracking of results. Table on the collection screen records the f-ratio for each frequency collected at each intensity level
- Printing of physiological audiogram with air conduction, bone conduction, and soundfield data on the same audiogram
- Test both ears using a Cz to Nape or Cz to Mastoids montage
- Masking is available for bone conduction or unilateral hearing loss³

1. Patent Number: 6602202.

2. 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.

3. Jeng, FC, 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.

exclusively from Bio-logic

Why Professionals choose

M•A•S•T•E•R II

Multiple Auditory S•Teady-State E•Voked R•esponse



Validation of M•A•S•T•E•R II technology by peer-reviewed research publications

M•A•S•T•E•R II was developed in cooperation with Sasha John, Ph.D., Terence Picton, M.D., Ph.D. and additional researchers at the Rotman Research Institute of Baycrest Centre, Toronto, Ontario. The research validating the M•A•S•T•E•R II technology, from facilities worldwide, is available at www.mastersystem.ca.

Exponential Modulation

This stimulus option enhances the response amplitude at low (500 Hz) and high (4000 Hz) frequencies so that responses can be obtained closer to threshold⁴.

F-Ratio

The most accurate Auditory Steady State Response (ASSR) method of response detection to assist in predicting behavioral audiometric thresholds even for normal hearing and mild hearing loss⁵.

Weighted Averaging

Improves data collection accuracy and reduces test time⁶.

User Defined Averaging Time

M•A•S•T•E•R II allows you to use your clinical judgment to determine the averaging time, shorter for severe to profound losses and longer for mild and moderate losses⁵.

Calculation of Noise Floor & Response Amplitude

Monitoring the noise floor and amplitude per ear and per frequency assists you in determining if continued averaging is needed in order to obtain a response, therefore reducing test time and increasing the ability to obtain true thresholds.

4. John M.S., Dimitrijevic A., & Picton T.W. (2002) Auditory Steady-State Responses to Exponential Modulation Envelopes. *Ear & Hearing* 23(2): 106-117.

5. 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.

6. John M.S., Dimitrijevic A., & Picton T.W. (2001) Weighted averaging of steady-state responses. *Clinical Neurophysiology* 112:555-562.

Complete Hearing Diagnostic Solutions



AEP
Standard auditory evoked potentials including ABR, ECochG, MLR, ALR, P300, VEMP and EABR

M·A·S·T·E·R® II
Multiple Auditory Steady-State Evoked Response Technology (ASSR)



BioMARK™****
Biological Marker of Auditory Processing

SCOUT®
Full range otoacoustic emission test capability including DPOAE, TEOAE and SOAE



CHAMP™***
Cochlear Hydrops Analysis Masking Procedure advanced technology option in AEP to assist in the assessment of cochlear hydrops



HINT®Pro****
Comprehensive system for evaluating functional hearing in quiet and in noise

Your Local Bio-logic Representative:

* Developed in cooperation with Sasha John, Ph.D. and Terence W. Picton M.D., Ph.D. at Rotman Research Institute of Baycrest Centre, Toronto, Ontario, Canada. Patent Number: 6602202.

*** Developed in cooperation with Manuel Don, Ph.D. at House Ear Institute. Patent applied for.

**** Developed in cooperation with Nina Kraus, Ph.D. and Trent Nicol at Northwestern University Auditory Neuroscience Laboratory.

***** Developed in cooperation with Sigfrid Soli, Ph.D. at House Ear Institute.

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