



# Dedicated *VEMP* product

## *The NEW Interacoustics® VEMP Test*

- Easy to use VEMP Protocols
- Simultaneous Recording of Left/Right
- Automatic Calculations
- Muscle Tone Monitoring
- OtoAccess™ Database Included

Interacoustics® now provides the VEMP (Vestibular Evoked Myogenic Potential) as part of the popular Eclipse/EP25 Advanced Auditory Software package. The new VEMP test on the EP25 enables clinicians to identify lesions of the saccule, the inferior vestibular nerve and descending vestibulospinal pathways as part of their standard VNG evaluations. The VEMP feature on the EP25 makes it one of the most advanced and easy to use

diagnostic tools which includes testing capabilities for ABR, Ecogh, Middle Latency ABR, MNN and P300. DPOAE and TEOAE are also available with continuity through the Interacoustics® OtoAccess™ database.

### ***VEMP Protocols***

The Interacoustics® VEMP program comes standard with 2 built in protocols based on either a click or 500 Hz tone burst stimulus. Since very loud stimuli are necessary to evoke a response from the saccule, small dB increments (up to 100dBHL) allow the examiner to modify the intensity without abruptly alarming the patient. The user can use the automated test routine or take manual command of the test at any time.

## Several important features assures high quality VEMP testing in the vestibular clinic:

### Simultaneous Recording:

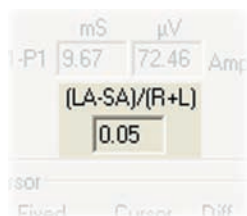
The Interacoustics® system incorporates the possibility of using 2 channels to simultaneously record VEMPs from the left and right saccule. This unique feature allows bilateral curves to be recorded for reproducibility purposes without additional stress to the patient.

### Automatic Calculations:

Once the examiner places the appropriate labels on the tracings, the system will automatically calculate the Left and Right differences for easy identification of normal or abnormal results.

### Muscle Tone Monitoring:

Patient cooperation in providing adequate muscle contraction of the SCM (sternocleidomastoid) muscle during the VEMP test is a critical aspect to obtain reliable results. The ongoing display of the EEG during testing provides the examiner with a visual guide on the patients muscle contractions.



### OtoAccess™ Database:

The OtoAccess™ database from Interacoustics® provides unlimited storage (based on PC storage medium) that includes complete patient demographic data, a patient journal with all stored test sessions and an easy backup routine. The OtoAccess™ can be installed as a stand alone database or be Networked to your server. This allows convenient storage for viewing and editing of data from other workstations. OtoAccess™ is included as a standard part of your Eclipse package.

## General Technical Specifications

### System:

The Eclipse black box connects via USB to most standard laptop or desktop PCs running with Windows® Pro software. An optional PC package is available from Interacoustics® upon request.

### PreAmplifier EPA4V:

2 channels.  
Gain: 60/80dB.  
Impedance information for each individual electrode. Readout directly on Amplifier.

### Transducers:

EARTone ABR insert phones.  
B71 Bone transducer.

### Stimuli:

Click and Tone Bursts.  
Rate: 0.1 – 80.1 per sec. (default 5.1 per sec.).  
20 – 130dB peSPL in 1dB steps.  
-10 – 100dB nHL in 1 dB steps.

### Tone Burst:

Frequencies: .5kHz to 4kHz.  
Number of cycles: 1 – 3120.  
Envelopes: Blackman, Gaussian, Hanning, Hamming, Bartlett, Rectangle, and manual rise/plateau/fall.

### Number of Curves per Session:

Unlimited.

### Automatic Tests:

Automatic test protocols included for Click and 500Hz Toneburst. As many automatic test protocols as desired, may be designed and added by operator.  
Manual control during automatic testing is available.

### Data Acquisition:

Analysis time: -20 to 80mS (150mS max. window).  
Acquisition start: +/- 20mS from stimulus onset.

### Rejection system:

Two rejection engines work in tandem.

### Raw EEG:

Large online displayed EEG throughout testing.  
Refresh rate: 10Hz typical.

### Patient communication:

Talk forward.  
Talk back (built in loudspeaker).

### Modules available for the Eclipse black box:

- ABR EP25
- TEOAE25
- DPOAE20
- VEMP (must have EP25 Module)
- OtoAccess Proprietary Database



The Eclipse black box.

## Included Parts:

EPA4V Preamplifier  
ETB4 Standard electrode cable with buttons  
ETU4 Universal electrode cable  
ETR4 Electrode cable with re-usable electrodes  
PEG15 Set of 25 single use pre-gelled electrodes  
20 pcs. of Infant eartip (2 x 10)  
EarTone ABR Insert ear phones w/foam tips  
B71 Bone conductor

SPG15 Tube of skin preparation gel  
Electrode gel  
Alcohol pads (100 pcs.)  
USB cable 2m  
Power cable  
Software CD  
OtoAccess™ Database Software  
Operation Manual  
CE Manual

## Optional Parts:

TDH39 Headset  
DT48 A Headset

UCO15 Optical USB extension cable for Eclipse Black Box (can be delivered with 1 or 5 metres USB extension cable).

### Interacoustics USA

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

