## The Eclipse

Designed to meet your every need



**Versions:** 

#### **EP25 ASSR**

- Built for accuracy and speed

#### **EP25 ASSR & VEMP**

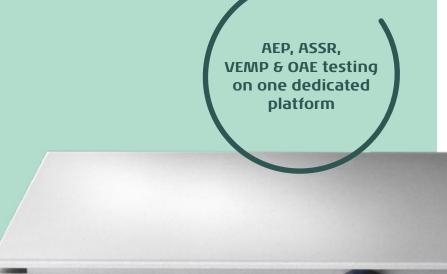
- Combine the power

#### **EP with VEMP**

#### **Balance Solution**

- Rate Study and ECochG

**EP25 with OAE** 





Audiometry Tympanometry ABR OAE Hearing Aid Fitting Balance



# Design your own diagnostic solution for a perfect result

The Eclipse is a modern and versatile platform. It is designed to fit seamlessly into your everyday workflow and to offer complete reliability and perfect results.

#### Have it your way

The goal: To achieve reliable test data to screen or diagnose patients accurately and efficiently.

Whatever your challenge may be, the Eclipse hardware platform does just that, enabling you to focus on the job at hand with the assistance of dedicated software modules for all facets of auditory evoked potentials and otoacoustic emissions.

#### Are you future-safe?

Feedback from audiology experts assist in our development process, ensuring more effective integration of our software for today and tomorrow. Upgrades are available for years to come.

#### 11

Silence is the Key.
- The Eclipse preamplifier provides
unrivalled stealth with
very low internal noise

#### Making complicated things easy

A range of pre-loaded test protocols are available in each software module ensuring that you will quickly feel confident. After getting acquainted with the software

you can add or modify test protocols and tailor them to your specific needs. The clear layouts allow you to easily interpret the results and focus on the essential outcomes of the test, which can be saved into the OtoAccess™ database for easy retrieval, review and export to your EMR in XML format.

#### A preview of the benefits

- Improved preamplifier reduces noise levels up to 25% in ABR/ASSR recordings
- Revolutionary CE-Chirp® stimuli for faster data acquisition
- Quick and easy waveform editing and marking tools
- Multiple customizable normative data options
- Convenient pre-loaded test protocols
- Simple, direct print to PDF (EMR/EHR ready) or export to XML



#### **ABR**

EP25

ABR, MLR, LLR, P300, MMN, ECochG

ASSR

Threshold assessment

#### Database options

NOAH

ОГ

OtoAccess™

#### OAE

#### **DPOAE**

Screening and clinical DPOAE

#### TEOAE

Screening and clinical TEOAE

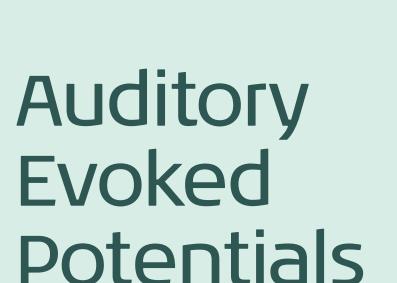
#### Balance

CVEMP OVEMP











New technologies. New standards. New ABR.

#### Silence - eliminating the noise

Reducing noise is the single most important factor for improving any evoked potential recording. The newly re-engineered Eclipse preamplifier reduces that noise by an astonishing 25%.

#### CE-Chirp® Stimulus Family – Double your response amplitudes

The revolutionary CE-Chirp® stimulus family for threshold assessment (developed by Claus Elberling) compensates for frequency specific cochlear travel times and generates waveform responses up to twice the size of traditional click or tone burst stimuli.

The original CE-Chirp® was designed for optimal response amplitude at medium stimulation intensities. By using the level specific CE-Chirp®, clearer waveform morphology at high intensities is also available.

The introduction of the CE-Chirp® LS stimulus family is an overall improvement to the original CE-Chirp® stimulus family.

For an easier visual evaluation of the NB CE-Chirp® responses, each of the NB CE-Chirp® stimuli have been time shifted to provide latencies similar to Click and the CE-Chirp® LS stimulus. The time-shifted NB CE-Chirp® are named NB CE-Chirp® LS, as the placements are level specific. Otherwise, the NB CE-Chirp® LS are identical to the original NB CE-Chirp®.

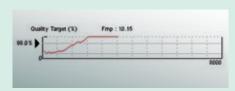
The CE-Chirp® stimulus family is incorporated in the ABR and ASSR software modules from Interacoustics.

#### Bayesian Weighting saves you valuable time

Using Bayesian Weighting during your ABR recording ensures that waveforms remain stable even during periods of patient activity. The influence of patient noise is minimized during the recording, resulting in continuously lower noise in the running average, saving valuable test time.

#### Fmp - knowing when to stop

Imagine having an objective waveform confidence indicator to assist you in confirming the presence or absence of a response. The Fmp graph provides objective and mathematical information based on multiple points within the recording to assist with your waveform analysis. Use of the Fmp provides a reduction in test time and confidence in your diagnosis.



The online display of the Fmp serves as a calculated response confidence. In this example, 99% response confidence was exceeded after only 1500 sweeps.



Rather than testing for a certain number of sweeps, the residual noise should be used as a stop criteria.

# EP25 From diagnostic ABR to specialized AEP

#### EP25 Comprehensive Clinical AEP

For specialized procedures requiring the full spectrum of AEPs: Go for the Advanced EP25 software.

#### A new standard

The contemporary interface delivers unrivalled ease-of-use and superior clarity, which will help you achieve clear and reproducible results in a confident and timely manner. Preloaded protocols peer-reviewed by key-experts, easy tailoring of manual and automatic test protocols and a multitude of useful tools make the Eclipse the preferred choice for threshold and neurological ABR.

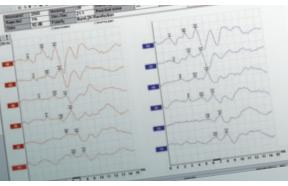
#### The benefits of specialized features

The EP25 incorporates functionality for early, middle, and late responses, including P300 and MNN tests.

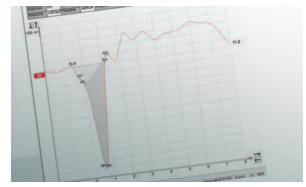
#### For your daily routine

- Threshold & neurological ABR testing
- Bayesian weighting
- Residual noise calculator
- Fmp calculator
- SNR 3:1 ratio calculator
- Normative latency data for click, CE-Chirp®, NB CE-Chirp®, CE-Chirp® LS & NB CE-Chirp® LS
- Single/split screen
- CE-Chirp®, NB CE-Chirp®, CE-Chirp® LS & NB CE-Chirp® LS for optimized threshold assessment
- CM & ECochG testing
- AMLR, ALLR & P300/MMN testing
- ECochG Area Ratio Calculation by John Ferraro

Vestibular EP
- We offer a special
version for the
vestibular clinic with
protocols such as
VEMP, ECochG and
rate study tests



Displaying Right and Left ear in a split screen format is beneficial when performing threshold work.



Unique ECochG Area Ratio Calculation implementation.

### **VEMP**

#### **CVEMP**

The Cervical Vestibular Evoked Myogenic Response (cVEMP) is an evoked potential measured from the sternocleidomastoid (SCM) muscle and is used to test the saccule and its afferent pathways through the inferior vestibular nerve.

It is useful in the differential diagnosis of vestibular system pathology.

#### **OVEMP**

The Ocular Vestibular Evoked Myogenic Potential (oVEMP) is an evoked potential measured from the inferior oblique muscle and is used to test the integrity of the utricle and its afferent pathways through the superior vestibular nerve. The oVEMP response provides information to assist in the diagnosis of disorders such as Superior vestibular Neuritis and Superior Semicircular Canal Dehiscence (SSCD).

#### **Patient Monitor**

A correct contraction of the SCM muscle is essential for a reliable cVEMP recording.

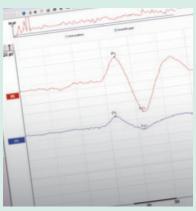
The patient monitor provides information about the test time and contraction of the SCM muscle.

#### EMG Scaling - a reliable result

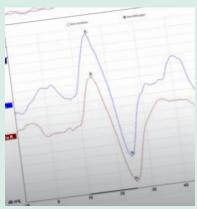
EMG scaling (amplitude normalization) corrects for differences in EMG activity throughout the test allowing for a more reliable final result.

#### **VEMP** ratio - easy calculation

Following VEMP waveform collection, the right and left waveforms can easily be set as VEMP partners for an automated amplitude asymmetry ratio calculation. Automated
VEMP ratio calculation
- The amplitude difference
between right and left side is
calculated automatically
using the VEMP ratio.
Simply mark two places on
the VEMP curve and
the software will calculate
the VEMP ratio.



VEMP recording with unequal muscle contraction



VEMP recording with responses scaled according to muscle tonus during recording





## ASSR Where speed meets accuracy

The Interacoustics ASSR system reduces test times by 50% thanks to Narrow Band CE-Chirp® stimuli and new powerful automated dual response detection methods.

#### A new (and faster) generation

Interacoustics ASSR represents a true breakthrough and a new generation in ASSR threshold estimation. The ASSR software enables 8 frequencies to be tested simultaneously to threshold in less than 20-30 minutes through the use of Narrow Band CE-Chirp® stimuli and a patented detection engine.

#### Full control - full speed

You will dramatically shorten test time as you are in full control of selecting the appropriate stimulus levels independently for each frequency based on current and previous results. Also, you are able to change the stimulation rate during testing depending on the state of your patient. All in all: Full control allows full agility and speed.

#### Cut test times in half

The Interacoustics ASSR software uses the Narrow Band CE-Chirp® stimuli to generate a maximal response, which makes the detection fast and efficient. The dual detection engine evaluates both the phase and the response magnitude from twelve of the higher harmonics of the fundamental modulation rate. This patented technology can reduce test time by 50% compared to traditional ASSR systems and offers unsurpassed accuracy.

#### Save data directly to NOAH

The estimated audiogram generated by the Interacoustics ASSR can be saved to NOAH. The estimated audiogram can easily be transferred to Genie or other similar hearing aid fitting software, ensuring a smooth and accurate hearing aid fitting.









# DPOAE20 TEOAE25 Otoacoustic emissions

The Eclipse hardware platform accommodates both DPOAE and TEOAE capabilities.

#### Shared features and benefits

- Lightweight probe with low internal noise
- Probe check indicator for correct
- Historic overlay for test comparison
- Test summary providing a quick overview of test results
- Protocol settings for automatic display of pass/refer results for hearing screening
- Weighted averaging improving data quality and limiting the test time

#### DPOAE

#### **Distortion product emissions**

The DPOAE module produces detailed DP Grams with protocols designed by the user for their preferences or requirements. Confidence in the OAE measurements is ensured via DPOAE reliability criteria. Available frequency range is 500-10000 Hz.

#### TEOAE

#### Transient evoked emissions

The TEOAE uses linear or non-linear broad band clicks to evoke otoacoustic emissions. The extensive range of clinical options provide a full clinical evaluation of TEOAEs. Available frequency range is 500-5500 Hz.

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### Science made smarter

Interacoustics is more than state-ofthe-art solutions

Our mission is clear. We want to lead the way in audiology and balance by translating complexity into clarity:

- Challenges made into clear solutions
- Knowledge made practical
- Invisible medical conditions made tangible and treatable

Our advanced technology and sophisticated solutions ease the lives of healthcare professionals.

We will continue to set the standard for an entire industry. Not for the sake of science. But for the sake of enabling professionals to provide excellent treatment for their millions of patients across the globe.

Interacoustics-us.com

Related

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(vHIT)

Titan
Tympanometry, OAE,
ABRIS and WBT



**OtoRead** Handheld DPOAE & TEOAE

#### **Product specifications**

All technical and hardware specifications concerning all products can be downloaded from our website.



Audiometry Tympanometry ABR OAE Hearing Aid Fitting Balance