Modern computer technology springs to mind, facilitating complex evaluations in vestibular analysis.
The eVNG is connected via USB 2.0 interface to a PC or notebook. The improved algorithm is able to extract the pupil from the video stream even if the patient wears make-up. The eye movement is automatically displayed and evaluated.
The application is based on a patient database, which contains all the related data. The database can be accessed via the local network.

All tests can be easily accessed through buttons. In the patient manager all tests are clearly displayed with date of examination and kind of test.

The basic version provides tests for spontaneous nystagmus, caloric test and position/positioning tests.

An extension for optokinetic tests and rotational testing is possible at any time.

User friendly routine check with the video nystagmography system

» real time image of the eyes
» improved image processing algorithm (even with make-up)
» automatic nystagmus detection
» calculation of all relevant parameters
» improved automatic artefact rejection
» full automatic test sequences
» stable binocular video goggle with mask cover
» soft cushion for optimal and comfortable fit
» detailed results printout
» hot mirror adjustable in 3 stepsfoot switch
» no other computer hardware required
» **by request eHIT and eVNG in one system**

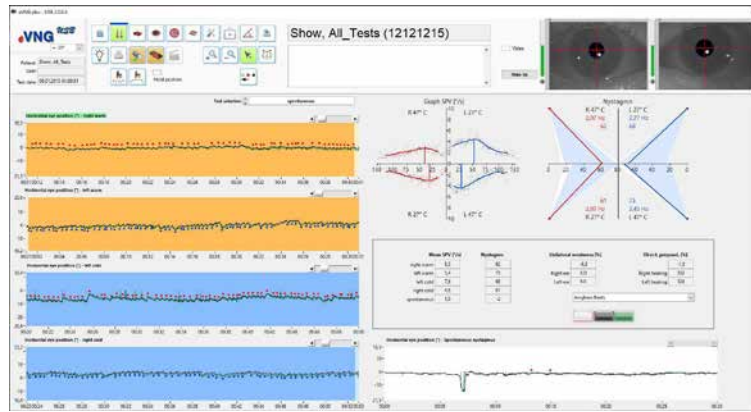## Modular Video Nystagmography System

Combi video goggle

The combined video mask can be used either for investigations into darkness or for visual stimulation.

The video image is focusable and can be individually adjusted both horizontally and vertically on the eye of the patient.
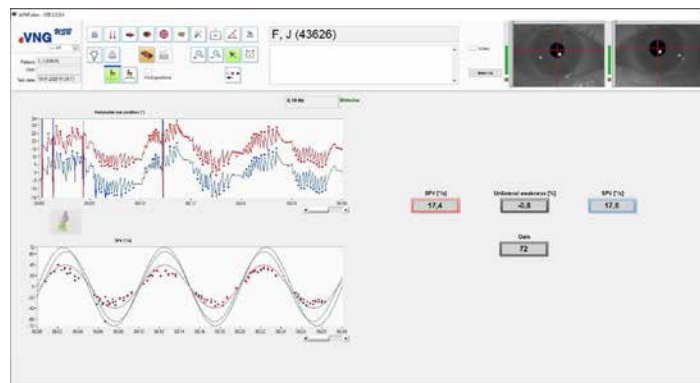
The soft cushion guarantees a pleasant and lightproof fitting to the face.

The user application

» network ready
» Firebird database
» binocularly analysis at 100 frames/s
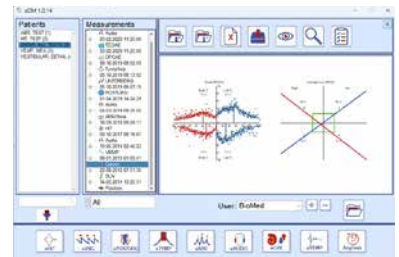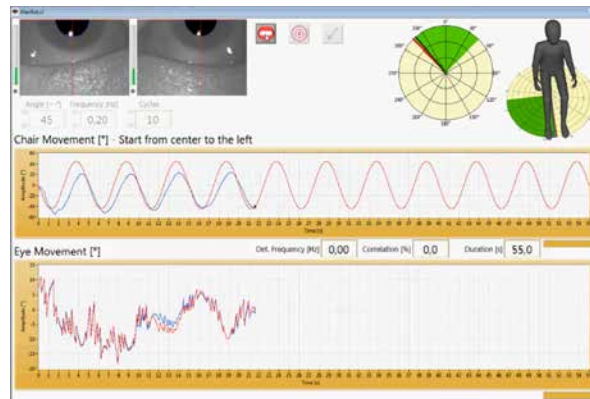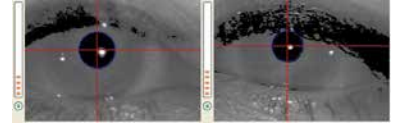» manual nystagmus marking
» compatible with Windows 10/11

Manual pendula test (MPT)*

To proof the compensation after an acute loss, the sinusoidal pendula test with the rotary chair is often used. To avoid the costs of an electrical driven rotatory chair, the manual pendula test was developed.

With the help of a normal office chair and the exact position sensors in the mask now this test can be done manually.

Visualisation of the data

The complete measurement data can be processed offline. The parameters of nystamgus detection can be changed to detect even very small eye movements. As a special feature, be convinced by the animation of eye movements without additional memory usage.

Optomotoric tests and rotary chair*

The eVNG System is ready for opto-kinetic tests, smooth pursuit tests, saccadic and antisaccadic tests. For rotational testing the eVNG can be connected to the rotatory chair VESTAR 100 USB.

KALORIstar CT
Air irrigator

With the „KALORIstar CT " you have a powerful tool available to stimulate the vestibular organ. Due to the innovative concept of active cooling a cold stimulus is always guaranteed. Thus, this device can be used not only in practice but also in clinical research. The eVNG USB software is able to remote control the device, with this feature a „one button" operation is possible.

» cold stimulus 7 Kelvin below ambient temperature
» very fast regulation
» Temperature: 20°C...51°C
» air flow 6 liters/ minute
» touch display
» stable handle
» handle holder

Technical specification

Sample rate: binocularly 100 Hz
Resolution: <0,2°
Camera: 1280 (H) x 1024 (V)
Weight goggle: 293g
Illumination: IR light (DIN EN 60825-1)
Applied Standards: EN 60601-1 / 1-1 / 1-2 und MDD
Software compatible with Windows10/11

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*optional