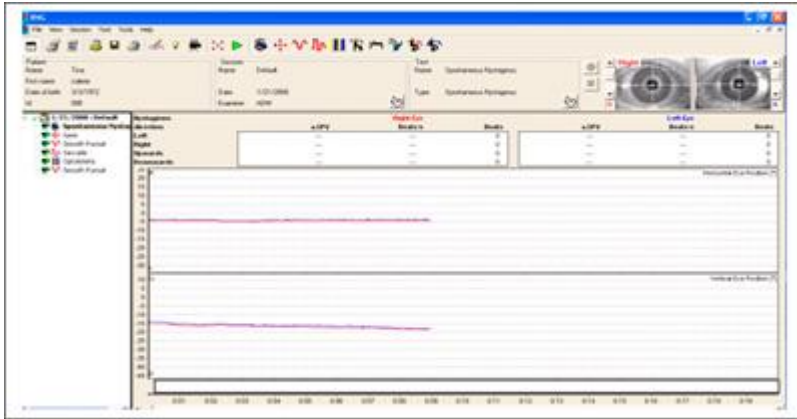


VO425

Tests

Spontaneous Nystagmus Test

The spontaneous nystagmus test is used to record non-evoked eye movements. This test is conducted with goggle cover attached to the front of the mask. This allows for recordings with the eyes open in complete darkness thus eliminating any possibility of fixation.

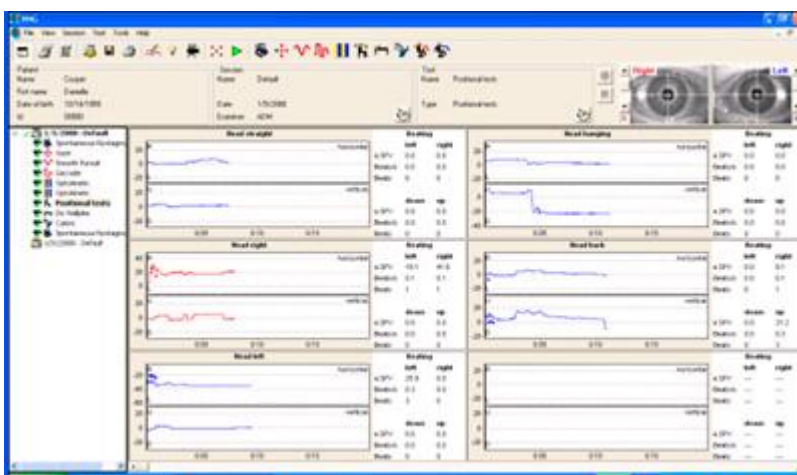


Spontaneous Nystagmus Test Window

Positional Tests

The positional tests allows the examiner to compare several measurements collected with the patient in a variety of positions, e.g. “head to the right”. The statistical analysis is identical to the analysis of the spontaneous nystagmus test. Various tests can be displayed on one page; the number of tests that can be displayed will depend on which options you select when configuring the test. If you choose to collect both horizontal and vertical data the number of tests displayed on a single page will be fewer than if you only collect either horizontal or vertical data.

This test is also conducted with goggle cover attached to the front of the mask, which allows for recordings with the eyes open in complete darkness, thus eliminating any possibility of fixation.



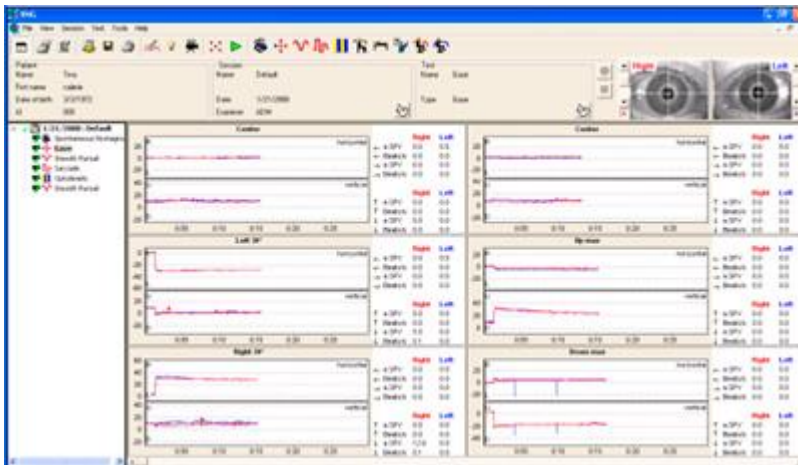
Positional Tests window

Gaze Test

During a gaze test eye movements are measured while the patient is fixating on different stationary targets. The gaze test analyzes the nystagmus "beating" during the fixation period.

The gaze test can display up to six independent binocular recordings on a single page, allowing the clinician to compare various fixation positions.

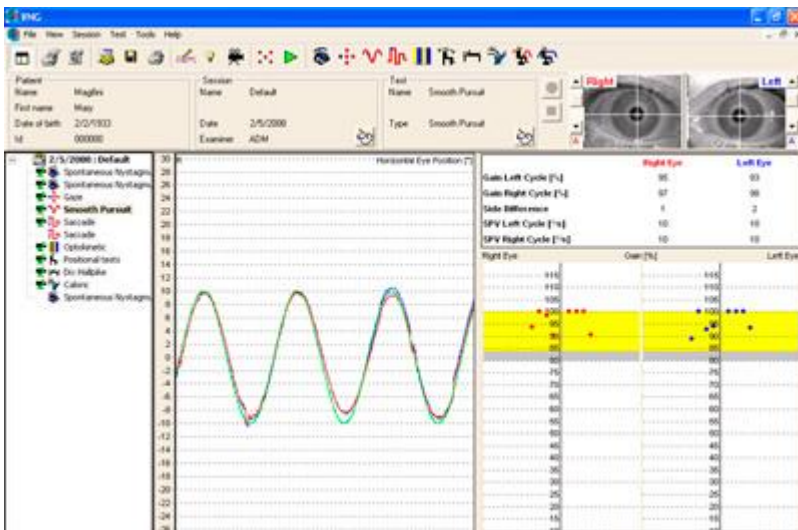
Using the VisualLab software a fixation target is projected in front of the patient. The analysis will start when the target moves to the pre-defined position.



Gaze test window

Smooth Pursuit Test

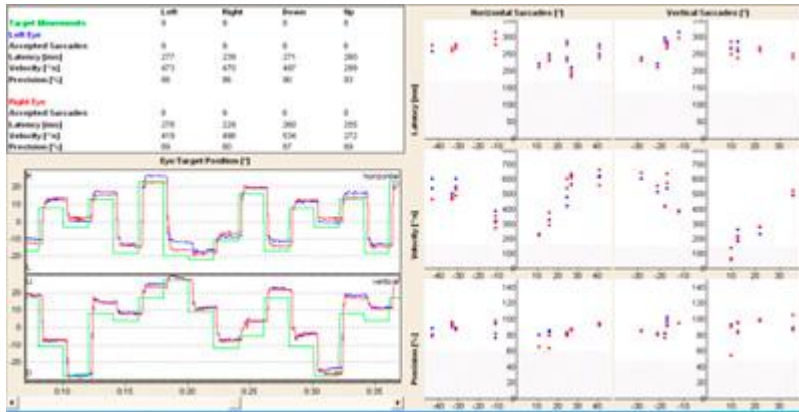
In the smooth pursuit test, the patient's eyes follow a target that is moving back and forth across the projection screen with constant velocity. An increasing or decreasing target velocity measurement can also be obtained by selecting the acceleration option when configuring the test.



Smooth Pursuit Test Window

Saccade Test

During the saccade test the patient's eyes have to follow a target generated by the VisualLab software. The target does not move constantly like in the smooth pursuit test, instead it jumps from one position to the next. The patient must fixate on the target and then move to the next point with fast eye movements (saccades). Ideally, the saccades should consist of one single fast movement that leads to an exact re-fixation on the target.



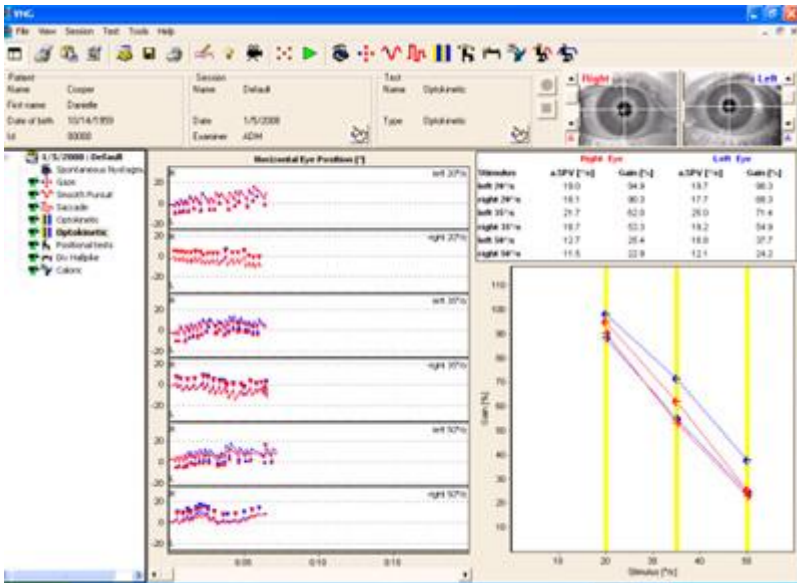
Saccade Test Window

Optokinetic Test

The optokinetic test is used to examine eye movement while under stimulation by a large moving pattern. Using the VisualLab software, various patterns can be generated that move across the projection screen in horizontal or vertical directions.

Large movements in the environment cause nystagmus beats that are used to avoid blur from image movement on the retina. During the slow phase of the nystagmus the eyes move with the velocity of the projection pattern. They then quickly travel in the opposite direction as they jump back to the original position.

The patient's optokinetic system is assessed in up to six subtests of different stimulus directions and speeds.

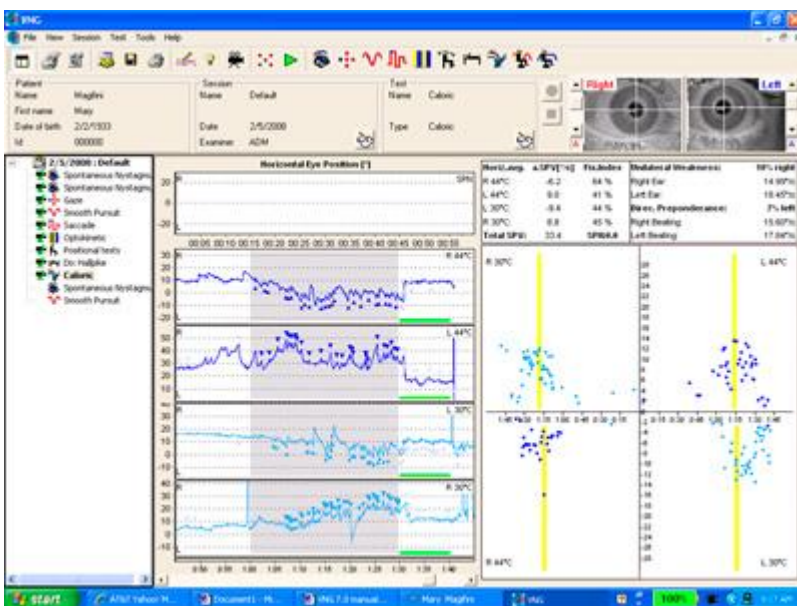


Optokinetic Test Window

Caloric Irrigation Test

The caloric irrigation test acquires eye movement data during direct stimulation of the vestibular organ via temperature controlled air or water irrigations of the ear. Recorded data is analyzed for slow phase velocity and frequency of nystagmus beating and is displayed in various standard diagrams. In addition, the values for unilateral weakness, directional preponderance and fixation index are calculated and displayed (see below).

Before the caloric irrigation test is performed, a spontaneous nystagmus (SPN) beating can be recorded. This is recommended for patients that have shown nystagmus in conditions without stimulation. The average slow phase velocity determined during the caloric SPN test is used in the calculation of directional preponderance.



Caloric Irrigation Test Window