DISOFT II

The most advance software platform for vestibular diagnostic.

SQL · AVI · PDF

Industriestrasse 33
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Difra instrumentation

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www.difra.be

VNG/ENG   vHIT   Rhinomanometry   Stabilometry   Subjective Verticality

BASIC VNG

Spontaneous Nystagmus, Gaze Tests, Position Tests, Positionning Tests (Dix-Hall Pike) and Caloric Tests are the principal components of BASIC VNG / ENG Module. Nystagmus and Slow Phase Velocities are detected and displayed in real-time. Dedicated graphs can be displayed on screen or printed into the final report .

During Positionning tests (Dix-Hall Pike, Epler, ...), the Headstar VNG system provides a direct control on the head position.

Culmination and Ocular Fixation Index are automatically detected and analyzed during Calorics Tests.

Available Tests

- Spontaneous, Gaze tests.

- Position, Positionning Tests (Dix-Hall Pike).

- Calorics Tests.

Caloric Water or Air Stimulator

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OCULOGRAPHY

With a TV or a beamer as display, oculography tests can be done in one step. Saccades or nystagmus are automatically detected and classified in graphs and numerical results.

Anti-saccade tests are part of oculography family with easy instructions for patient using red or green dots as targets.

Available Tests

- Calibration tests with saccades or targets stimulation.

- Regular, Random and Anti- saccades with horizontal or vertical stimulation.

- Smooth pursuit with horizontal or vertical stimulation.

- Optokinetic with horizontal or vertical stimulation.
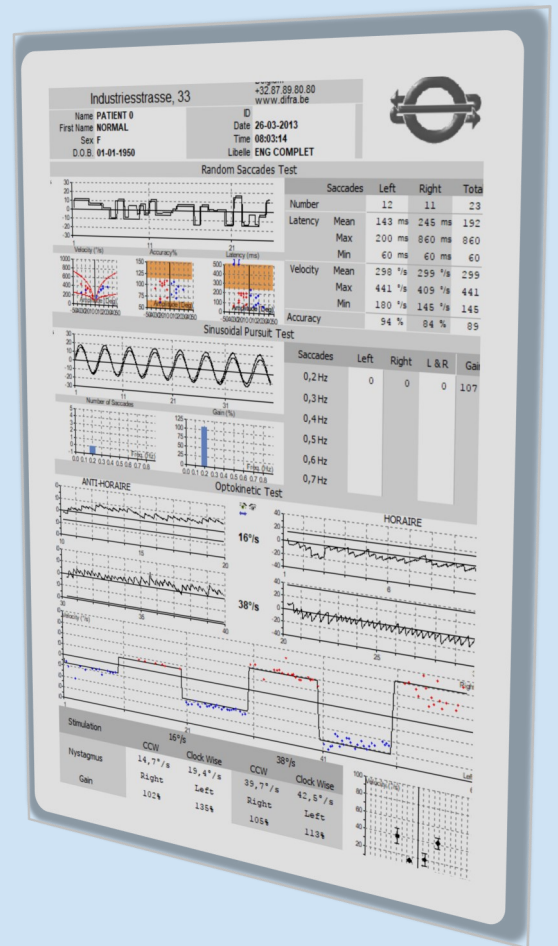
HD Visual Stimulation
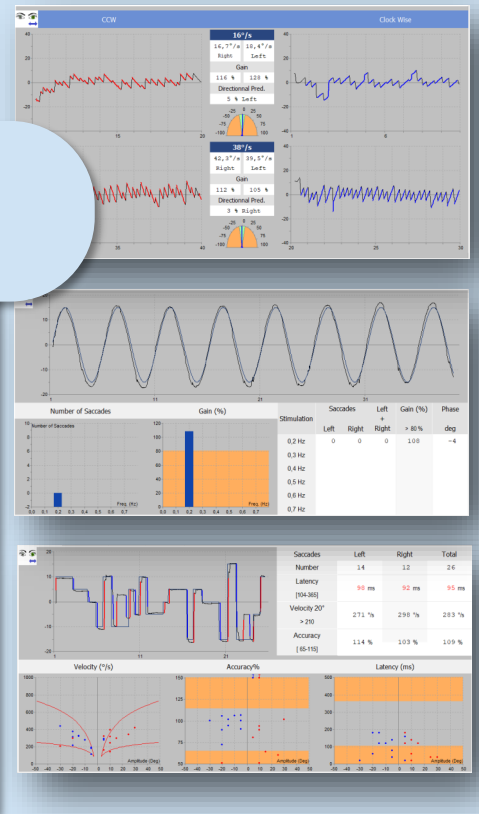
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VHIT

With Difra VNG Headstar device, its high speed camera (up to 250Hz) and gyroscope, head and eye movements are recorded and analysed to calculate VOR gain during small amplitude head thrusts.

All six semicircular canals (lateral, anterior and posterior) can be assessed.

HIMP and SHIMP tests are available with the help of the built-in fixation light inside the goggle.
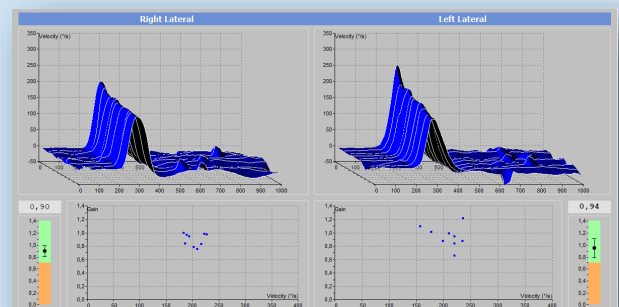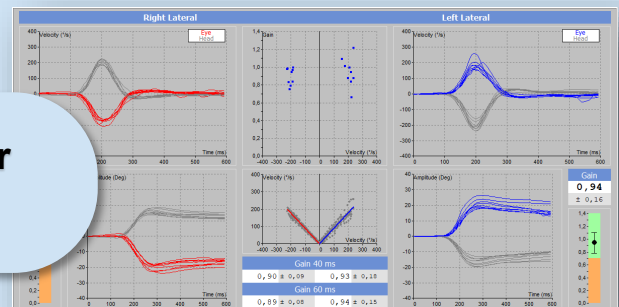
Results are available in 2D or 3D views. Overt and covert saccades detection allows proper diagnosis and rehabilitation recommendations.
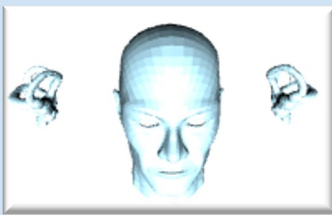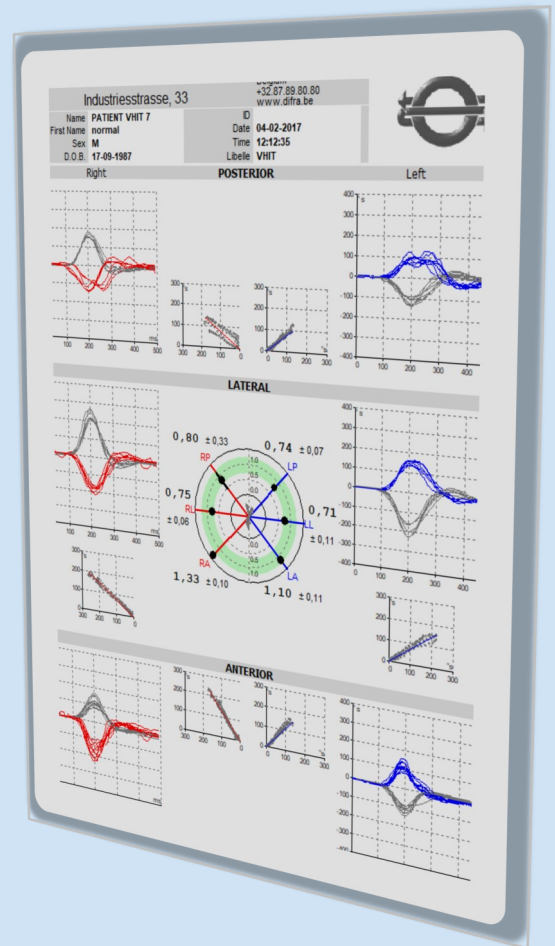
Available Tests

- Lateral HIMP VHIT

- RALP and LARP HIMP VHIT

- Lateral SHIMP VHIT

3D Headstar sensor

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ROTATIONAL

Four models of chair are available: NanoTorque, MiniTorque, MegaTorque and GigaTorque. All allows to run standard Sinusoidal, SHAT and Start and stop tests (trapezoidal). Transfer function of VOR reflex is calculated for Sinusoidal tests and time decay function for Start and stop tests.
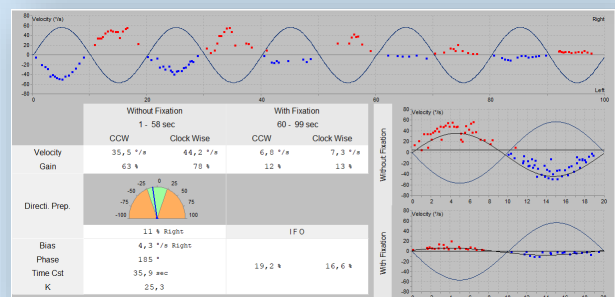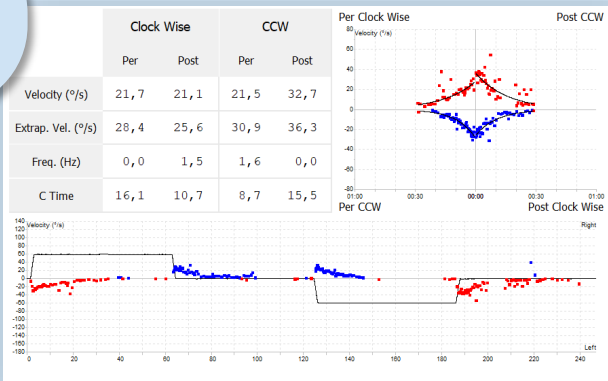
Vertical Off Axis Rotation (VOAR) and Mini-centrifuge stimulations are also available using our Giga-Torque or MegaTorque chair.

Available Tests

- Sinusoidal test with configurable velocity and amplitude.
- SHAT test .
- Start and stop test.
- Mini-centrifuge and VOAR.
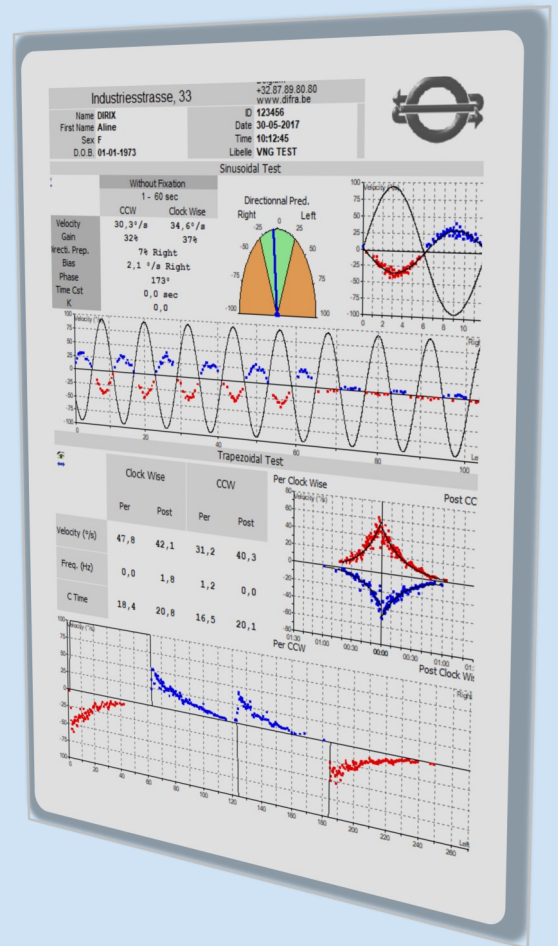
Nano Torque

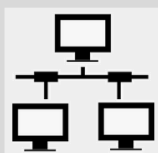VNG/ENG   vHIT   Rhinomanometry   Stabilometry   Subjective Verticality

SOFTWARE ABILITIES *

- Multiple Data-base engine compatibility : MS-SQL, MySQL, Firebird and MS-Access.

- Multiple stations working together on the same Data-base.
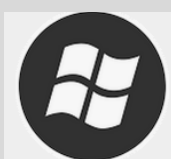- Dedicated review application (network application).

- Data Exchange using standard protocole (HL7, GDT, …).
- PDF, RTF and XLS export.

- Touch-screen compatible: one finger list scroll, buttons.

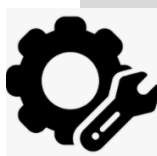- Create standard AVI video files and export to any other software.

- Compatible Windows 7, 8, 10.

- Foot or hand remote control option : Start/ stop, fixation light On/Off. Repeat previous test.

- Dual screen possibilities: Patient eye(s) in full screen and/or visual stimulation for oculography.

- Unlimited tests settings and software customisation.
- Multiple predeined tests sequences.

- Powerfull report layout editor, for a perfect report output. (PDF or paper).

- Easy way to modify or edit nystagmus detection. Directly on graphical results or in full screen raw signals.

- Multiple text files support : Anamnese, test comment, finale interpretation, …
- Automatic tests results summarry: main results and tests done.

ENG / VNG

B	Spontaneous and Gaze Test	Nyst. SPV and Freq (with and without fixation)
A	Position and Positioning (Dix-Hallpike, ..)	Nyst. SPV and Freq
S	Calorics Tests	Nyst. SPV and Freq, Directional Preponderance, Labyrinth Paresis.
I		Fixation Index.
C	Rotational test	Nyst. SPV and Freq, Directional Preponderance, Gain, Fixation Index.
O	Saccades and Random Saccades	Latency, accuracy, velocity
C	Smooth Pursuit	Gain, saccades detection
U	Optokinetic	Nyst. SPV and Freq, Gain, Drectional Preponderance
L		
O		
H	Active Head Rotation	VOR Gain, Phase and Asymmetry by Frequency
E	VHIT 6-axis	VOR Gain, presence of saccades (over / cover).
A	VHIT SHIMP	
D		
T	Sinusoidal	Gain, Bias, Phase, Time Cst. Directional Preponderance, Fixation Index.
O		
R	Start and Stop	Peak velocity, Decay time constant
Q	Micro-centrifugal / Tilt off-axis.	Excentration, torsional eye sinus fit.

SVV

Verticality test, Staircase	Angle of Perceived Center

RHINOMANOMETRY

Anterior Left and Right	Flow, pressure and resistance.
Posterior Left and Right	Broms' Angle.,
Posterior Total	4 Cycles Analyse (VR, Log VR, ER, LER, …)

STABILO

LOS – Limit of Stability	Reaction Time, Velocity, End/Max Excursion, Direction Control
SOT – Sensory organisation test	Stability Index, Ellipse Surface, Length, Velocity
	SOM, VIS, VEST and REF index, Romberg index.
FBK – Bio feef back rehabilitation.	

DVA

Static	Log-Mar
Dynamic, Dynamic on threadmill	Log-Mar / Head Velocity.

DB – Data Exchange

Use SQL DB	MS-SQL, MySQL, Firebird, MS-Access
Import / Export data	HL7, GDT, Report in PDF

Features and characteristics illustrated in this flyer can be bound to specific hardware or software purchase or configuration.

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