

# Balance

[ bal-uhns ]



Inventis balance range of products is characterized by innovative and unique solutions that can offer an unparalleled reliability and ease-of-use.





## Nystalyze

Nystagmus visualization and analysis system

— Nystalyze is a powerful and scalable system designed for visualizing and analyzing nystagmus, making it an invaluable tool for treating patients with dizziness and vertigo. With three different available modules, it offers the flexibility to configure the system according to the unique requirements of each clinic.

## VideoScope module

Video-Frenzel

— VideoScope is the Nystalyze module for the visualization and analysis of the eye movements. Suitable for both diagnostic and rehabilitation purposes, with VideoScope module the user can choose between unique flexibility and advantages of a wireless system, or a more standard configuration with wired camera.



- Simple and intuitive system
- Video and audio recording features
- Available with wireless camera



### Nystalyze

	VideoScope module	VNG Basic module	VNG Plus module
Video Frenzel	✓	✓	✓
Positional & Caloric	✓	✓	✓
Oculomotor			✓



▶ Check the video on: [www.inventis.it/video](http://www.inventis.it/video)



As of today, Nystalyze is the only available system on the market with a wireless camera that grants an unparalleled user experience in regard to patient mobility, freedom of movements and flexibility of use. Nystalyze is also available with standard wired camera.

## VNG module

Videonystagmography

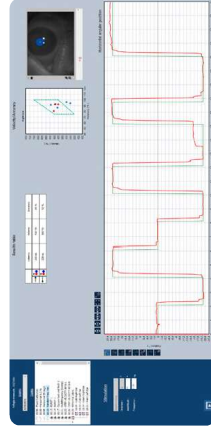
— Designed by Dr. Erik Ulmer, the SYNAPSYS VNG module, offers a wide and complete range of tests, including vestibular and oculomotor. SYNAPSYS VNG module is available in two versions: Basic and Plus.

**SYNAPSYS VNG module Basic** includes the positional, nystagmus and caloric tests.

**SYNAPSYS VNG module Plus** adds to offer the oculomotor tests: saccades, smooth pursuit, optokinetic and gaze.

By using state-of-the-art infrared cameras (whether wireless or wired) the patient's eye movements are recorded by the software and, thanks to its unique eye tracking system, SYNAPSYS VNG instantly detects the pupils without any adjustment required, even when it comes to difficult situations such as dark eyelids.

Advanced high-frequency bi-ocular camera analysis is also optionally available with the Visio mask. Specifically designed for oculomotor testing, it analyses both eyes simultaneously, allowing a true open field view.



SYNAPSYS VNG can guide through the examination of balance disorders and help reducing examination time. The presence of complete normative data to compare your results, the possibility to insert markers in real time and select different tracking modes (graphs, charts), as well as the available pre-loaded testing protocols, make the software extremely reliable and easy to use.



## SYNAPSYS MED4

Rotary chair

— Combine MED4, rotary chair with Nystalyze VNG to complete the battery of videonystagmographic tests with rotational, kinetic exams. Up to sixteen stimulation waveforms are available, including various sine waveforms, multi-frequency, speed step and sudden stop tests.

- Various sinusoidal tests (SHA profiles, decreasing sinus)
- Multi-frequencies (sweep)
- Multi-turn (step velocity)
- Sudden stop stimulations (square back and forth)
- If combined with wireless VNG, freedom of movements is maximized!



## SYNAPSYS Vestibular vibrator

Multi-frequency vibrator

— Designed to detect vibration-induced nystagmus (VIN), the SYNAPSYS Multi-Frequency vibrator helps finding unilateral vestibular dysfunctions, especially compensated deficits. Combine SYNAPSYS Multi-Frequency vibrator with SYNAPSYS VNG to make sure to offer the most complete range of vestibular testing.

- Fast and reliable test
- Patient's comfort; painless test
- Adaptability; 3 frequencies available (30, 60 and 100 Hz)



## SYNAPSYS VHIT

Video head Impulse

— Designed and developed with the help of Dr. Erik Ulmer, SYNAPSYS VHIT is a **unique product** in balance testing.

Thanks to a **revolutionary remote camera system**, SYNAPSYS VHIT is the first and only video VHIT that **does not require the use of goggles** or any kind of other device to be placed on patient's head. This results in a total prevention of mask slippage artifacts, a greater patient comfort and an absolute freedom of movement for the practitioner.



SYNAPSYS VHIT allows to **test all the 6 semi-circular canals** at high frequency as well as overt and covert saccades in a fast and simple way.

The camera indeed, automatically recognizes the investigated plane (horizontal, vertical RALP or vertical LARP) with the patient's head movements, thus allowing the operator to perform the entire examination in just few minutes without ever leaving the patient. Thanks to the display and sound information, the software is able to guide the doctor and help him/her perform the maneuvers correctly.

☑ Check the video on: [www.inventis.it/video](http://www.inventis.it/video)



No other system offers the opportunity to analyse position graphs (gaze vs head) and to re-evaluate possible not accepted manoeuvres thanks to a slow-motion playback of the manoeuvre video.

Moreover, SYNAPSYS VHIT is the **only solution when it comes to testing children**. Goggles attached tightly to the head are clearly not tolerated by infants, while this remote camera system allows to simply perform Video Head Impulse Test in infants as young as 3 months old.



Scan the QR code and read a preview!



This monograph was written with the aim of developing a didactic program that can guide both the less experienced and those who have already gained some experience. The path will therefore unfold from the physiological basics to daily diagnostics, in a continuum that allows to appreciate the fundamental elements of the use of the video Head Impulse Test.