

Patented
iVNG Technology



System	Korebalance® iVNG	Other VNGs	ENG
Overview	Korebalance®™ is the next generation of VNG testing that uses intuitive VNG software. Patented and proven innovative technology, provides the most user friendly, fast and accurate testing in the industry.	VNG systems were a great improvement over ENG systems in that they use cameras and software to track eye movements rather than unreliable electrodes to track facial muscle movements.	ENG systems were once the only systems available and use electrodes to measure involuntary rapid eye movements and attempt to interpret those movements with actual pupil movements.
Features	Korebalance® iVNG	Other VNGs	ENG
Testing	ExacTrak™ Advanced proprietary software provides exact eye coordinates throughout testing.	Requires manual setup and adjustment of cameras to monitor the pupil of the eye and directly reports eye movement.	Uses the corneo-retinal electrical potential (CRP) of the eye to indirectly record eye movement.
Test Time	Optional Testing Templates: 5 Minute Stat Test, 10 Minute Express Test, 20-30 Minute AIB Test. Custom Test Option Available	30-45 minutes	1-2 hours
Movement Detection	Can detect movements as small as 0.4°.	Can detect movements as small as 0.5°.	Cannot detect movement of less than 2-3°.
Electrodes	None	None	Yes, must apply disposable electrodes for each test
Type of eye movement	Measures and displays horizontal and vertical eye movements. Displays and automatically identifies nystagmus, including rightward, leftward, upward and downward beating for the most accurate results.	Limited: Measures and displays horizontal and vertical eye movements.	Measures horizontal and vertical positions. Vertical eye movements are usually noisy and contaminated by eye blinks.
Eyes Closed	Patient is not required to close eyes. This eliminates Bell's phenomenon as well as the need for concentration/mental tasking on the patient.	Patient is not required to close eyes. This eliminates Bell's phenomenon as well as the need for concentration/mental tasking on the patient.	Much of the testing is performed with the patient's eyes closed, potentially leading to Bell's Phenomenon.
Eye Tracking Method	Uses ExacTrak™ technology that automatically locks onto the pupil and tracks all movements.	Required to manually lock on to the pupil and manually-adjust goggles and camera during set up.	Uses electrical movements detected from electrodes. Electrode placement must be extremely accurate to obtain usable results.
iVNG Professor™	Built in Professor to Provide Guidance	No	No
VoiceTrack™	Allows you to command the software hands free with voice activation.	No	No
Custom Test Option	Option to create your own custom VNG test	Not standard	Not standard
Express & Stat Test™	Allow for Quick 5 & 10 minute tests	No	No

Equipment	Lightweight goggles with durable rubber facing to withstand years of use. Dual internal cameras provide protection against wear and tear.	Heavy goggles with foam facing that must be replaced frequently. Single camera is on the outside of goggles and must be repositioned for right and left eye. Camera is exposed, making it susceptible to damage and in need of continual maintenance.	Electrodes must be applied to each patient correctly in order to obtain proper testing results. Electrodes must be purchased continually.
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Lighting	Magnetic cover on goggles creates a completely dark environment for vision-denied and vision-enabled testing.	Must turn on and off lights in room and provide a completely dark room for vision-denied testing.	Must turn on and off lights in room and provide a completely dark room for vision-denied testing.
Test Set Up	The set up is done automatically using the ExacTrak™ software; for automated quick, easy and accurate set-up.	Must be manually adjusted by the technician for each test subject.	Requires precise electrode placement, calibration and light bar assembly. CRP is an unstable electrical potential that is adversely affected by changes in room lighting, illumination and electromagnetic fields.
Costs	Systems are all similar in initial investment. No long-term costs associated.	Systems are all similar in initial investment. Long-term costs include replacement foam padding and increased labor costs due to longer test times.	Systems are all similar in initial investment. Long-term costs include electrodes. Other increased costs associated with labor due to longer testing times.
iVNG Logic Tree™	Built in Logic Tree/Flow chart further documenting the steps followed and accuracy in logic flow, providing quantitative data test results for better patient care.	None.	None.
Limitations	Ability to test complicated cases, i.e. Ptosis-droopy eyes	Unable to test patients with Ptosis or other complications	Difficulty testing patients with muscle weakness.
On-the-Spot Interpretive Report.	On-the-Spot Interpretive report printed immediately after test. Includes results flow chart, further documenting the steps followed and accuracy in logic flow. Test results are available immediately following testing, including time-saving, automated nystagmus detection and SPV calculations.	No. Test results may need to be analyzed and sent to a neurologist for an interpretive diagnosis.	Some include interpretive reports, others may need to be analyzed and sent to a neurologist for an interpretive diagnosis.
Nystagmus & SPV-Calculation Data	Automatically calculates SPV; provides a significant amount of labor cost savings. You may also mark or edit SPV calculations and nystagmus points.	No. Increases labor costs. Increases risk of human error.	Some automate the process, most require the examiner to manually measure SPV / Nystagmus Points and mark the selection. Increases risk of user error. Increased labor costs, due to increased time taken to manually mark your own data.
All Digital Recording and Playback	Instant video playback of entire test sequence.	Not Standard	Not available
Software Updates	In-house engineers provide frequent software updates and support.	Not standard	Not standard
Medical History Logs	Creates and stores complete patient medical log and testing history in a HIPPA-compliant environment.	Not standard	Not standard
Exam Templates	Comes with 43 pre-loaded exam templates. Order of exams can be changed. Additional templates can be created for customization or research purposes.	No	No
Audiocue™	Auditory tone for headshake tests.	No	No
Dual Cameras	Included. Test both eyes simultaneously or individually.	Not standard	N/A