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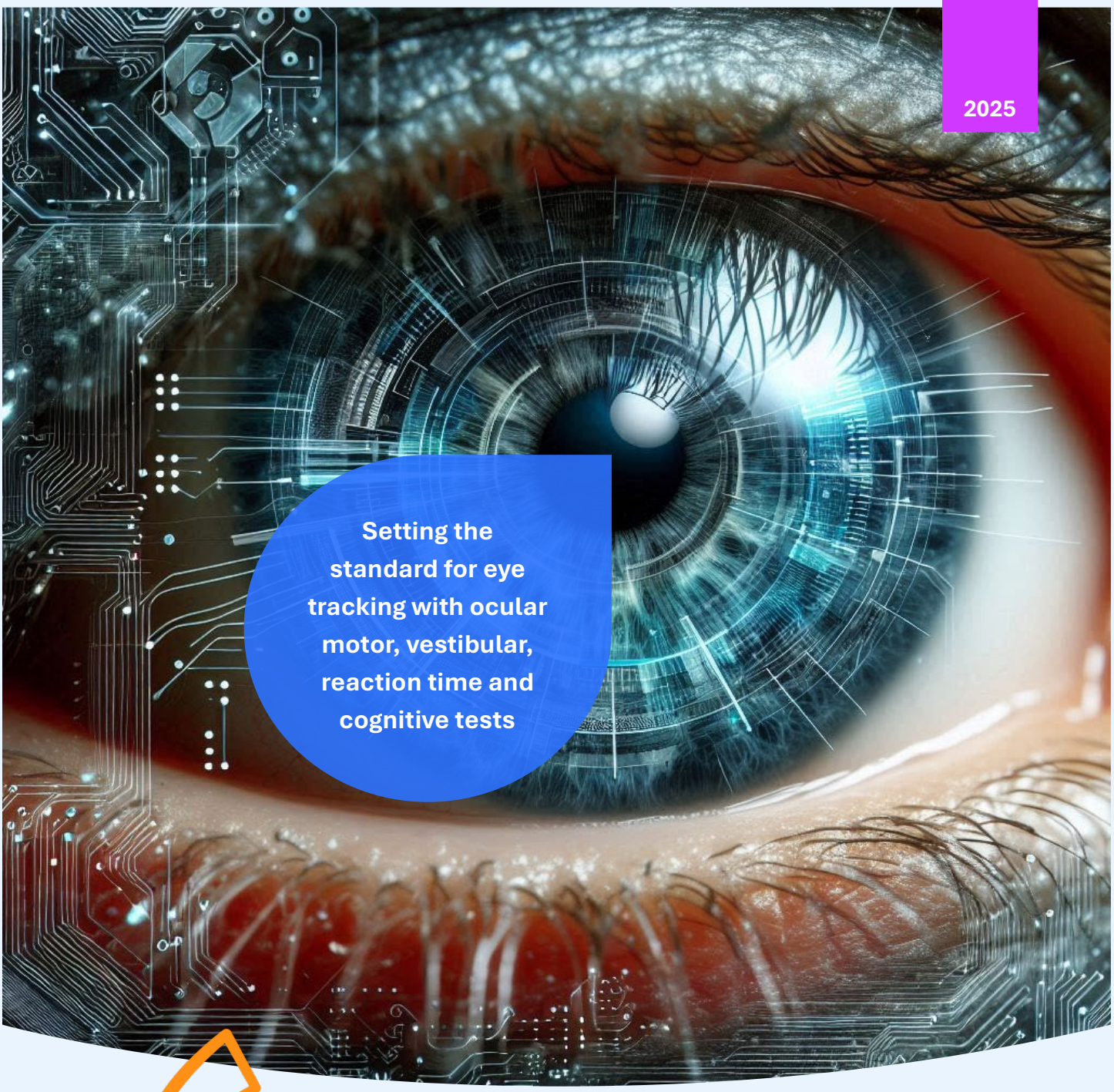


spryson

DX200 Virtual 3D VNG Goggles
All-in-One VNG System

 NeuroAI **DX200 Goggles** DX Falcon Neuro Otologic Test Center (NOTC)

Spryson is driven by an overarching ethos of accessibility, making sophisticated eye-tracking and brain health detection technology a viable option for a greater number of organizations and institutions.

An industry leading VNG system in a compact, portable package.

NEUROAI

DX200 GOGGLES

DX200 is an advanced, all-in-one VNG system that incorporates a virtual 3D display directly into its goggles, offering an unrivaled level of portability and compactness. This unique design ensures that clinicians and researchers have access to a full suite of diagnostic tools without sacrificing convenience or ease of transport. Its small footprint makes DX200 ideal for use in various clinical environments, from hospital settings to clinics to sports fields, enabling rapid assessments wherever needed.

DX200 opens the door to advanced diagnostics, particularly for those suffering from concussions, mild traumatic brain injuries (mTBI), and other neurological conditions. These tests, critical in identifying subtle impairments, include ocular motor, vestibular, and reaction time (OVRT) assessments.

Designed to streamline the testing process, DX200 integrates our NeuroAI software that automates key aspects of data collection.

DX200 Goggles

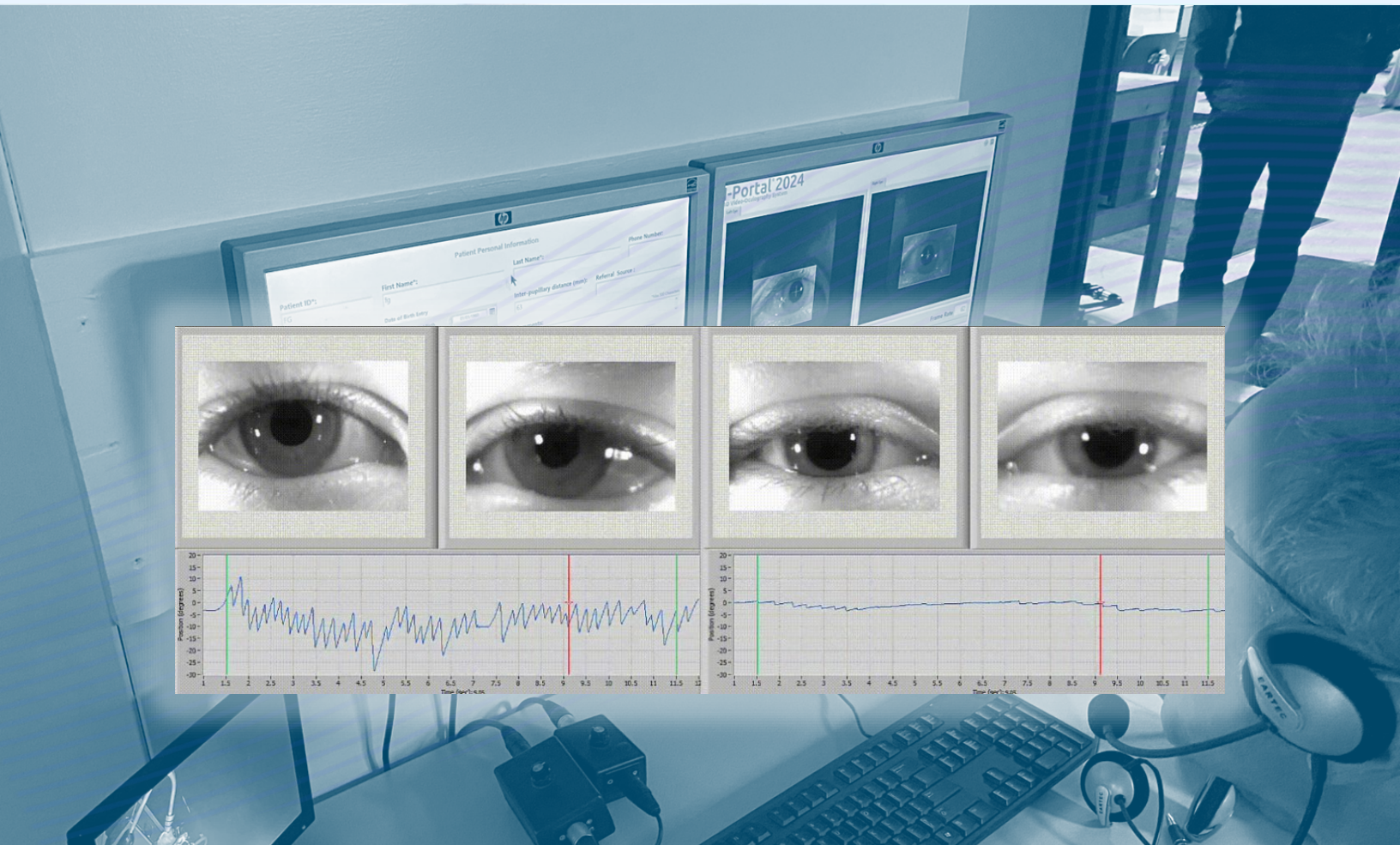
For clinicians and researchers specializing in concussion, mTBI, and other neurological conditions, our DX200 goggles are ideal tools for conducting patient diagnostics.

DX200 goggles are easy-to-use, lightweight, and comfortable to wear. Our goggles can run either industry-standard tests or proprietary tests designed by you and your team. The user-friendly interface makes it easy for you to group any set of tests into a single block to increase workflow efficiency – especially useful in busy clinical settings. Voice and video tutorials explaining how to take each test are built into standard testing protocols.

The depth and quality of the data captured by DX200s is unmatched. Many routine aspects of data collection and analysis are automated, streamlining the testing process.

DX200s use FDA-cleared and peer-reviewed normative data to interpret each test result, ensuring reports are based on reliable reference points and reducing variability between patients. This is crucial for making informed treatment decisions, particularly when dealing with delicate cases like head injuries, neurological disorders, or balance issues.

The custom reports are concise, clear, descriptive, and actionable -- essential for busy practitioners focused on vestibular, ocular motor, and neurological health.



Spryson's VNG system and software solutions have been refined through decades of collaboration with elite global institutions.

JOHNS HOPKINS
UNIVERSITY & MEDICINE

U.S.ARMY

Massachusetts Institute of Technology

NASA

NIH

MAYO CLINIC

DX200 Specifications

DX200 is an advanced, all-in-one VNG system that incorporates a virtual 3D display directly into its goggles, offering an unrivaled level of portability and compactness.

DX200 GOGGLES

Hardware Specs

- **Records both eyes simultaneously:** Yes
- **Goggle weight:** 595 grams (1.31 lbs)
- **Sampling rate:** 100 Hz
- **Resolution in pixels:** 348×248
- **Spatial resolution / Tracking accuracy:** 0.01^{o} Horizontal and Vertical, 0.1^{o} Torsional
- **Eye Tracking Range:** ±30° Horizontal and Vertical; ±10° Torsional
- **Pupillary Distance Fit:** 55 to 70 mm
- **Diopter Correction** ±4 diopters per eye
- **USB level:** USB 3.0
- **System latency:** 4 msec
- **Torsion recording:** Yes
- **Pupil diameter recording:** Yes
- **Pitch, yaw and roll sensors:** Yes

Ocular Motor, Vestibular and Reaction Time Tests

- **Vergence pursuit and vergence steps:** Evaluate how well the eyes track moving objects at varying distances
- **Anti-saccades and predicted saccades:** Measures inhibitory control and the ability to anticipate and react to stimuli
- **Subjective visual vertical and horizontal (SVV/SVH):** Evaluates the perception of vertical and horizontal orientation, which can indicate vestibular or brainstem dysfunction
- **Auditory and visual reaction times:** Assesses multisensory integration and response speed
- **Dual-task testing:** Combines an eye movement task with a motor task, which is especially useful for evaluating cognitive-motor integration in complex scenarios such as post-concussion assessment

Clinical Test Menu

CATEGORY	TEST	NORMATIVE DATA (510K)	CPT CODE (REIMBURSEMENT)	NOTC PRO+	NOTC STANDARD	DX-200	TEST PARAMETERS
Traditional Ocular Motor	Smooth Pursuit	●	92545, 92540 (Bundle)	●	●	●	4
	Saccade	●		●	●	●	4
	Optokinetic (OKN)	●	92544, 92540 (Bundle)	●	●	●	8
Advanced Ocular Motor	Vergence Pursuit			●	●	●	11
	Vergence Steps			●	●	●	5
	Predictive Saccade	●		●	●	●	5
	Antisaccade	●		●	●	●	6
	Self-Paced Saccade			●	●	●	2
Reaction Time	Visual Reaction Time	●		●	●	●	2
	Auditory Reaction Time	●		●	●	●	2
Dual Task	Saccade and Reaction Time	●		●	●	●	4
Static Vestibular	Spontaneous Nystagmus		92541, 92540 (Bundle)	●	●	●	3
	Gaze Nystagmus		92541, 92540 (Bundle)	●	●	●	4
	Positional		92542, 92540 (Bundle)			●	4
Dynamic Vestibular	Sinusoidal Harmonic Acceleration (SHA)	●	92546	●	●		5
	above for vertical canals			●			5
	SHA with Visual Enhancement	●	92546	●	●		5
	above for vertical canals			●			5
	SHA with Visual Suppression	●	92546	●	●		5
	above for vertical canals			●			5
	Pulse-Step-Sine			●	●		10
	above for vertical canals			●			10
	Positioning (Dix Hallpike etc.)		92542, 92540 (Bundle)			●	3
	Caloric (Requires irrigator, sold separately)		92537 or 92538			●	7
Impulse tests	Trapezoidal Rotation (Impulse Step Test)			●	●		8
	above for vertical canals			●			8
	vHIT (video Head Impulse Test)						6
	crHIT (controlled rotation Head Impulse Test) Hor, LARP abd RALP	●		●	●		11
	above for vertical canals			●			11
Otolith Function	Subjective Visual Vertical	●		●	●	●	3
	Subjective Visual Horizontal	●		●	●	●	3
	Dynamic Unilateral Centrifugation with SVV			●	●		

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Spryson is on a mission to create a quantum shift in the clinical approach to neurodegenerative disease, brain health and wellness.

Advancing Cutting-Edge Science

- Industry-leading eye-tracking technology and expertise in neuroscience
- Innovative products that aid in the diagnosis and monitoring of neurological injury and disease
- Backed by over 30 years of research, experience, and development