

User-Defined Protocol

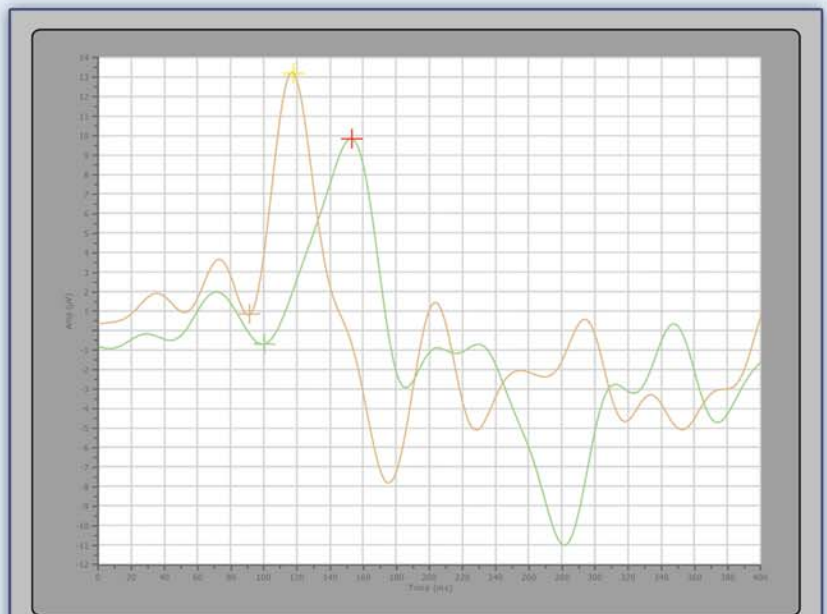
- Clinicians may customize testing parameters specific to each patient and pathology to assess the function of the entire vision system from the anterior segment to the visual cortex.
- Patented software enables the clinician to choose:
 - Pattern Type
 - Pattern Size
 - Contrast level
 - Eye (OD, OS and OU)
- Testing times are flexible and depend upon the customized settings designated by the practitioner.
- AutoCP™ automatically places cursors on the VEP data points' best fit locations.

Reports

The Diopsys® NOVA-VEP report allows for a quick qualitative analysis of the VEP waveform and easy quantitative analysis of the amplitude (strength) and latency (speed) values.

Documents progression of disease or response to therapy.

Reports may be created using any VEP test results and enables viewing of one or two graphs with up to 5 different VEP waveforms on each graph.



	T=15s -P=64 x 64-C-12/6/2010 3:44:33 PM OD 15%	T=15s -P=64 x 64-C-12/6/2010 3:44:33 PM OS 15%
Left Cursor Lat	100.4 ms	91.7 ms
Amp	-0.69 uV	0.84 uV
Right Cursor Lat	153.1 ms	118.0 ms
Amp	9.83 uV	13.19 uV
Delta Lat	52.6 ms	26.3 ms
Amp	10.52 uV	12.36 uV
CheckSize	32 x 32	32 x 32
Test Time	15	15
Pattern	Checkerboard	Checkerboard
SWVersion	2.11.0806	2.11.0806
Filtered	Y	Y
Eye	OD	OS
Contrast	15	15

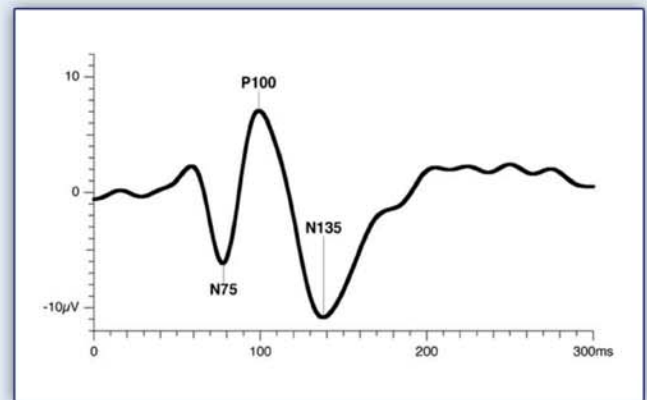
Easy, Objective, Functional

Visual Evoked Potential (VEP)

Visual Evoked Potentials (VEPs) are electrical signals that are a measure of the electrophysiological activity at the visual cortex. VEP results are a representation of the functional integrity of all levels of the visual pathway including the anterior segment, retina, optic nerve, lateral geniculate nucleus and visual cortex.

Amplitude, measured in microvolts (μV), indicates the functional strength of the neural structures conducting information along the visual pathway. Latency, measured in milliseconds (ms), indicates the time the electrical signal takes to travel from the retina to the visual cortex. The combination of amplitude and latency is helpful in determining the integrity of the visual pathway.

A typical pattern-reversal VEP graph response will primarily consist of the **N75 - P100 - N135 Complex**.¹ In normal patients, the first major negative peak occurs around 75ms (N75), or 75ms after the pattern onset. The first major positive peak occurs around 100ms (P100), and the second major negative peak around 135ms (N135). Based on pathologies, the amplitudes and latencies of these components may change.



A normal pattern-reversal VEP¹

The **Diopsys® NOVA-VEP User-Defined Protocol** enables the clinician to record, view and assess quality VEP signals using multiple test options. Patented technology for stimulus generation enables the designation of pattern size, contrast and frequency of checkerboard, horizontal, vertical or sinusoidal patterns. Test options also allow OD, OS and OU testing and comparison.

Diopsys® NOVA-VEP Features & Specifications

- Algorithms embedded in the Diopsys® NOVA-VEP software allow immediate and objective VEP waveform analysis.
- AutoCP™ automatically places cursors on the VEP data points' best fit locations.
- Artifact Detection aids in noise cancellation and accurate data acquisition/analysis.
- Re-VIEW™ feature can replay previous VEP tests to show wave formation and artifacts, giving the clinician the ability to identify the best acquired VEP signal.