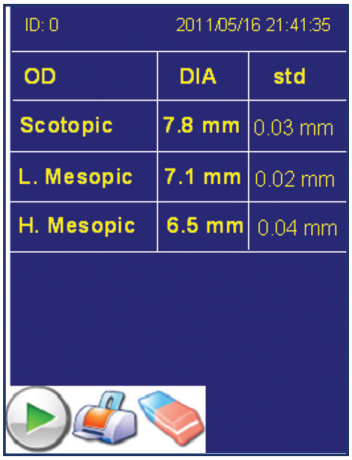
VIP™-200 Pupillometer

Very accurately measures pupil size under various light conditions

The NeurOptics® VIP™-200 Pupillometer is a portable, battery operated, hand-held device which very accurately measures pupil size. In order to simulate light conditions a patient may experience in daily life, the device can measure pupil diameter either with no background illumination for 2 seconds or variable light levels in one sequence (scotopic, low mesopic, high mesopic) for a total of 10 seconds. This allows the clinician to make the best possible medical decisions for LASIK and premium IOL patients based on pupil size, stated daily activities, and patient preferences.



VIP™ technology produces reproducible measurement results

Testing has shown that the NeurOptics® Pupillometer is consistent from unit to unit and operator to operator. In fact, the NeurOptics® Pupillometer has the highest accuracy and lowest error of all commercially available pupillometers*, while at the same time being the most economical hand-held infrared device. The key to the reproducibility in measurement is the use of VIP™ (Vertex Invariant Pupillometry™) technology developed by NeurOptics. This system compensates for the approximate 12mm range in vertex distance† that may lead to inaccurate pupil measurement (error up to 20%), producing accurate measurements that are not affected by vertex distance‡.

Simple to use and operate

The Pupillometer has one-button activation and requires no calibration by the user. Data is stored on the device and can be recalled and/or printed, and video of the measurement can be played on the device's screen.

Used by leading refractive surgeons

"The NeurOptics® Pupillometer…is very compact, simple to use, reasonably priced and gives accurate automatic readings to 0.1mm. An accurate instrument for measuring the scotopic pupil is essential for refractive surgeons."

--James Salz, M.D.

References:

*Schallenberg M, Bangre V, Steuhl KP, Kremmer S, Selbach JM., Comparison of the Colvard, Procyon, and Neuroptics pupillometers for measuring pupil diameter under low ambient illumination. J Refract Surg. 2010 Feb;26(2):134-43.

† Distance from the front surface of the eye to the back of a lens or optical device.

‡ The pupil is never at rest, and therefore a single, static, measurement is unlikely to be an accurate assessment of a pupil's true amplitude or range of diameter. To compensate for pupillary unrest NeurOptics employs a dynamic measurement system which captures 30 pupil positions over an approximate 2-second scanning period, thus producing the weighted average pupil size and standard deviation.

Technical Specifications NEUROPTICS® PUPILLOMETER – MODEL # VIP™-200
Measurement Characteristic Input: Human pupil size varying from 1mm to 9mm Output: The instrument provides data on pupil size: Average pupil aperture and standard deviation Tolerance: ± 0.1mm
Mode of Operation On Demand battery operation
Power Supply 4.2V 1800 mAmp/hour Li: Ion Cell (battery)
Operating Environment Temperature Range: 18° C (65° F) to 30° C (86° F) Relative Humidity: 20% to 70% RH. Non-condensing at all times
Transportation and Storage Environment Temperature: 0° C (32° F) to 75° C (167° F) Relative Humidity: 10% to 95% RH. Non-condensing at all times
Dimensions: With Eyecup: 8.3" (211mm) x 1.3" (33mm) x 4.5" (114mm) Without Eyecup: 7.5" (191mm) x 1.3" (33mm) x 3.5" (89mm)
Weight: 356g ± 10g
Classification: Class 1 LED product per IEC 60825

NeurOptics® VIP™-200 System Includes:

- VIP™-200 Pupillometer
- Charging Station & Power Supply
- Carrying Case

Optional Accessories:

- Printer Kit
- Spare Battery

Caution:

Federal (USA) law restricts this device to sale by or on order of a physician. Refer to product package insert for instructions, warnings, precautions and complications.

From Pupil to Expert…Precision Guaranteed™

NEUROPTICS
Phone: (949) 250-9792
Toll Free North America (866) 99-PUPIL
Fax: (949) 250-9796
E-mail: info@NeurOptics.com
www.NeurOptics.com
2082 Michelson Drive, Suite 450
Irvine, CA 92612
USA

CE 0123 EC REP EMERGO EUROPE Molenstraat 15 2513 BH, The Hague The Netherlands Tel: +31 (0)70 345 8570 Fax: +31 (0)70 346 7299