



OCULUS
CENTERFIELD 2



OCULUS®

We focus on progress

Oculus Centerfield 2

Projection perimeter for visual field tests up to 70°

Our know-how to your benefit

Take advantage of the more than 50 years' experience of Oculus in the design and production of visual field testing devices! The Centerfield 2 perimeter emerged as one result of the continuous research and development work. Oculus perimeters stand out through their well-engineered technology and high quality standard ("Made in Germany"). Oculus is market leader in Germany in compact visual field testing devices. The Centerfield 2 has proven its value repeatedly in the occupational medicine and ophthalmology.

The latest enhancements of Centerfield are directed towards:

- ease of operation
- faster diagnostics
- comfortable interface
- ergonomic design

Unrivaled

Centerfield 2 offers free choice of test point locations for re-examinations

The unique feature of the re-examination offers you a powerful tool to easily re-check ambiguous defects, using a free choice of additional test point locations.

The Oculus Centerfield 2 is the most compact perimeter capable of visual field testing up to 70°, therefore it is easily transportable. The closed construction makes dark rooms for the examinations unnecessary.



> *Increased functionality with the motorized chinrest*

10 arguments to convince you!

- **Reliable examination methods:**
glaucoma and macula programs, using a wide variety of threshold and supra-threshold strategies.
- **Highly configurable:**
all your particular needs can be met by customized test patterns and strategies, advanced networking capabilities help to easily access and store examination data.
- **Short duration:**
threshold values with CLIP in 2-3 minutes per eye.
- **Patented projection principle:**
this back surface projection perimeter follows the Goldmann standard.
- **User-friendly interface:**
fast and simple usage, one click and you can start your favourite program.
- **Unparalleled:**
a re-examination of peculiar test points, totally independent from the initial test grid, represents an optimal prerequisite for a confident assessment of visual field test findings.
- **Office Networking:**
easy integration into your familiar patient management system
- **The most compact perimeter for examinations up to 70°:**
small footprint – easily transportable.
- **Independence from room illumination:**
no separate dark room necessary, thanks to the closed construction.
- **“Made in Germany”:**
a perimeter recommended by the German Ophthalmological Society.



Technical highlights

Understanding Differential Light Sensitivity (DLS)

Every patient has a different ability to observe levels of illumination in different regions of its retina. In a perimeter, test points show up against a background with constant luminance, in well-specified luminance steps. One can determine the lower limit for observable stimulus luminance. This limit is called *Differential Light Sensitivity (DLS) threshold*.

Differential Light Sensitivity (DLS)



The smaller the observed difference in luminance, the higher the DLS.

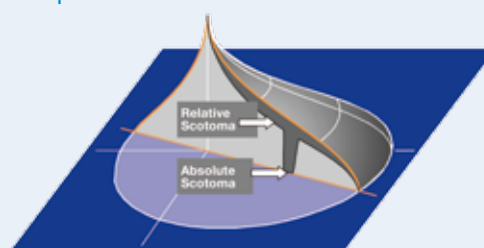
Threshold tests

The Centerfield 2 performs reliable and precise threshold examinations, by measuring sensitivity values on a decibel scale in all points of the chosen examination pattern. Quantitative results are essential e.g. in glaucoma diagnosis and follow-up. It is possible to use either the classical 4/2 or the fast threshold strategy. Optionally, one has the choice of the novel CLIP (Continuous Light Increment Perimetry) strategy, for real threshold measurements without interpolation in substantially shorter time.

Supra-threshold test strategies

In many situations it is sufficient to perform a fast scanning of the visual field. During the examination light stimuli with luminance slightly above the expected threshold values are presented. If the stimulus is not recognized, the device can present the stimulus with highest intensity. In this manner it can be decided, whether the decrease in sensitivity was caused by a relative or an absolute defect (scotoma). A re-examination targeted to the peculiar locations can complete the test, and the improved findings will additionally back up your diagnosis.

DLS dependence on visual field location



A reduced value of DLS indicates a relative scotoma. When even the brightest stimulus can not be seen, one has an absolute scotoma.

Reliable fixation and response checks

For automated check of fixation special stimuli are presented, centrally or on the blind spot. The examiner can additionally monitor the fixation of the subject through the built-in camera. Patient cooperation of subjects is tested using false positive catch trials: the device performs the usual movements, producing all the typical noises, but no actual stimulus is presented.

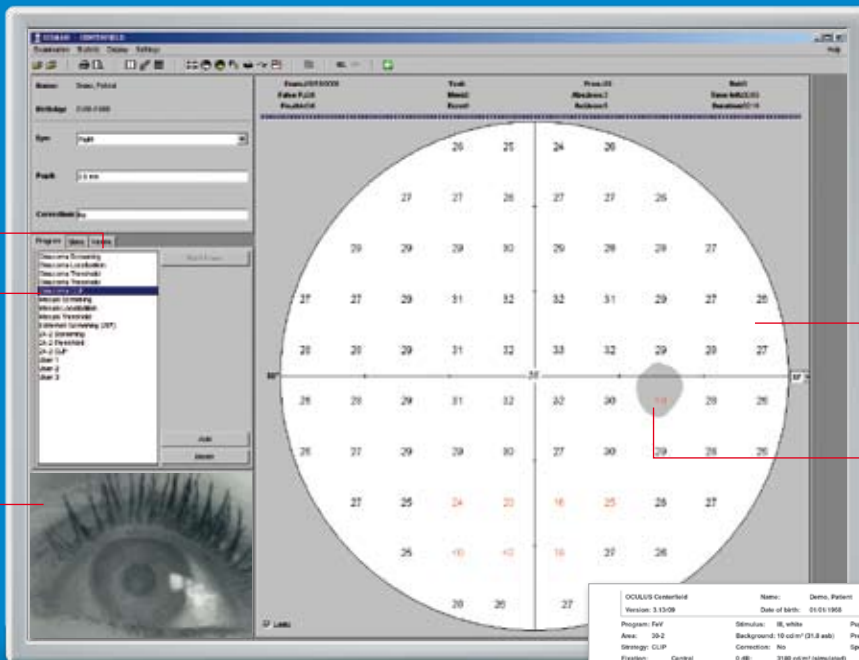
All the essentials at a glance!



2

1

3



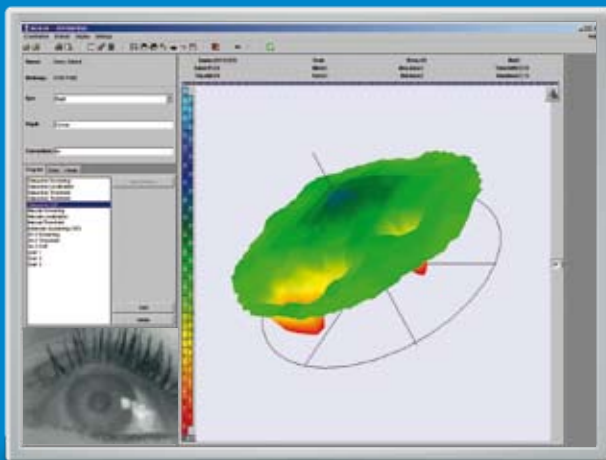
1 Special program "Glaucoma CLIP"

2 CLIP strategy

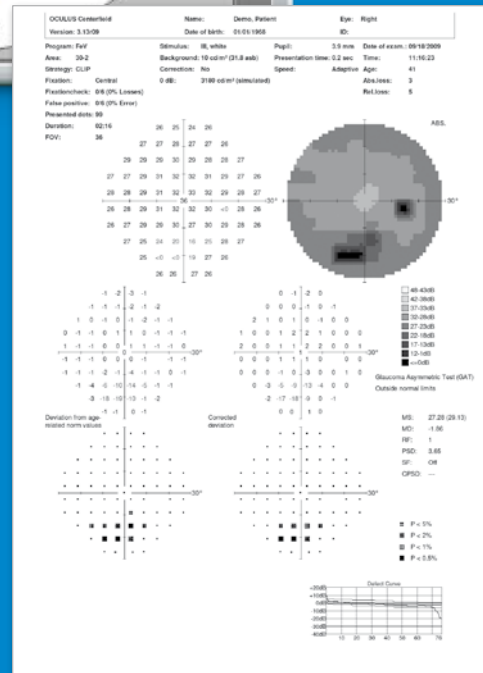
3 Continuous fixation control through the camera image

4 Test area directly indicating the measured sensitivity threshold values

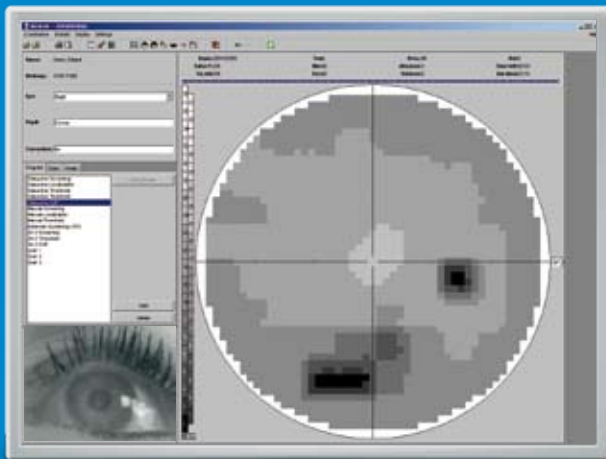
5 Blind spot, used as reference scotoma



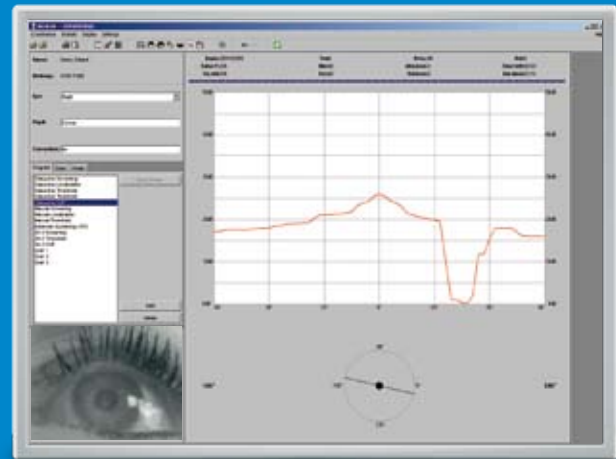
> Color 3D animation



> Comprehensive printout with a single click!



> Greyscale map



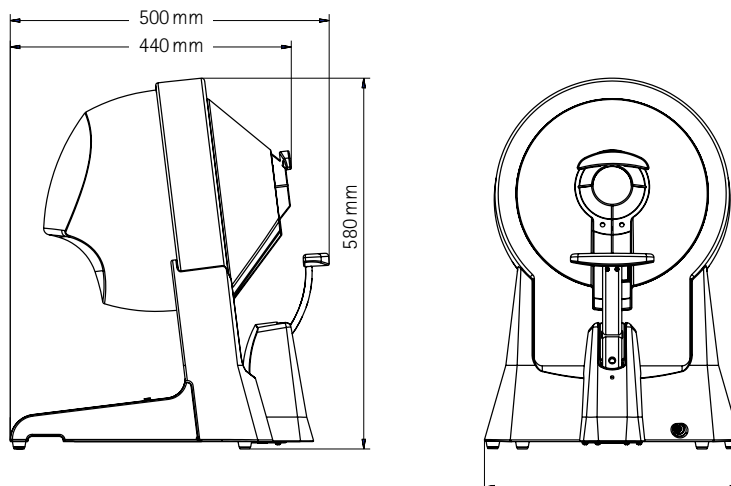
> Profile representation

Technical Data

Oculus Centerfield 2

Bowl radius	r=30 cm
Stimulus size	Size III (<i>following Goldmann</i>)
Luminosity range / steps	0-318 cd/m ² (1000 asb) / 0.1 log units
Background luminance	10 cd/m ²
Speed	slow / normal / fast / adaptive / user defined
Stimulus color	white / blue
Maximum eccentricity	36° / 70° (<i>fixation shift</i>)
Fixation control	CCD camera, central threshold, Heijl-Krakau
Patient positioning	Motorized chinrest with adjustable height; in depth adjustable headrest
Static perimetry	
Programs	Glaucoma (<i>Screening, Threshold, Localization</i>) Macula (<i>Screening, Threshold, Localization</i>) User defined programs
Strategies	Threshold strategies: classical 4/2, fast threshold Optional: CLIP strategy Supra-threshold strategies: 2-zones, 3-zones, quantify defects, threshold oriented class strategy
Test point patterns	Physiological patterns (Area 1-8), rectangular patterns (30-2, 24-2, 10-2) Estermann, profile. Additional patterns freely definable
Kinetic perimetry	
Strategy	Automatic, multiple isopters, freely selectable meridians (min 2°) and sectors up to 36°. Speed: 2° per second (<i>Goldmann standard</i>) or user defined
Weight	11.7 kg; Chinrest: 1.1 kg
Operating tension	100V - 240V
Minimal PC requirements	CPU 750 MHz; Windows 98 or newer, 256 MB RAM, VGA 800x600, USB
Included parts	Opaque eye patch, reponse button, support for correction lenses, 4 thin rim correction lenses (+/- 1.0 DS and +/- 3.0 DS), cover
Options	Electric lifting table, transport box, transport backpack, set of thin rim lenses, laptop, PC, printer

CE gemäß Richtlinie 93/42/EWG über Medizinprodukte



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Oculus is certified by TÜV according to
DIN EN ISO 13485:2003/DIN EN ISO 9001:2000