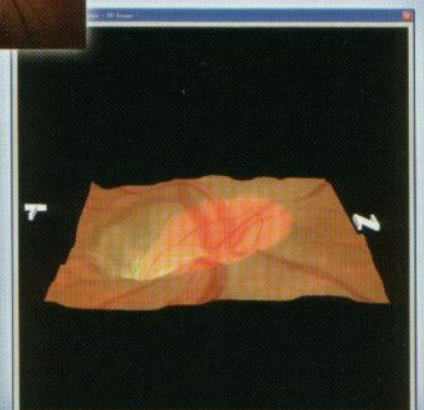
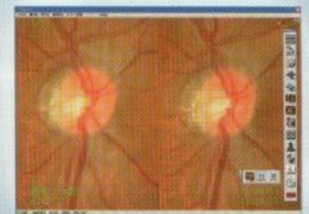
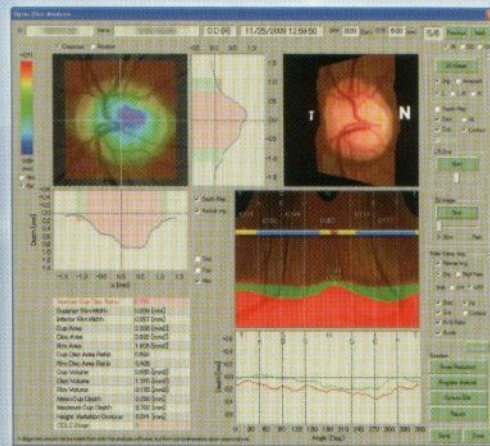
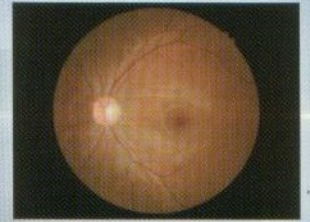




Technology for Life Science

2D/3D Non-mydratic Retinal Camera / Analysis System

Kowa nonmyd WX^{3D} RETINAL CAMERA



Kowa

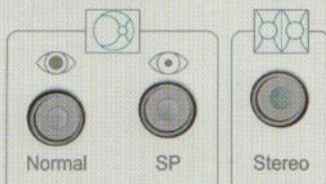
nonmyd WX^{3D}

RETINAL CAMERA

A new concept retinal camera with "SSP",
Simultaneous Stereoscopic Photography.



Three photography modes to choose from: Normal, SP (Small Pupil), and Stereo.



2D — Normal & SP —



Normal Field angle : 45°

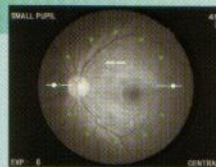
Kowa's exclusive optical design in combination with the 12 megapixel digital SLR camera delivers extremely detailed retinal images.

The integrated 9-points internal fixation system allows for mosaic photography covering a large retinal area.



SP (Small Pupil) Field angle : 45°

Retinal images can be taken even with smaller pupils. On screen guides indicate if the pupil size is within the sufficient range (above 3.5mm) for photography.



※ Some eyes may cause a flare around their circumference.

Automatic mosaic merge function

Mosaic images are created easily with automatic image rotation & alignment.

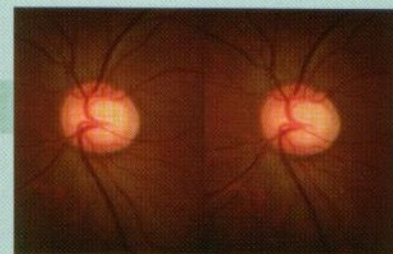


3D — Stereo —

Stereo Field angle : 34° (20°x27°)

Photography

Instant and simultaneous 3D photography is possible in 1-shot. Stereoscopic images are captured without the camera shifting.



Retinal observation on 3D images

The shape of the optic cup and disc can be viewed in a 3D image.

Switch between the parallel and cross viewing methods with 1-click when viewed on a 2D monitor.

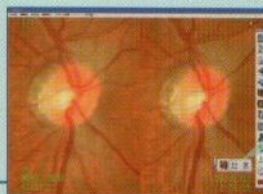


Image capturing



Parallel/Cross view icon (Icon may be hidden.)

3D Analysis System

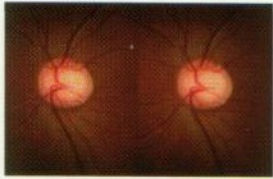
3D image analysis of optic disc

nonmyd WX

3D Analysis System

Photography

Start up the analysis system at the display of stereo image.



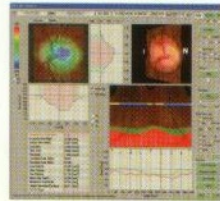
Contour line determination (manual/auto)

Cup and disc are plotted manually or automatically to support contour line determination.



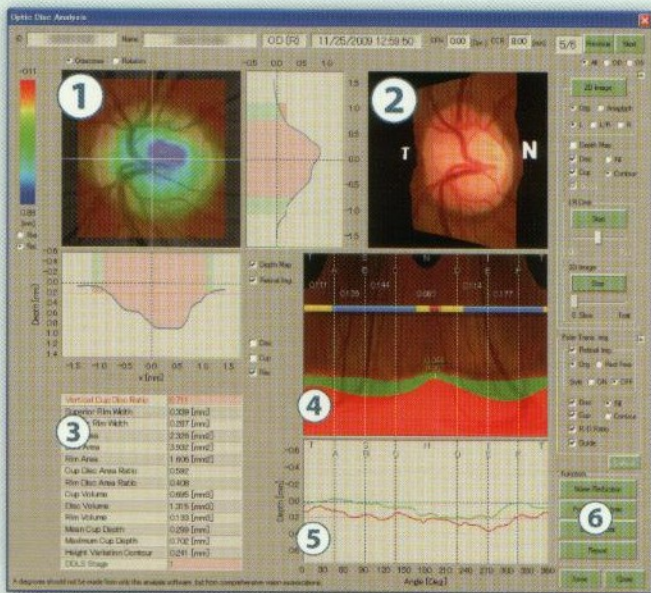
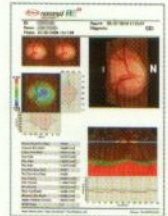
3D analysis

The analysis result is shown by the various parameters in the specified area.



Report output (PDF/JPEG)

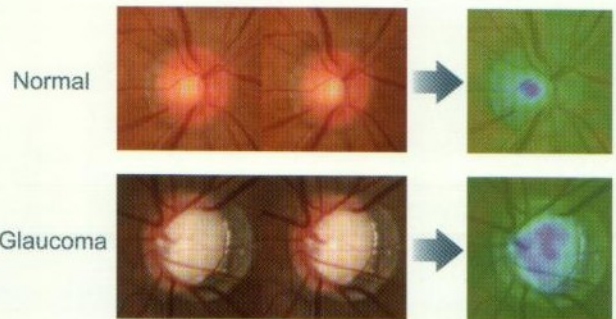
The analysis result can be output in PDF and / or JPEG format.



Analysis results

Depth distribution ①

Color-coded display of the depth distribution in the analysis area, or graphical display of the cross section of an arbitrary position.



3D display ②

Display of 3D image based on stereographic data.



Numerical data of analysis results ③

Display of optic disc parameters including "DDLS".*

Polar coordinates display ④

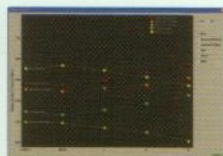
The polar coordinates display of the depth distribution permits visual display of the thin part of the rim. (marginal region of optic disc)

Contour line depth distribution graph ⑤

Graphical display of the depth distribution of cup and disc profiles.

Follow-up ⑥

Graphical display of cup/disc ratio, rim/disc ratio, cup area, and many other parameters.



*DDLS (disk damage likelihood scale) Stage

Indexical values defined by the disc size and the rim/disc ratio; which was suggested by Dr. George L. Spaeth as a method to diagnose the optic disc.

Bayer A, Harasymowycz P, Henderer JD, et al.: Validity of a new disk grading scale for estimating glaucomatous damage: correlation with visual field damage.

American Journal of Ophthalmology, vol. 133(6), pp.758-763, 2002.

**Specifications**

Photography modes	Normal / SP / Stereo (electrically switched)	Camera	Specific Nikon digital SLR camera
Stereoscopic photography method	Simultaneous stereo photography	Monitor	5.7 inch LCD monitor
		Internal fixation target	Central, Disc, Macula, mosaic 8 positions
Stereo photography parallax	7.4°(at the 0 diopter eye)	External fixation target	Red light (option)
Field angle	Normal : 45° SP : 45°* Stereo : 34°(20°×27°) *Some eyes may cause a flare around their circumference.	Optical head base adjustment range	Movable 40mm forward/backward Movable 98mm leftward/rightward Movable 27mm vertically (electric)
		Working distance	30mm
Minimum pupil size	Normal mode : ϕ 4.0mm SP mode : ϕ 3.5mm Stereo mode : ϕ 4.0mm	Chin rest adjustment range	Movable 55mm (electric)
		Interface	USB
Compensation range of examined eye	Without compensation : -12D~+13D Compensation - : -32D~-10D Compensation + : +10D~+35D	Power supply	Input : AC100~240V 50 / 60Hz Power consumption : 150VA
Focusing	Split luminous bars coincidence	Dimensions	310(W)×504(D)×548(H)mm
Working distance adjustment	2 luminous dots indication type	Weight	21kg / 46lbs (excluding the attached digital SLR camera)

3D ANALYSIS SYSTEM REQUIREMENTS

CPU	Celeron® 2.0 GHz or higher
Memory	1 GB or higher
Monitor resolution	SXGA or higher
OS	Windows® XP, Windows Vista®

A diagnosis should not be made from only this analysis software, but from comprehensive vision examinations.

Images of the monitor are compositions.

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Celeron is a trademark of Intel Corporation in the United States and other countries.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

Windows Vista is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

Specifications and appearances are subject to change without notice.

Distribution name : KOWA nonmyd WX



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