

Optical Coherence Tomography

3D OCT-2000 Series



THE ULTIMATE ALL-IN-ONE PRODUCT

Fast, Easy, and Precise

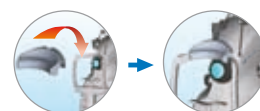
Unveiling Topcon 3D OCT-2000 Full Line-up of Spectral
Domain OCTs with High Resolution Fundus Cameras



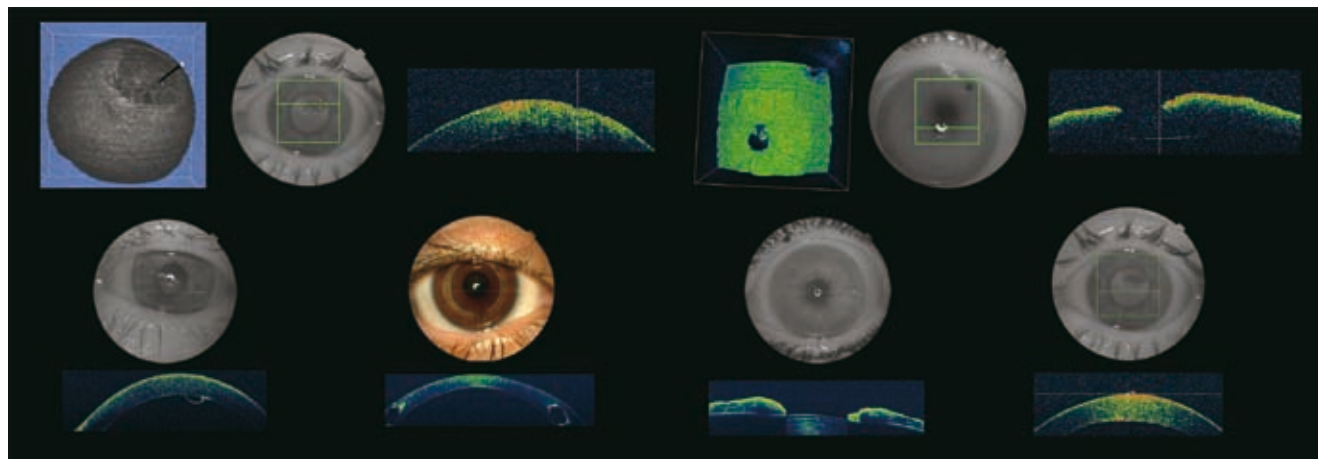
HIGH RESOLUTION ANTERIOR CHAMBER SCANNING

OCT is a non-invasive imaging modality that can precisely identify and acquire retinal and anterior chamber images easily. No extra device is required. All you need is a headrest attachment to capture anterior. 3D OCT-2000 provides this anterior imaging as a standard equipment.

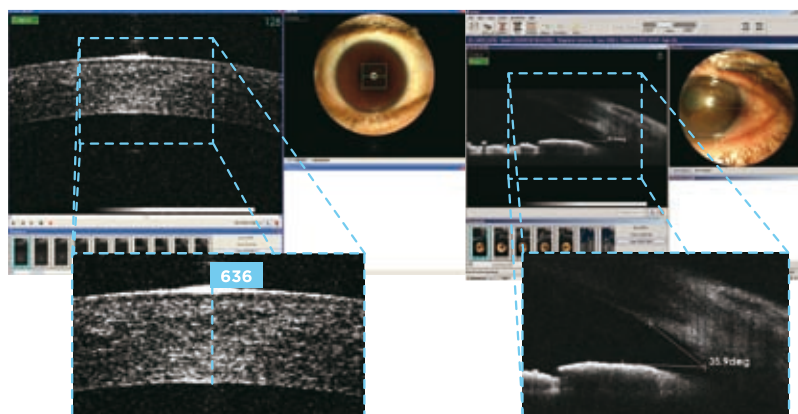
Simple headrest attachment



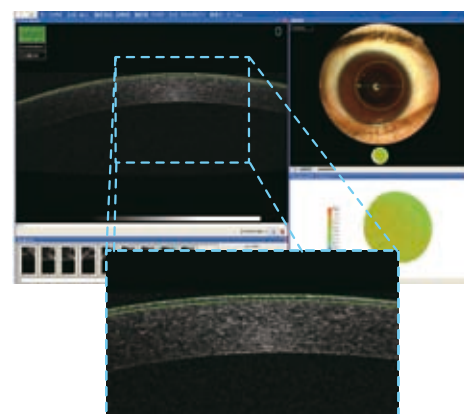
Anterior Chamber Scanning Images



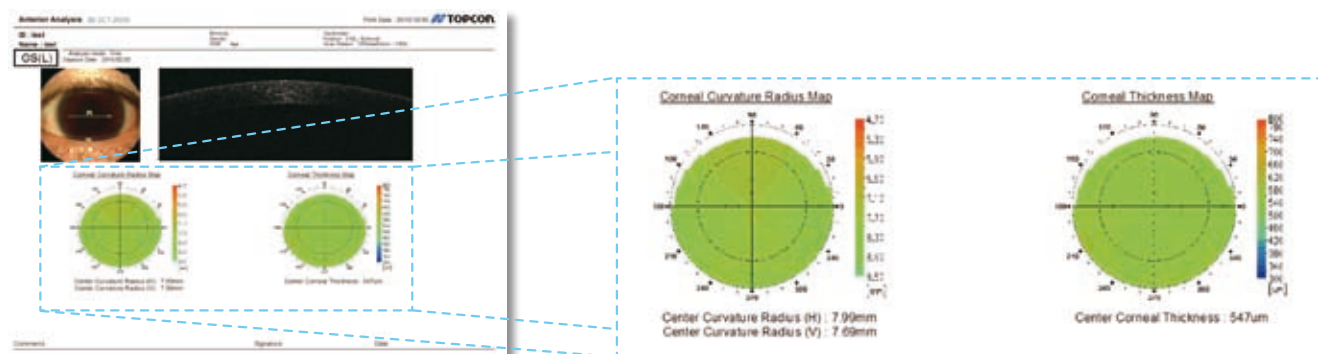
Caliper measurement



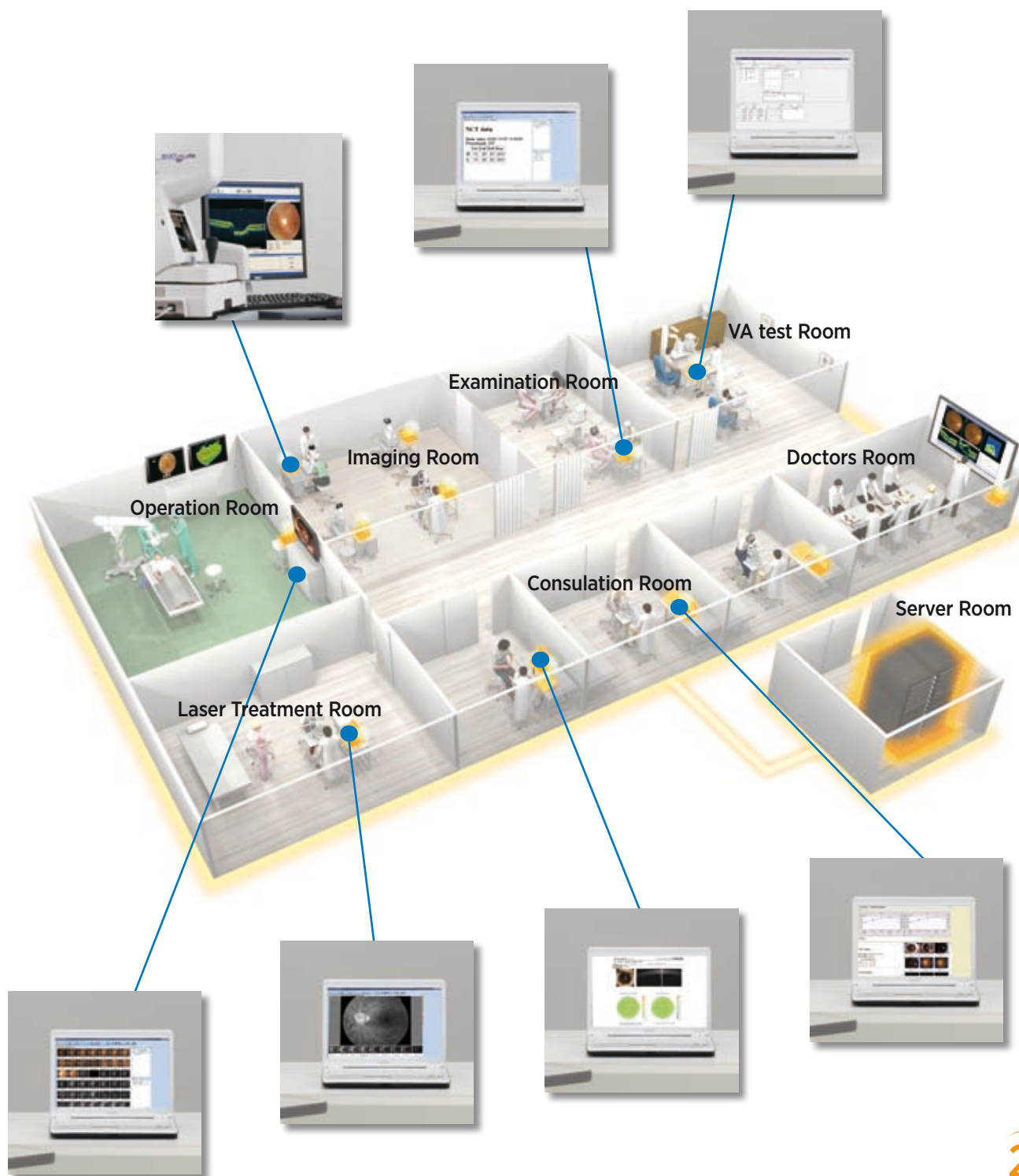
Segmentation



12 Radial report (sample)

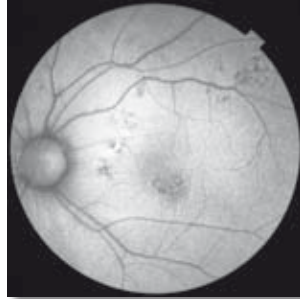


Topcon 3D OCT-2000 and its viewing software plays a powerful role in the management of the patient's data. The unique software enables all patient imaging and data to be collected, saved and reviewed remotely through one unified network, IMAGEnet™. OCT images can be viewed and analyzed through the network at any location; medical meetings, surgical simulation in the operating room and in a patient consultation room. Furthermore, an integrated IMAGEnet™ system allows all clinical images taken throughout the ophthalmology department to be stored in one patient file, thereby facilitating comprehensive diagnosis.

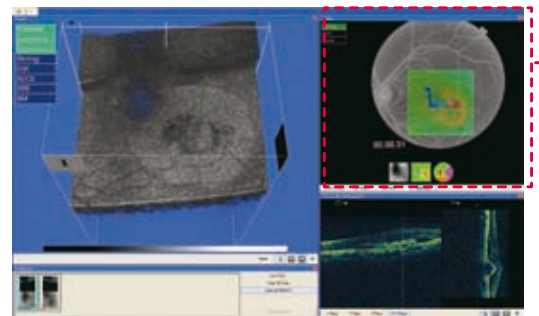
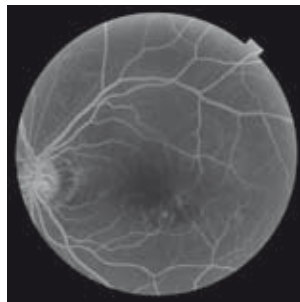
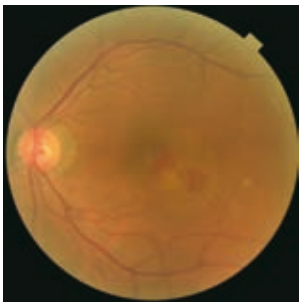


Clinical images

>> Case 1: Male, AMD (Age-related macular degeneration)

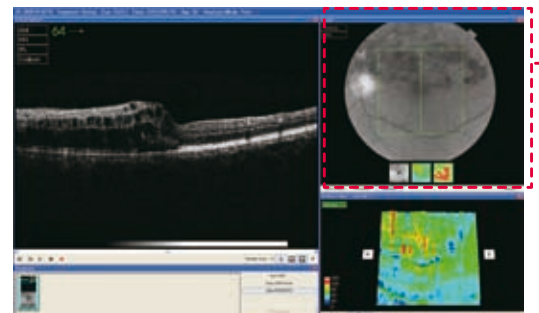
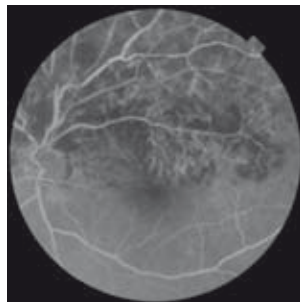
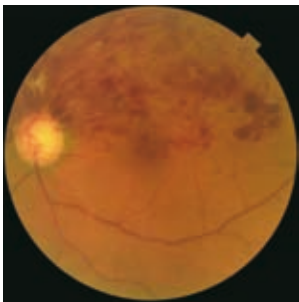


>> Case 2: 75-year-old, Male, AMD (Age-related macular degeneration)



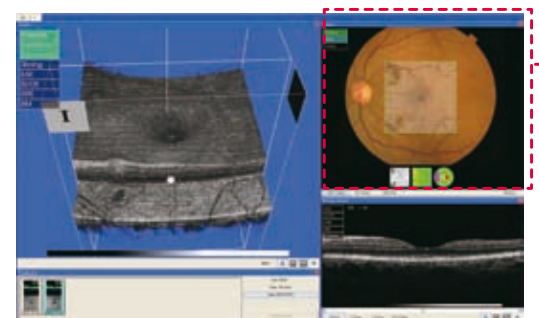
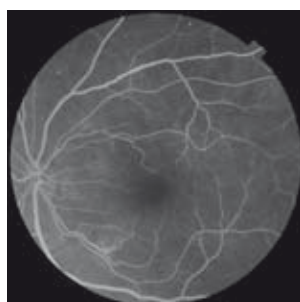
Imported FA image

>> Case 3: 82-year-old, male, BRVO (Branch retinal vein occlusion)



Red-free (digital)

>> Case 4: 57-year-old, female, DR (Diabetic retinopathy)



Color

Specifications

Observation & Photography or Fundus Image		
Scan Mode		Color, FA ^{*1} , FAF ^{*1} (Spaide Filters), Red-free ^{*2}
Observation		Near IR
Picture Angle		45° Equivalent 30° (Digital Zoom)
Diopter Scale Range^{*3}		-13 D to +12 D (in fundus photography)
Operating Distance		40.7 mm (in fundus photography) 63.7 mm (in enterlor segment photography) ^{*4}
Photographable Diameter of Pupil		45°: ϕ 4.0 mm or more Small pupil diameter: ϕ 3.3 mm or more
Observation & Photography or Fundus Image/ Anterior Segment Tomogram		
Scanning Range	(On Fundus) (On Cornea)	[Lateral] within 3-9mm [Vertical] within 3-9mm [Lateral] within 3-6mm [Vertical] within 3-6mm
Scan Patterns^{*5} (Recommended)	Macula: 3D Scan Macula: Radial Scan Macula: 7 Line Raster Disc: 3D Scan Disc: Circle Scan Anterior: Radial Scan (For Cornea) Anterior: Line Scan (For Angle Chamber)	512x128 (128 horizontal scan lines comprised of 512 A-scans), 6 x 6 mm 1024x6 or 12 (6 or 12 radial scan lines comprised of 1024 A-scans), 6 mm 1024x7 (1024 A-scans per B-scan x 7), 6 mm 512x128 (128 horizontal scan lines comprised of 512 A-scans), 6 x 6 mm 1024 A-scans, ϕ 3.4 mm 1024x12 (12 radial scan lines comprised of 1024 A-scans), 6 mm 1024 (line scanline comprised of 1024 A-scans), 3mm
Scan Speed		50,000 A-scans per second / 27,000 A-scans per second
Scan Depth		2.3 mm
In-depth Resolution		5 μ m - 6 μ m
Photographable Diameter of Pupil		ϕ 2.5 mm or more
Observation & Photography of Fundus Image / Fundus Tomogram		
Retinal Layers Identified		Macula: ILM, IS/OS, RPE, BM Glaucoma: ILM, NFL, IPL
OCT Reference Focus		Vitreous and Choroid
Fixation		Adjustable internal matrix LCD and external fixation device (Matrix LCD :The display position can be changed and adjusted. The presenting method can be changed.)
Light Source / Power Source / Power Supply		
Light Source		Super luminescence diode (SLD) Wavelength 840nm Half Bandwidth: 50nm Output on cornea - 0.65 mW
Power Source		Voltage: 100/110/120/220/230/240V Frequency: 50-60Hz
Power Supply		200VA (Max 400VA)
Dimensions / Weight		
Dimensions		545 mm(W) x 535 mm(D) x 600 - 630 mm(H)
Weight		35 kg (3D OCT-2000) 37 kg (3D OCT-2000 FA Plus)

^{*1} Only for FA plus model

^{*2} Display digital Red-free

^{*3} Without the diopter compensation

^{*4} With anterior segment attachment

^{*5} More variable scan patterns available with a combination of different pixel and scan range

IMPORTANT

Subject to change in design and/or specifications without advanced notice.

In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.



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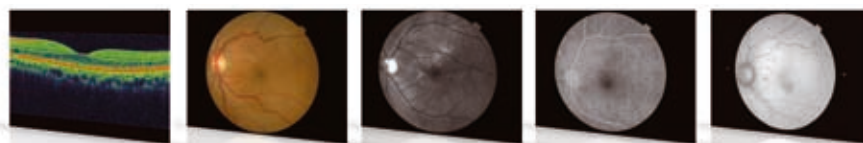
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3D OCT-2000 series was designed to meet the needs of all eye care professionals

The 3D OCT-2000 series of spectral domain OCT's was designed to meet the needs of all eye care professionals- from the single doctor practice to a large university hospital there is a model of the 3D OCT-2000 to meet everyone's needs.

3D OCT-2000 FA plus



OCT

Color

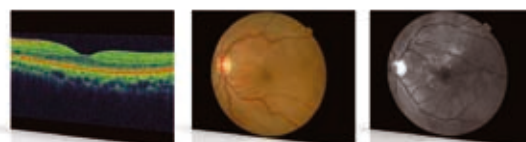
Red-free

FA

FAF

>> OCT , Color, Red-free (Digital), FA , FAF images acquirable

3D OCT-2000

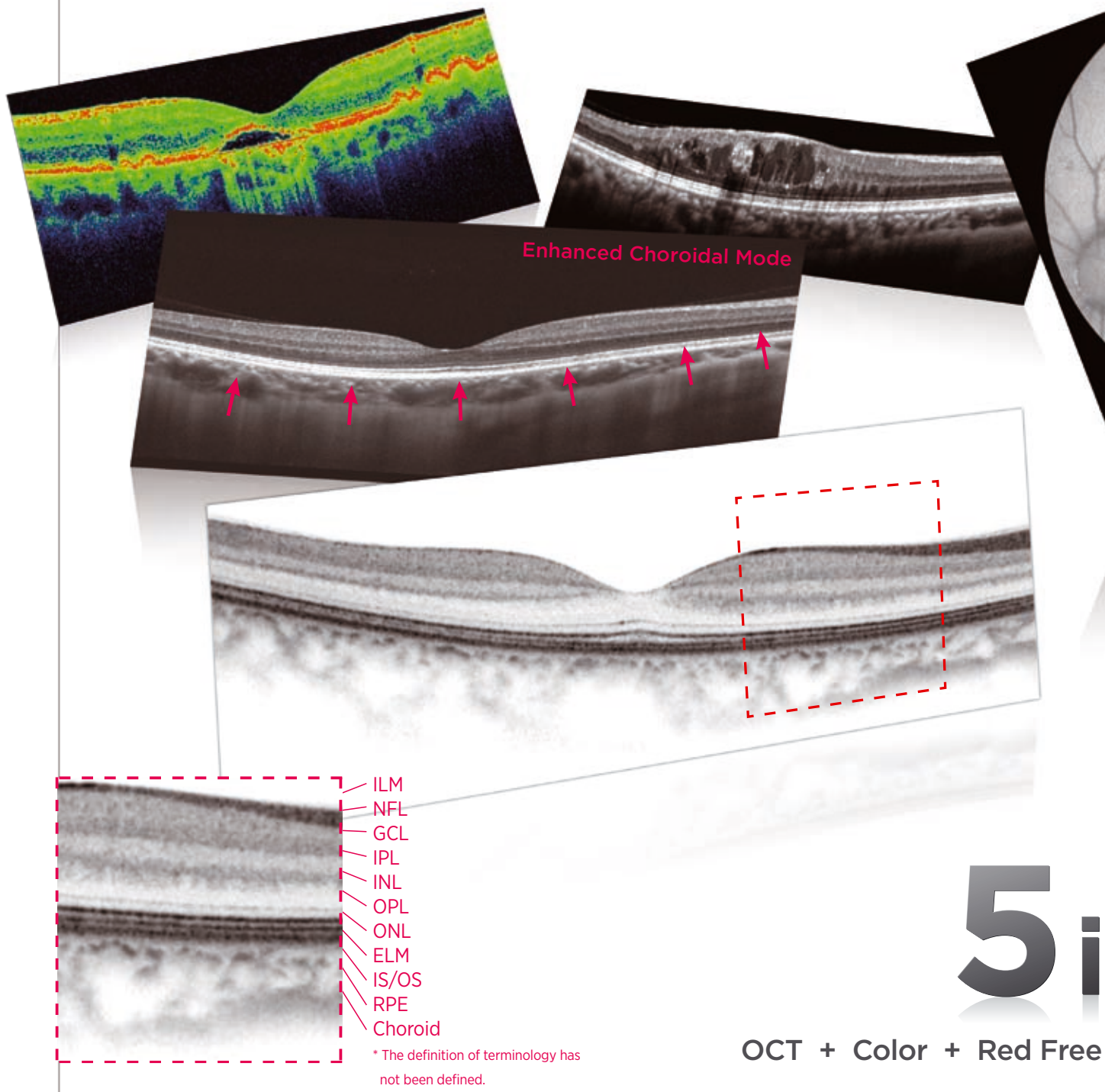


OCT

Color

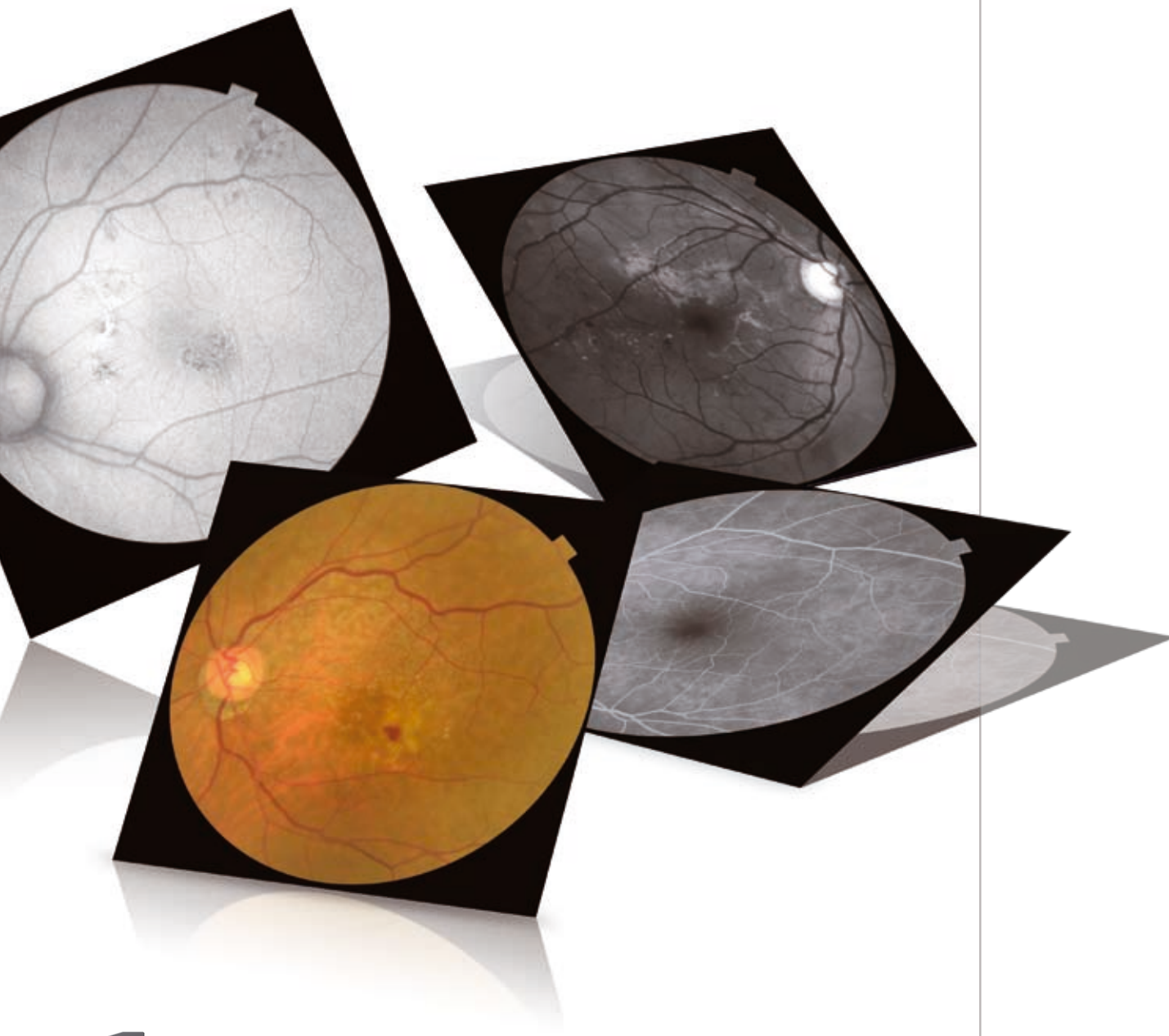
Red-free

>> OCT , Color , Red-free (Digital) images acquirable



50,000 A-scans/sec provides greater detail in a shorter period of time

The enhanced 50,000 A-scans/sec allows for faster tomography acquisition and minimizes artifacts generated by eye movements, producing clear cross-sectional retinal images. The new analysis mode reduces processing time by 50%. Topcon's "Enhanced Choroidal Mode" visualizes further internal structures, allowing much superior visualization of the RPE and choroidal area.



n1

(Digital) + FA + FAF

High resolution retinal camera produces stunningly detailed images

OCT, Color, Red-free (Digital), FA, FAF images can be generated from a single unit. Camera settings can be customized to provide your preference of fundus images. If only the OCT image is required, simply select "Color photography off".

CUSTOMER SATISFACTION



Easy touch panel

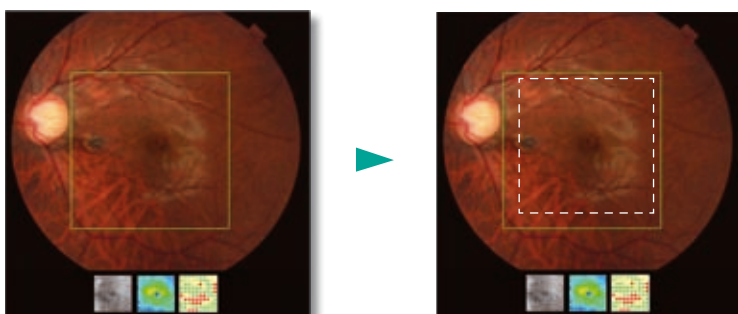
The monitor screen is a touch panel. The monitor displays information, and you can perform a variety of operations by touching its screen.



Auto functions

» Color fundus photography
Auto focus / Auto shoot


» OCT photography
Auto focus / Auto Z&Z lock /
Auto polarization




Auto center detection

If the fovea is slightly off center after performing a 3D(V) scan of the macula the 3D OCT-2000 can automatically center the fovea to ensure accurate reporting and serial monitoring of the image during analysis.

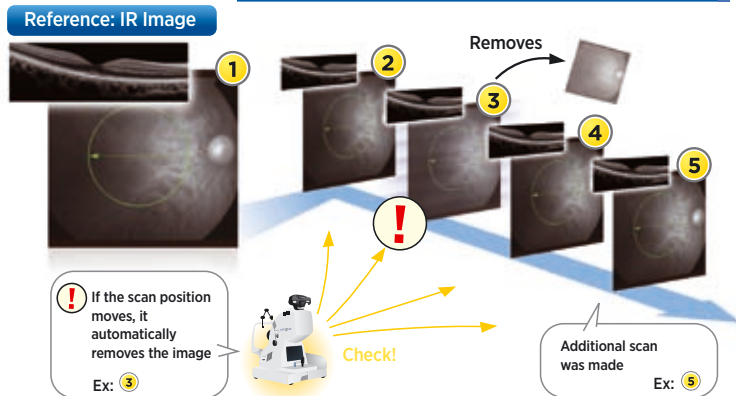


 During capture

 After capture



IR Tracking Technology (Ex: 4 overlapping)



IR tracking function

IR tracking utilizes the IR image during capture to overlap exactly the same place of the retina. If the scanned areas moves, the rescanning function will automatically begin.



Motion Correction / Compensation / Rescanning Function

X and Y direction of eye movements occur during image acquisition and this fixation problem can be the reason for major artifacts. To minimize this influence, "Motion Correction / Compensation / Rescanning Functions" are activated when capturing.

» Motion Correction

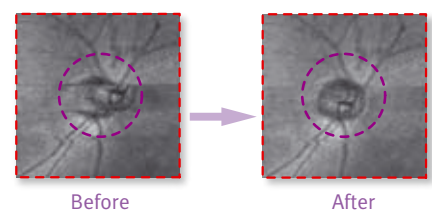
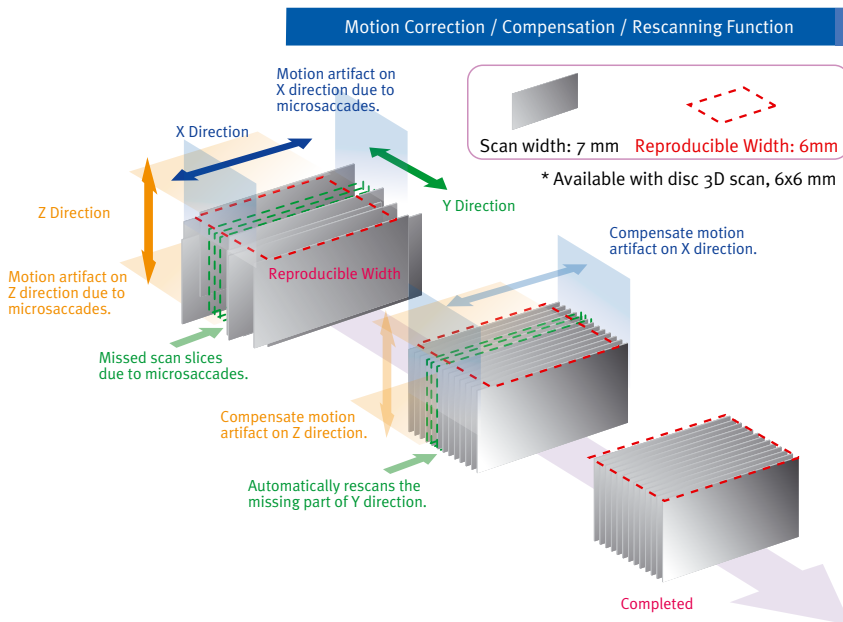
Corrects the Z direction movement.

» Compensation Function

Tracks ocular and scans 7X7mm area, then compensates X direction movement.

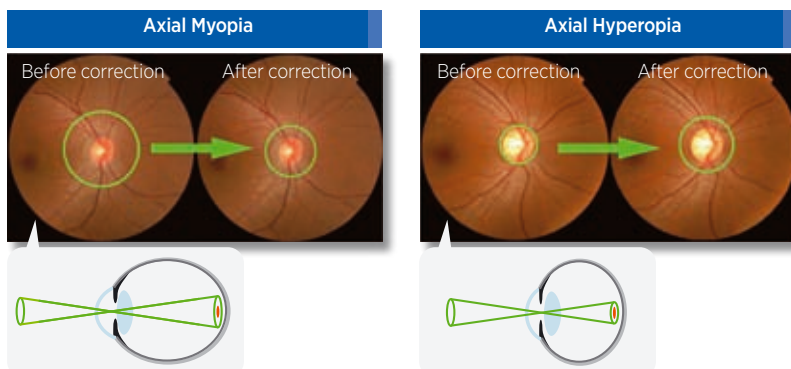
» Rescanning Function

Y direction movement can sometimes miss scanning area. In such case, the rescanning function automatically activates.

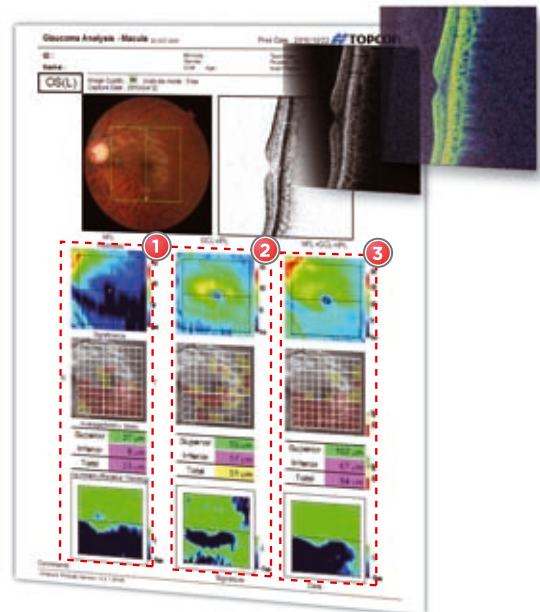
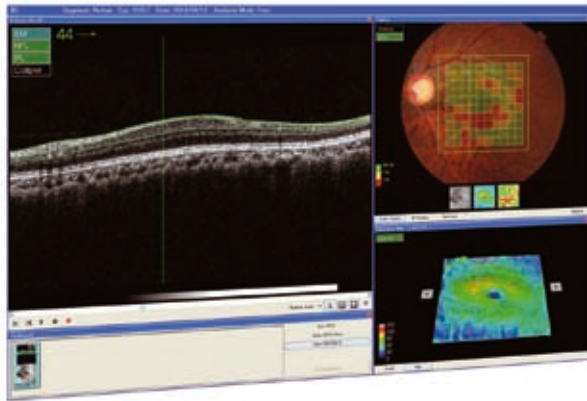


Circle Scan Diameter Correction

Patients with myopia or hyperopia can affect the quality of OCT scan. TheTopcon Circle Scan Diameter Correction adjusts this circle by referring to the patient's axial length, corneal curvature, and refractive diopter and keeps the consistent size diameter of 3.4 mm from the retina.



ANALYZED DATA CAN BE EASILY OBTAINED AND UNDERSTOOD FROM RICH REPORT TEMPLATES



Glaucoma analysis (Macula)

Glaucoma Analysis (Macula) detects and analyzes

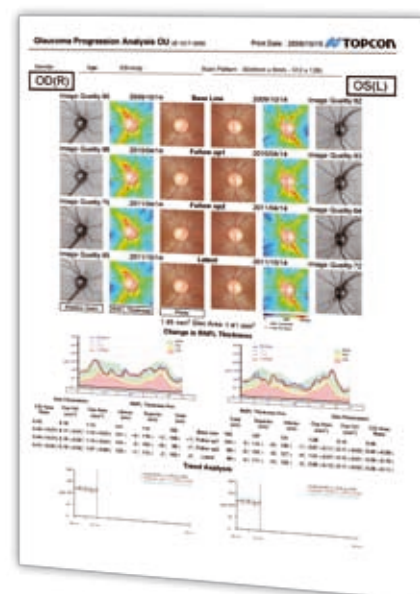
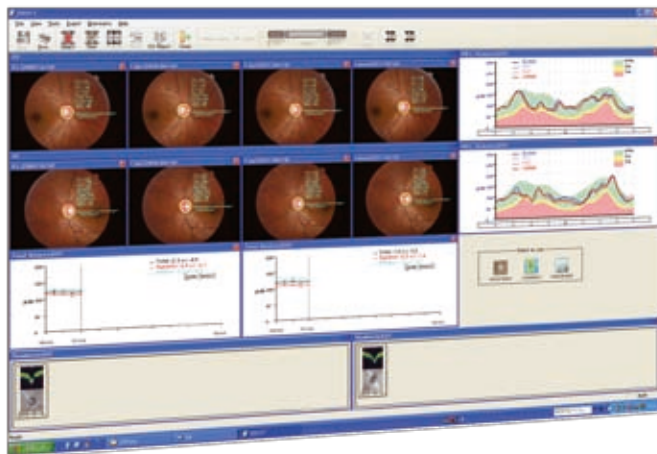
- ① NFL
- ② GCL+IPL
- ③ NFL+GCL+IPL at macula

Thickness map: Provides thickness of analyzed area with a color scale.

Significance map: The thickness results can be compared with normative database over the 10×10 grid area on Red-free image.

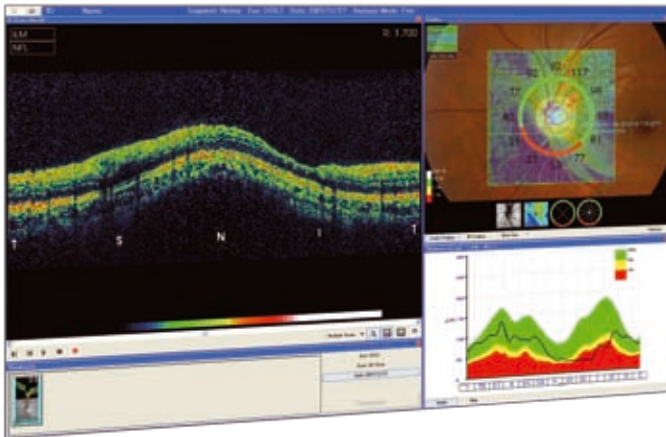
Average data: Thickness of Total / Superior / Inferior average can be displayed.

Asymmetry map: Produces a differential value of the superior and inferior thickness.



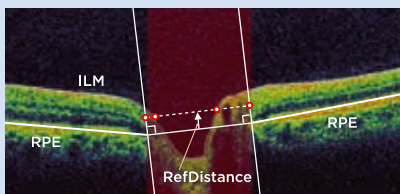
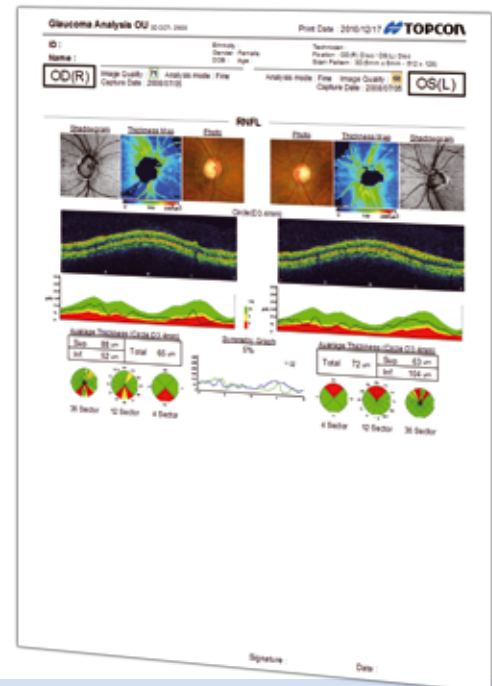
RNFL trend analysis

Color fundus/NFL thickness map/OCT images/ Cup and Disc ratio can be generated and compared with the normative database. A maximum of 4 scanned images can be displayed and used for the RNFL Trending Report.



Optic disc analysis

The above image is an example of a standard glaucoma analysis and report. The cup and disc margin can be manually adjusted to ensure accurate results.

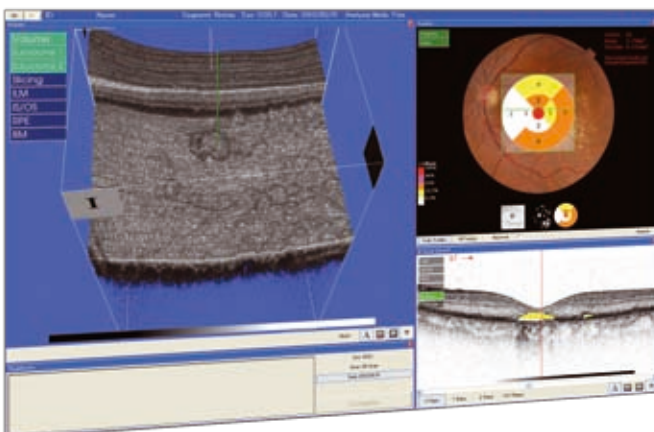


>> Disc margin

Based on the edges of the RPE the software automatically determines the disc margin.

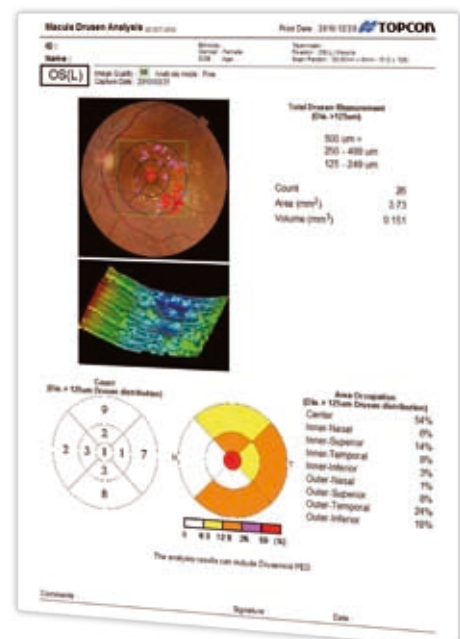
>> Cup margin

Using a horizontal line between the edges of the RPE edges as a reference point, the software creates a line 120 μm above the line between the edges of RPE. The Cup margin will be determined at the cross points of the reference plane and the ILM.



Drusen analysis

Drusen counts / area / volume can be displayed. Drusen counts are described on the color fundus image and report, and are color-coded according to the Drusen area in each ETDRS grid. This Drusen analysis enables quantitative analysis and may aid in the management of AMD.



FA/FAF PHOTOGRAPHY: TOPCON IMAGING TECHNOLOGY AHEAD OF ITS TIME



3D OCT-2000 FA plus can produce OCT, Color, Red-free (Digital), and FAF images. Topcon 3D OCT-2000 contributes to effective diagnosis.

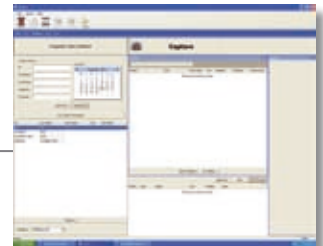


Easy Capturing: FA/FAF

FA/FAF photography is now available with the Topcon 3D OCT-2000.

1

Register / Select patient



2

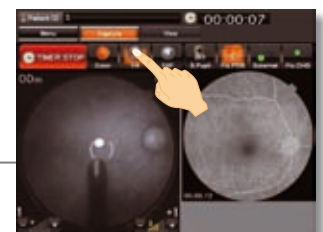
Choose scanning pattern

* Ex, FA photography



3

Capture



4

Image will be automatically exported to PC

