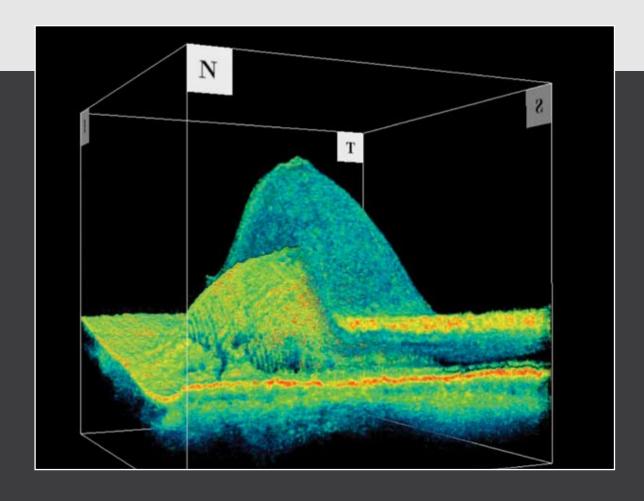


Fourier Domain Optical Coherence Tomography



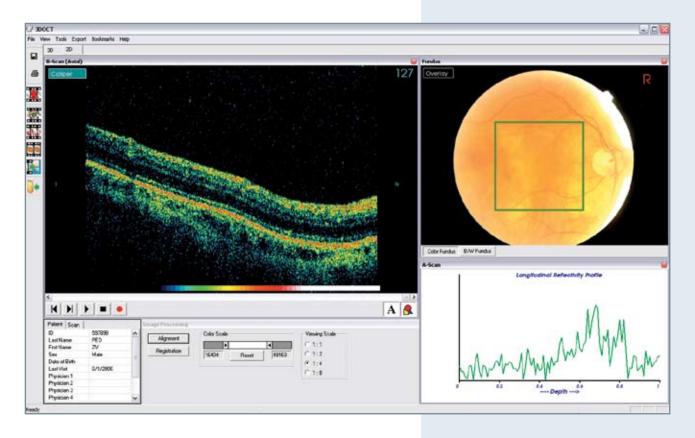


Fourier Domain OCT with a non-mydriatic retinal camera



Fourier Domain OCT

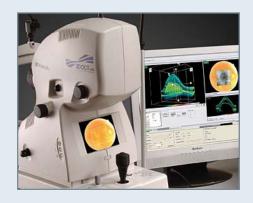
Recent advances in OCT technology have dramatically increased the scanning speed and the amount of data collected over Time Domain OCT systems. This new technology commonly known as Fourier Domain OCT or Spectral Domain OCT makes it possible to visualize large areas of the retina, significantly enhancing OCT's diagnostic utility.



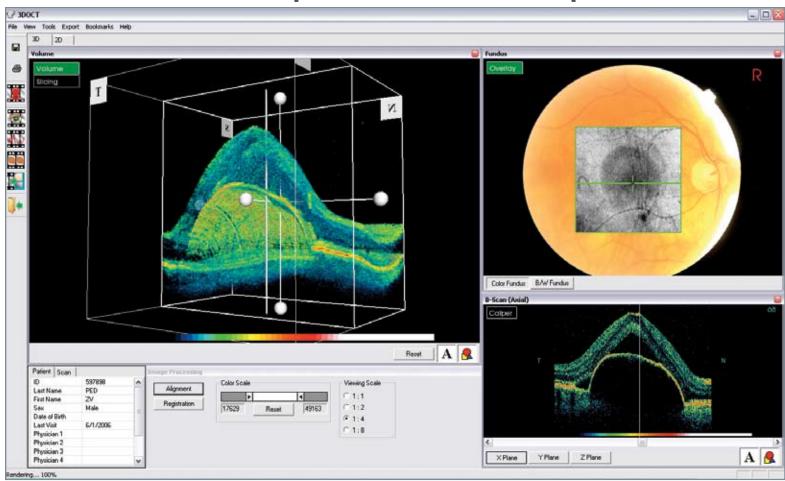
The Topcon 3D OCT-1000 combines the latest Fourier Domain technology, a non-mydriatic retinal camera and Topcon's exclusive TrueMap $^{\text{TM}}$ 3D OCT software into a single system.

The Topcon 3D OCT Difference

- Fourier Domain OCT system combined with a color non-mydriatic retinal camera
- | Easy-to-use, intuitive TrueMap™ software
- | Pin-Point Registration™ of OCT image with fundus images
- | Compare function allows serial monitoring of OCT images
- | Seamless integration with IMAGEnet™



Topcon 3D OCT TrueMap™ Software



▲ Pin Point Registration[™]

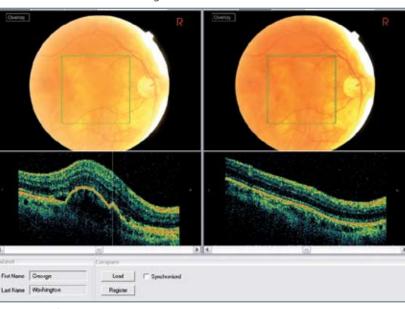
Registration

- Know the location of the OCT image with the fundus image every time with Topcon's exclusive Pin Point Registration™.
- TrueMap™ software enables dynamic viewing of images and identifies the data point in three viewing modes simultaneously 3D, fundus image and 2D.
- Quickly identify the boundaries of the scanned area. 3D OCT maps 100% of the area within the green box.
- Intuitive TrueMap™ software enables dynamic review of images in a digital environment eliminating the need for static printed reports.
- Measure the distance between any two points with the Caliper Function

Compare Function



- Pin-Point Registration[™] and synchronization interlinks serial exams for easy comparison.
- Enhanced point and click functions also enable analytical tools in the Compare function.

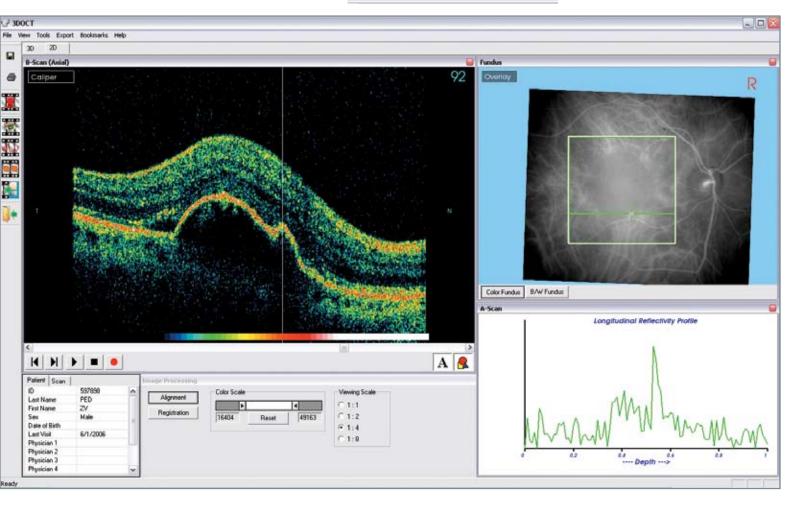


Example of 3D OCT image pre & post treatment

◆ Point, Click and Control

- Enhanced point and click functions enable rotation, cropping, slicing and peeling of 3D images and zoom in/out of all images.
- Orientation Markers provide quick orientation of 3D image to fundus image.
- Easily export 3D movies or individual images for presentations.
- Bookmark locations to expedite review of OCT exams.





▲ Registered Imported Fundus Images with OCT Image

- | 3D OCT TrueMap[™] software and proprietary Pin-Point Registration[™] enables registration of imported fundus images (FA, ICG) to OCT images.
- Easy to use video controls allow instant review of 100% of the mapped area in 2D and 3D.



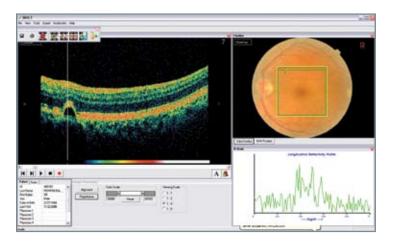
Quickly enhance image contrast to optimize visualization.

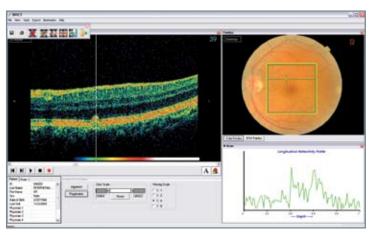
3D OCT-1000 Case Studies

Case 1

PED (Pigment Epithelial Detachment)

In a routine follow up of an asymptomatic 61 year old male, two suspicious areas were seen on a color fundus image. The 3D OCT-1000 with TrueMap™ Pin-Point Registration™ automatically registers the OCT image with the color fundus image allowing the physician to detect two small pigment epithelial detachments (PED).

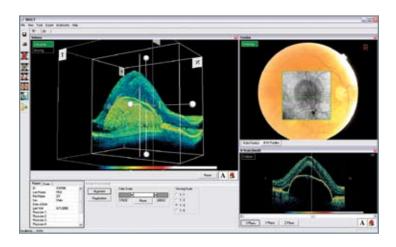


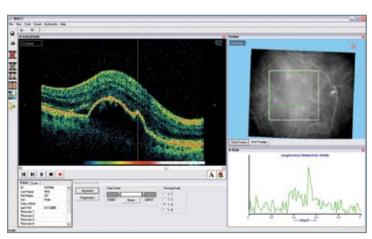


Case 2

PED with "Hot Spot"

In a 53 year old male with PED, an ICG fundus image was imported and registered to the patient's current 3D OCT-1000 image using Pin-Point Registration™ to reveal the OCT structure associated with a "Hot Spot" adjacent to the PED.





Specifications

ОСТ	
Light source	Super luminescent diode (SLD)
Wavelength	840 nm
Half bandwidth	50 nm
Output on the cornea	<650 μW
Scanning speed	18,000 axial scans/sec
Spot size on retina	20 μm
Longitudinal/axial resolution	6 μm
Horizontal resolution	20 μm
Longitudinal scan range	1.68 mm
Scan acquisition time	0.05 sec for 1B scan (1,024 A scans) to 3.6 sec for 256 B (65,536 A scans) scans of 6 x 6 mm area
Scanning patterns	Box scan (6 \times 6 mm, 4.5×4.5 mm, 3×3 mm), line scan (6 mm, 4.5 mm, 3 mm), circular scan (2.4 mm & 3.0 mm diameter), radial pattern scan
Power consumption	160 VA (max 400VA)
Power supply	110 V 50-60 Hz
Dimensions	12.6" (W) x 18.9" (D) x 6.7" (H)
Weight	19.9 lbs
Retinal Camera	
Angle of coverage	45°
Digital zoom	2x, 4x
Image quality	3.15 megapixel CCD camera
Pupil size	3.2 mm or larger
Focus adjustment range	-13D to +40D
Internal fixation	3 LED matrix targets: (optic disk, macula, macula and disk) with multiple target patterns
External fixation	LED
Monitor	5.6 inch color display
Chinrest	Motorized vertical movement 60 mm
Power consumption	160 VA (max 400VA)
Power supply	110 V 50-60 Hz
Dimensions	10.7" (W) x 19.9" (D) x 23.4" (H)
Weight	57.3 lbs
Computer	
PC	Min. of 3.0 Ghz processor, 2GB RAM, 1.0 TB hard drive, CD-RW/DVD-ROM, Windows XP
Monitor	Hi-resolution flat panel color LCD
Table	
Foot print	29 1/2" X 52", wheel chair accessible
Height	28.0" - 36.0"
Power consumption	160VA to max of 400VA
Power	110 V (50-60Hz)
Weight	164 lbs



All technical specs are subject to change without notice.

