Introduction

Optical Coherence Tomography (OCT) is a novel high sensitivity, non-contacting, high resolution and non-invasive imaging technique. It is capable for acquiring clear images of fine structure and pathological changes of the fundus (the macula, optic disc), as well as high speed in vivo images of retina. Based on OCT images, quantitative analysis is also possible. This is crucial for diagnosis of optic nerve damage, and for diagnosis and treatment follow-up of glaucoma.

Features

- OCT utilizes low coherence of broadband light to suppress background noise. It obtains resolution which is 1~2 magnitudes higher than conventional ultrasound imaging (μm), and very high signal-to-noise ratio (over 100 dB).

- OCT employs near-inferred light source. It does no harm to human body. Both transparent and nontransparent tissue can be imaged.

- It is non-contacting and non-invasive. In vivo test under natural condition can be done and test result is unrelated to thermal and mechanical properties of the tested object.

- Systems for OCT are usually compact and easy-to-operate , which makes this technique especially promising for clinical application.
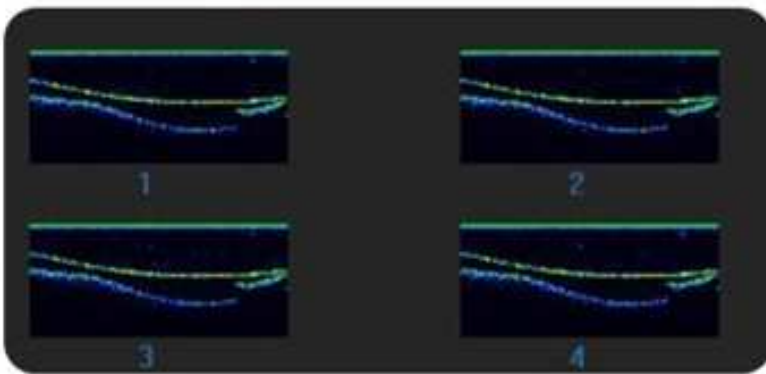
Features

1.

Frequency domain OCT technique can extract coherent signals from different depth at the same time. No depth-scanning device is needed.
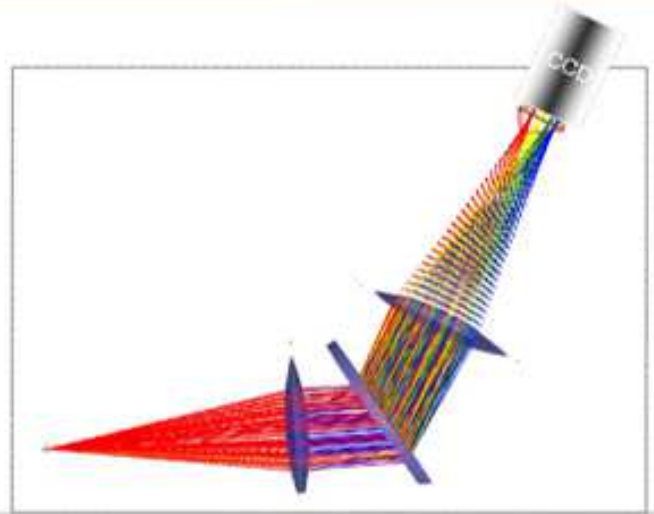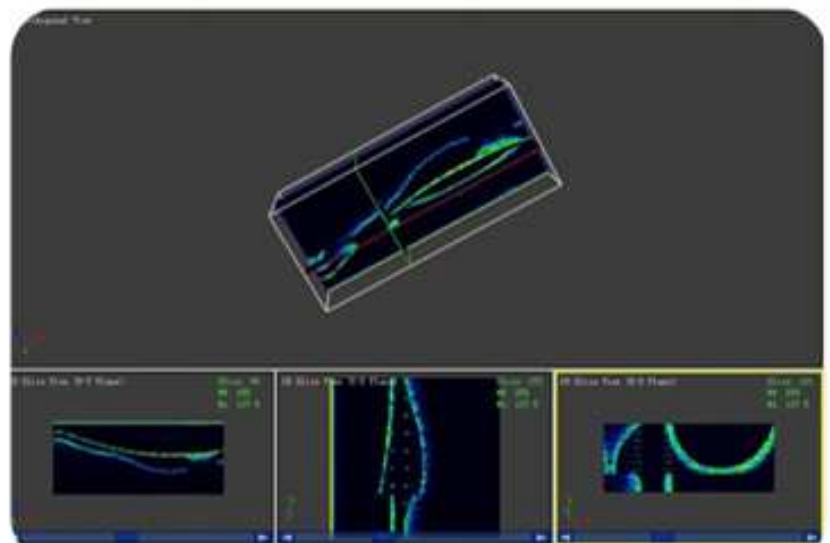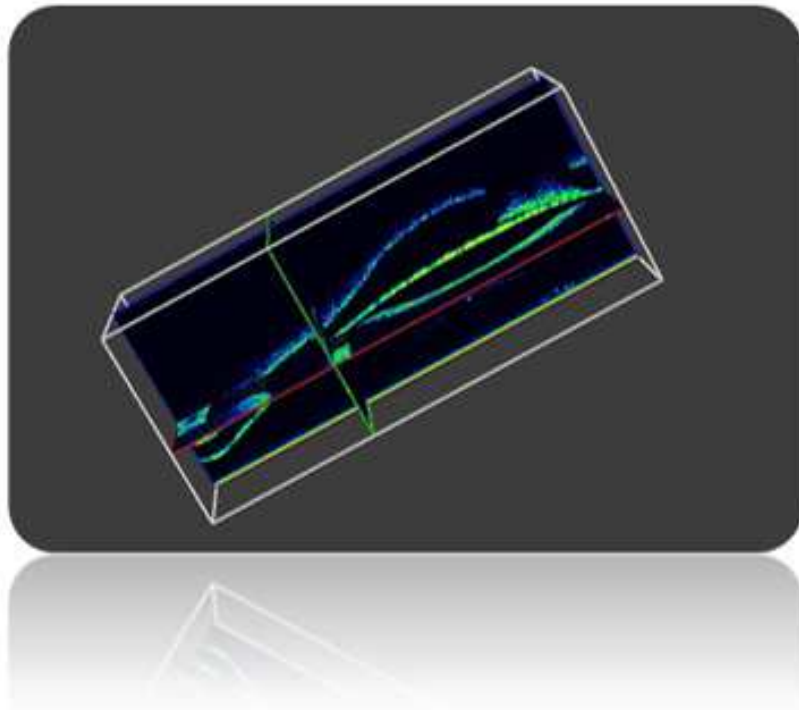
2.

The diagnosis of anterior segment and posterior segment of the eye can be achieved by the same device. Very cost-effective.

3.

Pioneered fast 3D OCT system to obtain three-dimensional images of fundus, for accurate measurement of lump volume, tracking and monitoring the patient's condition.
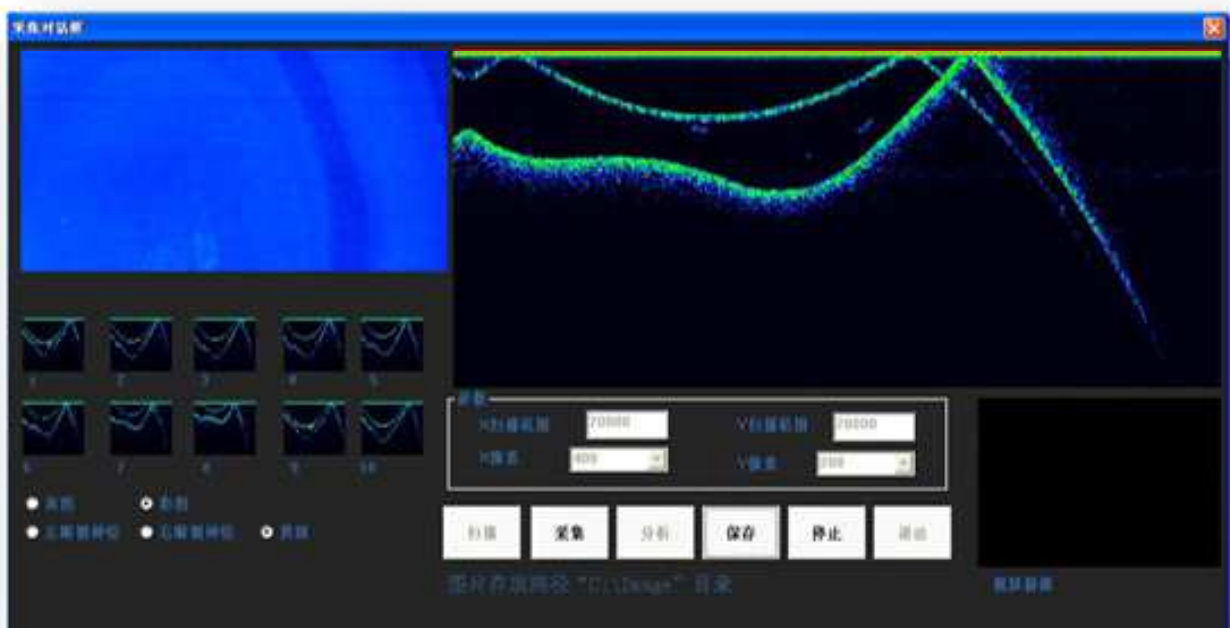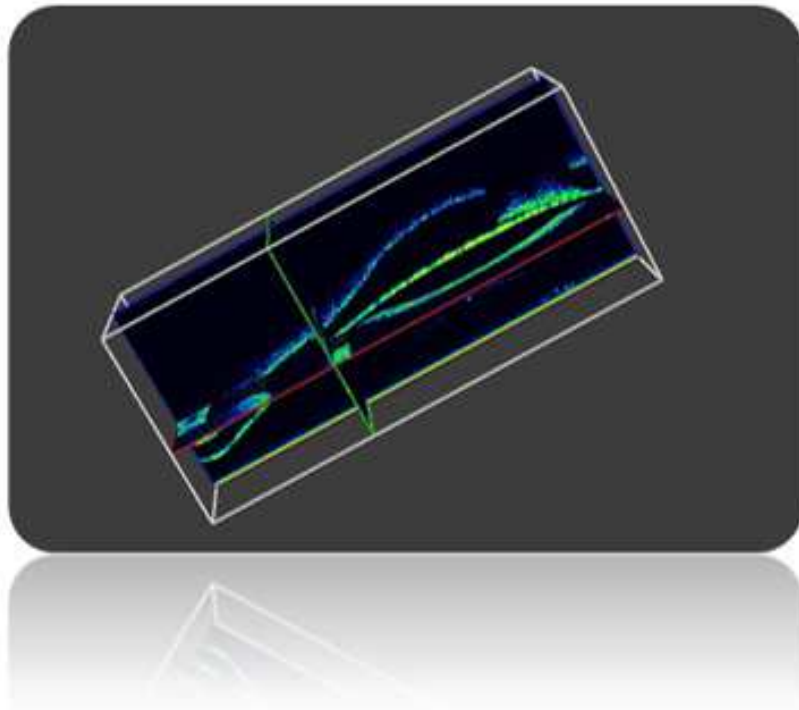
4.

Unique denoising mode can effectively improve the signal-to-noise ratio of low coherent optical signal, therefore improves resolution and contrast.

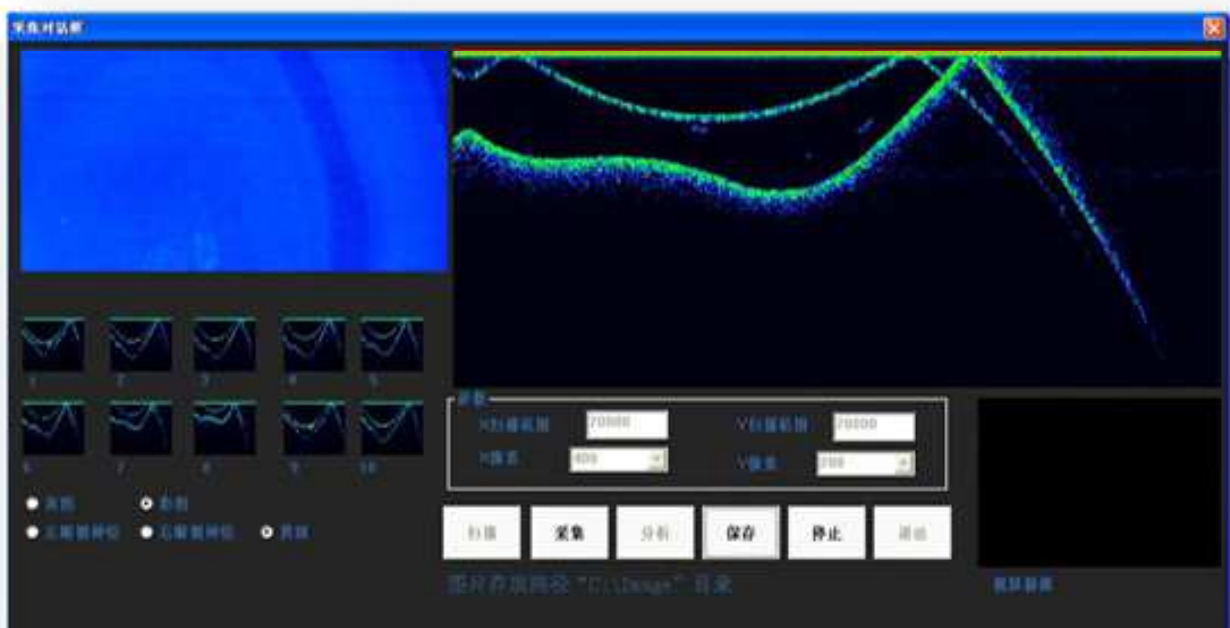# VC ++ based multifunctional systems analysis and graphics management software

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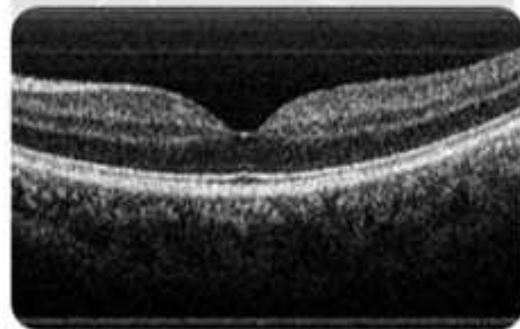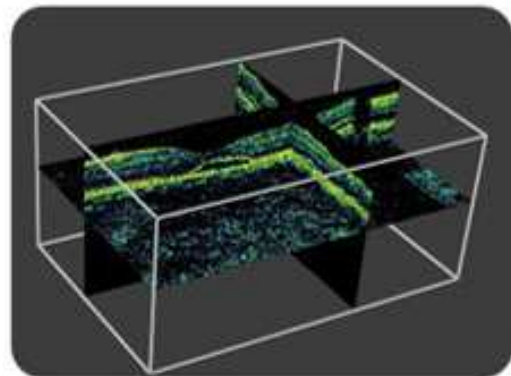
VC ++ based multifunctional systems analysis and graphics management software

Details

OCT Parameters

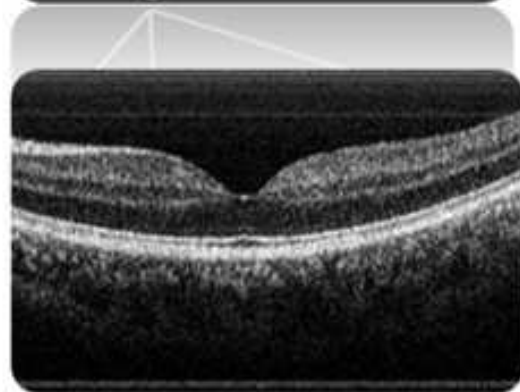|	
Type	Frequency Domain
Source	840 nm SLD
Optical Power	800 μw (Self-protected)
Scanning Modes	Fundus, Anterior Segment
Scanning Depth	2 mm
Axial Resolution	8 μm
Lateral Resolution	15 μm
A-scan Speed	30,000 A-scans/s
B-scan Speed	60 frames/s & 10 frames/s

Computer & Display

OCT Image Color	Standard OCT Color, Grayscale and Reverse Color
Display Modes	2D、3D
3D OCT Functions	Rotation、Slicing
C-scan Display	C-scan Cross-section Analysis
Hard Disk	500 GB
CPU	2 Cores、2 .5GHz
Memory	4 GB
Graphics Card	1 GB
Monitor	22-inch

Details

OCT Parameters

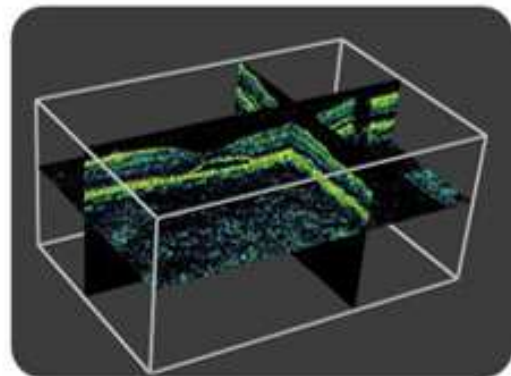|	
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Other Specifications

Automatic Functions	Fundus, OCT Imaging
Chinrest	Motor-driven
Communication	RS-232
Dimensions	470x356x432
Weight	10 kg
Power Consumption	80 W
Power Supply	220 V-50 Hz AC