

ellex.



| PREMIER DIAGNOSTIC ULTRASOUND |

eyecubed™

Ophthalmic ultrasound  
to image complex  
ocular structures.



eyecubed.

eyecubed.

The Eye Cubed delivers unparalleled sensitivity and the highest-quality image resolution, making it the premier device for ultrasound examination of the eye. Created by Innovative Imaging, the pioneers in ophthalmic ultrasound technology, the system features real-time imaging, advanced movie mode using the fastest

sampling rate available, and internal memory for storing measurements – all of which advance and improve the diagnostic process. In addition, customized configuration of A-Scan and B-Scan modes make the device suitable for both retinal specialists and anterior segment surgeons.

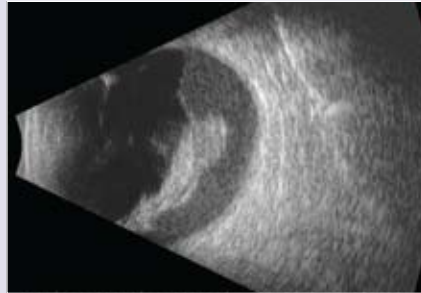


Indications for use		Why You Should Buy Your Ultrasound from Ellex
Posterior Segment	B-Scan	Ellex engineered its first high-performance ophthalmic laser in 1985, and today is the only medical technology manufacturer focused solely on the ophthalmic market. In all, more than 12,000 Ellex lasers are in use globally to treat cataract, glaucoma and retina patients. With the 2006 acquisition of Innovative Imaging, the Ellex product line expanded to include premier diagnostic ultrasound devices.
Wide Field Anterior Segment	B-Scan	
Axial Length Biometry	A-Scan	
Standardized Diagnostic	A-Scan	

## Why the Eye Cubed delivers superior image quality

### Highest Signal-to-Noise Ratio

The unique amplifier and probe design of the Eye Cubed provides for the industry's highest signal-to-noise ratio. Because noise is reduced to a minimum, details of even the finest ocular structures become visible – including blood and inflammatory cells.



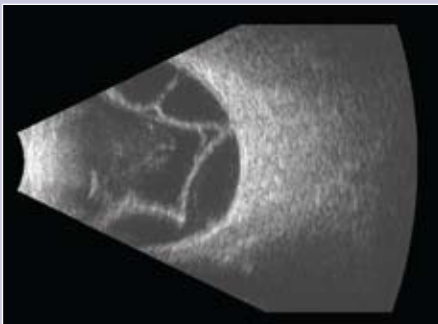
### High-Speed Imaging

With an image acquisition rate of up to 25 frames-per-second, the system provides the fastest image-sampling rate available today. This speed creates a real-time view of detailed ocular activity, including blood cell movement and membrane behavior.

### Advanced Movie Technology

The Eye Cubed's advanced movie technology greatly improves the diagnostic process. Users can capture up to 10-second movies of each exam, then store and recall them in full movie mode, or as single frames.

### B-Scan Modes

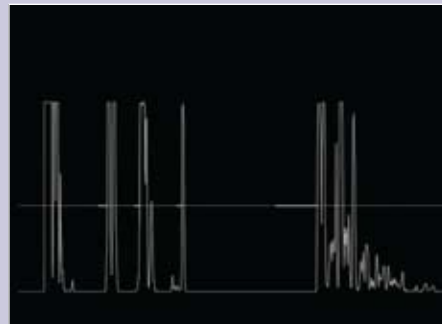


Posterior Segment 10 MHz



Wide-Field Anterior Segment 20 MHz

### A-Scan Modes



Axial Length Biometric



Standardized Diagnostic



Our sole focus is ophthalmology. Our technology is extraordinary.

## Eye Cubed Features

### High-resolution image viewing

High-resolution 7" digital monitor with 256 shades of grey, plus an additional external color monitor for precise viewing of true real-time images and movies.

### Electronic storage of ultrasound images

Images can be stored on the built-in 110 GB hard drive and recalled to the screen for additional analysis, measurements and documentation.

### Flexible system configuration

Full upgradeability – regardless of initial configuration – creates maximum flexibility and versatility.

### Backlit-illuminated keyboard

Improves data entry in dimly lit conditions.

### Clinical application training and support

Every user receives comprehensive application training by certified ultrasound specialists. In addition, Ellex offers frequent courses on diagnostic ultrasound for physicians, fellows, residents and technicians.

### Custom velocity settings

Pre-programmed velocities for Phakic, Aphakic, and four types of Pseudophakic; adjustable velocities for special cases; and independent velocities for different ocular structures.

## Product Specifications

### Network and Connectivity

- USB 2.0 ports for memory sticks and peripherals
- Built-in multimedia reader
- Fully network and printer-ready
- Windows XP operating system

### Data Management

- Data archiving
- Data export capability

### B-Scan Modes

- 2 sets of electronic measurement calipers with variable velocity
- Movie sequence adjustable up to 10 seconds
  - Real-time image viewing
  - Movie editing tools available

#### Posterior Segment 10 MHz

- 25 frames-per-second image acquisition rate
- Sealed probe
- Gain adjustable from 27-90 dB
- Adjustable dynamic range via Log, S1, S2, S3
- Axial resolution: 150 microns
- Lateral resolution: 200 microns
- Scanning angle: 52 degrees
- Image depth: 45 mm

#### Wide field anterior segment 20 MHz

- 13 frames-per-second image acquisition rate
- Gain adjustable from 27-90 dB
- Adjustable dynamic range via Log, S1, S2, S3
- Axial resolution: 75 microns
- Lateral resolution: 90 microns
- Scanning angle: 30 degrees
- Image depth: 12 mm
- Image width at focal zone: 15-17 mm

### Electrical Requirements

Power supply	100-240 VAC auto-ranging
Frequency	50/60 Hz
Input power	120 VA
System Size	15 x 17 x 6.5 inches (38 x 43 x 16.5 cm)
Weight	20 lbs. (9kg)

### A-Scan Modes

- IOL power calculations and analysis:
  - Holladay-I
  - SRK-T
  - Haigis
  - Hoffer-Q
- Movie sequence adjustable up to 5 seconds
- 50 frames-per-second image acquisition rate

#### Axial length biometry A-Scan

- Immersion or contact method
- Solid focused probe with internal fixation light
- Probe frequency: 10 MHz
- Image depth: 40 mm
- Points on x-axis: 2048
- Bits of resolution: 256
- Measurement accuracy: 50 microns inherent, 100 microns clinical
- Automatic or manual image capturing
- Built-in pattern recognition with automatic scleral echo detection
- Statistics: average and standard deviation

#### Standardized diagnostic A-Scan

- Two caliper measurements displayed in mm with variable velocities
- Tissue sensitivity value stored in memory with reset function
- Probe frequency: 8 MHz parallel beam
- Measurement accuracy: 50 microns inherent, 100 microns clinical

Specifications are subject to change without notice.

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