



Echoscan US-4000 / 500

US Edition



THE ART OF EYE CARE

Three in One*

The US-4000 comprehensive ultrasound device includes B-scan, Biometry and Pachymetry. Combining all three functions in one compact and innovative device brings a new image to your practice.

*Only for the US-4000
The US-500 includes Biometry and Pachymetry.

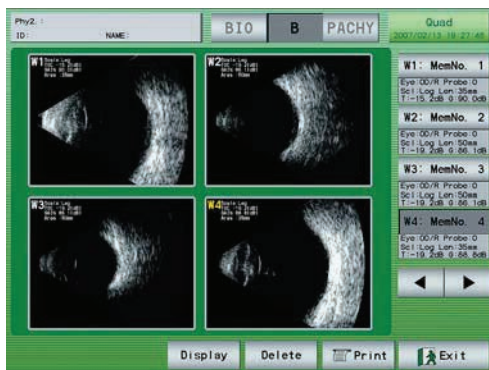
- COMPACT
- ONLY 8.5 kg
- TOUCH PANEL DISPLAY
- NO PC REQUIRED
- TILTABLE COLOR LCD



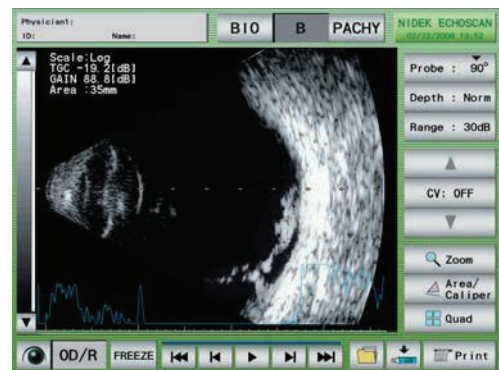
B-scan*

A Crisp and Clear Image

The results are high quality images, which are essential for accurate analysis. The key to achieving high quality images is through scanning 400 lines over 60° which is displayed on a 1024 x 768 XGA monitor. High contrast of resonated signals and the high quality LCD monitor provide the ideal images for the most accurate diagnosis.



Multi Image Display Function



CrossVector Mode

Internal Printer

B-scan image is easily printed with the internal thermal printer and may be attached to the patient's medical record sheet.

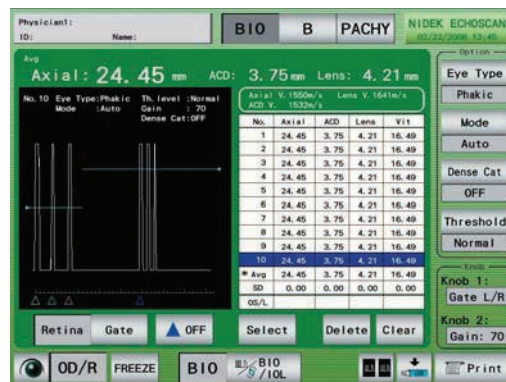


*Only for the US-4000

■ Biometry

Rapid, Accurate and Easy to Use

Using new algorithms, axial length measurements and IOL power calculations are performed twice as rapidly as the conventional model. Measurement accuracy for dense cataracts and existing opacities is accomplished by pressing the "Dense Cat" switch and "Gate switch".



Biometry Image



Customized IOL Calculation

■ Pachymetry*1

The US-4000 / 500 pachymetry mode offers precise measurement of the corneal thickness within a $\pm 5 \mu\text{m}$ error.



45° fixed Probe* 2



45° detachable Probe



Straight Probe

*1 The model without pachymetry is also available.

*2 Provided as standard accessories depending on the configuration.

■ Easy Data Transfer

Data is easily stored through USB memory and LAN. Utilizing the special interface cable, keratometry values measured by any NIDEK ARK are automatically imported into the US-4000 / 500 for easy IOL power calculation.

US-4000 / 500 Specifications

Model	US-4000	US-500
B-scan		
Probe	10 MHz transducer, 10 frames / second	
Scan angle	60°	
Scan depth	Normal (35 mm / 1550 m/s), Long (50 mm / 1550 m/s)	
Sector line density	400 Lines	Not available
Zoom	x2.5, x5.0	
Moving image record	Approx. 20 seconds	
Scale	Color, Gray scale 256 levels	
Gain / TGC	0 to 90 dB variable / 0 to -20 dB variable	
Gain curves	Log, Liner, S-curves	
Biometry		
Probe	10 MHz solid probe	
Internal fixation	LED (red)	
Measurement value	Axial length, Anterior chamber depth, Lens thickness, Vitreous body length	←
Accuracy	0.1 mm	
Range	12 to 40 mm	
Minimum calculation step	0.01 D	
Built-in IOL formula	BINKHORST, HOLLADAY, Regression, Regression II, Formula/T, HOFFR Q	
Pachymetry*		
Probe	10 MHz solid probe	
Accuracy	5 µm	←
Range	200 to 1300 µm	
Minimum indicated unit	1 µm	
Measured part	Corneal thickness up to 25 points can be memorized.	
IOP correction	Available	←
Display	8.4-inch TFT color LCD (XGA: 1024 x 768)	←
Printer	Thermal type line printer (Easy loading and auto cutter)	←
Interface	USB memory (1.1), LAN, RS-232C for KM communication, Video out (NTSC)	USB memory (1.1), LAN, RS-232C for KM communication
Power supply	AC 100 to 120 V 10%, 230 V 10%, 50 / 60 Hz	←
Power consumption	70 VA	←
Dimensions / Mass	300 (W) x 285 (D) x 330 (H) mm / 8.5 kg	←
Standard accessories	Stylus, B-scan probe, A-scan probe (14610-E310), Foot switch, Test piece (for Biometry measurement), Printer paper, Power cord, Ultrasonic gel, Dust cover, Spare fuse, Probe rest	Stylus, A-scan probe (14610-E310), Foot switch, Test piece (for Biometry measurement), Printer paper, Power cord, Dust cover, Spare fuse, Probe rest
Optional accessories	Video printer, Video printer paper, Pachymetry probe (45° fixed type)*, Pachymetry probe (45° detachable type), Pachymetry probe (straight type), Test piece for 45° pachymetry probes*, Test piece for straight pachymetry probe, Probe stand, Barcode reader, Magnetic card reader, IOL calculation formula (Hagis), RS-232C cable *Provided as standard accessories depending on the configuration.	Pachymetry probe (45° fixed type)*, Pachymetry probe (45° detachable type), Pachymetry probe (straight type), Test piece for 45° pachymetry probes*, Test piece for straight pachymetry probe, Probe stand, Barcode reader, Magnetic card reader, IOL calculation formula (Hagis), RS-232C cable *Provided as standard accessories depending on the configuration.

*1 The model without pachymetry is also available.

Caution : U.S. Federal Law restricts this device to sale, distribution and use by or on the order of a physician or other licensed eye care practitioner.
Specifications may vary depending on circumstances in each country.
Specifications and design are subject to change without notice.



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