



Echoscan  
US-4000/500



THE ART OF EYE CARE

## Three in One

The US-4000 comprehensive ultrasound device includes B-scan, biometry\*<sup>1</sup> and pachymetry\*<sup>2</sup>. Combining all three functions in one compact and innovative device brings a new image to your practice.

\*1 Optional for the US-4000. Standard for the US-500.

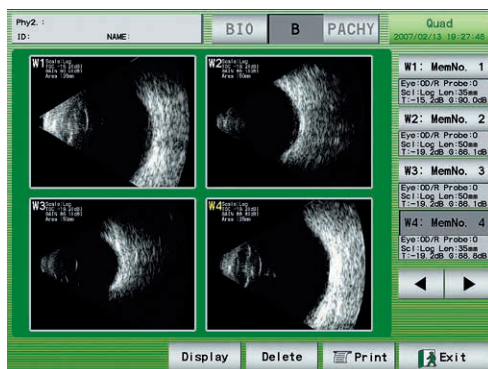
\*2 Optional

- COMPACT
- ONLY A LIGHTWEIGHT 8.5 KG
- TOUCH PANEL DISPLAY
- NO PC REQUIRED
- TILTABLE COLOR LCD

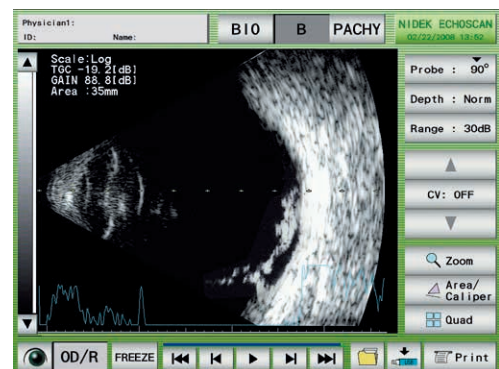
### ■ B-scan\*

#### 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 1,024 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



Cross vector 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.

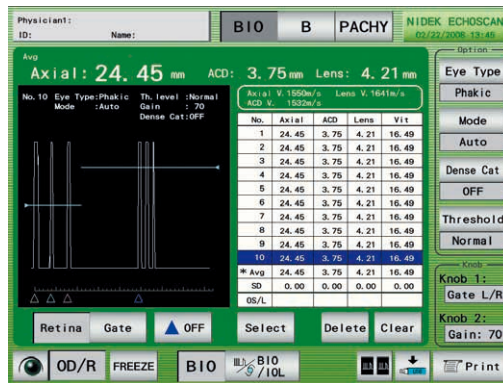


\*Standard for the US-4000. Not available for the US-500.

## ■ Biometry\*

### Rapid, Accurate and Easy to Use

Using the following algorithms, axial length measurements and IOL power calculations are performed twice as fast 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

\*Optional for the US-4000. Standard for the US-500.

## ■ Pachymetry\*

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



45° Fixed probe



Straight probe

\*Optional

## ■ Easy Data Transfer

Data is easily stored in USB memory or by 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>B-scan</b>		
Probe	10 MHz	Not available
Scan angle	60°	
Scan depth	Normal (35 mm / 1,550 m/s), Long (50 mm / 1,550 m/s)	
Sector line density	400 lines	
Zoom	x2.5, x5.0	
Scale	Color, Gray scale 256 levels	
Gain / TGC	0 to 90 dB / 0 to -20 dB	
Gain curves	Log, linear, S-curve	
<b>Biometry*1</b>		
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 display unit	0.01 mm	
Built-in IOL formula	Binkhorst, Holladay, SRK, SRK II, SRK/T, Hoffer Q	
<b>Pachymetry*2</b>		
Probe	10 MHz solid probe	←
Accuracy	±5 µm	
Range	200 to 1,300 µm	
Minimum display unit	1 µm	
Measured point	Up to 25 points can be memorized.	
IOP correction by corneal thickness	Manually entering IOP	
Display	8.4-inch color LCD (XGA: 1,024 x 768)	←
Printer	Thermal line printer with automatic paper cutter	←
Interface	USB (1.1), LAN, RS-232C, Video output (NTSC)	USB (1.1), LAN, RS-232C
Power supply	100 to 120 V AC / 230 V AC, 50/60 Hz	←
Power consumption	70 VA	←
Dimensions/mass	300 (W) x 285 (D) x 330 (H) mm / 8.5 kg 11.8 (W) x 11.2 (D) x 13.0 (H)" / 19 lbs.	←
Standard accessories	Stylus, B-scan probe, Foot switch, Printer paper, Power cord, Ultrasonic gel, Dust cover, Spare fuse, Probe rest	Stylus, A-scan probe, Foot switch, Test piece (for biometry measurement), Printer paper, Power cord, Dust cover, Spare fuse, Probe rest
Optional accessories	A-scan probe, Pachymetry probe (45° fixed type), Pachymetry probe (straight type), Pachymetry probe (45° detachable type), Test piece for 45° pachymetry probes, Test piece (for biometry measurement), Test piece for straight pachymetry probe, Video printer, Video printer paper, RS-232C cable	Pachymetry probe (45° fixed type), Pachymetry probe (straight type), Pachymetry probe (45° detachable type), Test piece for 45° pachymetry probes, Test piece for straight pachymetry probe, RS-232C cable

\*1 Optional for the US-4000. Standard for the US-500.

\*2 Optional

	US-4000	US-500
B-scan	Standard	Not available
Biometry	Optional	Standard
Pachymetry	Optional	Optional



US-4000

Product/model name: ECHOSCAN US-4000

ECHOSCAN US-500

Brochure and listed features of the device are intended for non-US practitioners.

Specifications may vary depending on circumstances in each country.

Specifications and design are subject to change without notice.

