

# US-4000/500



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.

\*The US-500 includes biometry and pachymetry only.

- 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.

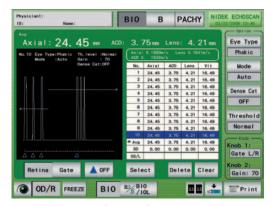


<sup>\*</sup>Available for the US-4000

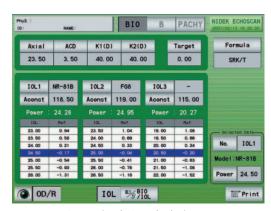
# **■** Biometry

#### 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

# Pachymetry

The pachymetry mode offers precise measurement of the corneal thickness within a  $\pm 5~\mu m$  error. (A model without pachymetry is also available.)



45° Fixed probe\*



Straight probe

## ■ 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.

<sup>\*</sup>Provided as standard accessories depending on the configuration.

#### **US-4000/500 Specifications**

Model	US-4000	US-500
B-scan		
Probe	10 MHz	
Scan angle	60°	
Scan depth	Normal (35 mm / 1,550 m/s), Long (50 mm / 1,550 m/s)	
Sector line density	400 lines	N
Zoom	x2.5, x5.0	Not available
Scale	Color, Gray scale 256 levels	
Gain / TGC	0 to 90 dB / 0 to -20 dB	
Gain curves	Log, linear, S-curve	
Biometry		
Probe	10 MHz solid probe	
Internal fixation	LED (red)	
Measurement value	Axial length, Anterior chamber depth, Lens thickness,	
	Vitreous body length	<b>←</b>
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	
Pachymetry*1	* * * * * * * * * * * * * * * * * * * *	
Probe	10 MHz solid probe	
Accuracy	±5 μm	
Range	200 to 1,300 μm	<b>←</b>
Minimum display unit	1 μm	
Measured point	Up to 25 points can be memorized.	
IOP correction	Available	<b>←</b>
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, A-scan probe, Foot switch, Test piece (for	Stylus, A-scan probe, Foot switch, Test piece (for biometry
	biometry measurement), Printer paper, Power cord, Ultrasonic gel,	measurement), Printer paper, Power cord, Dust cover, Spare fuse,
	Dust cover, Spare fuse, Probe rest	Probe rest
Optional accessories	Video printer, Video printer paper, Pachymetry probe (45° fixed type)*2,	Pachymetry probe (45° fixed type)*2, Pachymetry probe (straight type),
	Pachymetry probe (straight type), Test piece for 45° pachymetry probes*2,	Test piece for 45° pachymetry probes*2, Test piece for straight
	Test piece for straight pachymetry probe, Barcode reader, Magnetic card	pachymetry probe, Probe stand, Barcode reader, Magnetic card reader,
	reader, RS-232C cable	RS-232C cable
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<sup>\*1</sup> The model without pachymetry is also available.



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.



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<sup>\*2</sup> Provided as standard accessories depending on the configuration.