



Echoscan US-4000 / 500



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



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.



*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



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, SRK, SRK II, SRK/T, HOFFR Q | |
| Pachymetry*¹ | | |
| 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 (straight type), Test piece for 45° pachymetry probes*, Test piece for straight pachymetry probe, 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 (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. |

*¹The model without pachymetry is also available.

Product / Model name: ECHOSCAN US-4000

Product / Model name: 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.



HEAD OFFICE
(International Div.)
34-14 Maehama, Hiroishi
Gamagori, Aichi 443-0038,
JAPAN
TEL: +81-533-67-8895
URL: <http://www.nidek.com>
[Manufacturer]

TOKYO OFFICE
(International Div.)
3F Sumitomo Fudosan Hongo
Bldg., 3-22-5 Hongo, Bunkyo-ku,
Tokyo 113-0033, JAPAN
TEL: +81-3-5844-2641
URL: <http://www.nidek.com>

NIDEK INC.
47651 Westinghouse Drive,
Fremont, CA 94539, U.S.A.
TEL: +1-510-226-5700
+1-800-223-9044
(US only)
URL: <http://usa.nidek.com>

NIDEK S.A.
Europarc,
13 rue Auguste Perret,
94042 Créteil, FRANCE
TEL: +33-1-49 80 97 97
URL: <http://www.nidek.fr>

NIDEK TECHNOLOGIES S.R.L.
Via dell'Artigianato,
6/A, 35020 Albignasego (Padova),
ITALY
TEL: +39 049 8629200/8626399
URL: <http://www.nidektechnologies.it>

NIDEK (SHANGHAI) CO., LTD.
Rm3205, Shanghai Multi
Media Park, No.1027 Chang
Ning Rd, Chang Ning District,
Shanghai, CHINA 200050,
TEL: +86 021-5212-7942
URL: <http://www.nidek-china.cn>

NIDEK SINGAPORE PTE. LTD.
51 Changi Business Park
Central 2, #06-14, The
Signature 486066,
SINGAPORE
TEL: +65 6588 0389