

*A Total Solution for Ultrasound Diagnostics*

# **US-4000**

ECHOSCAN



## Three in One

The US-4000 comprehensive Ultrasound diagnostics unit includes B-Scan, Biometry and Pachymetry. Having all three functions in one compact and stylish device brings a new image to your practice.

- THE IDEAL SIZE
- ONLY 8.5 kg
- TOUCH PANEL DISPLAY
- NO PC REQUIRED
- TILTABLE COLOR LCD



### ■ B-Scan

#### A CRISP AND CLEAR IMAGE

Image quality yields a high quality image of the patient eye which is essential for accurate analysis in B-Scan diagnostics. The key to achieving this high quality image is through sampling 400 lines over 60° which is displayed on a 1024 x 768 XGA monitor. The combination of high-density scanning sectors and the high quality LCD monitor provides the ideal image for the most accurate diagnosis.

Multi Image Display Function



Cross Vector Mode



#### PRINTING WITH INTERNAL PRINTER

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



## ■ Biometry

### FAST, ACCURATE and EASY TO USE

By using a new algorithm, the axial length measurements and IOL power calculation can be made more than twice faster than the conventional model. The measurement accuracy for dense cataracts and an existing hazy media can be improved by pressing "Dense Cat" switch and "Gate select" switch.

Biometry Image



Customized IOL Calculation



## ■ Pachymetry

The US-4000 pachymetry mode offers precise measurement of the corneal thickness with a maximum  $\pm 5 \mu$  error. With the pachymetry feature, the US-4000 is the only ultrasound instrument in the market able to provide all the US diagnostic solutions in a single unit.\*

45 ° Probe with fixed tip



45 ° Probe with detachable tip



(Optional)

Straight Probe



(Optional)

\*Another model of US-4000 with only B-Scan and Biometry is also available.

## ■ Easy Data Transfer

The data can be easily stored through USB memory and LAN. By using the special interface cable, keratometry value measured by any NIDEK ARK can be automatically input into the US-4000 for easy IOL power calculation.

# US-4000 Specifications

|                          |  |
|--------------------------|--|
| <b>B-Scan</b>            |  |
| Probe                    | 10 MHz transducer, 10 frames / sec.  |
| Scan Angle               | 60 °   |
| Scan Depth               | Selectable from 35, 50 mm  |
| Sector Line Density      | 400 Lines  |
| Zoom                     | x 2.5, x 5.0   |
| Scale                    | Color, Gray scale 256 levels   |
| Gain / TGC               | 0 to 90 dB variable / 0 to -20 dB variable   |
| Gain Curves              | Log, Liner, S-Curves   |
| <b>Biometry</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 Calculation Step | 0.01 D   |
| Built-in IOL Formula     | BINKHORST, HOLLADAY, SRK, SRK-2, SRK-T, HOFFR-Q<br>Auto-setting of A-Constant, ACD Value and Surgeon-Factor Value are possible by specifying the IOL |
| <b>Pachymetry</b>        |  |
| Probe                    | 10 MHz solid probe   |
| Accuracy                 | ± 5 μ m  |
| Range                    | 200 to 1300 μ m  |
| Minimum Indicated Unit   | 1 μ m  |
| Measured Part            | Corneal thickness up to 25 points can be memorized.  |
| Display                  | Color LCD, 8.4 inch TFT (XGA: 1024 x 768)  |
| Printer                  | Thermal Type Line Printer (Easy Loading and Auto Cutter)   |
| Power Supply             | AC 100 to 120V ± 10%, 230V ± 10%, 50 / 60 Hz   |
| Power Consumption        | 70 VA  |
| Dimensions & Weight      | 300 (W) x 285 (D) x 330 (H) mm / 8.5 kg<br>11.8 (W) x 11.3 (D) x 13 (H) " / 11.74 lbs  |



Eye & Health Care  
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\*Specifications and design are subject to change without notice for improvement.



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