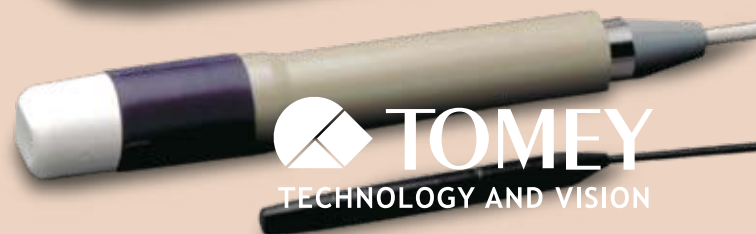


ULTRASOUND **A/B-SCANNER**

▶ **INTELLIGENT UD-6000 & UD-1000**

- *Annular Array
10/20 MHz B-Scan*
- *40 MHz UBM Probe*
- *Automated
Videorecording*
- *Built-in
Biometry (UD-6000)*
- *Diagnostic A-Mode*
- *Colour Touch Screen*
- *Memory Card*
- *Detailed Resolution*



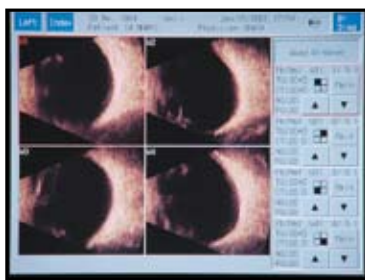
THE LATEST GENERATION

INTELLIGENT TECHNOLOGY IN DIAGNOSTICS

UD-6000 A/B SCANNER AND BIOMETER

UD-1000 A/B SCANNER

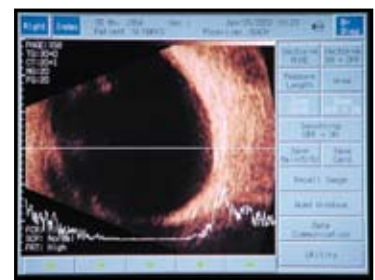
The TOMEY ultrasound A/B Scanner's B-probe has an innovative annular array structure. It includes a precise mechanical sector system for homogeneous scanning. Conventional sector scanning probes can only focus on one point e.g. to see the retinal area. The Annular Array Probe (10/20 MHz) of UD-6000/UD-1000 has 6 round oscillators placed in an annular arrangement and visualizes three focal planes at the same time. This setup is called the "Dynamic Multi-Focus System" and provides a clear live video image all over the eye. The round design of the probe perfectly fits the human eye and orbita - a vast improvement over linear and convex probes. In addition the unique scanning system has a frame rate of 22 frames per second - fast enough to provide a motion picture.



Multiple display and zooming are just two of the various features of the UD-6000/UD-1000.



The UD-6000 provides a powerful A-Diagnostic mode as well as a biometry mode.



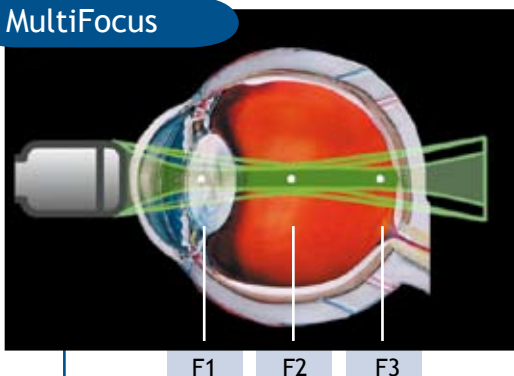
Detailed resolution and an extremely clear image of the whole eye.

UD-6000 - Four Functions in One Instrument

The UD-6000 combines all the applications of modern ultrasound diagnostics used in ophthalmology:

- Latest generation high resolution A/B-sector scanner
- Diagnostic A-mode
- Sophisticated Biometry system
- UBM - ultrasound bio microscope (40 MHz B-Scan Probe)

MultiFocus



The "TOMEY-Multi-Focus-System" provides amazingly detailed and clear B-images of the whole eye, thanks to its three focal planes (F1-F3).

The image of a conventional "Single-Focus-System" is only sharp at the probes preadjusted focal plane. Areas displayed in front and behind show far less detail.



UD-6000 with 40 MHz probe



Image of anterior segment taken by UBM 40 MHz probe

20 MHZ PROBE
40 MHZ PROBE UBM

Due to the probes higher frequency, you can visualize even the finest details of the anterior segment of the eye.

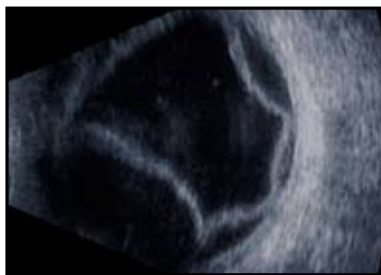
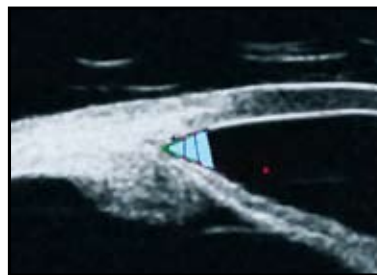
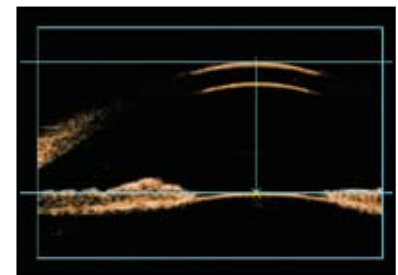


Image of 10 MHz probe



Angle calculation by UBM 40 MHz probe



Perpendicular ACD measurement by 40 MHz probe

The Latest Ultrasound Technology at Your Command

You can control all parameters and modes of the UD-6000 via the touch screen as easy as 1-2-3.

Tools to Benefit From

A highlight of the UD family is its automated video-recording mode, in which the last 202 live images (up to 20 secs) of the examination are stored. The pictures can then be recalled individually or played back in sequences as required.

An outstanding feature of both systems is its measuring function, which allows a user-defined area to be superimposed onto any frozen image. The software then automatically calculates the corresponding dimensions. In addition, the built-in zoom facility enables fine structures to be enlarged.

Annular Array Probe (10/20 MHz)

The UD-6000 is equipped with a very high-resolution sector scanning ultrasound probe that is designed to the latest developments in ultrasonic technology.

The "Dynamic Multi-Focus-System" scans near, middle and far points, while the single focus scans only the far point i.e. to see the retina area. Therefore, the near and middle images are out of focus. The Multi-Focus scan provides detailed and clear images of any area at the same time.

Video and Lan Connection to the PC

With this solution it is possible to display the video signal on the PC screen and to save single pictures and measurements of the examination.

OPTIONALS



P 93E



UD-Table



UD-1000



UD-6000

SPECIFICATIONS

Probe Type / Frequency

<i>Solid Type</i>	
<i>Tip Diameter</i>	5.3 mm (flat)
<i>A-Diagnostic-Probe</i>	10 MHz (optional)

Mech. Sector Scan Annular Array

<i>Multifocal</i>	3 Focus Points
<i>B-Scan</i>	10 MHz
	20 MHz (optional)
	40 MHz UBM (optional)

Measurement Object / Range

<i>Total Range</i>	10-35 mm
<i>ACD Range</i>	1.80-7.00 mm
<i>Axial Length</i>	15.00-35.00 mm
<i>Gray Scales</i>	256 levels
<i>Gradation Sequenz</i>	240 Levels
<i>Accuracy</i>	± 0.1 mm
<i>Minimum Distance</i>	
<i>Resolution</i>	0.01 mm
<i>Measurement Points</i>	3,500

Image Display Range Image Adjustment

<i>Total Gain</i>	1-80 dB (A-Diag)
	1-60 dB (B-Scan)
<i>Near Gain</i>	1-40 dB
<i>Far Gain</i>	1-40 dB
<i>Contrast</i>	1-60 dB

Imaging System

<i>Monitor</i>	10.4" Colour Touch Screen (SVGA)
----------------	----------------------------------

Video Frame Rate / Sec

<i>High</i>	22 sec
<i>Low</i>	11 sec
<i>Images</i>	202
<i>Analyse Function</i>	Zoom/A-Vector/Quad Window/Lenght& Area Measurement

Biometry for UD-6000 only

<i>IOL Storage Capacity</i>	10
<i>Biometry</i>	10 MHz Fixation LED
<i>Calculation Formula</i>	Haigis (Opt./Std.), SRK-T, SRK-II, Showa, Hoffer-Q, Holladay

<i>Documentation</i>	Built in Printer (UD-6000) LAN (Data Transfer Software)
----------------------	--

Video Out RGB NTSC (on Green)/RS 170A

LAN IEEE 802.3 (10M/100M)

Video Printer,
Memory Card incl.
min. 64 MB CF Card

Dimensions & Electric Requirements

<i>Dimensions WDH</i>	360 x 427 x 346 mm
<i>Weight</i>	Approx. 14.0 kg
<i>Power Supply</i>	AC 110 V to 240 V
<i>Frequency</i>	50/60 Hz
<i>Power Consumption</i>	Less than 80 VA

40 MHz UBM Probe (optional)

<i>Frequency</i>	40 MHz
<i>Scan</i>	Mechanical Linear
<i>Observation Area</i>	9*6 mm
<i>Display Resolution</i>	50*50 µm
<i>Scan Rate</i>	10 Frames/sec.
<i>Images</i>	102
<i>Colour scale</i>	240 Gradation
<i>Minimum Distance</i>	0.002 mm (V=1550 m/s)
<i>Distance Measurement</i>	
<i>Accuracy Between</i>	
<i>Two Cursors</i>	± 0.1 mm
<i>Eye Cup (imm. cup)</i>	4 Types
<i>Operation Arm</i>	Yes
<i>Dimensions</i>	31 x 200 mm
<i>Weight</i>	Approx. 680 g

B/W-Printer P 93 E (optional)

<i>Printing System</i>	Thermal Print
<i>Printing Head</i>	325 dpi, max. Resolution 1022 x 1000 dpi
<i>I/O Signals</i>	Composite Video (PAL, NTSC)
<i>Picture Formats</i>	7 Picture Formats (max. DIN A6)
<i>Printing Time/Picture</i>	3.9 sec (Normal)
<i>Max. No. of Prints/Roll</i>	
<i>(Paper Save Function)</i>	136 (Normal)
<i>Dimensions (WxDxH)</i>	154x300x97 mm
<i>Weight</i>	Approx. 2.8 kg
<i>Power Supply</i>	120 V AC, 50/60 Hz, 1.2 A 220/240 V, 50/60 Hz, 0.7 A

TOMEY EUROPE

TOMEY GmbH
Am Weichselgarten 19a
91058 Erlangen
Germany
Phone (+49) - 9131 - 77710
Fax (+49) - 9131 - 777120
eMail: info@tomey.de

TOMEY ASIA-PACIFIC

TOMEY CORPORATION JAPAN
2-11-33 Noritakeshinmachi
Nishi-ku, Nagoya 451-0051
Japan
Phone (+81) - 52 - 581-5327
Fax (+81) - 52 - 561-4735
eMail: info@tomey.co.jp

Visit our internet domain:

www.tomey.de