prosound 3500SX

As of December 2006, Aloka was the first company to reach a significant milestone in producing 200,000 diagnostic ultrasound systems.
We will continue to contribute to human health through our development of innovative and user-friendly systems.

- The specifications, shape and color of this product are subject to change without prior notice.
- Some models may not be available in certain countries.

We strive to provide quality products and services for our customers.

We operate with regard for the environment.

Mixed Sources
Product group from well-managed forests and other controlled sources
www.fsc.org Cert no. SGS-COC-2053
© 1996 Forest Stewardship Council

PRINTED WITH SOYINK
Trademark of American Soybean Association

We care, Ultrasound@Aloka.

ALOKA CO.,LTD.

6-22-1, Mure, Mitaka-shi, Tokyo, 181-8622 Japan
Telephone : +81 422 45 6049 Facsimile : +81 422 45 4058
www.aloka.com

Printed in Japan 2007-09 E212 ⑤ (D)

ALOKA
Science & Humanity

A Platform for Digital Pure Beam Imaging

The strengths of the ALOKA ProSound® 3500SX include clear imaging, great versatility, user-friendly design, and comprehensive data management.
Enjoy the functions and performance you require in your clinical practice.
The high performance of the 3500SX stems from the state-of-the-art technologies developed for our premium performance ProSound systems.
The 3500SX offers great versatility over an extensive range of clinical applications with abundant specialty probes and flexible system architecture.
The system can be customized according to your specific application needs, offering greater simplicity of operation.
The ProSound 3500SX proves its worth in your clinical practice.

- **Pursuing High Image Quality**
  - Tissue Harmonic Echo (T.H.E.)
  - Multi-Beam Processing
  - 12-bit A/D Converter
  - W-SHD Probes
- **Assisting Examination and Diagnosis**
  - Quint Frequency Imaging (Q.F.I.)
  - Dual Dynamic Display (D.D.D.)
  - Free-Angular M-mode (F.A.M.)
- **Diversified Data Management Media**
  - Various formats
  - Multiple storage media
  - DICOM compatible
- **Pursuing a User-friendly System**
  - Customizable operation panel
  - Ergonomic design
  - Lightweight and mobile

Advancing Digital Technology

In pursuit of high image quality for more detailed examination

Tissue Harmonic Echo (T.H.E.)

For clearer images with less noise and artifact

Tissue Harmonic Echo utilizes second harmonics that include less side lobe artifact, which can provide improved tissue differentiation and increased contrast resolution to help examine difficult-to-scan patients.

Fundamental T.H.E.

Multi-Beam Processing

For higher frame rate to capture fast movement

Multi-Beam Processing offers exceptionally high frame rates by processing echo information in different directions at the same time. It is useful for optimal performance in studies requiring dynamic imaging of patient morphology such as the fetal heart.

12 bit A/D Converter

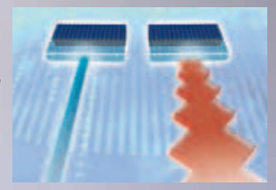
To display minute difference of echo level

The dynamic range of an ultrasound system strongly depends on the performance of the A/D converter. We have introduced a high-performance 12-bit A/D converter, which can deliver remarkably enhanced contrast resolution.

PixelFocus™

To focus on the entire image

With the advanced full-digital beam former, the focus is controlled down to the pixel level, providing precise spatial resolution throughout the image for improved visualization of clinical details.



Diversified Specialty Probes

To meet a wide variety of clinical applications

Aloka internally develops probes by carefully listening to the ultrasound user's opinion. Thus probes for the specific applications have optimum performance. Image quality greatly depends on the probe. The ProSound 3500SX can connect the W-SHD (Wide-band Super High Density) probes, which have the following superior technical features.

- Micro-fine crystal cutting reduces generation of side lobe artifacts.
- Transducer elements with multi matching layers offer a wider frequency bandwidth.
- Impedance matching technology increases dynamic range and S/N ratio.

Micro Convex Probe

UST-9133

Biopsy attachment
MP-2781

The micro convex probe is thin and shaped for easy intercostal approach. The blind zone is minimized with nearly vertical insertion angles of 5 and 25 degrees.

The Brilliance of Life in 4D Images

Easy-to-understand images promote dialog between doctor and mother

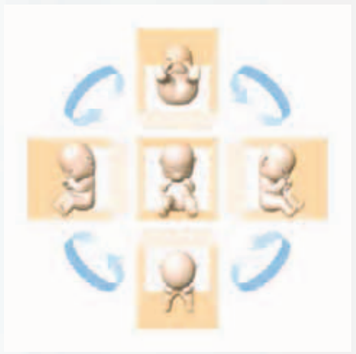
Real-time 3D (4D)

4D images can be seen easily and quickly

With the dedicated 4D probe, it is possible to acquire 3D image data sets at high speed. The high volume rate permits smooth display of fetal movement.

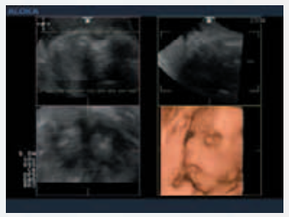
Variable view point

The view point of a 3D image can be freely rotated 360 degrees horizontally and vertically. Images you want to see, for example the face of a fetus, can easily be displayed irrespective of the fetus' position.



Multi-planar display

It is possible to display images of three arbitrary planes simultaneously. Sections of any position desired can be displayed, for example horizontal, longitudinal, and transverse planes. The horizontal plane, normally unavailable in the ordinary 2D B-mode, provides additional useful information.

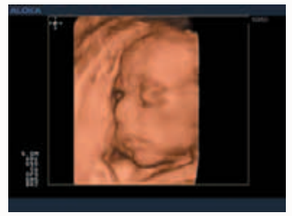


Compact and lightweight 4D probe

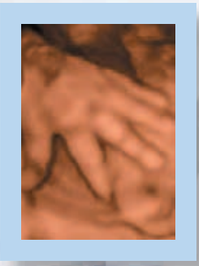
From routine examination to 4D imaging

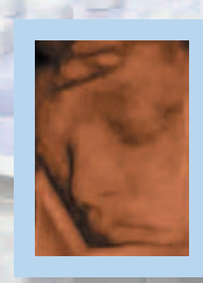
The B-mode image quality of the dedicated 4D probe is equivalent to that of the normal 2D probe. As the 4D probe can be used in 2D B-mode, M-mode, Flow and PowerFlow mode, and PW mode, smooth operation from routine examination to 4D imaging is possible.

Transabdominal 4D probe



Transvaginal 4D probe





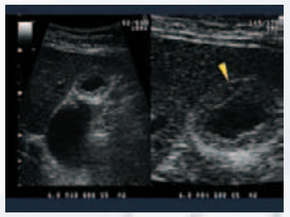
Provides the Images You Want to See

Furnished with functions to help provide clinically useful images

High-resolution Zoom

Magnifies images maintaining high resolution

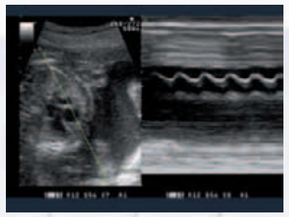
In the Write Zoom, line density in the magnified area is increased to provide high-resolution images. In the Read Zoom, even frozen images can be magnified with high resolution.



Free Angular M-mode (FAM)

Eases and speeds up M-mode examination

FAM enables you to set the M-mode cursor at any position and in any direction on a B-mode image to obtain an M-mode trace. For example, you can easily put cursor line perpendicular to the ventricular septum and the posterior wall of the left ventricle for accurate calculation. Up to three cursors can be set at once.



Dual Dynamic Display (D.D.D.)

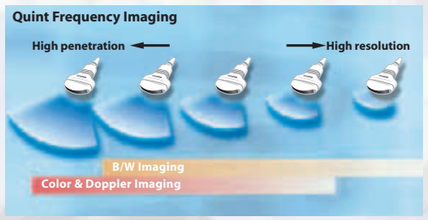
Easier recognition of relationship between anatomy and flow information

D.D.D. is a function to display B-mode images with and without Color Flow image simultaneously in real time. This function clearly shows the relationship between the morphological information and the blood flow of the region of interest.

Quint Frequency Imaging (Q.F.I.)

To obtain optimum image quickly

The Q.F.I. allows selection of optimal frequencies over an extremely wide range of probe's bandwidth. It is possible to select higher resolution imaging or higher penetration imaging according to the situation without changing the probe.



Simple and Easy to Use

For higher patient throughput and efficient data management

Customizable Operation Panel

For more efficient examination

The functions that are often used can be accessed at the touch of a key by presetting those functions to Direct Access Keys.

Ergonomic design

Eases operator's physiological stress

- The flicker-free LCD monitor reduces eye fatigue.
- The operation panel and the viewing monitor can be shifted up/down for your optimum position.
- The compact and lightweight system can be moved easily.

Supports Comprehensive Data Management

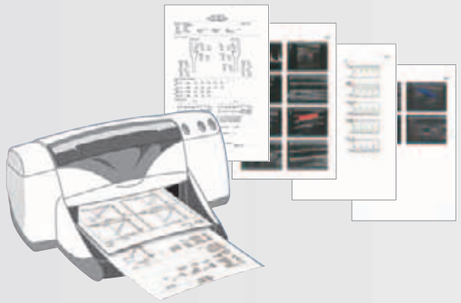
To manage patient information and image data flexibly

Sophisticated Measurement / Report functions

The measurements are transferred to the report automatically.

Simple measuring process and automatic report function streamline the examination process.

- Supports various applications, including Obstetrics, Gynecology, Cardiology, Peripheral vascular, Urology, and Abdomen.
- Obstetric report displays a trend graph, which is invaluable for monitoring fetal growth. Past measurements can also be plotted on the display.
- Gynecology report displays ovarian follicle measurements during fertility treatment.
- Peripheral vascular report covers various parameters, including Intima-Media Thickness (IMT), and its simple operation is perfect for routine examination.
- The capability of the report function is not limited to reporting measured values; various diagrams and ultrasonic images can also be displayed.
- The report data can be printed out with a PC printer directly connected to the system.



Digital Data Management with Multiple Media

Provides an organized information system

- The past measurement data and ultrasound images can be quickly retrieved by entering the patient ID or name.
- Thumbnail display of the past images of a patient is helpful for follow-up examination.
- It is possible to save data into the built-in FD drive and also into the external CD-R drive*.
  (*Option)

Connectable with DICOM network

Enables cross-modality data management

The system is compatible with DICOM 3.0. The patient data and image data can be transmitted to the file server in the network. Worklist management enables acquisition of the names and ID numbers of the patients who are scheduled to be examined today.

Superb Image Quality