



Diagnostic Ultrasound System MODEL : PROSOUND α6



# prosound α6



ALOKA – An Environmentally Friendly Company

- The specifications, shape and color of this product are subject to change without notice.
- The standard components and optional items vary depending on the country.



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

We operate with regard for the environment.

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## Revolutionary Performance; Ease of Use

The ProSound *a6* is the next generation of compact color ultrasound systems, providing unprecedented performance with a broad range of applications.

The ALOKA ProSound Alpha series has a well-established reputation in hospitals and medical facilities throughout the world. Now, the exceptional performance of the high-end ProSound series systems is available in this compact system, delivering outstanding image quality and versatility.

The ProSound *a6* has also been designed for ease of use – its ergonomic design greatly reduces the workload of the user.

To make the experience more comfortable for patients and to minimize patients' uneasiness with medical equipment:  
— the overall system and its body are designed to be quieter and more compact.

To make the system easier to operate and to enhance examination efficiency:  
— the height adjustment mechanism of the operation panel ensures optimum positioning for the examiner.

To address environmental issues:  
— ALOKA address the issues of energy and resource saving, recycling and non-use of specified toxic substances.

With this small yet powerful system, we will bring the benefits of ultrasound diagnosis to people, worldwide.



## Sophisticated Technologies, Easy to Use

### Powerful



- Technologies developed for the high-end modes of the ProSound series are incorporated in the system to enhance efficiency of imaging diagnosis.
- The system provides high-definition imaging and a wealth of new applications, without compromising image quality.
- Excellent image processing functions including Broadband Harmonics (BbH), Adaptive Image Processing (AIP) and Spatial Compound Imaging (SCI).
- High sensitivity *e*FLOW for depicting blood flow.
- A wide variety of analysis software including *e*TRACKING and TDI Analysis.

### User Friendly



- To make the units easier to operate and enhance examination efficiency, the height adjustment mechanism of the operation panel ensures optimum positioning for the examiner.
- A large touch screen panel boosts visibility and makes the switches easy to operate. Switches have optimized arrangement according to frequency of use.
- Designed and produced with regard for environmental protection.

### Compact



- Integration of electronic circuits produces a smaller main body.
- A lightweight and compact body offers high mobility, easy handling and portability.

## Advanced High Image Quality Technology

### Broadband Harmonics™(BbH)

Harmonic imaging by Broadband Harmonics technology delivers sensitivity and resolution comparable to those of fundamental imaging. In addition to reducing artifacts caused by side lobes and multiple echoes, imaging performance is enhanced over the entire image.

### Adaptive Image Processing(AIP)

AIP clearly displays differences in tissues. It is able to display outlines of tissues more clearly by selectively emphasizing boundaries. It reduces speckle noise while maintaining the frame rate.

### Spatial Compound Imaging(SCI)

Spatial Compound Imaging is used to depict sidewall structures of tubular cavities (arteries, veins, plaques, thrombus, etc). It allows the ultrasound beam to be directed in multiple directions, superimposing the different images on top of each other, reducing noise patterns by image comparisons. Consequently, artifacts are eliminated or dramatically reduced.

### Image optimizer

Image Optimizer allows the brightness of B-mode images to be instantly optimized. Images are displayed under the desired imaging conditions at the touch of a button, freeing the examiner from constant imaging adjustments during examination, resulting in more efficient examinations.

### *e*FLOW

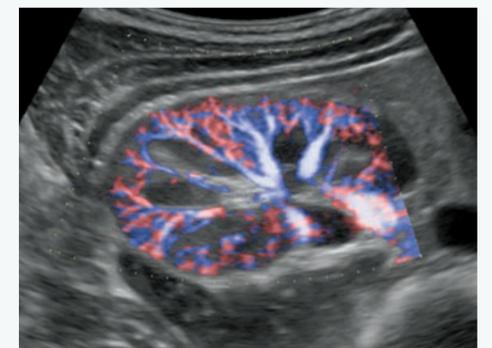
Spatial resolution is higher than the conventional blood flow display methods, while optimized filtering reduces blooming (a distortion of the image). The system clearly displays information on blood flow, from high speed flow in large vessels to low speed flow in fine peripheral vessels.



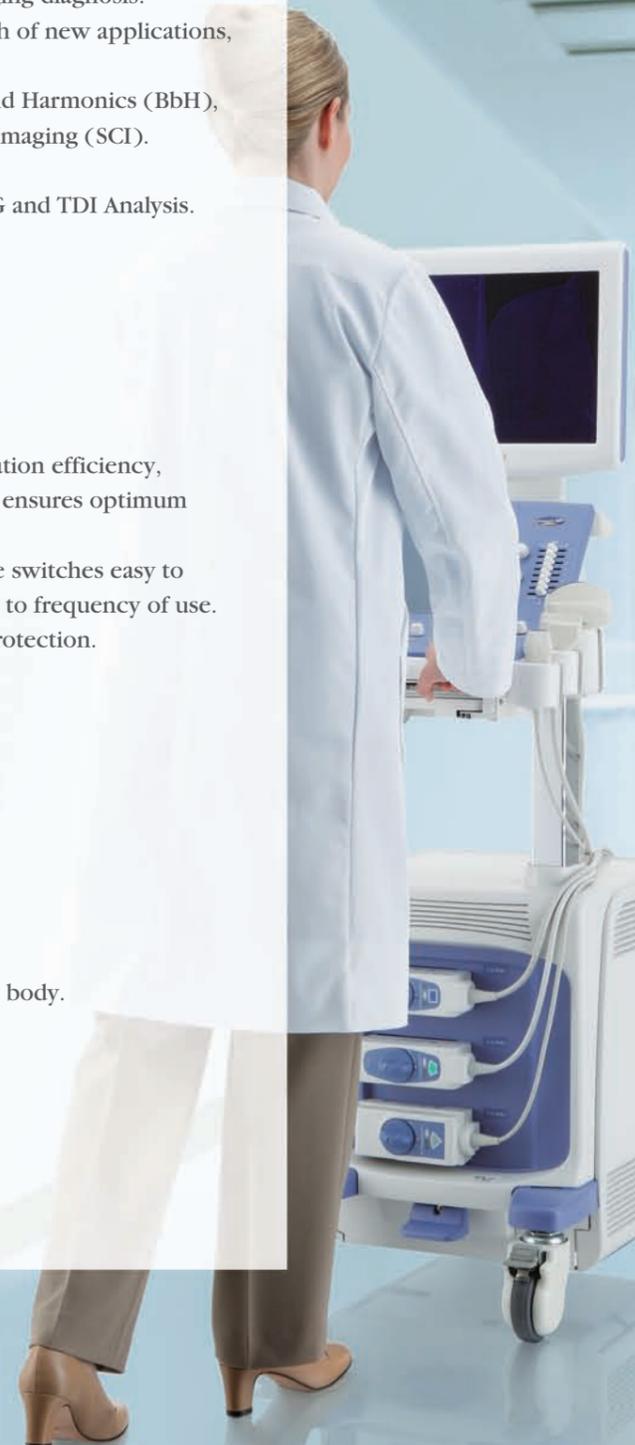
Thyroid gland tumor



Gallstone



Kidney



# Functions for Efficient Workflow and Contented Patients

## Real-time 3D (4D)

Real-time 3D is a mode which allows the visualization of structures in 3D in real time (4D). These images are obtained with specific Obstetrics and Gynecology probes. Robust 3D analysis software is embedded into this function, which allows the users to review the fetus from any plane in order to easily navigate into the volume and seek for abnormalities.

## Freehand 3D

This function allows the use of a conventional 2D probe to reconstruct a 3D volume by a manual screening. This offers the possibility to reconstruct a 3D image - 3D surfacing.



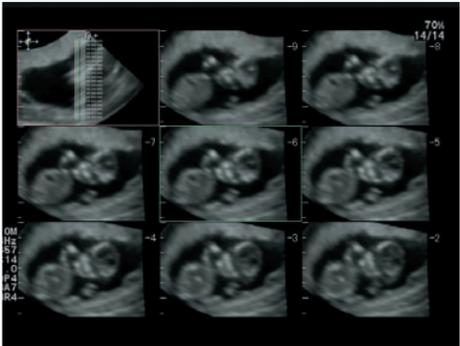
Fetus (25 week)



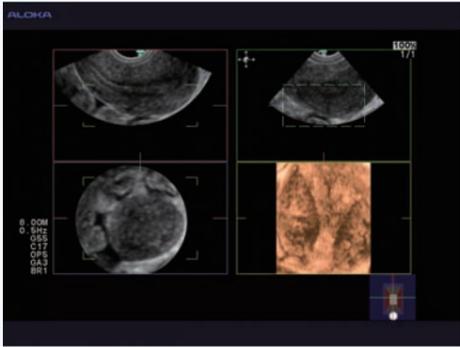
Fetus (13 week)



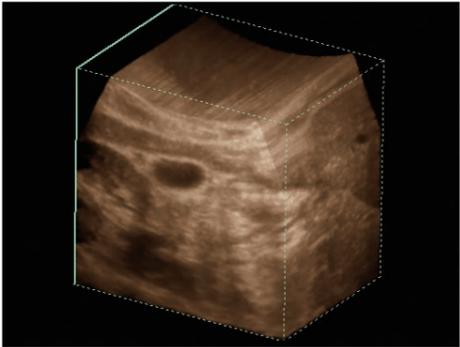
Fetus (25 week)



Multi-slice imaging (MSI), Fetus (13 week)



Multi-planar Reconstruction (MPR), Uterus



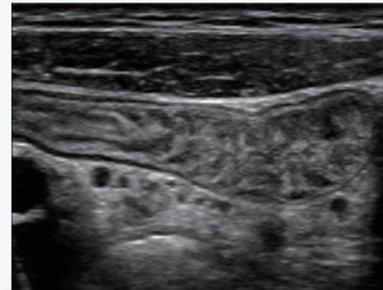
Freehand 3D, Liver and gall bladder

# Supporting a Wide Variety of Diagnostic Specialties

## ● Abdomen

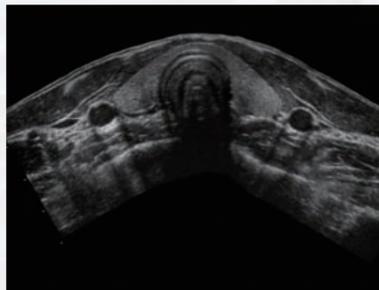


eFLOW (Liver)

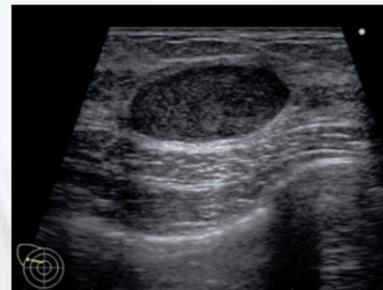


Digestive tract

## ● Small Parts



Extended Field of View (Thyroid gland)

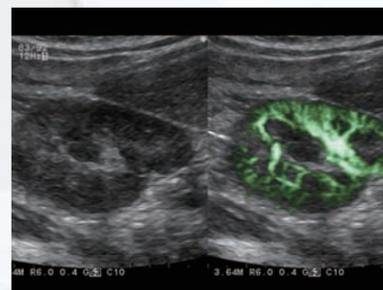


Trapezoidal Imaging (fibroadenoma)

## ● Urology

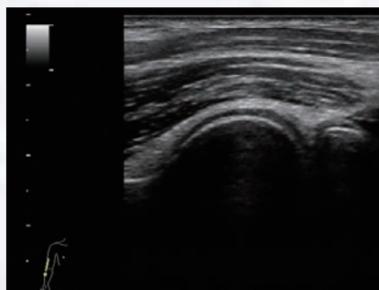


Testis

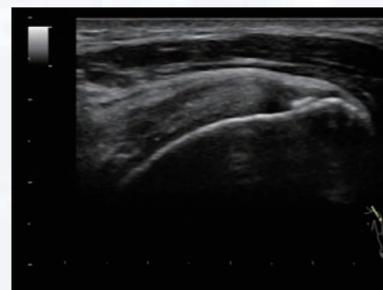


Dual Dynamic Display, eFLOW (Kidney)

## ● Orthopedics



Elbow joint

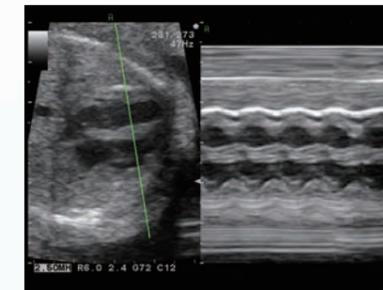


Rotator cuff of shoulder

## ● OB/GYN



Fetal profile



Free Angular M-mode (Fetal heart)



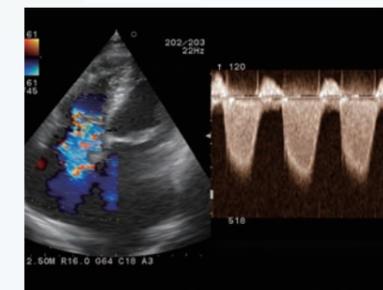
Ovarian cancer

## ● Cardiovascular

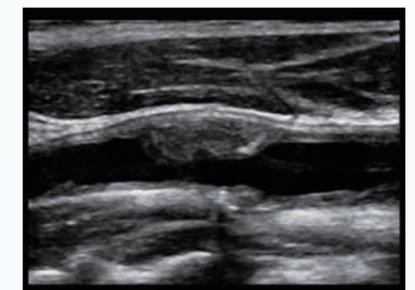
The system is equipped with various functions to make routine examination comfortable, such as Dual Dynamic Display (DDD), Free Angular M-mode (FAM) and Doppler Auto Trace. In addition, a wealth of analysis software is available, including Asynchrony Study, TDI, STRAIN and eTRACKING for advanced quantitative evaluations.



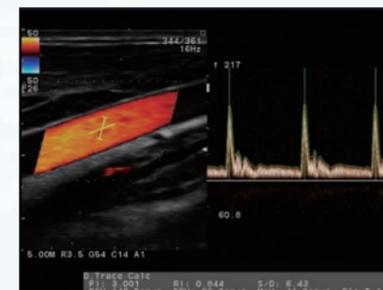
LV long axis view



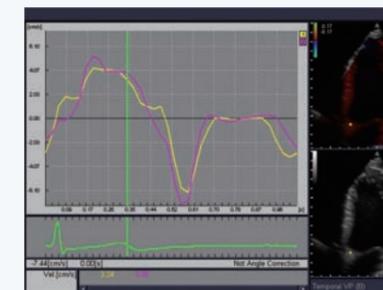
Tricuspid regurgitation



Carotid plaque



Doppler Auto Trace, Carotid artery



TDI analysis



eTRACKING analysis

## Simple Design for Enhanced Utility



### The ergonomic panel design greatly reduces examination time

- The system is both versatile and easy to use as frequently used functions can be assigned to the controls on the touch panel and operation panel.
- The keyboard illuminates automatically when a key below the operation panel is touched, making the system easy to use in dark examination rooms.

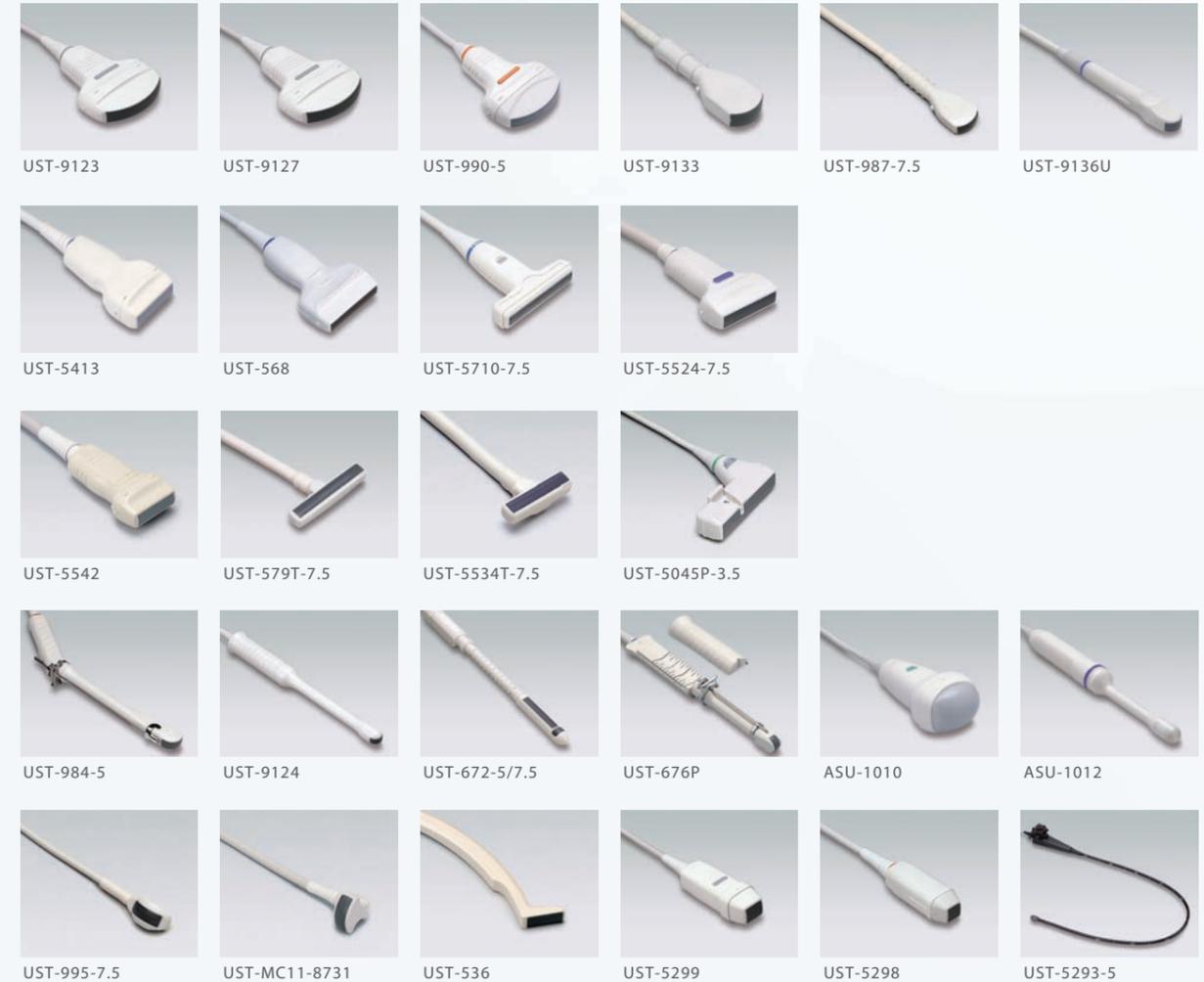


### Ergonomic design and usability

- The high-quality LCD monitor can be swiveled horizontally and tilted vertically.
- The height of the operation panel can be adjusted to suit the position of the user during examination.
- The compact body (42cm wide) allows the system to fit easily into narrow bedside spaces. The rounded body and quietness of the system make the experience more comfortable for patients.
- Patient information and image data can be digitally stored in the built-in HDD, USB memory or DVD drive. The system is compatible with JPEG and other general storage formats, and the DICOM storage format.



## A Full Suite of Probes



Note: The compatible probes vary depending on the system version. Some probes require optional unit for connection.

### ALOKA is an environment-friendly company.

ALOKA actively adopts various measures to facilitate segregation and recycling of waste products in the product design stage. ALOKA works hard to eliminate harmful substances. ALOKA continues to make every effort to save resources when producing units and to develop low-power-consumption systems.

