



Diagnostic Ultrasound System MODEL: PROSOUND α6



ALOKA
illuminate the change

prosound α6



We are an environmentally friendly company.

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

We operate with regard for the environment.



Revolutionary Performance; Ease of Use

Unprecedented performance with a broad range of applications
- the compact ProSound α6 is at your service.

Our ProSound series has a well-established reputation in hospitals and medical facilities throughout the world. The exceptional performance of the higher-end ProSound systems is available in the ProSound α6, delivering outstanding image quality, versatility and ergonomics.



Powerful

- Incorporation of technologies developed for our higher-end models of the ProSound series.
- High-definition, high quality imaging for a wide range of applications.
- Excellent image processing functions: Broadband Harmonics (BbH), Adaptive Image Processing (AIP), Spatial Compound Imaging (SCI).
- High blood flow definition: eFLOW
- A wide variety of analytical software including eTRACKING and TDI Analysis.



User Friendly

- The operation panel's height adjustment mechanism allows for easier operation and enhancement of examination efficiency.
- Large touch panel screen boosting visibility and easier operation.
- Optimized switch layout according to frequency of use.



Compact

- Small main body size accomplished by integration of electronic circuits.
- Mobility, easy handling and portability assured by the light weight and compact size.



Incredible Imaging Technology Bringing About High Versatility

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.

eFLOW

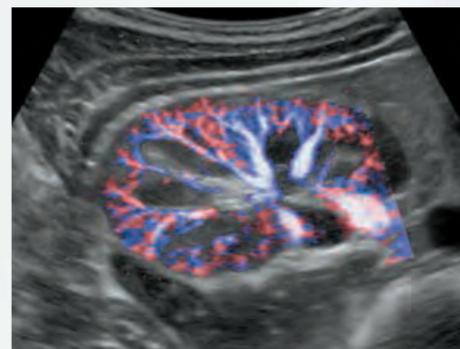
Spatial resolution is higher than the conventional blood flow display methods, while optimized filtering reduces blooming (a distortion of the image). The system clearly displays information on blood flow, from high speed flow in large vessels to low speed flow in fine peripheral vessels.



Thyroid gland tumor



Gallstone



Kidney



eFLOW image of the liver, with impressive vessel representation

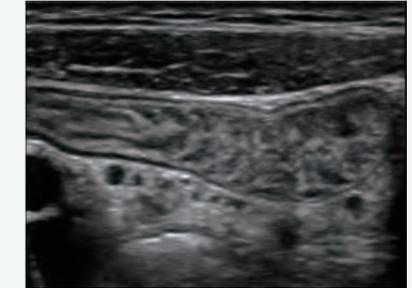
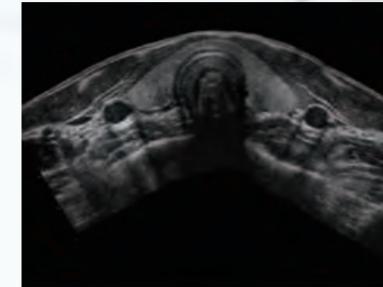
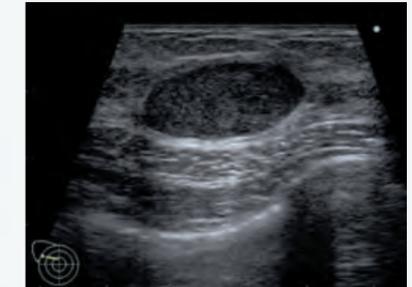


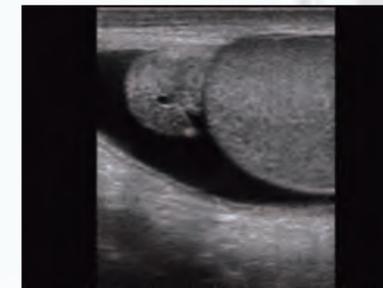
Image uniformity enabling clear visualization of the digestive tract



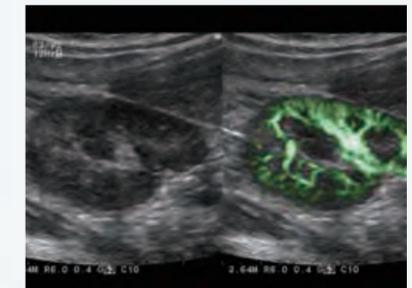
Extended Field of View offers panoramic understanding of the thyroid gland



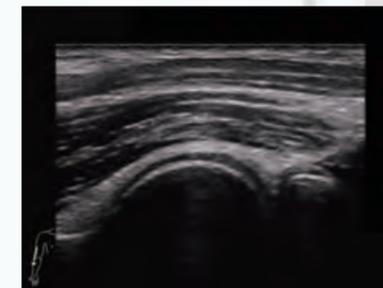
Trapezoidal imaging of a fibroadenoma and its surrounding tissues



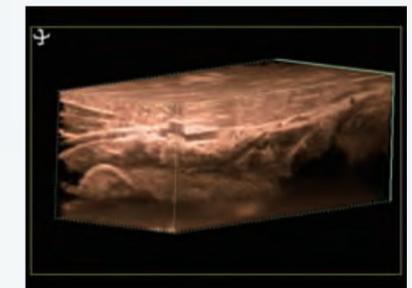
High spatial and contrast resolution image of the testis



B/W and eFLOW images of the kidney in one screen with Dual Dynamic Display



Detailed delineation of the elbow joint



Freehand 3D image of muscles and its surrounding tissues

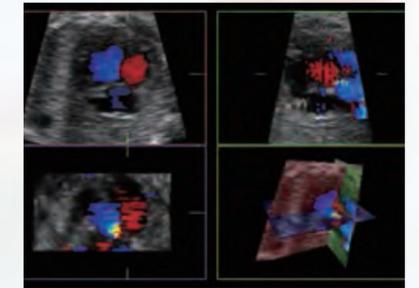


Confident Observations and Measurements For Both Mother and Child



Spatiotemporal Image Correlation (STIC)

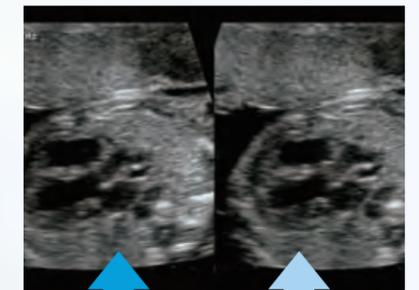
View the fetal heart in 3D from any angle. Or observe it in 2D, from any cross section. STIC collects images of the same time phase from the data of multiple heart beats to construct the heart's volume data. High precision is guaranteed; the ProSound α 6 detects fetal heartbeats by analyzing time phase using M-mode waveform or Doppler spectrum pattern.



Global understanding of the fetal heart using STIC

Dynamic Slow-motion Display (D.S.D.)

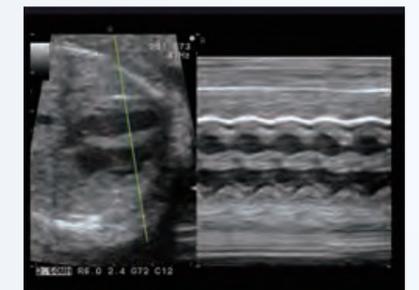
Observe the fast moving fetal heart, by displaying a real-time image and its slow-motion image together on one screen. For example, while a real-time image of two cardiac cycles is displayed, its slow-motion image can be displayed in half speed, as one cardiac cycle. The fetal heart, valve leaflets, and regurgitation flows and other fast moving objects can be observed easily and in detail.



Capture movements of the fast moving fetal heart with D.S.D.

Real-time Free Angular M-mode (FAM)

For easy and accurate analysis on the M-mode, whether the targeted heart is an adult's or a fetus's. With FAM, up to three cursors can be set at any position, at any angle. The M-mode images can also be reconstructed after the image is frozen, using the Cine Memory function.



M-mode imaging from any angle of the fetal heart, using FAM

Automated Nuchal Translucency (NT) Measurement

Automated NT Measurement will automatically detect and measure NT thickness by setting the region of interest (ROI) on fetal neck's mid-sagittal view. This easy, quick and efficient function enhances accurate detection of chromosomal abnormalities such as Down syndrome.

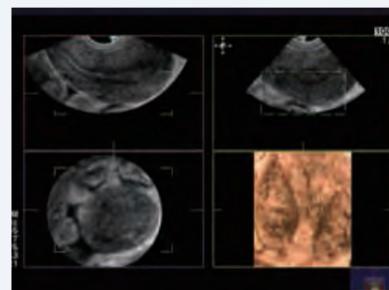


Quick, easy, accurate analysis with Auto NT Measurement

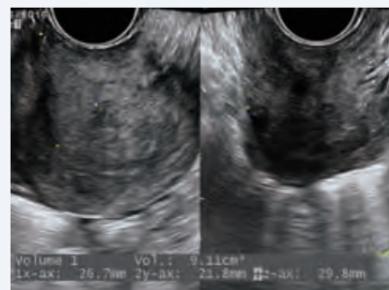
Courtesy of Dr. Marc Althuser, France



Detailed imaging of the fetus's face and fingers with Real-time 3D (4D)



Multi-planar Reconstruction offering multiple views for further understanding of the uterus



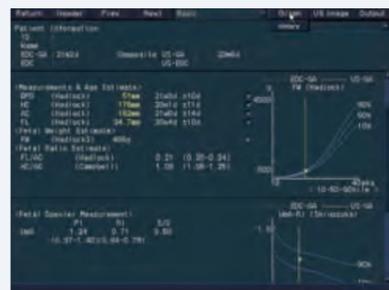
Cervical cancer, post-treatment



Multi-slice Imaging for observation of multiple slices



Ovarian cancer



Past and present data can easily be displayed on one report screen

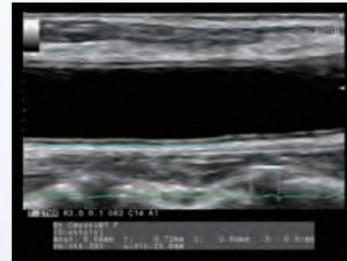
Specialized for Diverse Applications

Cardiovascular

ProSound $\alpha 6$ offers a full complement of various analyzing software. Dual Dynamic Display (D.D.D.), Free Angular M-mode (FAM), and Doppler Auto Trace make daily examinations more comfortable. Software such as Asynchrony Study, Tissue Doppler Imaging (TDI), Strain, *e*TRACKING provide more detailed, quantitative evaluation. The ProSound $\alpha 6$ is ready for the fundamentals and more.

Automated IMT Measurement

Early prognosis of cardiovascular events such as stroke or myocardial infarction is possible with Automated IMT Measurement. By simply setting the ROI on a long-axis view of the vessel, the max and mean IMTs are calculated.



*e*TRACKING (Echo Tracking)

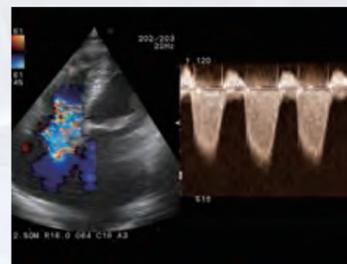
Changes in vessel diameter are measured automatically and in real time with the analyzing function using *e*Tracking. With the precision of up to 0.01 mm, the tracking gate follows the vessel wall movement caused by pulsation.



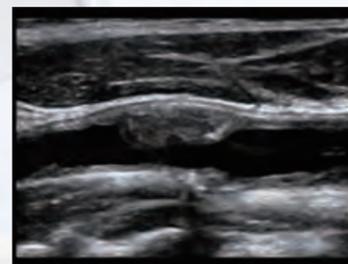
*e*TRACKING report screen



LV long axis view



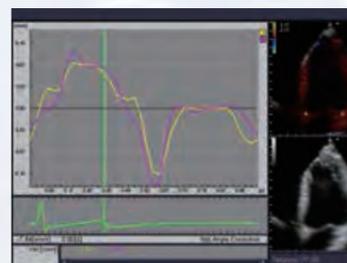
Tricuspid regurgitation



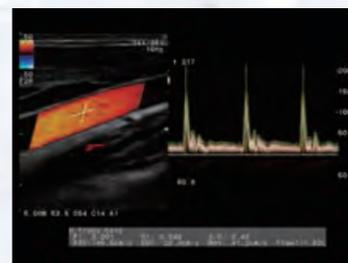
Accurate depiction of IMT and plaque of both near and far walls



Stress echo



Detailed analysis of velocity and time enables evaluation of the systolic and diastolic functions.



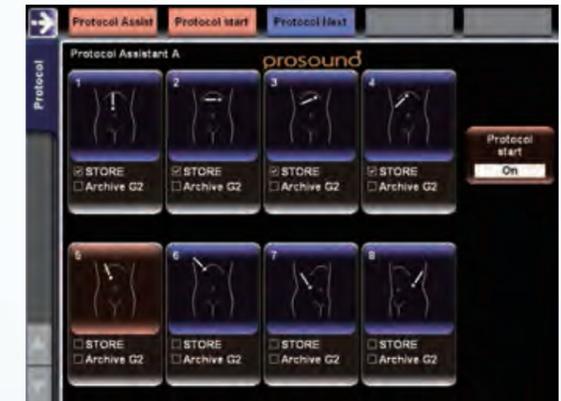
Reliable data acquired by the high-accuracy Doppler Auto Trace

Protocol Assistant

Smooth, confident examinations are available with the Protocol Assistant. Procedures of examinations can be pre-registered in the protocol:

- Parts to be examined, with body marks and annotations.
- Necessary measurements

The registered protocols are displayed on the touch panel, enabling the sonographer to check the progress of examination at any time. Mis-recordings of images are avoided by checkmarks on the acquired/recorded sections and warning messages when the exams are being interrupted.



The ProSound $\alpha 6$ Probe Lineup

ProSound $\alpha 6$ offers a wide variety of probes in various frequencies, suitable for a wide range of applications. Clear imaging. Well-considered shapes and sizes. Light weight. These probes are designed not only for stable, accurate and detailed imaging but also usability and comfort for both the sonographer and patient.



Abdominal, UST-9123



OB/Gyn, ASU-1010



Endovaginal Gynecological, UST-9124



Cardiac, UST-5299



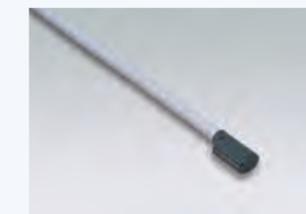
Cardiac, TEE, UST-5293S-5



Peripheral vascular, Small parts, UST-5413



Intraoperative, UST-579T-7.5



Intraoperative, UST-533



Intraoperative, UST-9133

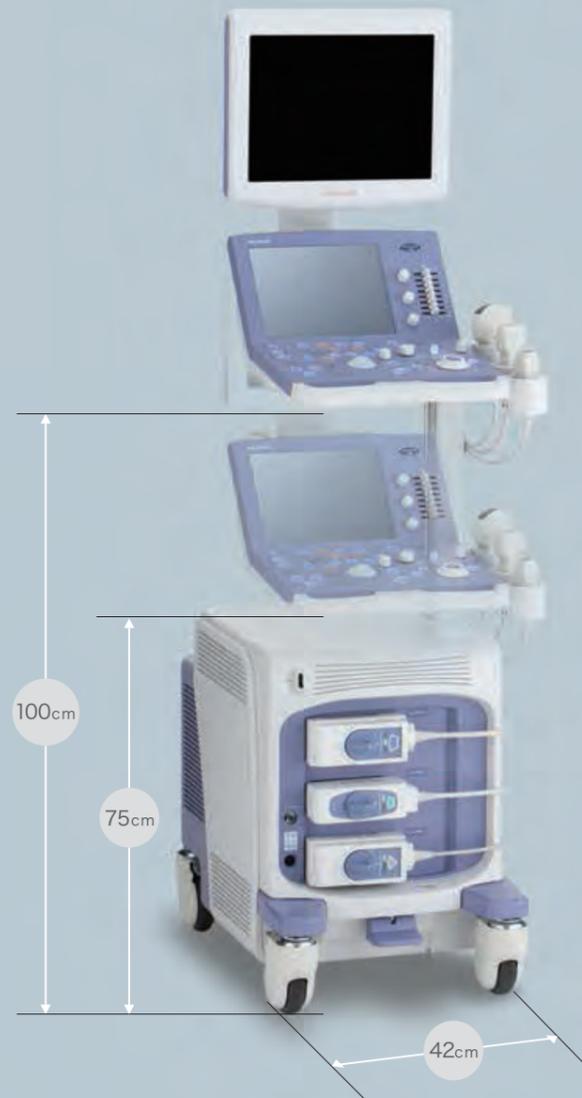
Note: The compatible probes vary depending on the system version. Some probes require optional unit for connection.

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.



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 or external DVD recorders.



17-inch Optional Monitor

The large screen enables easier, deeper observation.



Keyboard

The keyboard, which can be retracted under the operation panel, is ready for use with a light touch of a finger. The keys automatically illuminate during use, enabling efficient use in dark examination rooms.



The User-friendly Horizontal Probe Holder

The unique holder for endocavity probes enable two ways of securing; vertically and horizontally. Laying the endocavity probe down horizontally for its usability is another one of our friendly features.

We are committed to environmental protection.

We at Hitachi Aloka Medical actively adopt various measures to facilitate segregation and recycling of waste products in the product design stage. We work hard to eliminate harmful substances.

