GE Healthcare

Accomplish more.

LOGIQ 7

Demand more.

GE Healthcare is re-imagining ultrasound to bring you breakthroughs to make your job easier – and ultimately change the way ultrasound happens. Innovative LOGIQ® 7 system features, robust LOGIQworks™ and the ability to virtually rescan a patient after the exam, enable new ways at looking at your workflow to bring you enhanced productivity and comfort.

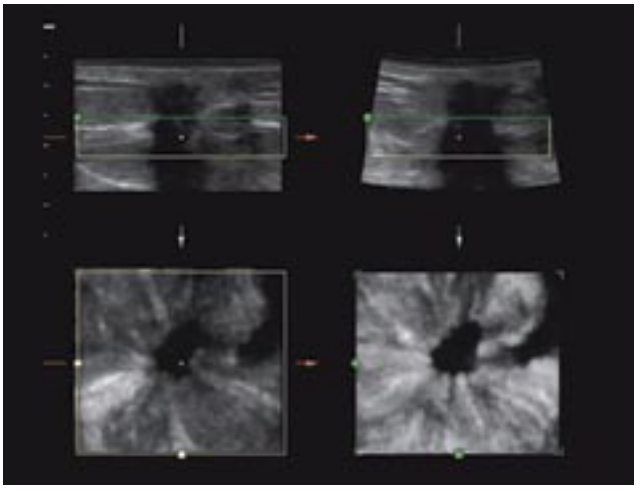
LOGIQ 7, GE's premium shared service ultrasound system, is versatile and reliable – meeting the demands of virtually any clinical setting. It supports a full range of applications, from abdominal, OB/GYN, small parts, and pediatric, to vascular and cardiovascular imaging, including transesophogeal, stress echo, Tissue Velocity Imaging (TVI), Tissue Velocity Doppler (TVD) and Q-Analysis.

And we have taken this breakthrough a step further to deliver more comfort. We call it *SonoErgonomics*™ – ergonomics engineered with the sonographer in mind. A fully adjustable flat panel monitor, height adjustable keyboard, and voice-activated operation are just some of the ergonomic advantages of the LOGIQ 7.

GE Healthcare's latest technology breakthroughs address the total ultrasound suite – from the inside out – bringing you enhancements in image quality, productivity, comfort and workflow. From new Volume Imaging Protocol (VIP) and integrated diagnostic workstations, to new ergonomic features and voice-activated operation – the latest breakthroughs are changing how ultrasound is done.

See more.

Image quality is the cornerstone of the LOGIQ 7. GE has developed advanced technology that gives you improved resolution and superior image quality, for enhanced diagnostic capabilities that help you see more than ever before.

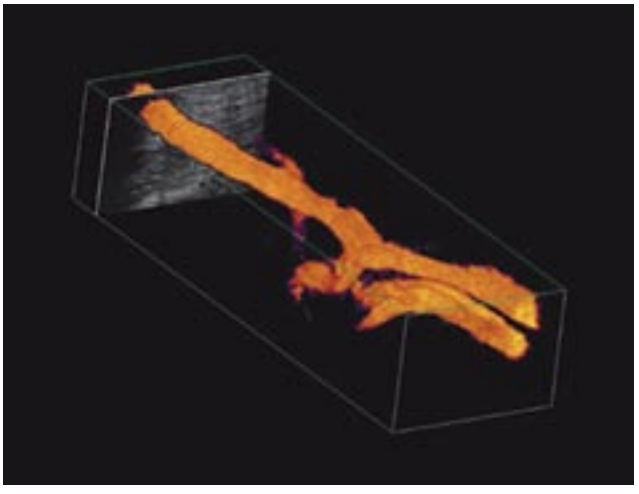


Volume Ultrasound

LOGIQ 7 turns up the volume in ultrasound by integrating our Volume Ultrasound advancements with 2D optimization technologies – taking your facility into a new era of ultrasound. Now, you can acquire and construct volumetric images instantaneously with 4D transducers, reconstruct volumes from raw data cine loops and manipulate data to view from sagittal, transverse or coronal, as well as oblique planes, to see anatomical relationships never before visualized.

Our latest volume enhancements deliver more:

- Volume Calculation (VOCAL) automatically calculates volumes based on trackball tracing of the region of interest for evaluating irregular structures.
- Inversion Mode makes it easier to visualize volumes compared to conventional ultrasound techniques by automatically providing surface renderings of hypoechoic structures, beneficial for the evaluation of contiguous multiple cysts or irregular fluid collection.
- Volume Contrast Imaging (VCI-Static) delivers unmatched B-Mode contrast resolution and speckle suppression in each of the three cut planes, helpful in evaluating solid organs and cystic structures.

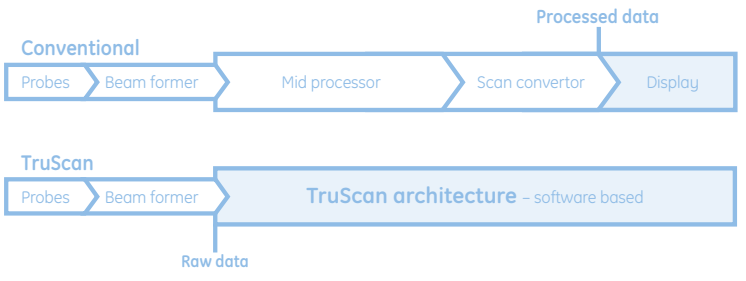


The virtual rescan

GE's exclusive TruScan™ architecture makes the virtual rescan possible. TruScan allows raw image data to be stored early in the image chain for optimum flexibility during processing and analysis post exam. With access to raw image data, you are able to compensate for variations in image acquisition by virtually rescanning the patient after they have left the exam room.

Using raw data, the virtual rescan allows you to:

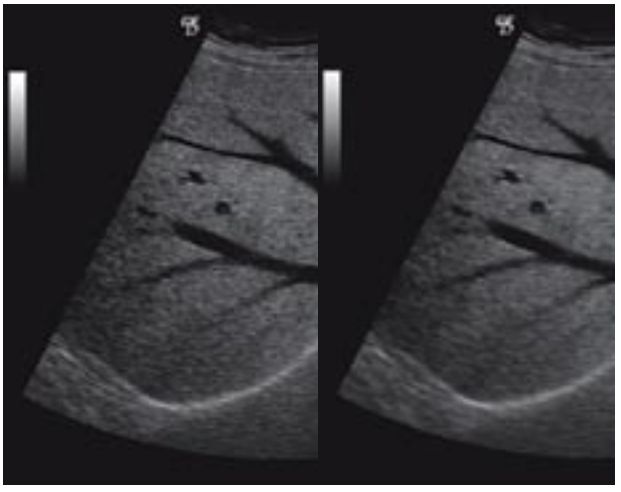
- Optimize images acquired under difficult scanning conditions:
  - Add/modify SRI
  - Modify B-Mode gain and dynamic range
  - Achieve one-touch Automatic Optimization
  - Change baseline shift, sweep speed and Doppler gain
- Take measurements; add or edit annotations
- Adjust time gain controls
- Analyze and manipulate volume data and construct 3D volume images from a cine loop
- Perform an off-line anatomical M-Mode scan from an archived cine loop, as well as a Q-Analysis (strain, tissue Doppler and re-synchronization)



Clear flow visualization

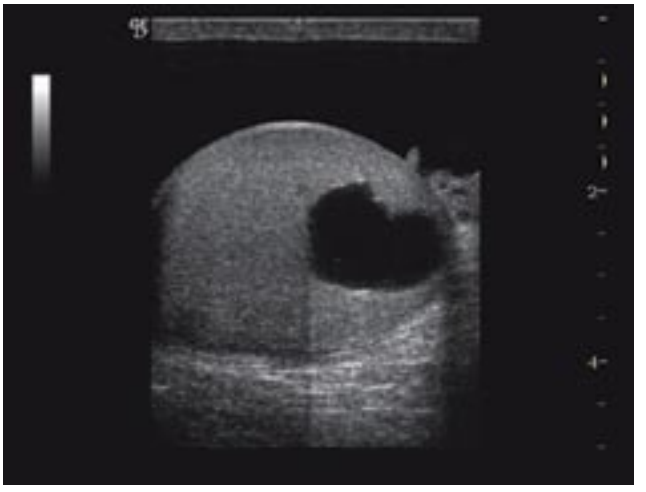
B-Flow, a unique GE technology, displays true hemodynamics and provides direct visualization of blood reflectors by magnifying those blood reflectors 30dB (1000 times). A significant advantage for vascular studies, it eliminates color flow over-write, frame-rate impact, and offers less angle dependence.

In addition, GE's exclusive B-Flow Color adds color to the image to further enhance visualization of the blood reflectors. It also enhances B-Flow resolution and can be used during anatomical B-Mode scanning. B-Flow Color is part of GE's 3rd generation B-Flow coded ultrasound technology.



Fewer speckles, more definition

Speckle Reduction Imaging (SRI) heightens your visibility through enhanced, contrast resolution. SRI is an adaptive, real-time software algorithm that suppresses speckle artifact, preserves true structure borders while maintaining true tissue architecture.

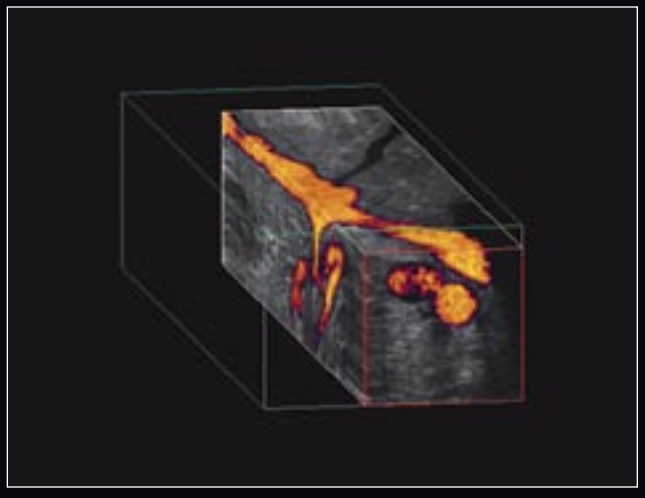


Uncompromised penetration and resolution

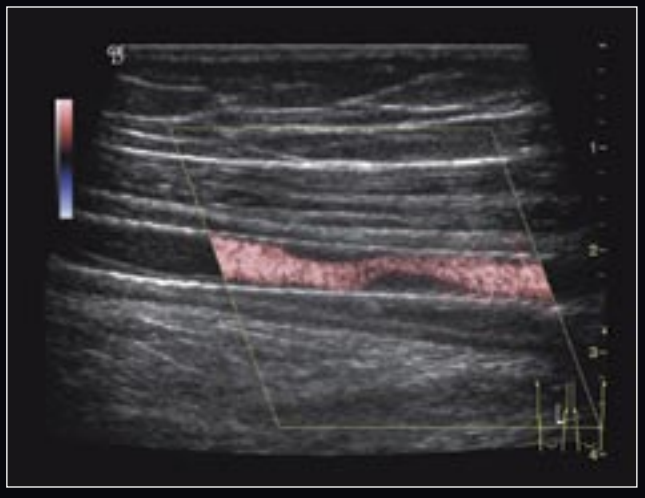
Matrix array transducers with multiple rows of elements help you achieve uniform resolution throughout the field of view, which reduces volume averaging and improves overall image consistency in both near and far fields. GE's matrix technology diminishes the compromises between penetration and resolution.

Visualize more.

Vascular

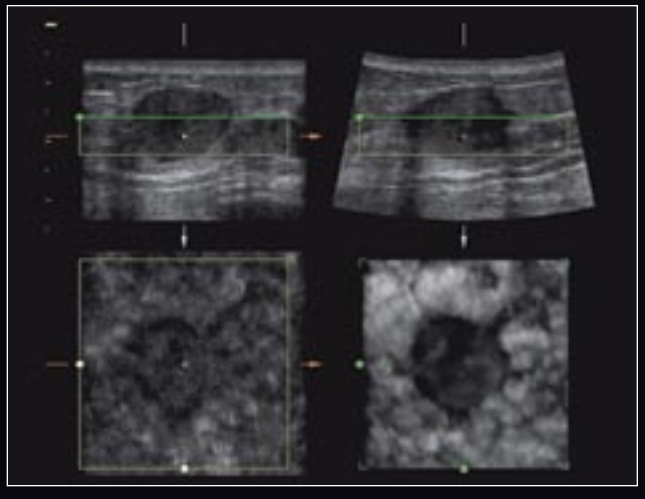


Volume rendering of lower extremity vein using power Doppler and Advanced 3D



Stenosis and stent of lower extremity artery using B-Flow Color

Small parts

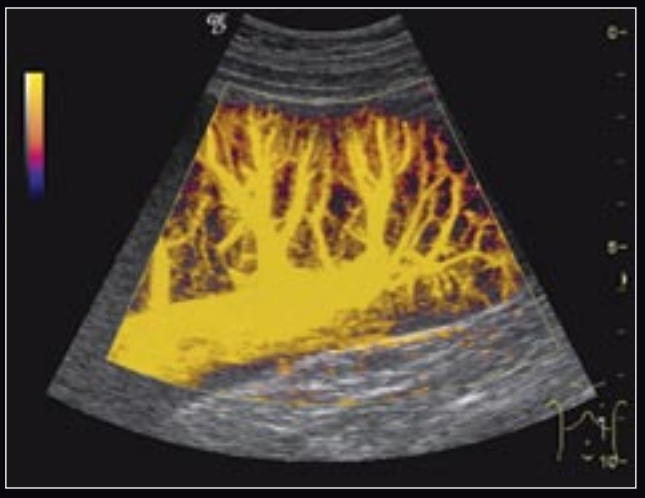


Multiplanar view of breast mass

Scrotal mass using SRI and matrix technology

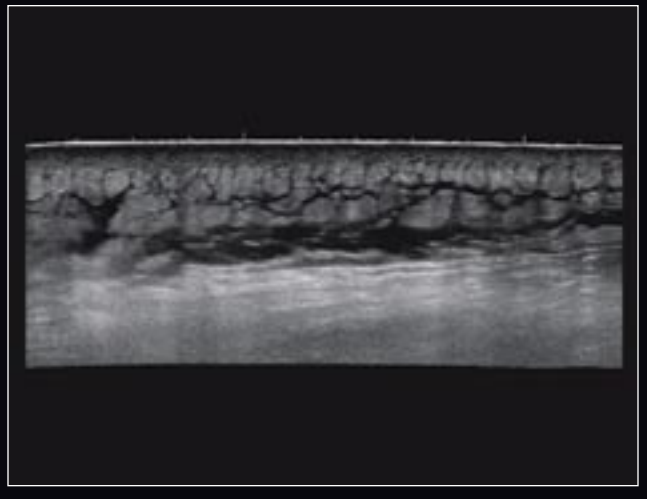
Abdominal

Liver and gallbladder using SRI

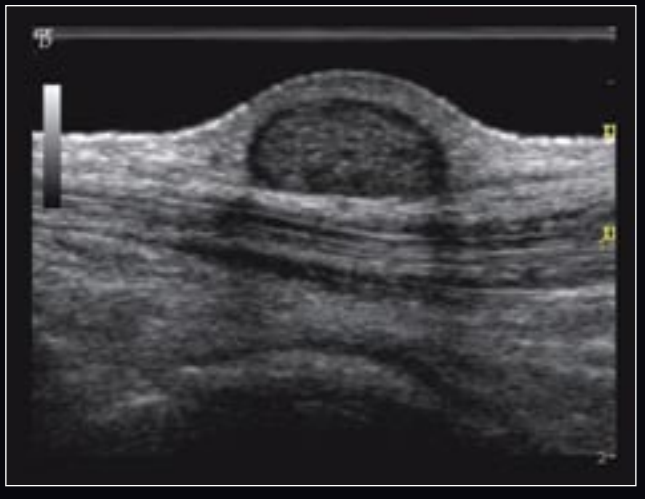


Spleen using B-Flow Color

Musculoskeletal



Leg edema using LOGIQView



Atheroma using CrossXBeam, Coded Harmonics and matrix technology

Obstetrics

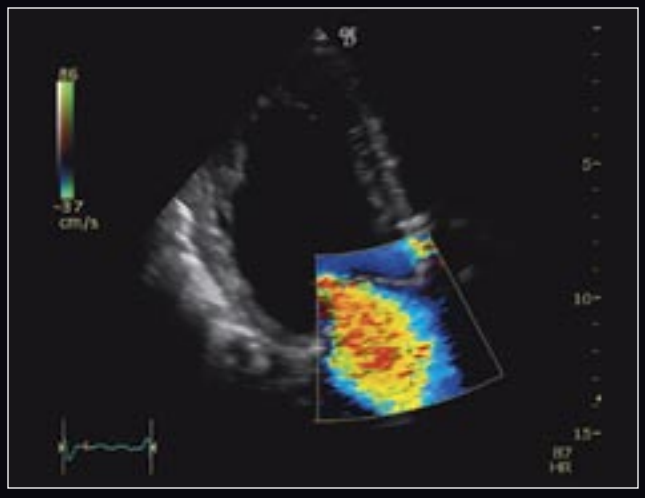
Volume rendering of baby face

Volume rendering of fetal extremities

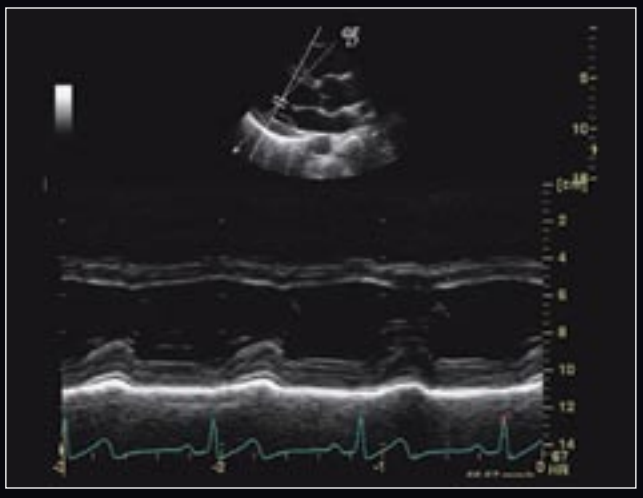
Fetal profile using Coded Harmonics and CrossXBeam™

Color B-Flow of umbilical cord

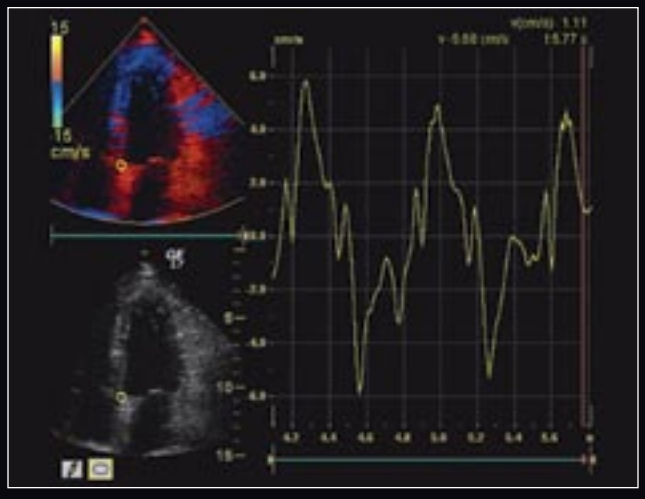
Cardiac



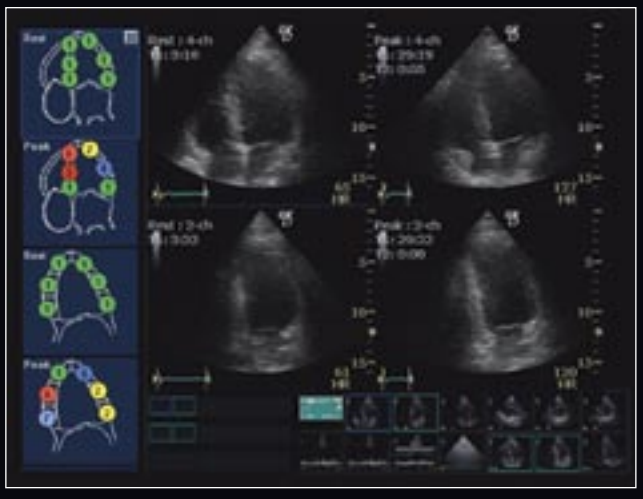
Mitral valve regurgitation using color Doppler



Anatomical M-Mode



Tissue Velocity Imaging (TVI)



Stress echo wall motion with scoring

Be more comfortable.

And that's just the beginning. The LOGIQ 7 breakthrough introduces innovative ergonomic features designed with the sonographer in mind – we call it *SonoErgonomics*™ – and it brings you more comfort, exponentially.

A Position your 17" flat-panel monitor to the most comfortable viewing location for each study with the fully articulating arm. It even folds flat for clear visibility during transport. Infinite positioning flexibility affords you an exceptional scanning experience with less neck strain.

B Adjust the keyboard to a height that's comfortable for each scan.

C Get one-touch efficiency from redundant keystrokes with color touch screen and programmable keys. It's easy on your eyes and fingertips.

D Voice-activated with the latest in wireless and speech recognition technology. Voicescan, accurately recognizes more than 150 voice commands for a variety of system functions, including trackball movements. Enjoy the ultimate in freedom – perform multiple tasks simultaneously.

E Move a significant amount of scan time to the comfort of your workstation. With LOGIQworks, VIP and virtual rescans, you can now sit, versus stand and reduce the amount of time reaching.

F Easily transport or park your LOGIQ 7 system with four swivel wheels, two that automatically lock.

E

F

A
B
C
D

Get more.

With GE, you get more than a great ultrasound system, superb image quality and innovative tools and features – you get a full productivity solution.

By combining the expertise of the world's leading provider of healthcare IT and ultrasound systems, GE's unique combination of LOGIQ 7 and LOGIQworks offers a revolutionary workflow solution for today's ultrasound practice.

GE's Volume Imaging Protocol (VIP) takes productivity to the next level. VIP is a method of scanning on the LOGIQ 7, which uses volume data sweeps to image an entire organ in a matter of seconds – much like is done in CT or MR. Data transfers via DICOM to LOGIQworks, enabling a 3D virtual rescan of the raw data/volume dataset in any plane. Having more data with volume sweeps helps increase diagnostic confidence.

By incorporating Volume Imaging Protocol at your facility you can:*

- Reduce probe time up to 60%
- Reduce potential rescans up to 50% for sonographers
- Improve physician workflow and minimize interruptions
- Improve department throughput up to 30%
- Decreased facility backlog

Accomplish more.

For more than a century, GE Healthcare has been inventing medical technologies. In ultrasound, our continuous stream of breakthroughs have redefined the standards for image quality, accelerated the development of new applications and increased clinical efficiency for users worldwide.

Find out how LOGIQ 7 and LOGIQworks can help you accomplish more, contact your GE Healthcare representative, call 888 202 5528 or visit us on the web at www.gehealthcare.com/ultrasound.

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* Benefits reported by Celebration Health Florida Hospital using VIP.

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