

GE Healthcare



Vivid E9

4D Cardiovascular ultrasound system



Capture the entire heart in a single beat.
Not just a valve, but the entire ventricle.
And break down the barriers to routine,
day-to-day 4D imaging from acquisition
to archiving.

In a heartbeat, everything changes.

Meet the Vivid™ E9, GE Healthcare's first
cardiovascular ultrasound system built
specifically for 4D imaging – from ergonomics
to image acquisition to data management.

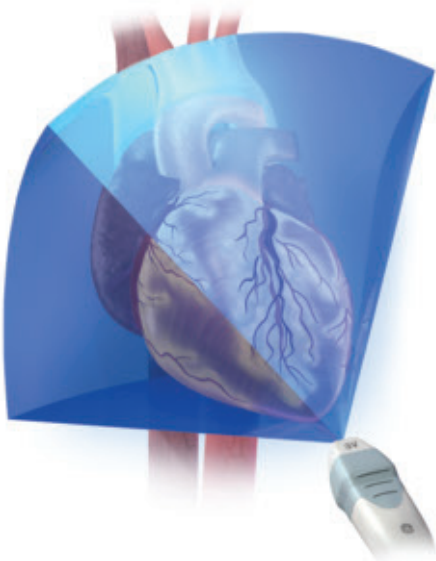
Featuring our new Accelerated Volume Architecture 4D platform for 8X the processing power. With quantification tools, 4D Stress and advanced ergonomics. One-touch ease of use puts 4D effortlessly at your fingertips.

As 4D becomes routine in your clinical practice, you still need the best 2D image quality possible. Vivid E9 handles 2D imaging with equal power, precision and agility, made possible with the M5S probe's single-crystal matrix array.

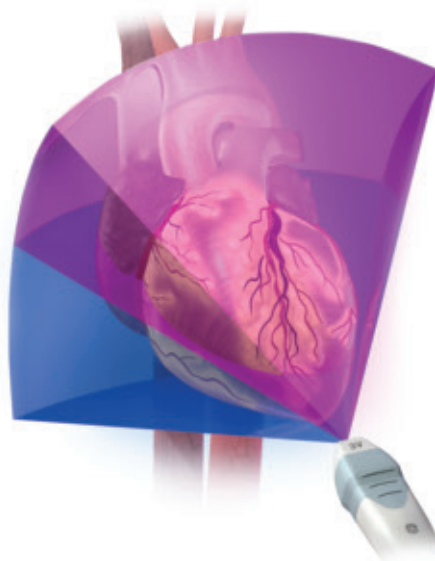
The door to 4D and its many new possibilities hasn't merely been opened.
It's been completely removed.

Flexi-Volume 4D Acquisition

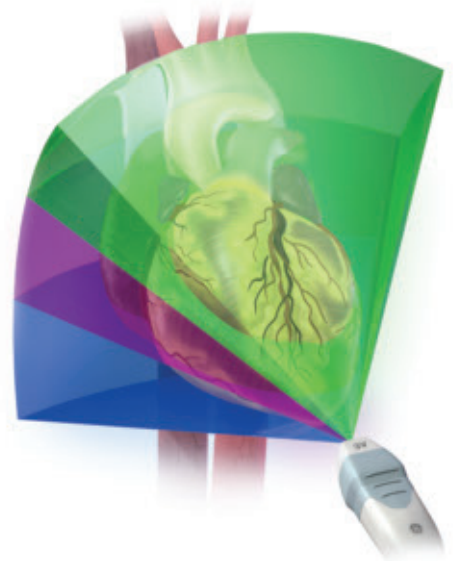
Single beat



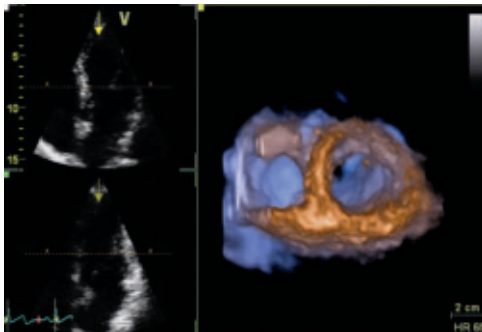
Dual beat



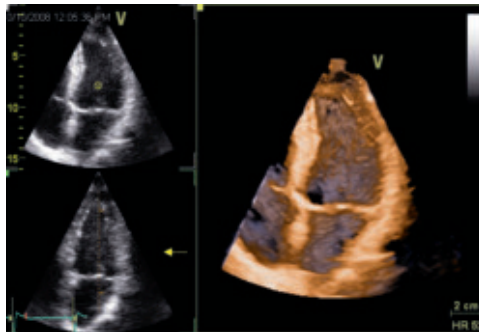
Multi beat



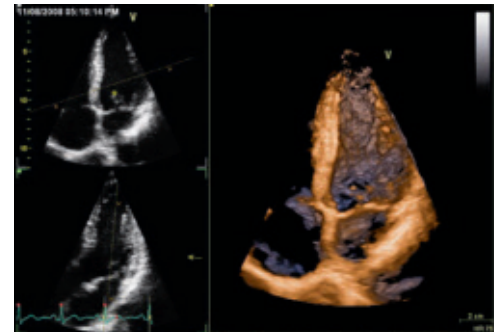
Thanks to the power of the Accelerated Volume Architecture, Vivid E9's Flexi-Volume captures a full volume of data in your choice of one, two or multiple heart cycles to fit your patient. Eight times the processing power delivers twice the volume size with fewer artifacts, giving you the ability to deliver increased volume size, resolution and volume rate, with the quantification you expect from GE. You see the entire ventricle, not just a valve – with no gating, splicing or ECG needed for single-cycle acquisitions.



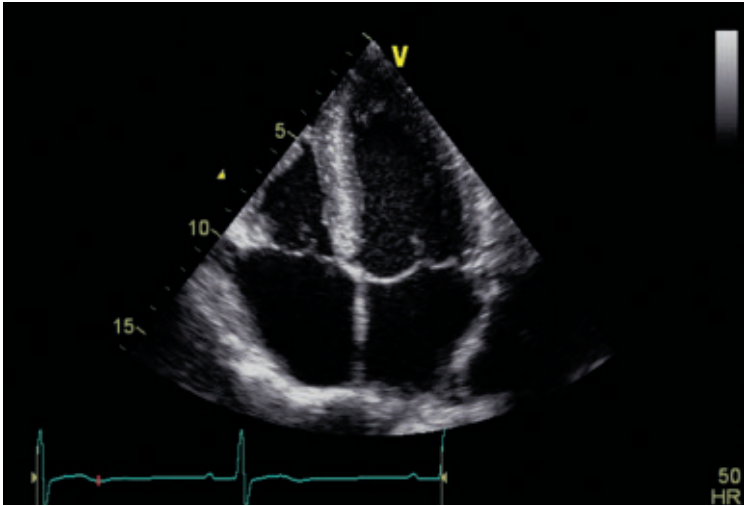
4D single-beat short-axis



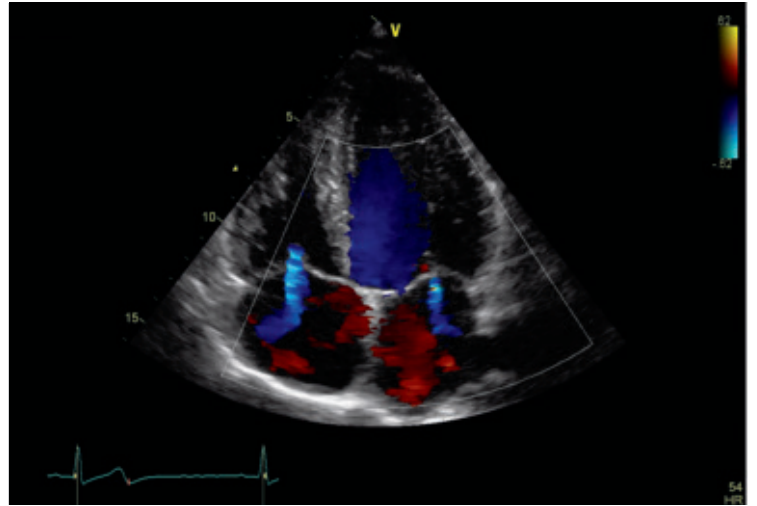
4D dual-beat 4-chamber



Multi-beat (3) 4-chamber

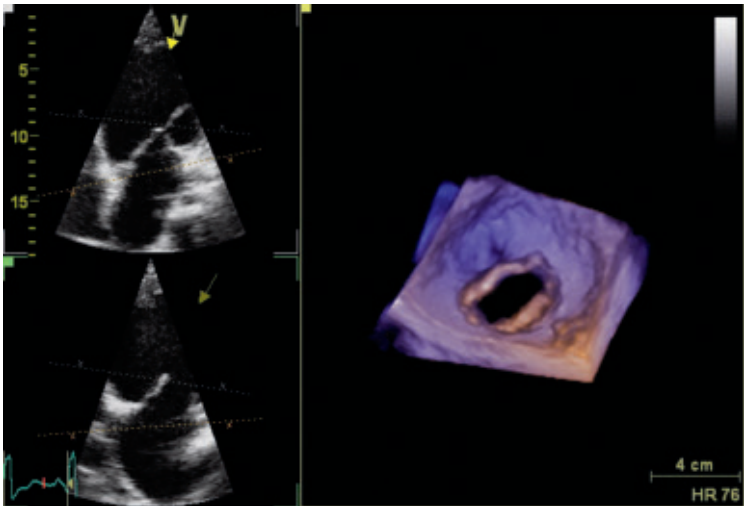


4-chamber 2D using the M5S transducer

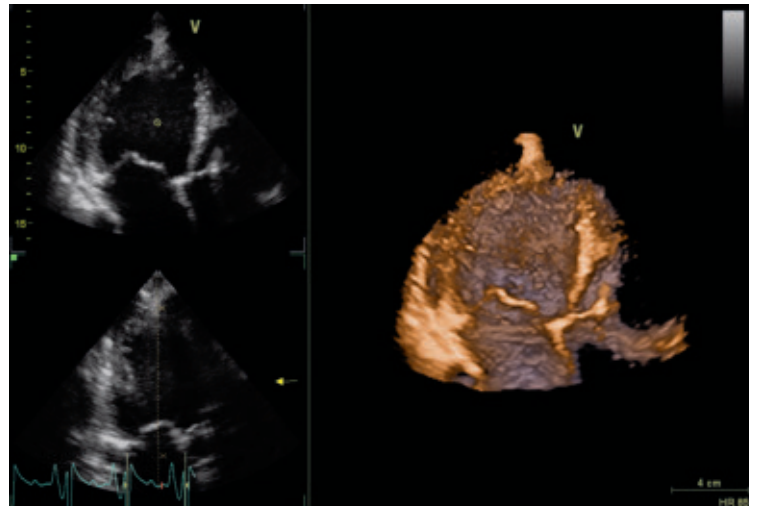


4-chamber 2D with color using the M5S transducer

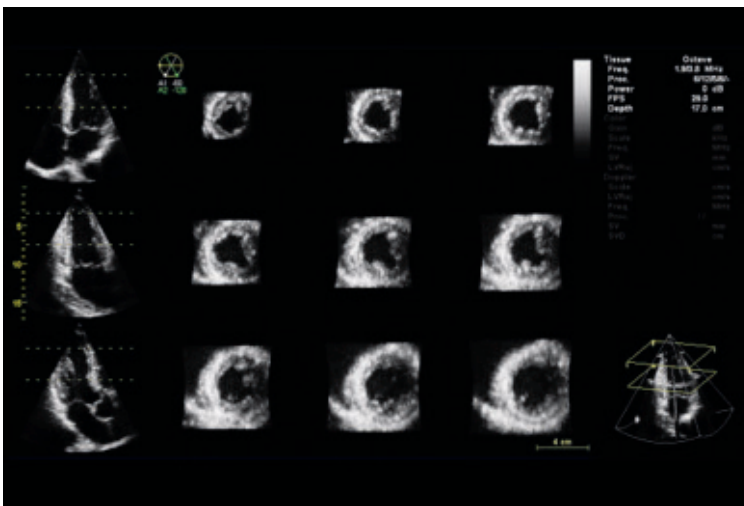
The new M5S transducer marries matrix-array and single-crystal technologies for better endocardial definition and texture, and crisper valves across a wider range of frequencies than traditional transducers.



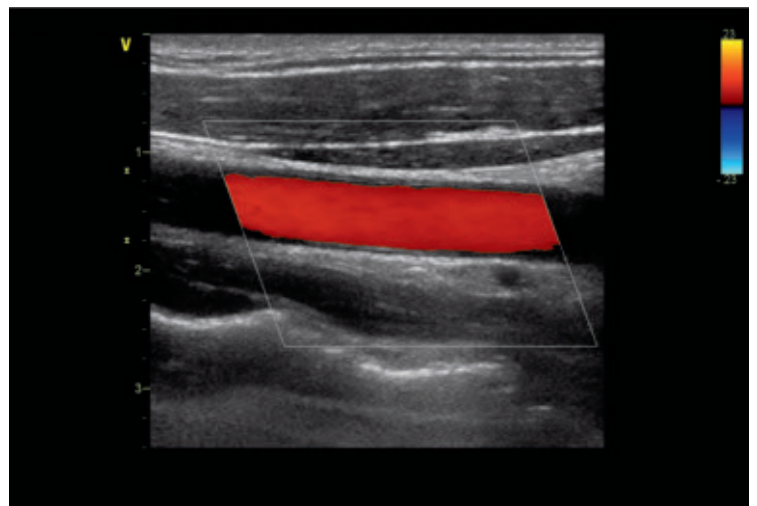
4-chamber mitral stenosis



LV non-compaction



12 slice



Carotid with color flow



Accelerated Volume Architecture

The Vivid E9 features a new Accelerated Volume Architecture (AVA) platform with 8X the processing power of conventional processing. A field of view large enough to capture the entire heart with high frame rates. New D-series transducers enhance 2D, 4D and shared service imaging across your entire patient population.

The result: Exceptional image quality and complete diagnostic information. Ungated. Unspliced. Unbelievable.



Built for the Easy 4D exam. From acquisition to answers.

The Vivid E9 makes 4D imaging every bit as easy and effortless as 2D imaging. It brings remarkable improvements to your entire 4D workflow process, thanks to fast, consistent reproducibility.

Auto LVQ

A mesh-based surface-tracking model, the new 4D Auto LVQ quantification tool provides you with a graphical output of pure 4D volume data. Utilizing temporal data, it delivers more reproducible results that are less prone to artifacts and variable heart rhythms for automatic volume and ejection fractions.

4D Views

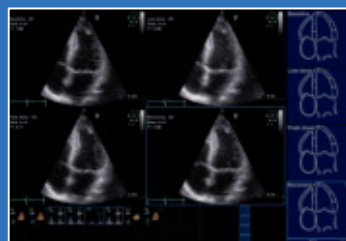
4D Views provides you with “one-touch” options to view images such as 4-chamber, 2-chamber, APLAX, mitral valve and aortic valve.

It takes the full volume acquisition data set and, with the touch of a button, automatically crops away the volume to instantly deliver the view you want. 4D Views eliminates the manual cropping and cutting of conventional 3D workflow – a time-consuming process that’s difficult to teach and learn.

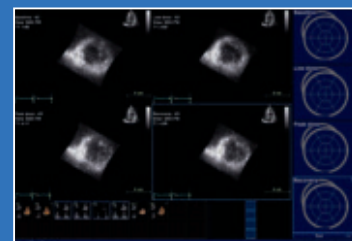
4D Virtual Store

This innovative feature reduces the size of patient studies by using image pointers to refer back to the original full-volume data set, rather than saving multiple large data sets for every new crop view or measurement.





4-chamber 4D stress views



Short-axis 4D stress views

4D Stress

Greatly improving workflow for stress echo procedures, 4D Stress is an innovative first step in helping you integrate 4D into the routine of your day-to-day clinical practice.

Acquire an entire full volume. Using 4D Stress, the Vivid E9 then cuts that volumetric view into three planes for short-axis analysis and three planes for long-axis analysis, so you can view images more easily.

With the Vivid E9, you can now visualize short-axis slices of the entire ventricle under stress. See views you've never seen before with conventional stress echo, which only shows you one slice in the short-axis view.

Scan Assist

With Scan Assist, you can quickly customize the system for your departmental protocols for CRT optimization, and let the system guide you to the next view, mode and measurement.

Using new Scan Assist technology, you can acquire single-cycle or multi-cycle full volumes in any variation of traditional, multi-dimensional or full-volume views. There are also templates for both exercise and pharmacologic stress, all customizable using Scan Assist.

From its slim, lightweight, maneuverable design, to its adjustable electronic keyboard, the entire Vivid E9 system is ergonomically designed to be easier to handle and operate.

Ergonomically easy.

Highly mobile

40% smaller and 30% lighter than console-based ultrasound systems, the highly mobile Vivid E9 is ready to roll right to the bedside.

User adaptable

Using one-touch ergonomics, the Vivid E9's keyboard position, LCD display angle and touch panel interface can all be easily configured to your precise preferences.



Adjustable LCD display

The 17-inch all-digital high-definition LCD display tilts and swivels easily to the most comfortable viewing angle.

Accessible touch panel controls

The Vivid E9's new touch panel uses fewer hard keys, making the keyboard smaller and the keys larger for easier access. Expanded 4D imaging controls are organized for an easy 4D workflow, with flexibility for future expansion for additional 4D features.

Adjustable floating keyboard

With one touch, you can easily adjust the height and position of the Vivid E9 keyboard. Once comfortably positioned, just lock it in place to prevent accidental shifting.

Easy keyboard storage

The keyboard stores conveniently out of the way in a drawer when not in use.

Convenient data management

Data management options are conveniently located, with multiple USB ports and a DVR recorder.



Front and rear handles

Handles on both the front and rear of the Vivid E9 make it easy to transport the system.

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Healthcare Re-imagined

GE is dedicated to helping you transform healthcare delivery by driving critical breakthroughs in biology and technology. Our expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, and biopharmaceutical manufacturing technologies is enabling healthcare professionals around the world to discover new ways to predict, diagnose and treat disease earlier. We call this model of care “Early Health.” The goal: to help clinicians detect disease earlier, access more information and intervene earlier with more targeted treatments, so they can help their patients live their lives to the fullest.

Re-think, Re-discover, Re-invent, Re-imagine.

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imagination at work