Unparalleled diagnostic tools

Philips iU22 ultrasound system Vision 2009 Upgrade

Philips continues to expand the capabilities of the premium iU22 platform. Vision 2009 is the 4th major upgrade, focusing on helping you achieve diagnostic confidence, improved workflow and throughput, and giving you the latest cutting-edge imaging and quantification capabilities.

New advancements in breast imaging

- Volume imaging transducer for new views and expanded evaluation
- Tissue aberration correction technology to confidently image all patient types
- Advanced XRES for new levels of tissue margin differentiation

New VL13-5 linear array transducer for high performance 2D, 3D and 4D imaging for breast, small parts, vascular, and general applications

New Enhanced breast image quality through the addition of new advanced XRES algorithms and tissue aberration correction technology for greater clarity and definition when imaging patients with fatty breast tissue

New SmartExam system-guided protocols with new features that include exam record, support for 3D, and automatic mode switching to greatly improve workflow efficiencies

New Enhanced vascular imaging capability with new levels of performance on the L9-3 transducer as well as new dual imaging display capability

New QLAB quantification tools including vascularity flow indices, and ROI and MVI motion compensation

New OB and GYN difficult patient tissue specific imaging presets for the C5-1 PureWave transducer with tissue aberration correction and coded beamforming technologies

New Enhanced connectivity, including the use of USB devices for high speed data storage

New Contrast agent imaging on the L12-5 linear array transducer and live MicroVascular Imaging to view microvascularization in low-perfused tissue and lesions, such as in the breast

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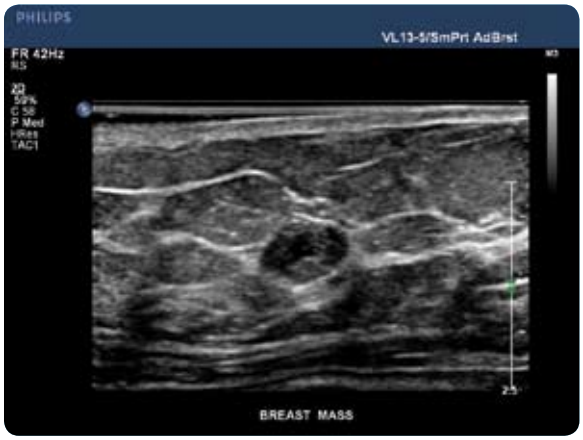
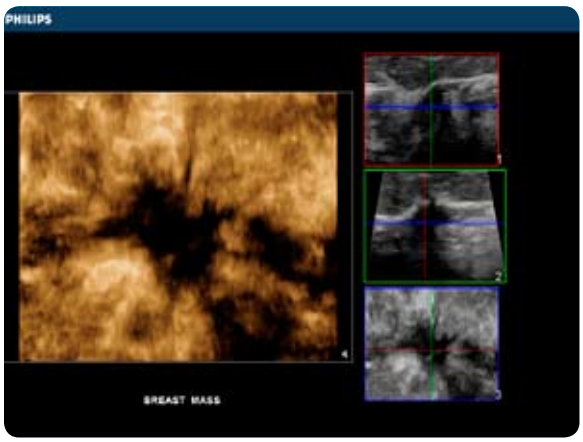




The L12-5, L17-5 and new VL13-5 transducers accommodate user-selectable tissue aberration correction algorithms that compensate for alterations in the speed of high frequency sound waves through breast tissue. This speed of sound compensation results in increased image sharpness and clarity on patients with fatty breast architecture.

Advanced breast imaging solutions

Ultrasound is a valuable tool to help you distinguish between cystic and solid masses, and between benign and cancerous tumors in the breast. To aid diagnosis our advanced breast imaging technology enhances guidance during biopsy and provides tools to evaluate simple and complex masses.

- Gain greater clarity and border definition throughout the breast with enhanced optimization on the L12-5 and L17-5 linear array transducers. Tissue aberration correction and advanced XRES technologies are also supported on these transducers.
- Apply the latest advances in volume imaging to breast exams with the new VL13-5 transducer. Tissue aberration correction and advanced XRES are supported in both 2D and 3D imaging modes.
- New live MicroVascular imaging on the L12-5 transducer displays contrast microbubble pathways to better determine breast tumor microvascularization.

Expand your volume imaging applications

The new VL13-5 volume linear transducer supports a wide range of applications. The transducer is clinically optimized with tissue specific imaging presets for breast, thyroid, carotid, and general applications.

With the iU22 system you can send volume data sets to your PACS to view and measure in sweep review mode or for more sophisticated volume reconstruction you can send to the ViewForum for ultrasound workstation for further 3D manipulation, intelligent slicing and final diagnostic work.

The VL13-5 volume transducer is designed with ergonomics in mind, aiding comfort while scanning.

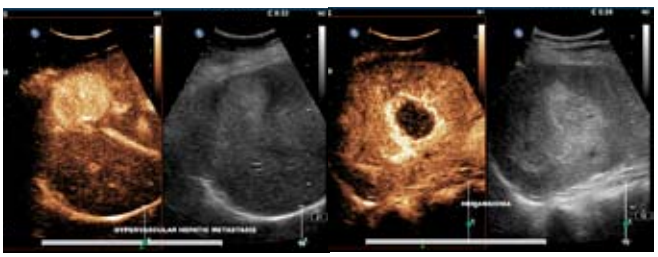
Contrast-enhanced ultrasound

Contrast-enhanced ultrasound (CEUS) on the iU22 system helps you identify lesions in the liver and breast with remarkable levels of clarity. The C5-1 PureWave transducer with advanced pulsing technologies improves penetration and resolution of contrast microbubbles, helping you detect and characterize focal hepatic lesions. Its narrow footprint facilitates intercostal access to cirrhotic livers.

The L12-5 linear transducer and the iU22 display real-time microvascular blood flow to help you characterize breast lesions early in their development, when they are smaller than 1 cm. In addition, live MicroVascular Imaging (MVI) traces blood flow in low-perfused tissue, such as the breast, which can improve CEUS workflow during characterization to save you time in the exam room.

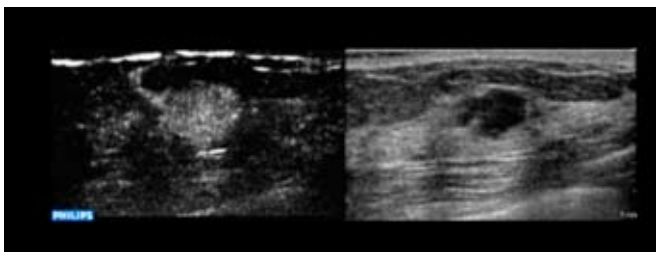
iU22 Vision 2009 whole body contrast support

Clinical application	Supporting transducer(s)
Abdominal (2D, 3D, 4D) • Liver, pancreas kidney, spleen, aorta • Biopsy, ablation	C5-1, C5-2, S4-1, V6-2, X3-1, 3D6-2
Superficial • Breast, vascular, thyroid	L12-5, L9-3, L8-4
TCD	S5-1
Transvaginal • Ovarian, uterine	C8-4v
Prostate	C8-4v, C9-5ec
LVO	S5-1

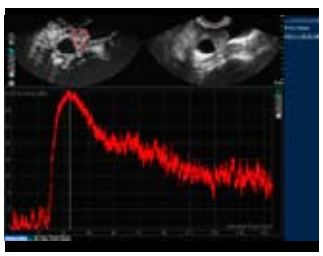


Liver contrast

Liver 3D contrast



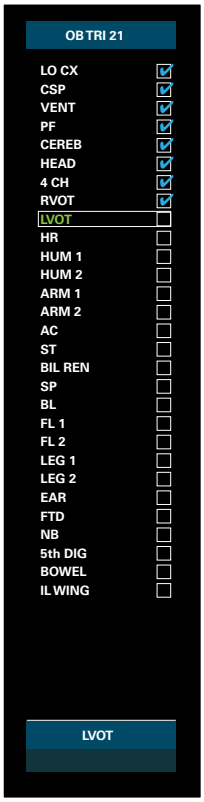
Breast contrast



Ovarian contrast

Easily integrate SmartExam and reduce exam time

The increasing case load of ultrasound departments is driving ultrasound clinicians to find ways to increase productivity and improve efficiencies when performing ultrasound exams. The iU22 Protocols feature has already been clinically shown to reduce ultrasound exam time by 30 to 50%. Now, programming a new exam type with the SmartExam feature is as easy as performing the exam. SmartExam remembers the steps. Your study requirements are automatically saved: views, annotations, body markers, mode changes, and quantification. This unique feature even allows you to incorporate 3D data sets into your exam protocol. Once your new exam protocol is saved, it can be used again and again as SmartExam moves you through each step of your customized exam.



Advanced tools increase diagnostic confidence regardless of difficulty

Today's clinicians are demanding ultrasound system features that increase diagnostic confidence, regardless of how difficult the patient or exam. Philips addresses this need with several new features, such as color flow quantification to generate information about the flow characteristics of lesions. Flow, vascularity and vascularization flow indices quantify color flow using QLAB ROI and GI 3DQ plug-ins.

OB and GYN difficult patient tissue specific imaging presets have been added to the C5-1 transducer. These new presets include tissue aberration correction and coded beamforming technologies, providing an excellent one-probe solution for transabdominal exams on challenging patients.

Expanded QLAB capabilities

Vision 2009 upgrade package contains increased QLAB quantification functionality.

- GI 3DQ plug-in with iSlice and advanced measurement capabilities now also supports the new VL13-5 volume transducer.
- The new color index calculations can be used to quantify the amount and intensity of color signal present in an image. The ROI function allows color quantification of 2D color files and GI 3DQ provides color quantification of 3D files.
- An enhancement to the ROI and MVI plug-ins includes a new algorithm specifically designed to compensate for movement that may be present in a long loop of data. The motion compensation algorithm identifies the pixel boundaries in a region of interest and tracks the pixels from frame to frame. This reduces the need to manually adjust the boundaries on each frame of the loop, saving considerable analysis and optimization time.

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