### **Relentless Innovation**

for your diagnostic confidence

## **SAMSUNG**





Take what you want





## All the key benefits you want

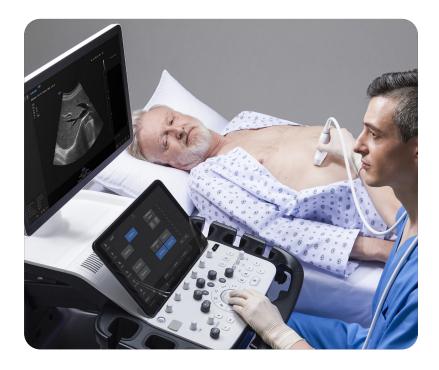
The V7 offers a fascinating performance and gives you the possibility to do what you want with comprehensive tools that feature the latest innovations. For instance, EzHRI<sup>TM</sup>, TAI<sup>TM</sup>, and TSI<sup>TM</sup> are advanced abdominal dedicated diagnostic features, that help healthcare professionals make accurate clinical decisions by quantifying fatty liver in real time. Rich in features, V7's versatile system is capable of a wide range of clinical applications that allow you to explore to the fullest.



Overview video

### Diagnose diverse and challenging clinical cases

The V7 comes with a variety of tools for diverse and challenging cases. Healthcare professionals can execute targeted examinations with ease, using the necessary advanced features prepared in the right place. Furthermore, various sophisticated 2D and color imaging features are supported for extraordinary image quality.



### 2D imaging









**Diagnostic features** 









### Color imaging











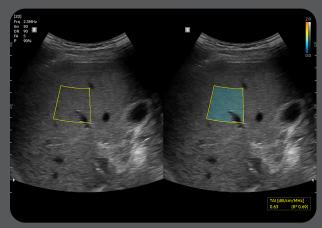






# Striking images for confidence





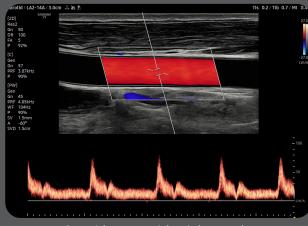
TAI™ (Tissue Attenuation Imaging)



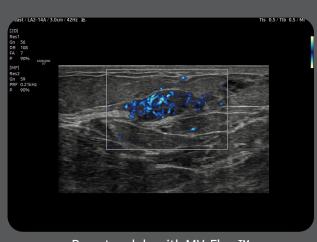
Thyroid



Pancreas



Carotid artery with triplex mode



Breast nodule with MV-Flow™



Knee with Panoramic+

# Enriched diagnostic features with accuracy and precision

The V7 system comes with advanced features that assist in precise diagnosis and increasing throughput. The V7's variety of features and user-friendly interface aid in significantly improving the healthcare professionals' daily ultrasound examination experience.

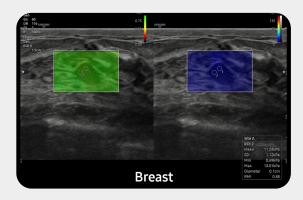


### Display and quantify tissue stiffness in a non-invasive method

S-Shearwave Imaging<sup>TM</sup> <sup>1</sup> allows the non-invasive assessment of stiff tissues in various applications. The color-coded elastogram, quantitative measurements, display options, and user-selectable ROI functions are useful for accurate diagnosis.



White paper



## Quantitative measurement of liver fat with ultrasound signal

TAITM 1 (Tissue Attenuation Imaging) provides quantitative tissue attenuation measurement to assess steatotic liver changes.



White paper

TSI<sup>TM 1</sup> (Tissue Scatter distribution Imaging)
provides quantitative tissue scatter distribution
measurement to assess steatotic liver changes.

## Hepato-renal index with automated ROI recommendation

HRI (Hepato Renal Index) is an index to quantify steatosis of a liver by comparing echogenicity between liver parenchyma and renal cortex. **EzHRITM** <sup>1</sup> places 2 ROIs on the liver parenchyma and renal cortex and provides HRI ratio.



*N*hite paper

### Easy calculation of the strain ratio between two ROIs

E-Strain<sup>™</sup> is designed to enable quick and easy calculation of the strain ratio between two regions of interest for day-to-day practice. Simply by setting the two targets, you can receive accurate, consistent results and make informed decisions in many types of diagnostic procedures.

## Analyze selected breast lesions and report breast assessment



S-Detect<sup>TM 1,4</sup> for Breast analyzes selected lesions in the breast ultrasound study and shows the analysis data, applies BI-RADS ATLAS\* to provide standardized reporting; and helps diagnosis with the streamlined workflow



White paper



\* Breast Imaging-Reporting and Data System, Atlas It is a registered trademark of ACR and all rights reserved by ACR.

### **Contrast Enhanced Ultrasound**

**CEUS+** <sup>1</sup> is a contrast agent imaging technology. The micro-bubble contrast agent injected into the body through the vein or alike is subjected to perform nonlinear resonance due to stimulation of ultrasound energy.



White paper

### Quantify wall motion of the left ventricle

Strain+¹is a quantitative tool for measuring global and segmental wall motion of the left ventricle (LV). Three standard LV views and a Bull's Eye are displayed in a quad screen for easy assessment of the LV function.



/hite paper

## Analyze selected thyroid lesions and report thyroid assessment



S-Detect<sup>TM</sup> <sup>1,4</sup> for Thyroid analyzes selected lesions in the thyroid ultrasound study and shows the analysis data, provides standardized reporting based on the ATA, BTA, EU-TIRADS, and K-TIRADS\* guidelines; and helps diagnosis with the streamlined workflow.

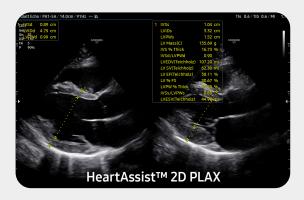
\* ATA: American Thyroid Association / BTA: British Thyroid Association
EU-TIRADS: European Thyroid Imaging Reporting and Data System
K-TIRADS: Korean Thyroid Imaging Reporting and Data System
ACR-TIRADS: American College of Radiology Thyroid Imaging Reporting and
Data System

## An automated reporting tool for heart diagnosis

HeartAssist™ ¹, a feature based on Deep Learning technology, provides automatic classification of ultrasound image into measurement views required for heart diagnosis and provides measurement results.







### Detect and track nerves with AI technology

NerveTrack<sup>TM</sup> <sup>1</sup>, a feature based on Deep Learning technology, detects and provides information of the location of the nerve area in real-time during ultrasound scanning.





White paper

Measure IMT in one click

**AutoIMT+** <sup>1</sup> is a screening tool to analyze a patient's potential risk of cardiovascular disease. It allows easy intima-media thickness measurement of both the anterior and posterior wall of the common carotid by the click of a button.

### Display needle tip clearly

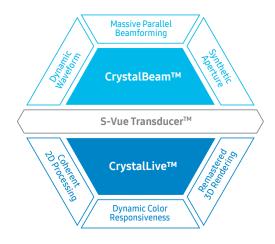
NeedleMate+™ ¹delineates needle location when performing interventions such as nerve blocks. Improved accuracy and efficiency in procedure are possible with beam steering added to NeedleMate+™.

**Other features** ElastoScan+™ ¹, AutoEF ¹, Panoramic+ ¹, StressEcho ¹, S-Fusion™ ¹, ArterialAnalysis™¹



# Extraordinary image quality delivers diagnostic confidence

Gain insight into complex issues with exceptional image quality and resolution by Samsung's core imaging engine, Crystal Architecture™. The proprietary technology combines enhanced 2D image processing and detailed color signal processing to optimize and refine the image. The cutting-edge V7 will provide outstanding image clarity for a confident diagnosis.

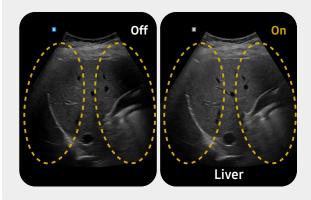


Crystal Architecture™

### **Enhance hidden structures** in shadowed regions

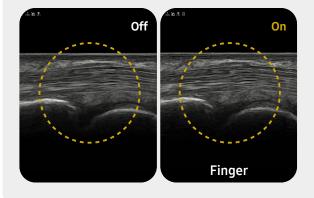
ShadowHDR™ selectively applies high-frequency and low-frequency of ultrasound to identify shadow areas where attenuation occurs.





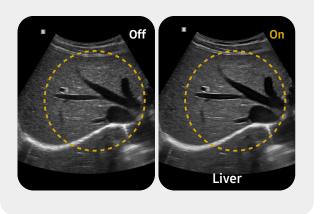
### Clean up blurry areas in the image

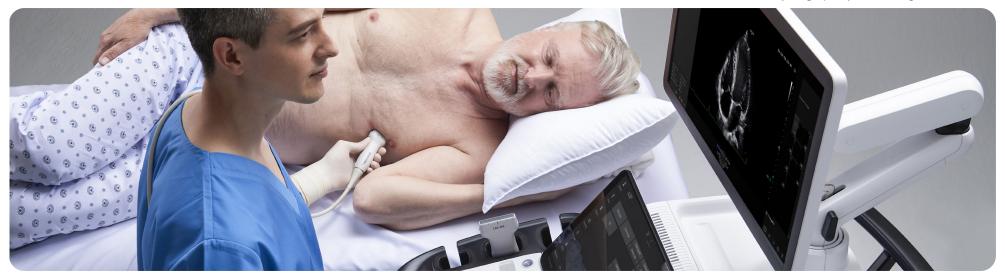
**HQ-Vision™** ¹ provides clearer images by mitigating the characteristics of ultrasound images that are slightly blurred than the actual vision.



### Reduce noise to improve 2D image quality

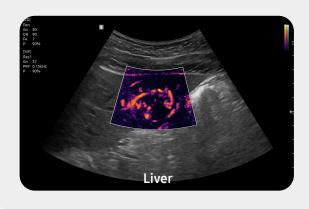
ClearVision enhances the edge contrast and creates sharp 2D images for optimal diagnostic performance.





## Visualize slow flow in microvascular structures

MV-Flow™ ¹visualizes microcirculatory and slow blood flow to display the intensity of blood flow in color.



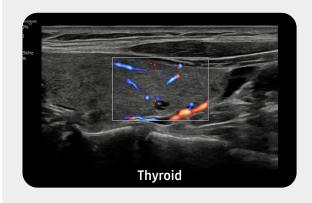
## Show blood flow in vessels in a 3D like display

**LumiFlow™** <sup>1</sup> is a function that visualizes blood flow in 3 dimensional-like to help understand the structure of blood flow and small vessels intuitively.



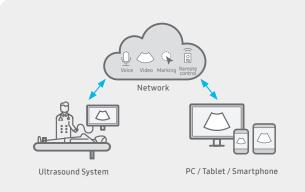
## Examine peripheral vessels with directional power Doppler

**S-Flow<sup>TM</sup>**, a directional power Doppler imaging technology, can help to detect even the peripheral blood vessels. It enables accurate diagnosis when the blood flow examination is especially difficult.



# Efficient workflow re-designed for simplicity

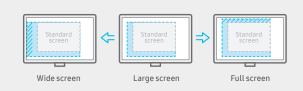
Made to maximize efficiency, allow V7 to streamline your workflow and reduce various tasks to just a few steps or keystrokes. The user experience is enhanced through how V7 displays scan data more easily and accurately. To ensure utility, the ergonomic design makes optimal use of the user's working environment. V7 is committed to enhancing healthcare professionals' workflow by providing intuitive optimization.



## Real-time image sharing, discussion, and remote control of ultrasound system

SonoSync™ 1,5 is available in PC and smartphone, etc. as a real-time image share solution that allows communication for care guide and training between doctors and sonographers. In addition, voice chatting, text chatting and real-time marking functions are provided for better communication; and the MultiVue function is included that allows monitoring multiple ultrasound images on a single screen.





### See images in expanded view

The ultrasound examination can be performed while viewing the images and cines that are expanded at various ratios according to the user preference.

## Build predefined protocols to ensure every step is followed every time

EzExam+TM¹ enables you to build or use a predefined protocol, and assign protocols for examinations that are regularly performed in the hospital in order to reduce the number of steps that you have to go through.



### Customize frequently used functions on the touchscreen

**TouchEdit**, a customizable touchscreen, allows the user to move frequently used functions to the first page.



### Select transducer and preset combinations in one click

**QuickPreset** allows the user to select the most common transducer and preset combinations in one click.





Access directly to RIS from the system

## Access to RIS from the browser of the ultrasound system

**RIS Browser** improves the workflow by allowing access to RIS through the embedded browser in the system. This allows for post processing without the need to move to a PC after scanning.

### Assign functions to the buttons near the trackball

The buttons around the trackball can be customized for easy selection of commonly used functions.



## Save image data directly to USB memory

User can directly export image/cine with a USB device.



## Continue working even when AC power is temporarily unavailable

BatteryAssist™ provides battery power to the system, enabling users to perform scans when AC power is temporarily unavailable. It also allows the system to be moved to another location without having to turn the power off and then back on.







## Effective cooling system

An effective airflow system cools down the ultrasound system by constantly letting heat out and reducing fan noise.

### **Recycled materials**

Eco-conscious resin cover is applied to the air vent exterior cover.

## Comprehensive selection of transducers

### **Curved array transducers**



CA1-7SD \*
Abdomen, Obstetrics,
Gynecology, Pediatric,
Musculoskeletal, Vascular,
Urology, Thoracic



CA3-10A
Abdomen, Obstetrics,
Gynecology, Pediatric,
Musculoskeletal, Vascular,
Urology, Thoracic



CA4-10M \*
Abdomen, Pediatric,
Vascular

### Phased array transducers



PA1-5A<sup>PE</sup> \*
Cardiac, Vascular,
Abdomen, Pediatric, TCD,
Thoracic



PA3-8B Cardiac, Pediatric, Abdomen, Vascular, TCD



PA4-12B Cardiac, Pediatric, Abdomen, Vascular, TCD

### Linear array transducers



**LA2-14A**Small parts, Vascular,
Abdomen, Pediatric,
Thoracic, Musculoskeletal



LA4-18AD \*
Abdomen,
Musculoskeletal, Small
parts, Vascular, Pediatric



LA2-95 \*
Abdomen,
Musculoskeletal, Small
parts, Vascular, Pediatric



L3-22 Musculoskeletal, Small parts, Vascular, Pediatric



**LA3-22AI**Musculoskeletal,
Intraoperative

### **Volume transducers**



CV1-8AD Abdomen, Obstetrics, Gynecology, Urology



EV2-10A \*
Obstetrics, Gynecology,
Urology



**Endocavity transducers** 

**EA2-11ARD \***Obstetrics, Gynecology, Urology



EA2-11AVD \*
Obstetrics, Gynecology,
Urology



miniER7 \*
Urology, Obstetrics,
Gynecology

### **CW transducers**



**DP2B**Cardiac, Vascular, TCD



**CW6.0** Cardiac, Vascular, TCD

## TEE transducer



MMPT3-7 Cardiac

### Ultra Compact Prostate Ultrasound Transducer

Samsung has developed miniER7, an ultra-mini caliber prostate transducer with minimal head size to reduce patients pain and discomfort\* when performing prostate examinations.

- \* Compared to Samsung's EA2-11ARD
- \*\* Based on internal exam



#### \* Ergonomic transducers

The new endocavity transducer supports natural grip by moving the max-width point to a more forward position and also increasing the length of the grip to allow balanced weight distribution.



To address the emerging need for cybersecurity, Samsung provides a solution to support our customers by offering the tools to protect against cyberthreats that may compromise invaluable patient data and ultimately degrade the quality of care.









#### About Samsung Medison CO., LTD.

Samsung Medison, an affiliate of Samsung Electronics, is a global medical company founded in 1985. With a mission to bring health and well-being to people's lives, the company manufactures diagnostic ultrasound systems around the world across various medical fields. Samsung Medison has commercialized the Live 3D technology in 2001 and since being part of Samsung Electronics in 2011, it is integrating IT, image processing, semiconductor and communication technologies into ultrasound devices for efficient and confident diagnosis.

- \* This product, features, options, and transducers may not be commercially available in some countries.
- \* This product is a medical device, please read the user manual carefully before use.
- 1. Optional feature which may require additional purchase.
- 2. S-Vue Transducer™ is the name of Samsung's advanced transducer technology.
- 3. Strain value for ElastoScan+™ is not applicable in the United States and Canada.
- 4. Recommendations about whether results are beniqn or malignant in S-Detect™ are not applicable in the United States.
- 5. SonoSync™ is an image sharing solution.

### **Eco Packaging**

Eco-conscious recycled paper is included in the product packaging.





This award is for the contribution to the development of eco-friendly packaging in Korea. The ultrasound system V7 has won the KAPPE PRIZE of the Korea Star Awards.

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