

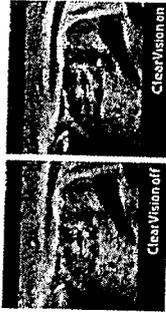
# Extraordinary image quality for a clearer view

With the astonishingly clear view provided by Samsung's advanced imaging technologies, you can make clinical decisions with greater confidence.



## Clear Vision

The newly introduced Clear Vision feature is a revolutionary image enhancement technology that provides a clearer view of the fetus. It is designed to improve the image quality of the fetus, making it easier to see and identify. This technology is available on all Samsung ultrasound machines.



## Multivision

Multivision technology allows you to see multiple views of the fetus at the same time. This feature is designed to help you identify the fetus more quickly and accurately. It is available on all Samsung ultrasound machines.



## S-Harmonic 3.7

The new S-Harmonic 3.7 technology is a revolutionary image enhancement technology that provides a clearer view of the fetus. It is designed to improve the image quality of the fetus, making it easier to see and identify. This technology is available on all Samsung ultrasound machines.



Fetal brain in S-Flow

Umbilical cord in color Doppler

Umbilical cord in PV



Fetal heart in color Doppler

Fetal heart

2nd trimester

# Enhanced tools for optimized care

Samsung's advanced yet budget-friendly tools, previously exclusive to our premium ultrasound platforms, enhance obstetric and gynecological exam capabilities for efficient and effective care.



## Realistic Vue™

Realistic Vue™ displays multiple, realistic, anatomical views of the fetus, allowing you to address the diagnostic needs of your patients. This tool is available on all our platforms, including our portable, desktop, and mobile devices.



## 3D XI™

3D XI™ provides a more natural and realistic view of the fetus, allowing you to address the diagnostic needs of your patients. This tool is available on all our platforms, including our portable, desktop, and mobile devices.



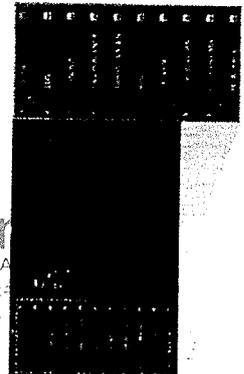
## 5D NT™

5D NT™ provides a more natural and realistic view of the fetus, allowing you to address the diagnostic needs of your patients. This tool is available on all our platforms, including our portable, desktop, and mobile devices.

5D NT™ provides a more natural and realistic view of the fetus, allowing you to address the diagnostic needs of your patients. This tool is available on all our platforms, including our portable, desktop, and mobile devices.

## EZ-Exam™

EZ-Exam™ is a budget-friendly tool that provides a more natural and realistic view of the fetus, allowing you to address the diagnostic needs of your patients. This tool is available on all our platforms, including our portable, desktop, and mobile devices.



## Quick Preset™

Quick Preset™ allows the user to select the most common presets and preset combinations. Quick Preset™ provides an easy way to make a full list of presets, simple and easy.



## Hello Mom™

Hello Mom™ supports simple and easy-to-use, user-friendly, and intuitive mobile applications, which can be used on the 40-100 MHz ultrasound system directly from Android smartphones or tablet devices. These images can then be shared easily with others.



Download the Hello Mom™ app on your smartphone.



Available on the Google Play and the App Store.



Available on the Google Play and the App Store.

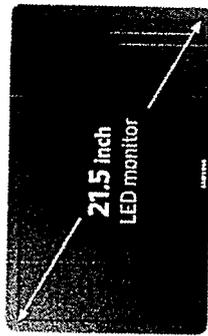


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# User-friendly design

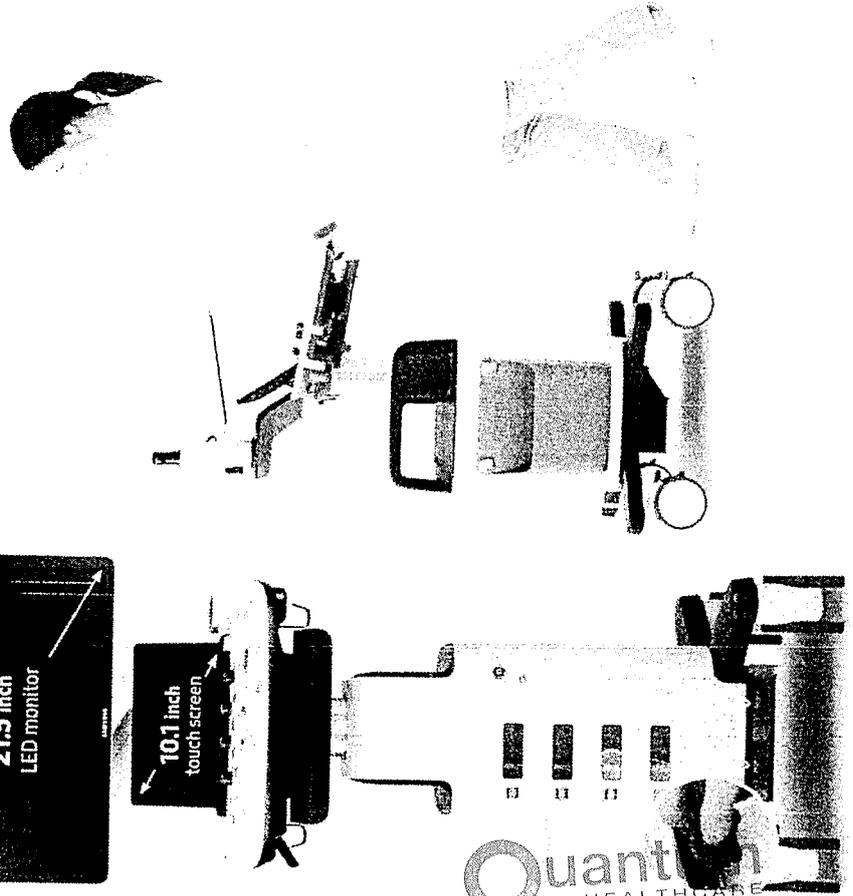
XI40's ground-breaking design was inspired by users' ideas and suggestions during development. Every detail, such as the fully articulating monitor arm, the operating panel which can be easily adjusted to different heights, and additional storage space, has been created to make the work environment more comfortable.



21.5 inch LED monitor



10.1 inch touch screen



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Scan

1. Articulating monitor arm

The fully articulating monitor arm allows the user to adjust the monitor to the most comfortable viewing angle.



2. Height-adjustable operating panel

The height-adjustable operating panel allows the user to adjust the panel to the most comfortable height.



3. Endocavity transducer holder

The endocavity transducer holder allows the user to hold the transducer in a secure and stable position.



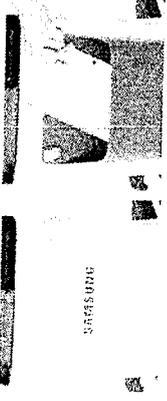
4. Gel warmer

The gel warmer keeps the gel warm during the procedure.



5. Side storage

The side storage provides a convenient place to store the transducer and other accessories.



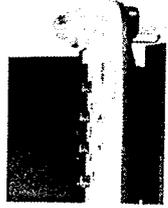
6. Rear tray

The rear tray provides a convenient place to store the transducer and other accessories.



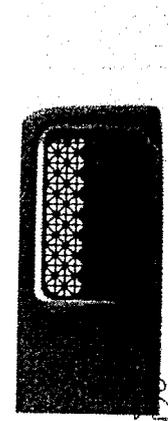
7. Low noise

The low noise design ensures a quiet and comfortable work environment.



8. Printer cover

The printer cover protects the printer from dust and damage.



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# Comprehensive selection of transducers

## Curved array transducers



CA2-8AD

- 2D/3D/Color Doppler
- 8.0cm curved array



C2-8

- 2D/3D/Color Doppler
- 8.0cm curved array

ข้อ 5.1



C2-5

- 2D/3D/Color Doppler
- 5.0cm curved array

## Volume transducers



VN4-8

- 2D/3D/Color Doppler
- 8.0cm volume



V5-9

- 2D/3D/Color Doppler
- 5.0cm volume



CF4-9

- 2D/3D/Color Doppler
- 4.0cm curved array

## Phased array transducer



PN2-4

- 2D/3D/Color Doppler
- 4.0cm phased array

## CW transducer



DP2B

- 2D/3D/Color Doppler
- 2.0cm CW

## Linear array transducers



LA3-16AD

- 2D/3D/Color Doppler
- 16.0cm linear array



LN5-12

- 2D/3D/Color Doppler
- 12.0cm linear array



L5-12/50

- 2D/3D/Color Doppler
- 12.0cm linear array

ข้อ 5.2

## Endo-cavity transducers



EVN4-9

- 2D/3D/Color Doppler
- 9.0cm endo-cavity



ER4-9

- 2D/3D/Color Doppler
- 9.0cm endo-cavity

ข้อ 3.6



ส่วน

วันที่ 2 เดือน กันยายน พ.ศ. 2567

Ref.US044/2567

เรื่อง รับรองเงื่อนไขเฉพาะ  
เรียน ประธานคณะกรรมการ ประกวดราคาซื้อเครื่องตรวจอวัยวะภายในด้วยคลื่นเสียงความถี่สูง ชนิดสี 2 หัวตรวจ ด้วยวิธีประกวดราคาอิเล็กทรอนิกส์ (e-bidding) ตามประกาศ จังหวัดนครปฐม ลงวันที่ 22 สิงหาคม 2567  
อ้างถึง เอกสารประกวดราคาซื้อด้วยวิธีการประกวดราคาอิเล็กทรอนิกส์ (e-bidding) เลขที่ 103/2567

ตามเอกสาร บริษัท ควอนตัม เฮลท์แคร์ (ไทยแลนด์) จำกัด ได้ทำการเสนอราคาซื้อเครื่องตรวจอวัยวะภายในด้วยคลื่นเสียงความถี่สูง ชนิดสี 2 หัวตรวจ ด้วยวิธีประกวดราคาอิเล็กทรอนิกส์ (e-bidding) ตามประกาศ จังหวัดนครปฐม ลงวันที่ 22 สิงหาคม 2567 เอกสารประกวดราคาซื้อด้วยวิธีการประกวดราคาอิเล็กทรอนิกส์ (e-bidding) เลขที่ 103/2567

บริษัทฯ ขอรับรองเงื่อนไขเฉพาะ ทุกข้อดังนี้

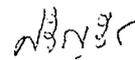
#### 6. เงื่อนไขเฉพาะ

- 6.1 มีคู่มือการใช้งานและบำรุงรักษาทั้งภาษาไทยและภาษาอังกฤษ
- 6.2 ผู้ขายต้องรับประกันคุณภาพตัวเครื่องและหัวตรวจเป็นเวลาไม่น้อยกว่า 2 ปี นับแต่วันตรวจนับเครื่อง
- 6.3 ผู้ขายจะต้องส่งวิศวกรมาตรวจเช็คเครื่องทุกๆ 4 เดือน ภายในระยะเวลาประกัน
- 6.4 ผู้ขายต้องจัดส่งเจ้าหน้าที่ที่ชำนาญงานมาทำการสาธิตการใช้งานของเครื่อง และการดูแลรักษาเครื่องให้กับเจ้าหน้าที่ของโรงพยาบาลจนสามารถใช้งานได้เป็นอย่างดี

จึงเรียนมาเพื่อโปรดทราบ และรับรองมา ณ ที่นี้

ขอแสดงความนับถือ

  
บริษัท ควอนตัม เฮลท์แคร์ (ไทยแลนด์) จำกัด  
Quantum Healthcare (Thailand) Co., Ltd.



(นางศรีรัฐช พาวเวียง)

ผู้เสนอราคา

# SONY



**UP-X898MD**  
Hybrid Graphic Printer

ข้อ 5.3

**UP-D898MD**  
Digital Graphic Printer



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The UP-X898MD and UP-D898MD are compact medical grade black and white digital printers designed to be integrated into both analog and digital medical imaging environments such as mobile C-arm, cardiac catheterization laboratory and digital ultrasound systems.

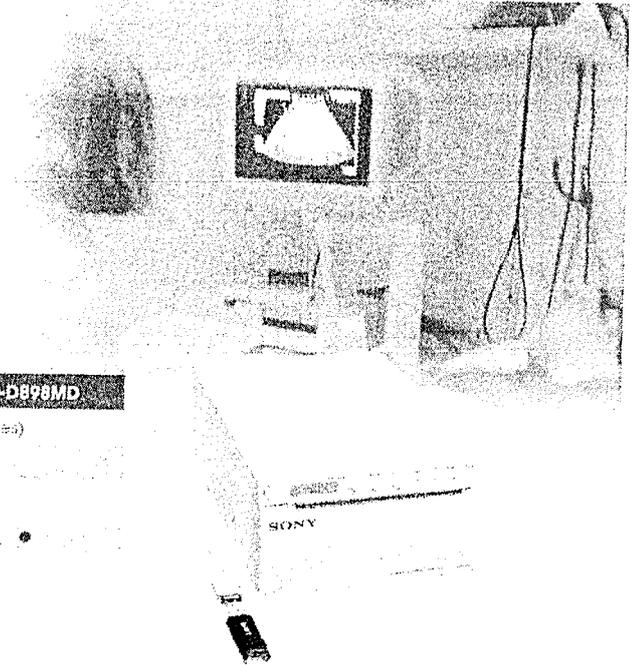
The high quality thermal print engine can produce hard copy prints of still images captured by these systems for use in patient records and referrals.\*<sup>1</sup> For even greater convenience, printed still images can also be stored to a connected USB flash drive.\*<sup>2</sup>

These printers are successors to the popular Sony UP-897MD and UP-D897 of medical printers. Redesigned and upgraded, it offers several operational and ergonomic enhancements while retaining the same space-saving footprint and easy integration into medical carts. Usability is further enhanced by an enlarged LCD display panel and joystick for intuitive menu navigation.

Both models are capable of delivering high-quality black & white prints in less than two seconds. Advanced thermal printing technology delivers photo quality results using widely available Sony's print media.

The UP-X898MD can accept both analog video and digital signal inputs, while the UP-D898MD accepts digital signal inputs only.

\*1 The images printed from the UP-X898MD and UP-D898MD are not to be used for diagnosis.  
\*2 This feature is only available on the UP-X898MD.



## Products Overview

	UP-X898MD	UP-D898MD
Roll Paper Width	110 mm (4.33 inches)	
USB Flash Drive Storage	●	●
Analog Video Input	●	●
USB Connector (For medical device connection)	●	●

## Key Features

### High quality printing

Advanced thermal printing technology enables photo-quality black & white prints with a high resolution up to approximately 325 dpi and gray levels up to 256 steps.

### A6 prints in less than two seconds

While operating in high speed mode, these printers can produce A6-size prints in approximately 1.9 seconds (when used with UPP-110HS or UPP-110S print media).

### Accepts both digital and analog video input signals

A choice of analog composite video\*<sup>1</sup> and digital inputs allows flexible use with a wide range of modality devices.

### USB flash drive storage\*<sup>2</sup>

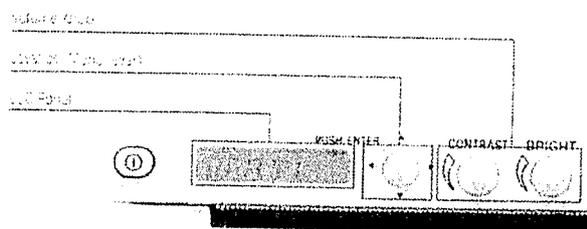
The UP-X898MD can automatically store printed images from both USB and Video inputs onto a connected USB flash drive.

### Compact, space-saving design

Measuring 38mm (H) x 154 mm (W) x 245 mm (D), these printers have the same space-saving design as the predecessors for easy flexible integration into medical carts.

### Enhanced operability

Building on the success of the popular UP-897MD and UP-D897, these printers feature an enlarged LCD panel that displays printer settings, selected paper type and advisory messages. An intuitive joystick control allows speedy menu navigation, while the new Auto Lock mode prevents unintentional changes to print settings.



SONY

Front Panel

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### Hard copy reference of print settings

For convenient reference, selected settings (Resolution, Contrast, Gamma and Sharpness) can optionally be printed in a blank space on the print paper.

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## Uses widely available print media

Sony offers a choice of three high quality widely available thermal print media types to meet the needs of different applications. Choose from the UPP-110HD, UPP-110S, or the UPP-110HG High Glossy Printing Paper that produces glossy, long-lasting near-photo quality prints.

## Wide PC compatibility

For maximum flexibility a wide range of PC drivers are provided for Windows XP, Vista, 7 and 8 (32/64bit).

## Quick guide print

Quick instruction guides for different print operations can be selected via the front control panel. They can be printed out for easy reference without needing to refer to the user manual.\*

## Compliance with Medical Safety Standards\*\*

This device is compliant and certified for IEC 60601-1 and product safety standards in the U.S.A., Canada and Europe.

\* Analog mode is only available on the UP-D896MD.

\*\* This feature is only available on the UP-X896MD.

† In English only.

\*\* Registration status of a medical device may vary depending on country.

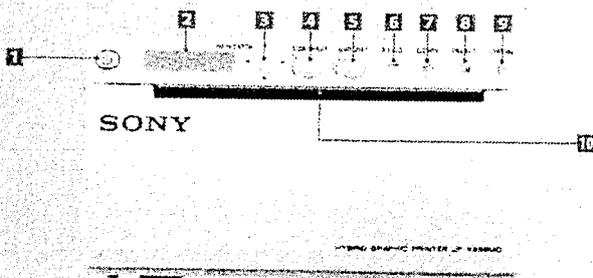
For more details, please contact your nearest Sony office or an authorized dealer.

Main Print Mode (Video input)

	Standard	Side
Normal (1-time)		
Small (0.5 times)		
Small (0.5 times multi)		
2x zoom (2 times)		

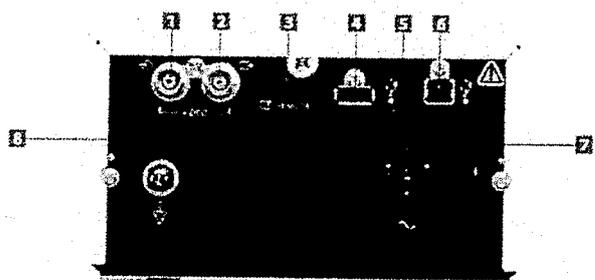
## Front and Rear Panels

UP-X896MD Front Panel



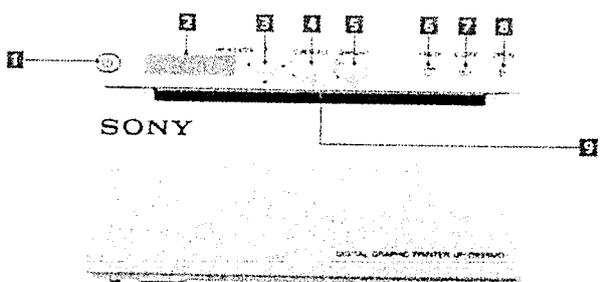
- |   |                 |
|---|-----------------|
| 1 Power ON/OFF Switch                                 | 5 FEED button   |
| 2 Printer window display (LCD liquid crystal display) | 7 COPY button   |
| 3 Menu level  | 8 PRINT button  |
| 4 CONTRAST control                                    | 9 OPEN button   |
| 5 BRIGHT (brightness) control                         | 10 Paper outlet |

UP-X896MD Rear Panel



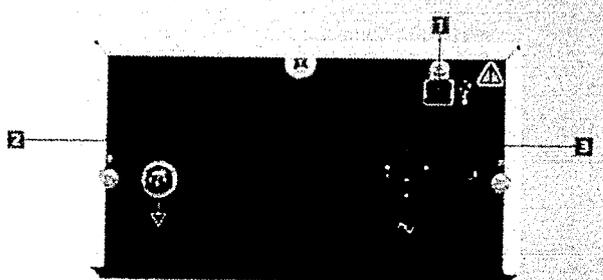
- |                                       |                                |
|---------------------------------------|--------------------------------|
| 1 VIDEO input connector (DVC type)    | 5 USB connector (type A) (top) |
| 2 VIDEO output connector (SVC type)   | 6 USB connector (type B)       |
| 3 REMOTE terminal commander connector | 7 AC IN connector              |
| 4 USB connector (type A)              | 8 Equipotential terminal       |

UP-D896MD Front Panel



- |   |                |
|---|----------------|
| 1 Power ON/OFF switch                                 | 6 FEED button  |
| 2 Printer window display (LCD liquid crystal display) | 7 COPY button  |
| 3 Menu level  | 8 OPEN button  |
| 4 CONTRAST control                                    | 9 Paper outlet |
| 5 BRIGHT (brightness) control                         |                |

UP-D896MD Rear Panel



- |   |
|---|
| 1 USB connector                           |
| 2 Equipotential ground terminal connector |
| 3 AC IN connector                         |

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# Specifications

	UP-X896MD	UP-D896MD
Printing Method	Direct Thermal (Dry Ink)	Direct Thermal (Dry Ink)
Resolution	300 dpi	300 dpi
Connections	USB 2.0 (Type A) (Front Panel)	USB 2.0 (Type A) (Front Panel)
Picture Elements	Digital: 1096 x 1296 dots Video: P1050: 720 x 501 dots Video: PAL: 720 x 501 dots	Digital: 1096 x 1296 dots
Picture Area	Digital: 120 x 120 mm (4.72 x 4.72 inches) (Std) STD Video: NTSC: 94 x 71 mm (3.70 x 2.79 inches) (WIDE) STD Video: PAL: 94 x 71 mm (3.70 x 2.79 inches) (WIDE) Print Area: (Digital) 110 mm (4.33 inches)	120 x 120 mm (4.72 x 4.72 inches)
Power Save	High speed mode Approx. 1.7 seconds (image already printed) (standby) Normal speed mode Approx. 3.3 seconds (image already printed) (standby)	High speed mode Approx. 1.7 seconds (image already printed) (standby) Normal speed mode Approx. 3.3 seconds (image already printed) (standby)
Printing Time	High speed mode Approx. 1.7 seconds (image already printed) (standby) Normal speed mode Approx. 3.3 seconds (image already printed) (standby)	High speed mode Approx. 1.7 seconds (image already printed) (standby) Normal speed mode Approx. 3.3 seconds (image already printed) (standby)
Picture Memory	Digital: 4 MB x 1 (20 x 1 dots) Video: 1 frame (approximately 100 x 80 dots) (standard)	Digital: 4 MB x 1 (20 x 1 dots)
Interface	USB terminal (Type A) (Front Panel) (optional) (XT) Infrared USB (USB 2.0) (XT) WIDE D INPUT (WIDE) (XT) NTSC/PAL composite video signals 1.8 V supply (NTSC/PAL) (optionally detachable) MICRO-USB (Type B) (optional) (XT) Power On / Standby mode (XT)	Infrared USB (USB 2.0) (XT)
Printer Driver Software	Windows: Windows XP, Vista, Windows 7, Windows 8, Windows 10 Mac OS: Mac OS X, OS X Server	Windows: Windows XP, Vista, Windows 7, Windows 8, Windows 10 Mac OS: Mac OS X, OS X Server
Power Requirements	AC 100-240V, 50/60Hz	AC 100-240V, 50/60Hz
Input Current	1.1 A (typ.)	1.1 A (typ.)
Operating Temperature	5°C to 40°C (41°F to 104°F)	5°C to 40°C (41°F to 104°F)
Operating Humidity	20% to 80% (no condensation allowed)	20% to 80% (no condensation allowed)
Storage and Transport Temperature	-20°C to +60°C (-4°F to +140°F)	-20°C to +60°C (-4°F to +140°F)
Storage and Transport Humidity	20% to 80% (no condensation allowed)	20% to 80% (no condensation allowed)
Dimensions (W x H x D)	154 x 88 x 240 mm (6.1 x 3.5 x 9.4 inches)	154 x 88 x 240 mm (6.1 x 3.5 x 9.4 inches)
Mass	2.5 kg (5.5 lbs)	2.5 kg (5.5 lbs)
Safety Standards	(USA) FCC Class B Part 15 Subpart B Digital Device Class A (EU) CE Marking Class A (UK) CE Marking Class A (Canada) ICES Class B (Australia) Class A (Japan) Class A (Korea) Class A (China) Class A (India) Class A (Brazil) Class A (Mexico) Class A (South Africa) Class A (New Zealand) Class A (Singapore) Class A (Taiwan) Class A (Thailand) Class A (Philippines) Class A (Vietnam) Class A (Indonesia) Class A (Malaysia) Class A (Singapore) Class A (Hong Kong) Class A (Macau) Class A (Australia) Class A (New Zealand) Class A (South Africa) Class A (Brazil) Class A (Mexico) Class A (South Africa) Class A (Brazil) Class A (Mexico) Class A	(USA) FCC Class B Part 15 Subpart B Digital Device Class A (EU) CE Marking Class A (UK) CE Marking Class A (Canada) ICES Class B (Australia) Class A (Japan) Class A (Korea) Class A (China) Class A (India) Class A (Brazil) Class A (Mexico) Class A (South Africa) Class A (New Zealand) Class A (Singapore) Class A (Taiwan) Class A (Thailand) Class A (Philippines) Class A (Vietnam) Class A (Indonesia) Class A (Malaysia) Class A (Singapore) Class A (Hong Kong) Class A (Macau) Class A (Australia) Class A (New Zealand) Class A (South Africa) Class A (Brazil) Class A (Mexico) Class A (South Africa) Class A (Brazil) Class A (Mexico) Class A
EMC Standards	CE Marking Class A (USA) FCC Class B Part 15 Subpart B Digital Device Class A (EU) CE Marking Class A (UK) CE Marking Class A (Canada) ICES Class B (Australia) Class A (Japan) Class A (Korea) Class A (China) Class A (India) Class A (Brazil) Class A (Mexico) Class A (South Africa) Class A (New Zealand) Class A (Singapore) Class A (Taiwan) Class A (Thailand) Class A (Philippines) Class A (Vietnam) Class A (Indonesia) Class A (Malaysia) Class A (Singapore) Class A (Hong Kong) Class A (Macau) Class A (Australia) Class A (New Zealand) Class A (South Africa) Class A (Brazil) Class A (Mexico) Class A (South Africa) Class A (Brazil) Class A (Mexico) Class A	CE Marking Class A (USA) FCC Class B Part 15 Subpart B Digital Device Class A (EU) CE Marking Class A (UK) CE Marking Class A (Canada) ICES Class B (Australia) Class A (Japan) Class A (Korea) Class A (China) Class A (India) Class A (Brazil) Class A (Mexico) Class A (South Africa) Class A (New Zealand) Class A (Singapore) Class A (Taiwan) Class A (Thailand) Class A (Philippines) Class A (Vietnam) Class A (Indonesia) Class A (Malaysia) Class A (Singapore) Class A (Hong Kong) Class A (Macau) Class A (Australia) Class A (New Zealand) Class A (South Africa) Class A (Brazil) Class A (Mexico) Class A (South Africa) Class A (Brazil) Class A (Mexico) Class A
ESD Protection	(EU) EN 61010-1:2011 (USA) IEC 61010-1:2011 (Canada) IEC 61010-1:2011 (Australia) IEC 61010-1:2011 (Japan) IEC 61010-1:2011 (Korea) IEC 61010-1:2011 (China) IEC 61010-1:2011 (India) IEC 61010-1:2011 (Brazil) IEC 61010-1:2011 (Mexico) IEC 61010-1:2011 (South Africa) IEC 61010-1:2011 (New Zealand) IEC 61010-1:2011 (Singapore) IEC 61010-1:2011 (Taiwan) IEC 61010-1:2011 (Thailand) IEC 61010-1:2011 (Philippines) IEC 61010-1:2011 (Vietnam) IEC 61010-1:2011 (Indonesia) IEC 61010-1:2011 (Malaysia) IEC 61010-1:2011 (Singapore) IEC 61010-1:2011 (Hong Kong) IEC 61010-1:2011 (Macau) IEC 61010-1:2011 (Australia) IEC 61010-1:2011 (New Zealand) IEC 61010-1:2011 (South Africa) IEC 61010-1:2011 (Brazil) IEC 61010-1:2011 (Mexico) IEC 61010-1:2011 (South Africa) IEC 61010-1:2011 (Brazil) IEC 61010-1:2011 (Mexico) IEC 61010-1:2011	(EU) EN 61010-1:2011 (USA) IEC 61010-1:2011 (Canada) IEC 61010-1:2011 (Australia) IEC 61010-1:2011 (Japan) IEC 61010-1:2011 (Korea) IEC 61010-1:2011 (China) IEC 61010-1:2011 (India) IEC 61010-1:2011 (Brazil) IEC 61010-1:2011 (Mexico) IEC 61010-1:2011 (South Africa) IEC 61010-1:2011 (New Zealand) IEC 61010-1:2011 (Singapore) IEC 61010-1:2011 (Taiwan) IEC 61010-1:2011 (Thailand) IEC 61010-1:2011 (Philippines) IEC 61010-1:2011 (Vietnam) IEC 61010-1:2011 (Indonesia) IEC 61010-1:2011 (Malaysia) IEC 61010-1:2011 (Singapore) IEC 61010-1:2011 (Hong Kong) IEC 61010-1:2011 (Macau) IEC 61010-1:2011 (Australia) IEC 61010-1:2011 (New Zealand) IEC 61010-1:2011 (South Africa) IEC 61010-1:2011 (Brazil) IEC 61010-1:2011 (Mexico) IEC 61010-1:2011 (South Africa) IEC 61010-1:2011 (Brazil) IEC 61010-1:2011 (Mexico) IEC 61010-1:2011
Approved Accessories	Thermal Head Cleaning Sheet (T1) (SRP0101) Roller Cleaning Paper (R1) (SRP0102) Before Using This Printer (U1) (SRP0103) USB Flash Drive Ex. Cable (Front Panel) (FPA1000)	Thermal Head Cleaning Sheet (T1) (SRP0101) Roller Cleaning Paper (R1) (SRP0102) Before Using This Printer (U1) (SRP0103) USB Flash Drive Ex. Cable (Front Panel) (FPA1000)

## Optional Accessories



FS-24  
Roll of Paper

RML-91  
Roller Cleaning Paper

ข้อ 5.5

## Printing Paper



UPP-I10HG

Thermal Print Media High Glossy  
Paper size: 110 mm (W) x 88 mm (H)

UPP-I10HD

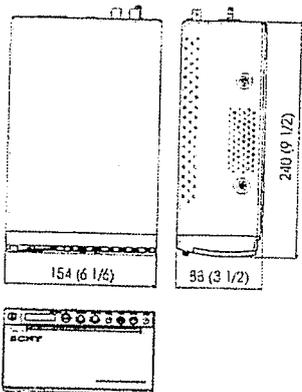
Thermal Print Media High Density  
Paper size: 110 mm (W) x 88 mm (H)

UPP-I10S

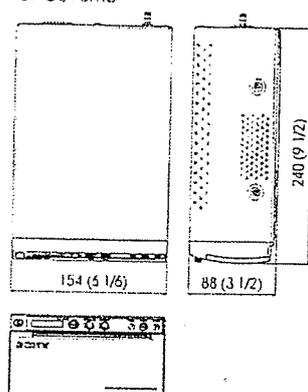
Thermal Print Media Standard  
Paper size: 110 mm (W) x 88 mm (H)

## Dimensions

UP-X896MD



UP-D896MD



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Features and specifications are subject to change without notice.

The values for mass and dimension are approximate.

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Registration status as a medical device may vary, depending on country.

For more details, please contact your nearest Sony office or an authorized dealer.

# CLEANLINE

เครื่องสำรองไฟฟ้า

UPS

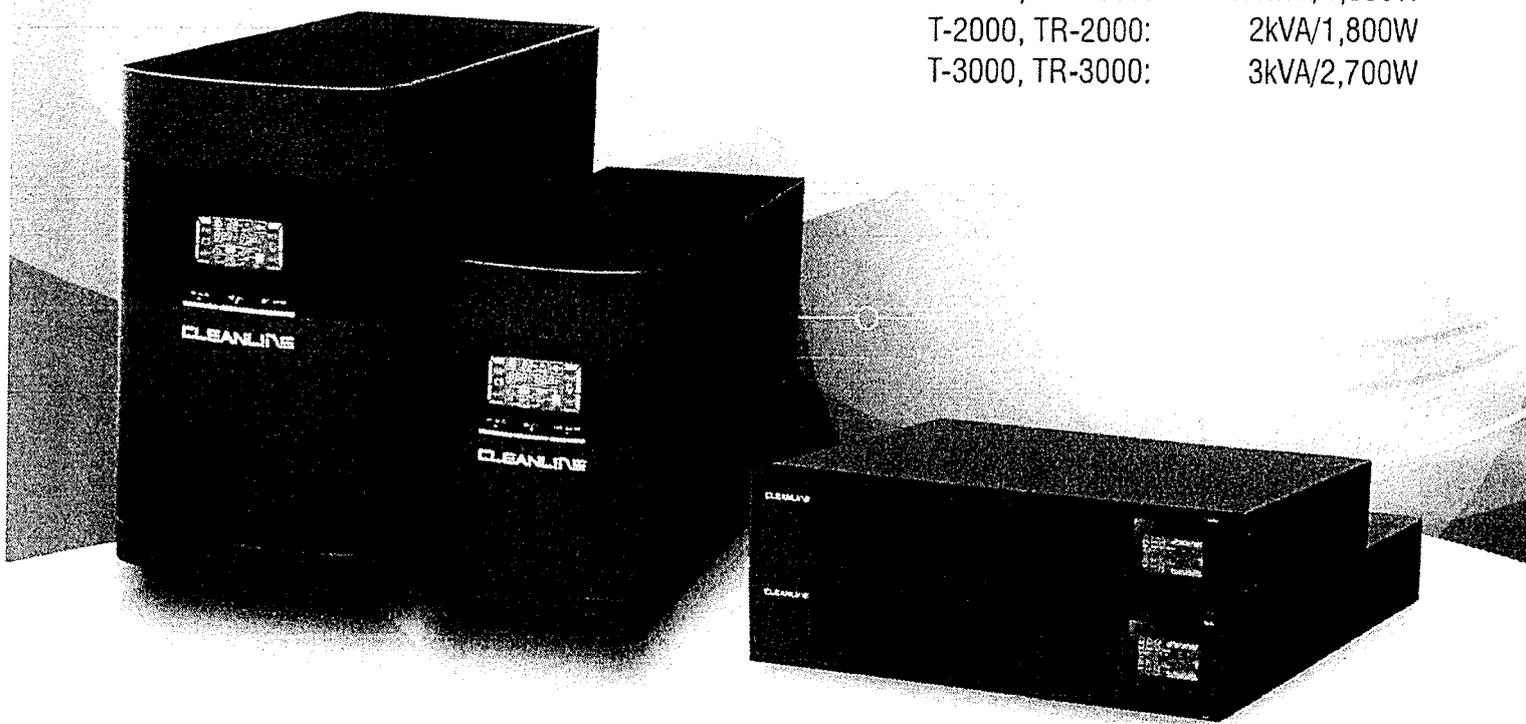


True On-Line Double Conversion Design

ข้อ 5.4

### Tower and 19" Rack-mount Model

T-1000, TR-1000:	1kVA/900W
T-1500, TR-1500:	1.5kVA/1,350W
T-2000, TR-2000:	2kVA/1,800W
T-3000, TR-3000:	3kVA/2,700W



### KEY Features:

- True on-line double conversion design UPS
- 100% digitized microprocessor controlled
- Output power factor 0.9
- Wide input voltage range 110-300Vac
- 50/60 Hz frequency converter mode
- MIMIC LCD for real-time UPS status display
- Auto self-testing system while turning on UPS
- ECO mode operation for energy saving
- Emergency power off (EPO) function
- Programmable power management outlets
- Selectable output voltage via LCD panel
- Cold start function
- Smart battery charger design to optimize battery performance
- Battery charger with temperature compensation technology
- Short circuit protection
- Lightning and surge protection
- Built-in USB and RS-232 communications port for management software
- Generator compatible
- **Optional external maintenance bypass switch**
- **Optional compatible with SNMP protocol**
- **UPS Monitoring and Controlling Software, Available for immediate download via the website**

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USPH คอมพิวเตอร์เฮลท์แคร์ (ไทยแลนด์) จำกัด  
Quantum Healthcare (Thailand) Co., Ltd.

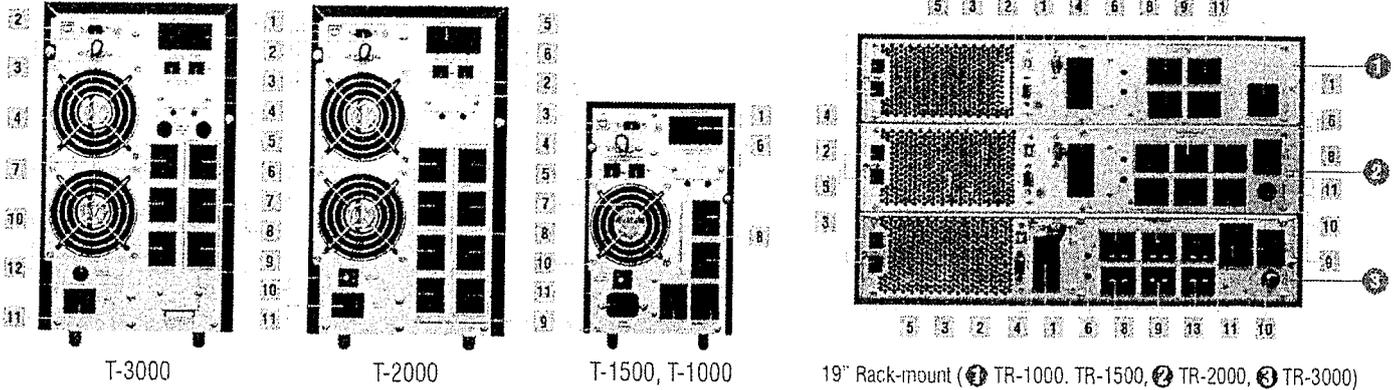
น.ส.กชกร

โจนา



True On-Line Double Conversion Design

- 1. Intelligent Slot
- 2. USB
- 3. RS-232
- 4. EPO
- 5. Network/Lan/Tel/Modem
- 6. External Battery
- 7. Cooling Fan
- 8. Programmable Outlets (P1)
- 9. Outlets
- 10. Circuit Breaker
- 11. Input Power
- 12. Output Terminal
- 13. Output Outlet



TECHNICAL SPECIFICATION

Tower Model		T-1000	T-1500	T-2000	T-3000
19" Rack-mount Model		TR-1000	TR-1500	TR-2000	TR-3000
Power Rating		1kVA/900W	1.5kVA/1,350W	2kVA/1,800W	3kVA/2,700W
<b>Input</b>	Voltage Frequency Phase Power factor	110-300Vac at 50% load, 160-300Vac at 100% load 50 or 60Hz ± 10% Single phase with ground > 0.99 @ nominal voltage (100% Load)			
<b>Output</b>	Voltage Voltage regulation Frequency Overload recovery UPS Design technology Crest factor Harmonic distortion Output waveform Transfer time	208/220/230/240Vac ± 1% 50 or 60Hz ± 0.1% (Battery mode) Auto transfer to UPS True on-line double conversion, Full digitized microprocessor controlled 3 : 1 ≤ 2% THD (Linear load), ≤ 4% THD (Non-Linear load) Pure sinewave 0 ms			
<b>Efficiency</b>	AC mode Battery mode ECO mode	> 90%	> 89%	> 89%	> 91% > 90%
<b>Protection and Filtering</b>	Surge protection Overload protection Short circuit protection	220V (IEEE C6100-4-5 level 3) UPS Automatic bypass if overload between 110% to 130% at 30 seconds and more than 130% at 1.5 seconds UPS Output cut off immediately or input fuse/circuit breaker protection			
<b>Battery</b>	Type Typical recharge time to 90% Management Battery protection Cold start (DC start) Back up time Expansion back up time	Sealed, Maintenance-free lead acid batteries 4 hours Self-test Cut off without draining any current when battery is low Yes 15-30 minutes (Depending on computer load) Depending on customer required			
<b>Indicators</b>	Status	UPS status, Load level, Battery level, Input/output voltage, Remaining backup time, and Fault conditions			
<b>Audible Alarm</b>	Battery mode Low battery Overload Fault	Sounding every 4 seconds Sounding every second Sounding twice every second Continuously sounding			
<b>Dimension (DxWxH mm)</b>	Tower 19" Rack-mount	397 x 145 x 220 480 x 438 x 88 (2U)		421 x 190 x 318 600 x 438 x 88 (2U)	
<b>Weight (kg)</b>	Tower 19" Rack-mount	12.5 18.4	13.8 18.5	25.8 25.7	27 29
<b>Environmental</b>	Operating temperature Relative humidity Noise level	0-40 °C 0-95% (Non-Condensing) < 45dB@1 Meter			
<b>Interface</b>	Smart RS232 USB SNMP (Option)	Software supports windows family, Linux, Sun solaris, IBM aix, Compaq true64, SGI IRIX, FreeBSD, HP-UX and MAC Windows family and MAC OS Power management from SNMP manager and web browser			



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Quantum Healthcare (Thailand) Co., Ltd.

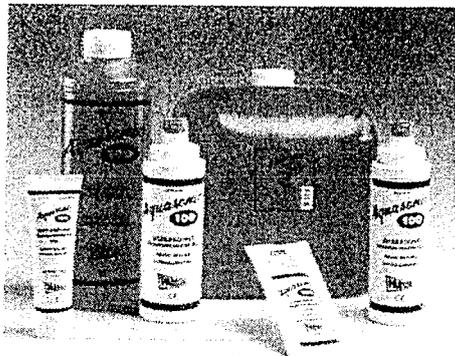


TIS 1201 Part 1:2013  
TIS 1201 Part 2:2013  
TIS 1201 Part 3:2013

## ULTRASOUND PRODUCTS

### AQUASONIC® 100 ULTRASOUND TRANSMISSION GEL

ข้อ 5.6



The World Standard for Medical Ultrasound Transmission. AQUASONIC 100 is the most widely used gel for diagnostic and therapeutic medical ultrasound. Recommended for all procedures where a viscous gel is required.

#### FEATURES

- ① Acoustically correct for the broad range of frequencies used
- ② Completely aqueous: will not stain clothing or damage transducers
- ③ Unique "can't be copied" formula is bacteriostatic, non-sensitizing and non-irritating
- ④ No formaldehyde
- ⑤ Not a spermicide
- ⑥ Used and recommended by leading manufacturers of medical ultrasound equipment, worldwide

PRODUCT #	PACKAGE SIZE
01-20	20 g single-use packette, non-sterile, 100 per dispenser box
01-02	60 g Doppler® size tube, 12 per box
01-08	0.25 L dispenser, 12 per box
01-34	1 L with dispenser cap, 6 per box
01-50	5 L SONICPAC® with refillable dispenser, 1 per box, 4 per case

### STERILE AQUASONIC® 100 ULTRASOUND TRANSMISSION GEL



The World Standard for sterile ultrasound gel. STERILE AQUASONIC 100 is recommended for diagnostic and therapeutic ultrasound applications when sterility is indicated.

#### FEATURES

- ① Overwrapped, sterilized foil pouches
- ② Acoustically correct for the broad range of frequencies used in medical ultrasound
- ③ Non-irritating
- ④ Completely aqueous; will not stain clothing or damage equipment
- ⑤ Not a spermicide

PRODUCT #	PACKAGE SIZE
01-01	20 g overwrapped, sterilized foil pouches, 48 per box

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Quantum Healthcare (Thailand) Co., Ltd.

**Zoom**

Use the **Zoom** dial-button on the control panel.

You can magnify an image. An image can be magnified by either Read Zoom or Write Zoom.

➤ **Read Zoom:** This function is used for zooming in on images that are stored on the hard disk.

1. Rotate the **Zoom** dial-button on the control panel.
2. Adjust the position of the zoomed-in screen with the trackball.
3. Observe the magnified image.

➤ **Write Zoom:** This function allows you to magnify and scan an image in real time.

1. Press the **Zoom** dial-button on the control panel. The Write Zoom box will appear on the screen.
2. Use the **Change** button to move and resize the Zoom box.
3. To finish Zoom mode, press the **Zoom** dial-button once again. Or press the **Exit** button on the control panel.

ข้อ 3.11 **Quick Scan**



**NOTE:** The Quick Scan function is available in all probes' applications.

Use the **Q Scan** button on the control panel. The 'Q Scan'  mark will appear at the top of an image.

In 2D Mode, it is used to optimize the contrast and brightness of an image by adjusting Gain and TGC automatically. In PW Spectral Doppler Mode, it is used to optimize the spectrum by adjusting Scale and Baseline automatically.

To finish QuickScan mode, press the **Exit** button on the control panel.

### Keyboard

The On-screen Keyboard (OSK) is part of the package. Clicking the entry window will display the OSK, with which you can input text using the touch screen. Alternatively, you can open the On-screen Keyboard by tapping the Keyboard button on the touch screen.



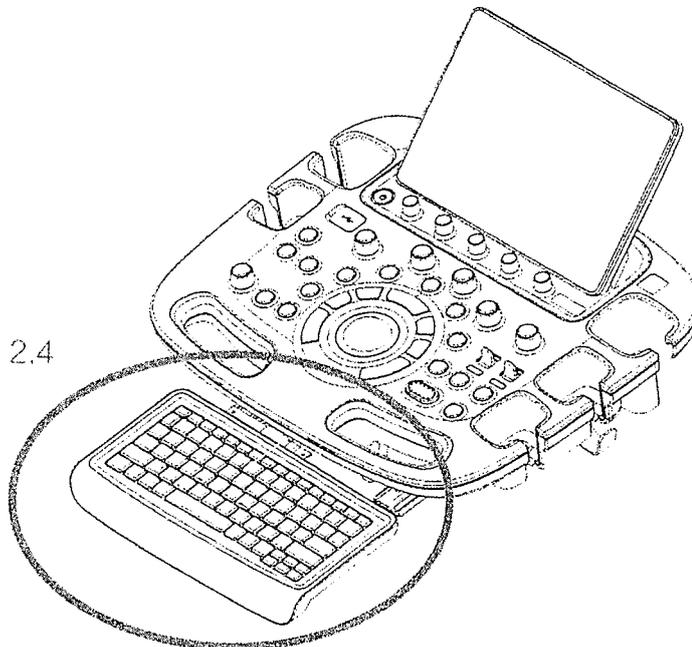
**NOTE:** Turn the On-Screen Keyboard On or Off in Setup > Peripherals > Peripherals as described in 'Chapter 3. Utilities'.



#### Optional Keyboard

In addition to the On-screen Keyboard, a physical keyboard is also provided which can be connected via a USB port.

รูป 2.4



### Focus

Use the **Focus** switch on the control panel to adjust the location of the focus.

### Depth

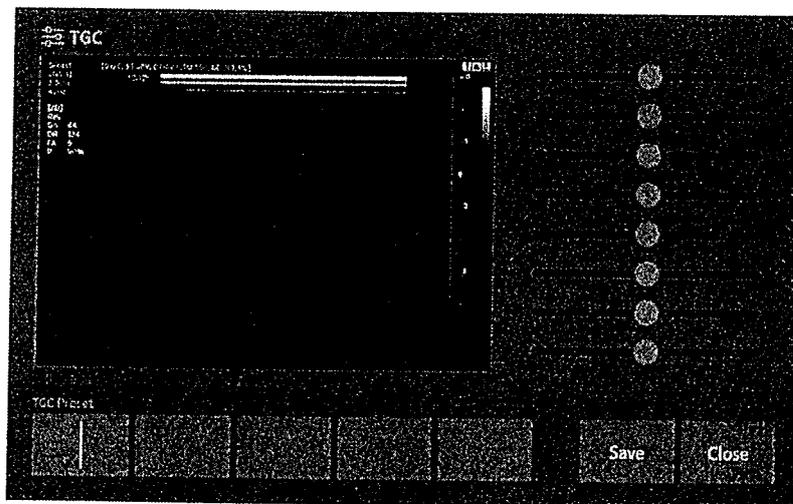
Use the **Depth** switch on the control panel to adjust the image scanning depth. The allowable range for adjustment varies depending on the probe type.



**CAUTION:** Too great a difference in the gain value settings of adjacent TGC sliders may cause stripes in an image.

- ▶ Penetration of ultrasound becomes weaker as the depth of the site to study increases. Use of TGC can compensate for this phenomenon.
- ▶ TGC can adjust the Gain based on the depth. The depth increases gradually from the top to the bottom sliders and moving the slider to the right increases the Gain, which makes the image brighter.

ข้อ 3.6 \* TGC Preset: User can set and save the TGC form.



[Figure 2.7 TGC – Touchscreen]

1. Use the TGC sliders to adjust the Gain, and select the User TGC button to save.
  2. With the User TGC button, you can save the pattern you want.
  3. Press **Save** to complete the User TGC settings.
- 5 The Operation mode that is currently in use and relevant function buttons are displayed.
  - 6 Soft Menu Area: The Soft Menu items that are available in the current input mode are shown.

The menu in use is shown in the border color. Press or rotate the dial-buttons right below each menu.



**When there are Two Soft Menus**

When there are two menus available – upper and lower, both menus can be adjusted with the corresponding dial-button. Or tap the button for the menu you want to use on the touchscreen and then use the dial-button.

# EU Declaration of Conformity

For the following

Product name : Ultrasound Scanner  
 Model(s) name : XH40  
 Risk Class : IIa  
 Basic UDI-DI : 880972578USS001X6  
 Document Revision: 2

We hereby declare under our sole responsibility, that the product above is in compliance with the MDR Regulation (EU) 2017/745. It is subject to the conformity assessment procedures set out in Annex IX (Chapter I and III) of the MDR Regulation (EU) 2017/745 under the supervision of TUV SUD (Notified Body No. 0123, EU Quality Management System Certificate (MDR) No. G10 076726 0012).

	EN ISO 15223-1:2021	EN 1041:2008
	EN ISO 13485:2016/A11:2021	EN ISO 10993-1:2009
ข้อ 2.6	EN ISO 14971:2019	EN 60601-1:2006/A1:2013/A2:2021
	EN 60601-1-2:2015/A1:2021	EN 60601-2-37:2008/A11:2011/A1:2015
	EN 60601-1-6:2010/A1:2015/A2:2021	IEC 62366-1:2015/A1:2020
	EN 62304: 2006/A1:2015	

The Directive (2011/65/EU) on the restriction of the use of certain hazardous substances in electrical and electronic equipment by application of EN 50581:2012.

All supporting documentation is retained under the premises of the manufacturer. This EU declaration of conformity is issued under the sole responsibility of the manufacturer.



**Manufacturer:**

SRN: KR-MF-000011620  
 SAMSUNG MEDISON CO., LTD.  
 3366, Hanseo-ro, Nam-myeon,  
 Hongcheon-gun, Gangwon-do 25108,  
 REPUBLIC OF KOREA

*Scully KIM*

2024-02-15

(Place and date of issue)

Scully Kim /Regulatory Affairs Manager

(Name and signature of authorized person)



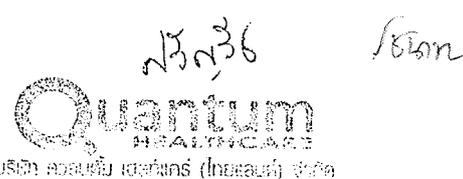
**Authorised Representative:**

SRN: DE-AR-000007005  
 Samsung Electronics GmbH  
 Am Kronberger Hang 6,  
 65824 Schwalbach am Taunus, Germany

Note: It is not the address of Samsung Service Centre. For the address or the phone number of Samsung Service Centre, see the warranty card or contact the retailer where you purchased your product.



บริษัท ควอนตัม เฮลท์แคร์ (ไทยแลนด์) จำกัด  
 Quantum Healthcare (Thailand) Co.,Ltd.



**Exhibit E**

**Letter of Authorization**

To Whom It May Concern:

This Letter of Authorization ("Letter") is issued on this date of **January 1<sup>st</sup>, 2024** ("Effective Date") by Samsung Medison Co., Ltd., a company existing under the laws of the Republic of Korea, with offices at **3366, Hanseo-ro, Yangdeokwon-ri, Nam-myeon, Hongcheon-gun, Gangwon-do, Republic of Korea** ("Samsung") in favor of **Quantum Healthcare (Thailand)** a company existing under the laws of **Thailand** with offices at **88/52 Nanglinchi Road, Kwaeng Chongnonsi, Khet Yannawa, Bangkok Thailand 10120** (hereinafter "Distributor") to authorize the Distributor to act on behalf of Samsung solely within the scope of authorization set forth below ("Scope of Authorization") and subject to the terms and conditions of this Letter.

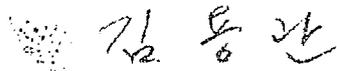
Scope of Authorization: (i) to act as Samsung's non-exclusive representative for the submission of bids and registration with the relevant government authority of the products mentioned below ("Authorized Products"); and (ii) to act as Samsung's non-exclusive representative for the distribution and servicing of the Authorized Products within the territory of **Thailand** ("Territory") pursuant to a definitive agreement entered into by the parties.

Authorized Products: RS85 Prestige, RS80 EVO, HERA W10, HERA W9, V8, V7, V6, HS60, HS50, HS40, XH40, HS30, HM70 EVO

This Letter is valid from the Effective Date until and including December 31, 2024; provided, however, that Samsung may in its sole discretion and at any time either amend the terms of this Letter or revoke this Letter in its entirety without any further obligation to Distributor.

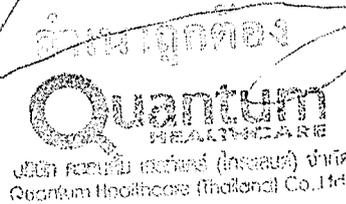
For and on behalf of  
**Samsung Medison Co., Ltd.**

SAMSUNG MEDISON Co., Ltd.



Yong Kwan Kim, CEO

Authorized Signature



Quantum  
HEALTHCARE  
บริษัท ควอนตัม เฮลท์แคร์ (ไทยแลนด์) จำกัด  
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Quantum Healthcare (Thailand) Co., Ltd.

