SAMSUNG

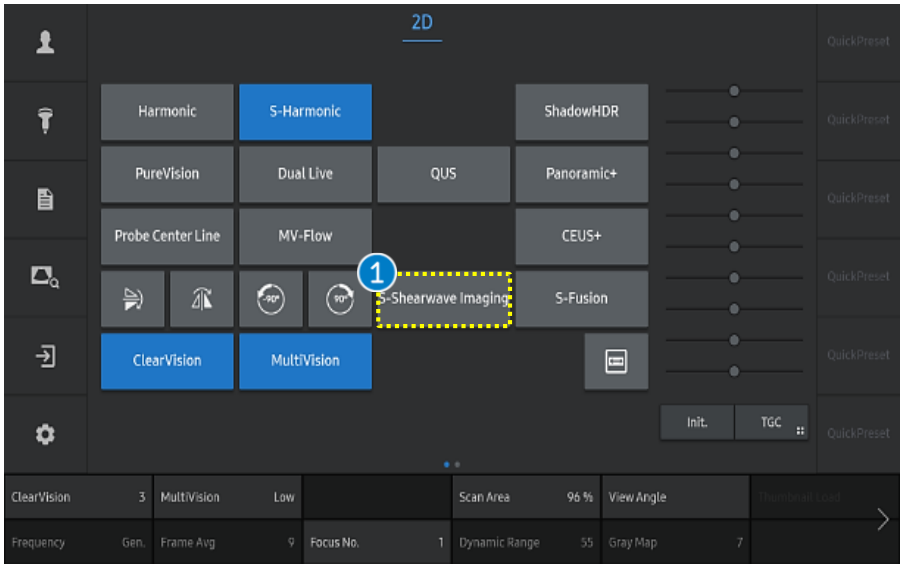
# S-Shearwave Imaging™

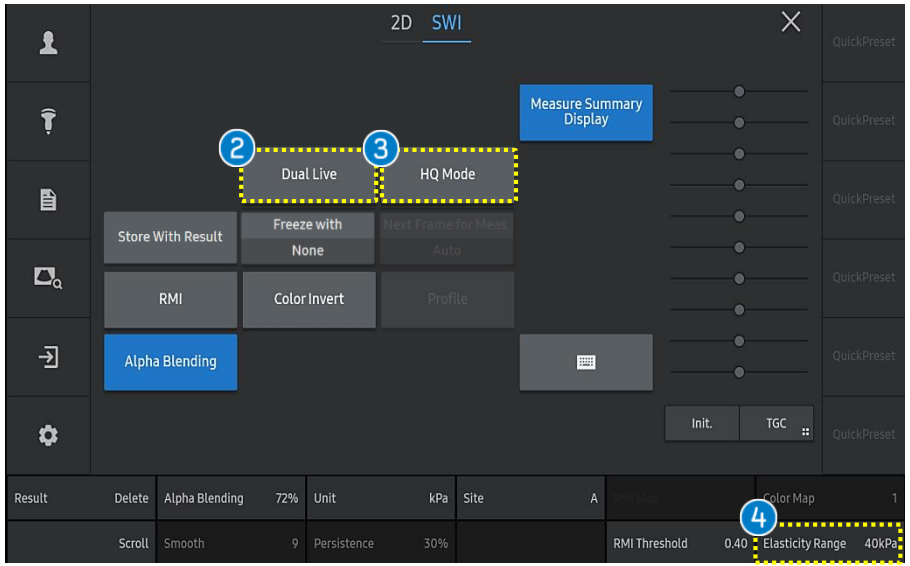
## RS85 Prestige User Quick Guide

## for Prostate


Produced by Clinical Training Center / SAMSUNG MEDISON CO.,LTD

# 1. Start S-Shearwave Imaging™

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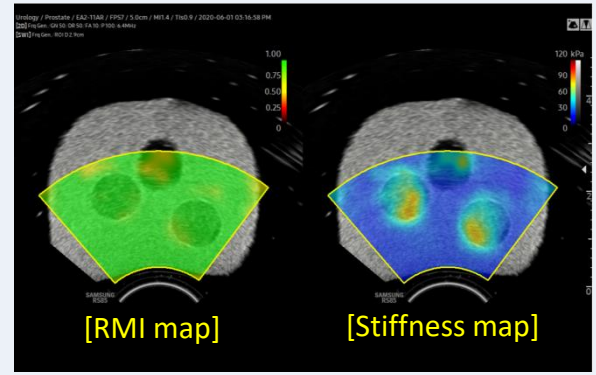
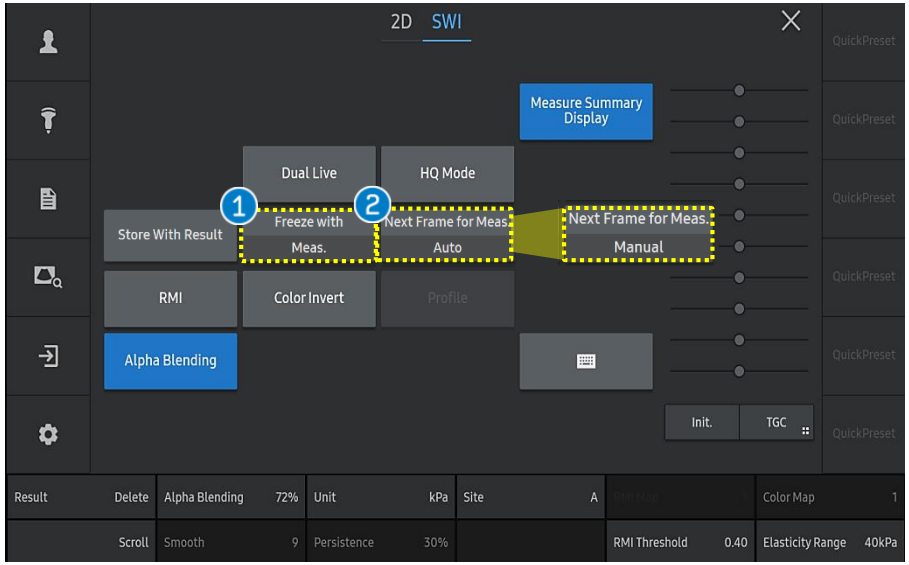
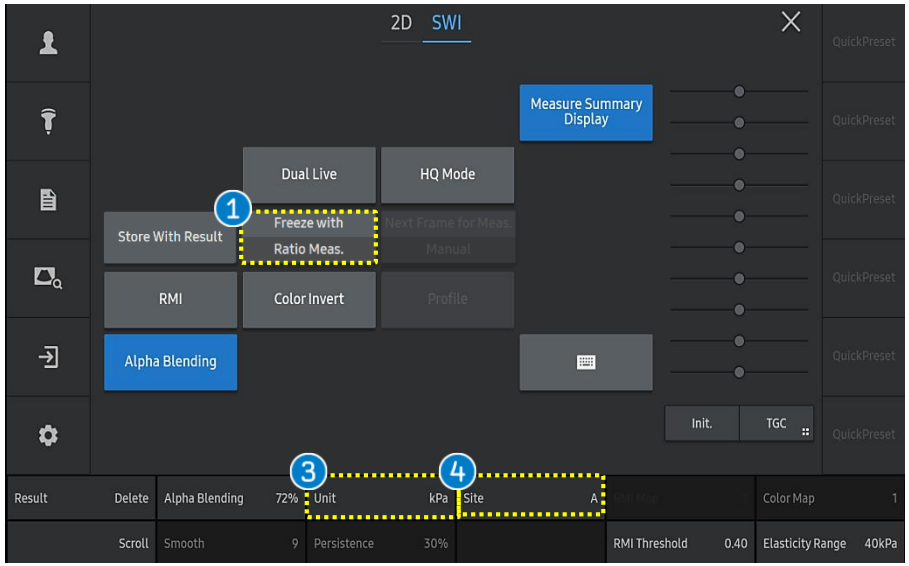
| ① S-Sherawave Imaging | Tap the [S-Shearwave Imaging] on the touch screen to start. |
| ② Dual Live | It displays both stiffness map and RMI map or 2D images in real time.   |
| ③ HQ Mode | With this [HQ Mode], it provides high resolution image. |
| ④ Elasticity Range | It is to change the color stiffness map range. If you change the [Elasticity Range], color map within ROI and the color of elasticity bar also will be changed accordingly. |

# 2. Measure the Elasticity (1)

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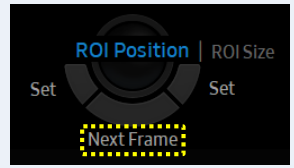
| ① Freeze with Meas./ Ratio Meas. | Starts Elasticity Measurement/Elasticity Ratio Measure when pressing Freeze. |
| ② Next Frame for Meas. | ▪ Auto: Automatically moves to the next frame after confirming the measurement by pressing [Set] button.<br>▪ Manual: Moves to the next frame by pressing [Next Frame] after confirming the measurement.  |
| ③ Unit | It is to change the unit of an elasticity value.<br>▪ he unit [kPa] is based on Young's modulus.<br>▪ The unit [m/s] is for Shearwave speed. |
| ④ Site | It is to change the ROI site. |

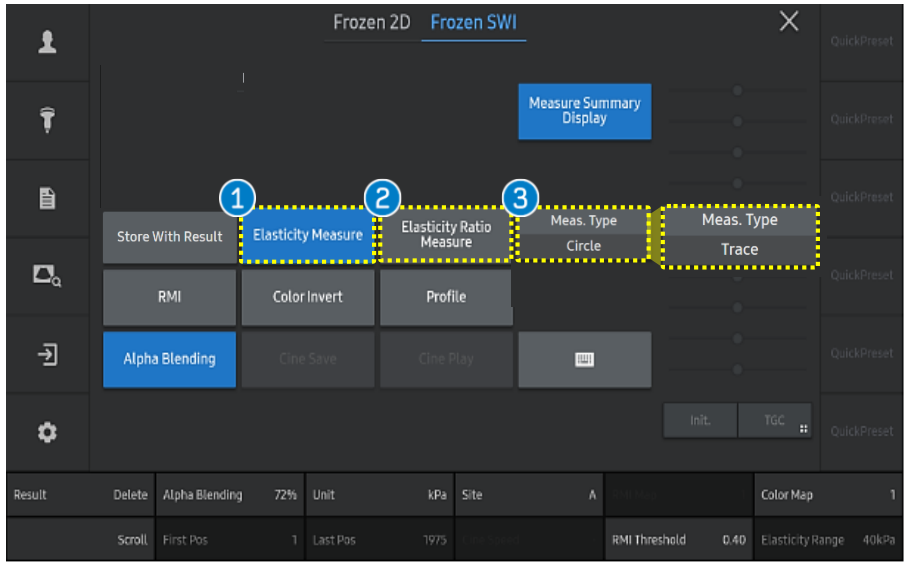


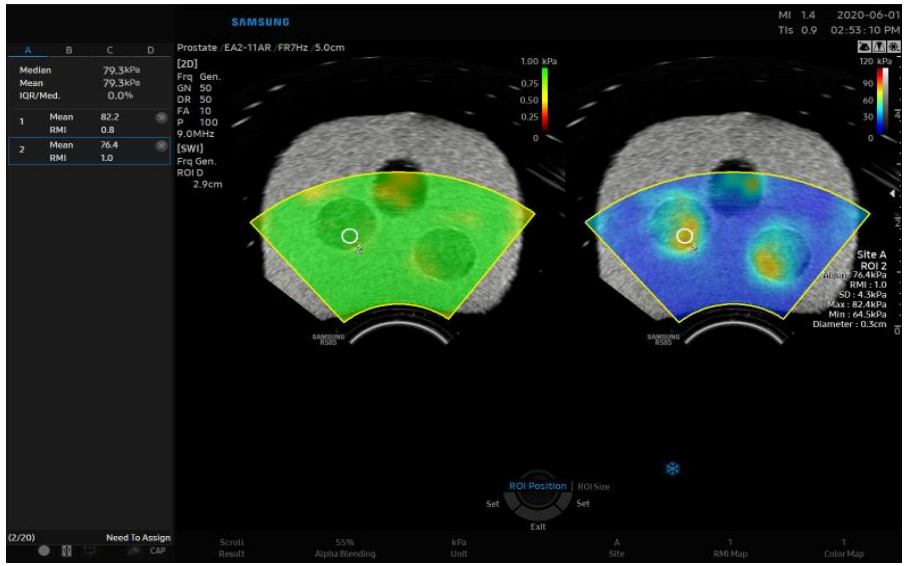
**Notes**

The Next Frame direction can be selected between Forwards or Backwards in the Setup page.

**Setup (Imaging ▶ Features ▶ S-Shearwave Imaging ▶ Next Frame Direction ▶ **Forward / Backward**)*

# 2. Measure the Elasticity (2)




[Elasticity Measure]

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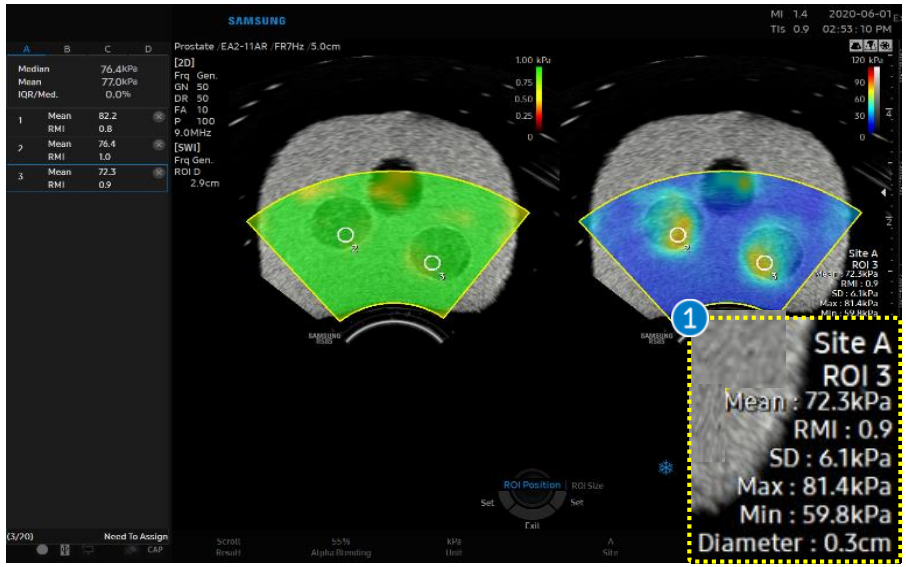
| ① Elasticity Measure | Tap the [Elasticity Measure]button.<br>▪ You can adjust ROI size using change key.<br>▪ Press the [Set] button to save the value.<br>▪ When moving the trackball, it copies additional ROI for next measurement. |
| ② Elasticity Ratio Measure | Tap the [Elasticity Ratio Measure] button.<br>▪ Place the first quantification ROI on the **area of interest** within the elasticity ROI and press the [Set] button.<br>▪ Place the second quantification ROI on the **reference** are within the elasticity ROI and press the [Set] button. |
| ③ Meas. Type | Select the measurement of ROI type between **Circle** or **Trace** type. |

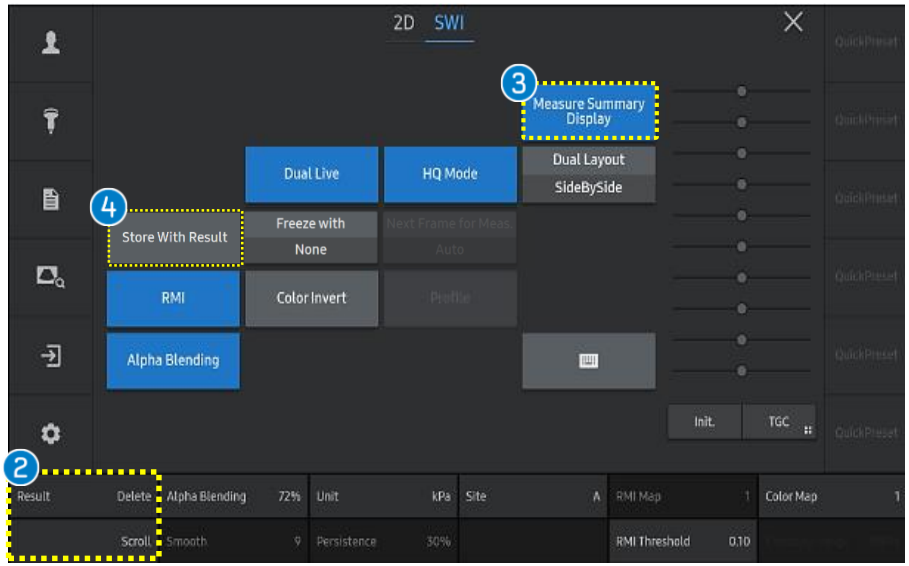
**Notes**

If Next Frame for Meas. is used, the location of the measurement ROI to the next frame can be set in the Setup page.

**Setup (Imaging ▶ Features ▶ S-Shearwave Imaging ▶ Next Measurement Cursor Display Position ▶* ***Center of ROI / Keep Last Position****)*

# 3. The results

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| ① Result box | The stiffness results within quantification ROI are displayed. |

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| **Mean** | Mean elasticity value in ROI |
| **SD** | Standard deviation in ROI |
| **Min** | Minimum elasticity value in ROI |
| **Max** | Maximum elasticity value in ROI |
| **Diameter** | Diameter of ROI box |

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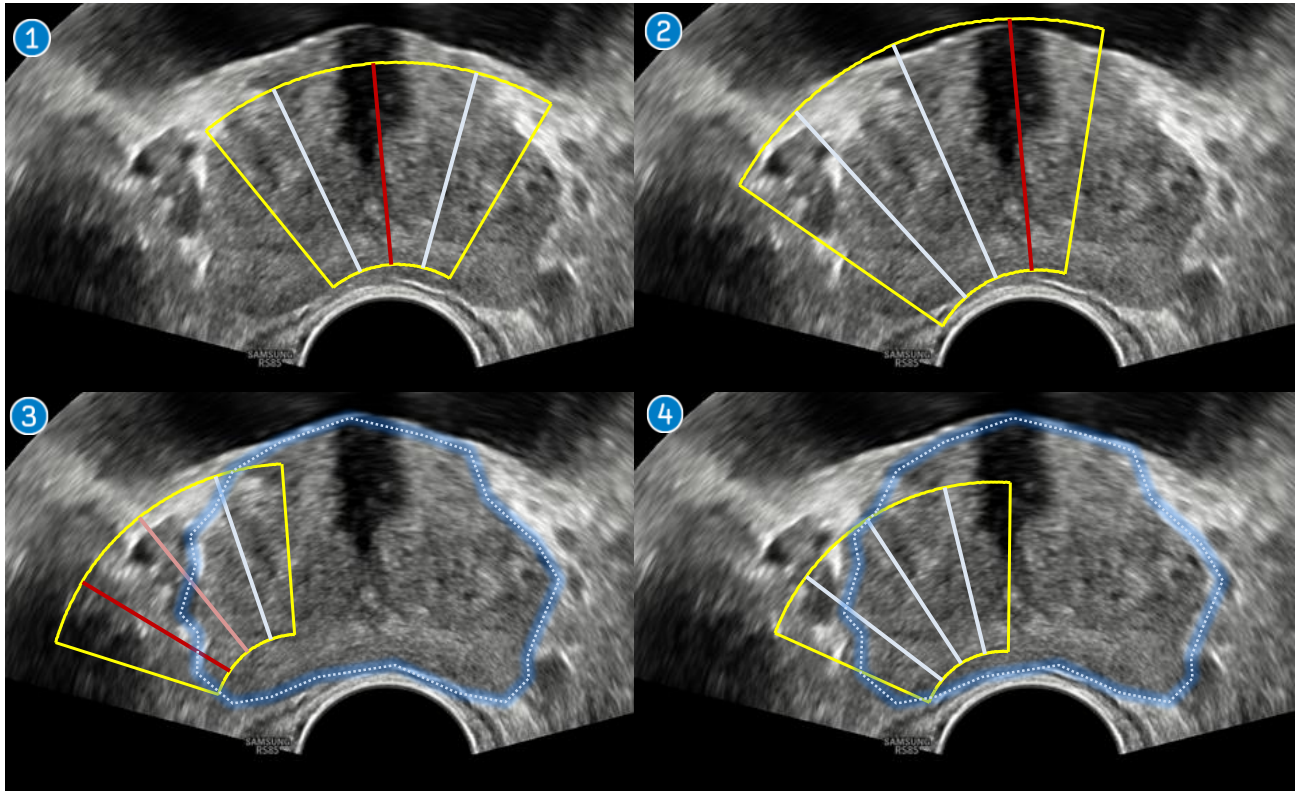
| ② Stiffness Result | ▪ Available to view the measured results.<br>▪ It can scroll the result using [Scroll] button. If you want to delete the result individually by pressing the [Delete] button or selecting ⊗ icon. |
| ③ Measure Summary Display | Available to select the measure summary (Median, Mean, IQR, IQR/Med value) to be displayed on the result or not. |
| ④ Store with Result | Saves the image including the measurement results area. |

# Tips and Tricks

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| Scan & ROI position | 1 , 2 If the push line is located on the urethra, it is difficult to get a good result value. (the red lines)<br>Because shear wave cannot pass through a liquid.<br>3 When part of the ROI is located outside the prostate as 3 in the figure above, It is difficult to expect a good result. This is because push lines located outside the prostate cannot properly induce shear waves. (the red, pink line)<br>4 is the best case because the push line is not located on the urethra and ROI is well placed. |

- The features, options may not be commercially available in some countries.
- Sales and shipments are effective only after the approval by the regulatory affairs. Please contact your local sales representative for further details.
- This Quick guide does not include all of the details of instruction, fore more detail, please refer to RS85 User Manual.
- Do not distribute this document to customers unless relevant regulatory and legal affairs officers approve such distribution.
- This User Quick Guide is based on RS85 V2.08.01
- Disclaimer: Some Images in this content were obtained from other system.