SAMSUNG

HeartAssist™

V series **Quick Guide**
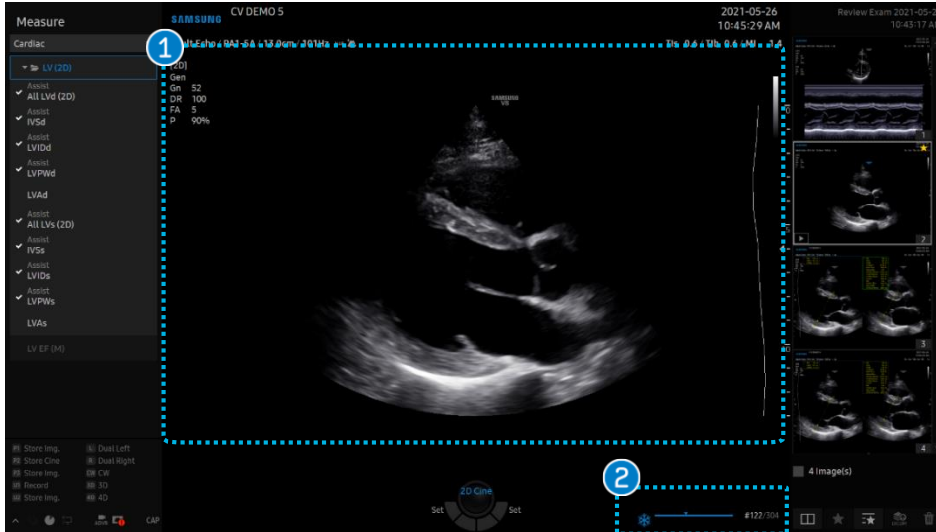
HeartAssist™

1. Probe and Preset

| PA1-5A | EA2-11AR | LA2-14A | CA1-7S |

Default   User

Abdomen	Pediatric	Vascular	Cardiac	Thoracic
Abdomen	Ped Abd	Carotid	**Adult Echo**	Lung
Renal	Neo Head	Arterial	Ped Echo	
Bowel	Ped Hip	Venous	Aortic Arch	
Aorta				
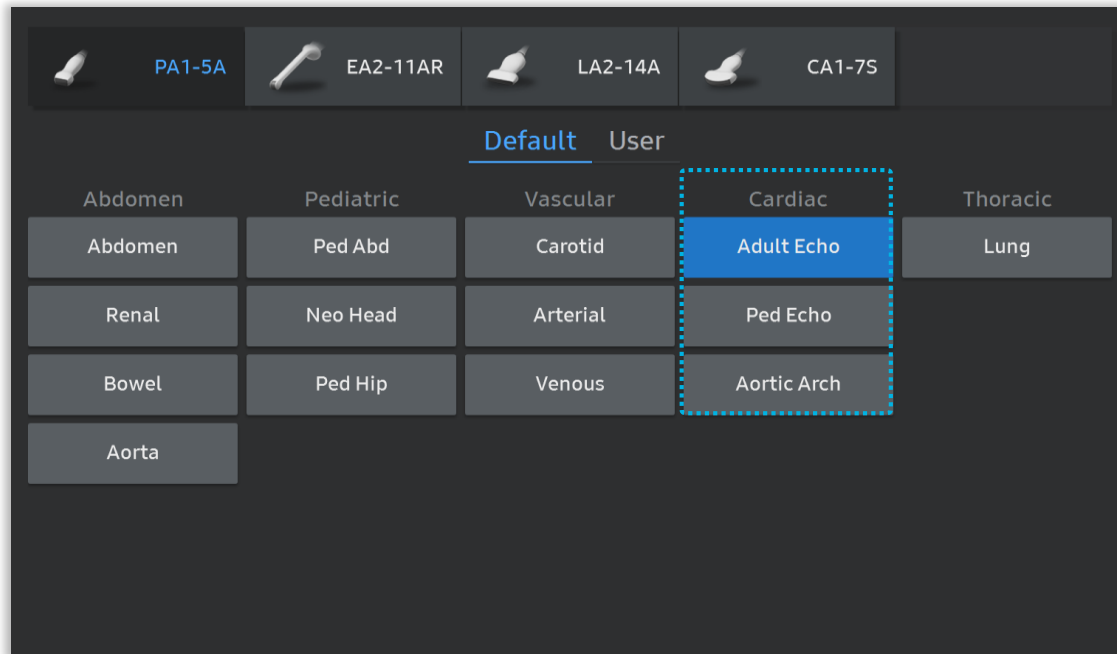
※ Available application and preset

Probe	PA1-5A, PA3-8B
Application	Cardiac
Preset	Adult Echo, Ped Echo, Aortic Arch

# 2-1. [B mode] Single Layout – Workflow

❶ Image scan	Acquire the Image or Cine data to start HeartAssist™.
❷ Find the Frame	Find the frame for measuring by using the trackball.
❸ Auto Measure	Click the [Auto measure] button on the touch screen or [Measurement] button on the control panel.
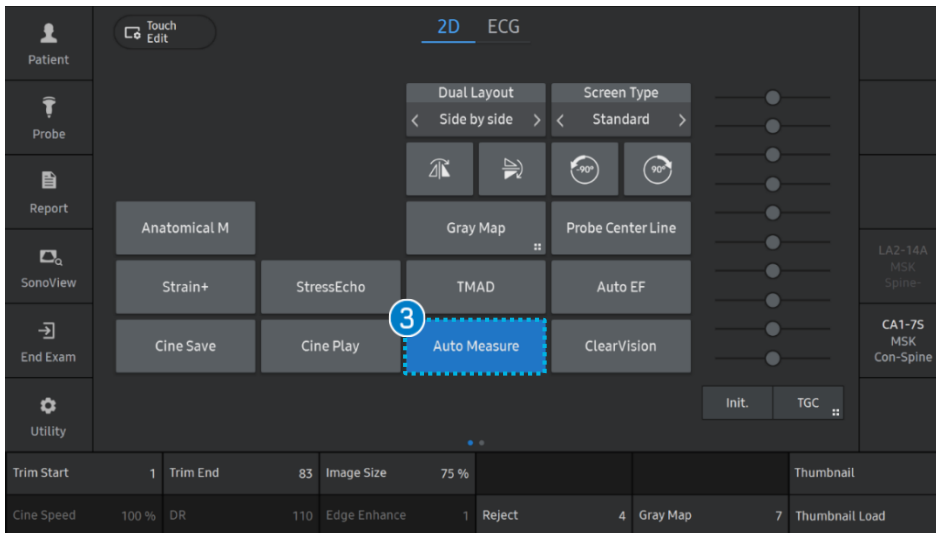
★Tips

If you check the box " Activate Assist with Measurement key pressed " in setup page, activate Heart Assist function using measurement button.
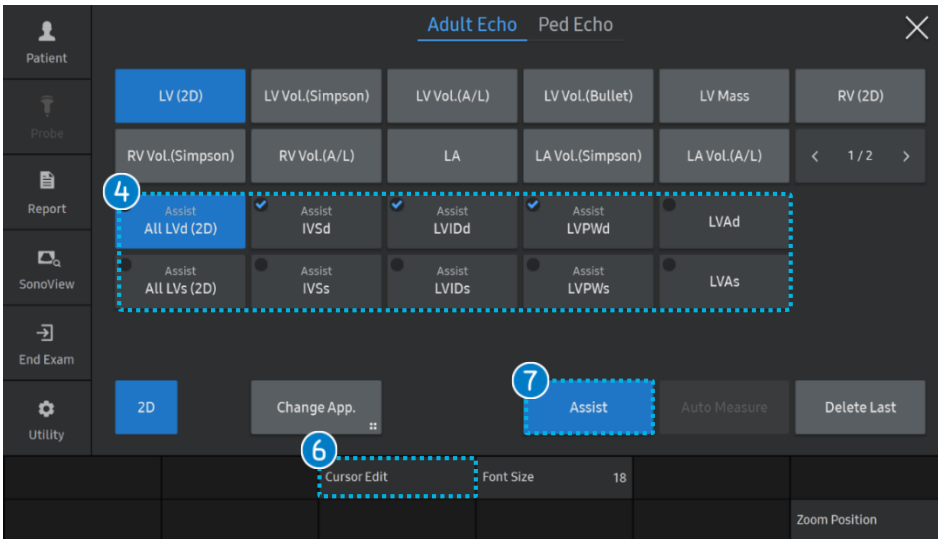
HeartAssist™ — 2-2. [B mode] Single Layout - Workflow
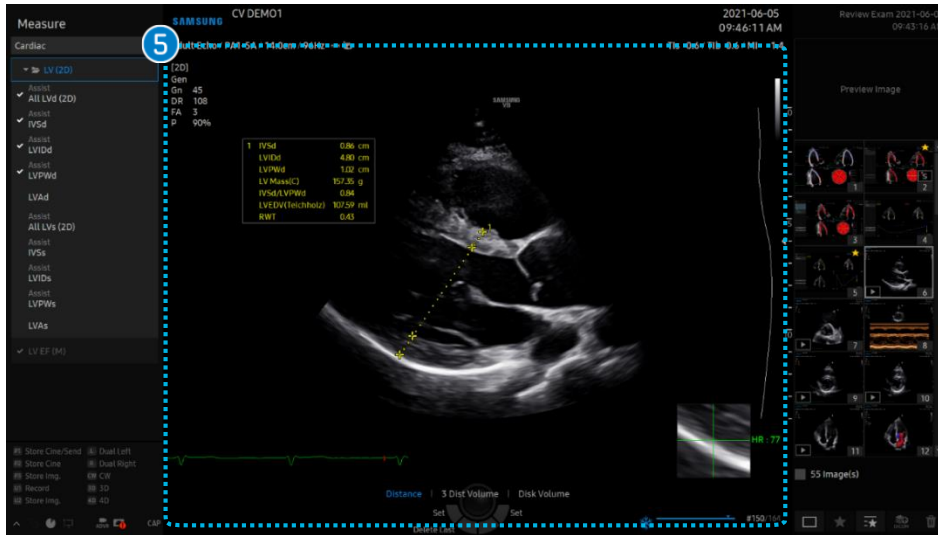
| ❹ Measure Item	Click the measure item that you want.
❺ Check the measure results	Check the image that you scanned, and the measure results that system automatically provided.
❻ Cursor Edit	You can edit the measure cursor. And also it's available to edit the cursor by using change button.
❼ Assist	If you want to measure manually, inactivate the [Assist] button.

★Tips

- Above the word of measure item 'Assist' means the HeartAssist™ function is supported.
- Note) The activate/inactivate status will be last remain.

2-3. [B mode] Single Layout - Setup
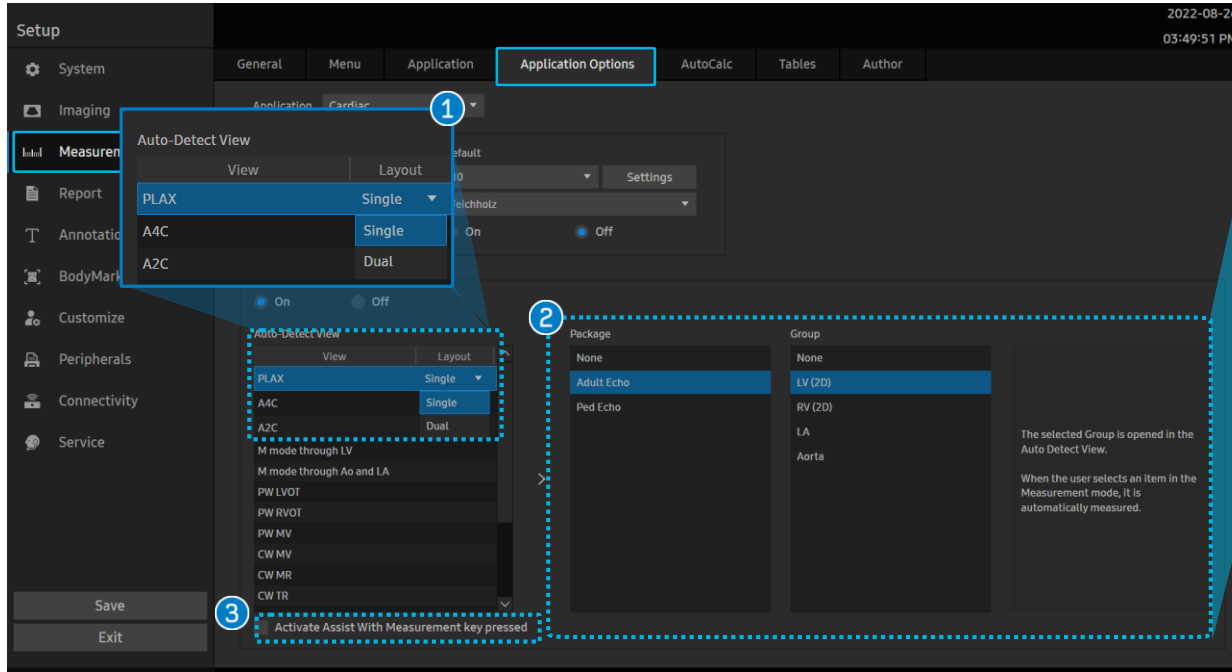
* In PLAX view

The selected Group is opened in the Auto Detect View.

When the user selects an item in the Measurement mode, it is automatically measured.

|		
❶	**Auto-Detect View**	Select the single layout option. *(Setup > Measurement > Application Options > Cardiac)*
❷	**Measure item** **(B mode _ Single)**	Select to set both measure package and measure group. You can select the measure group that initially want to use.
❸	**Activate Assist with Measurement key pressed**	If you check the box, you can use the HeartAssist™ function by measurement button on control panel.

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3-1. [B mode] Dual Layout - Workflow
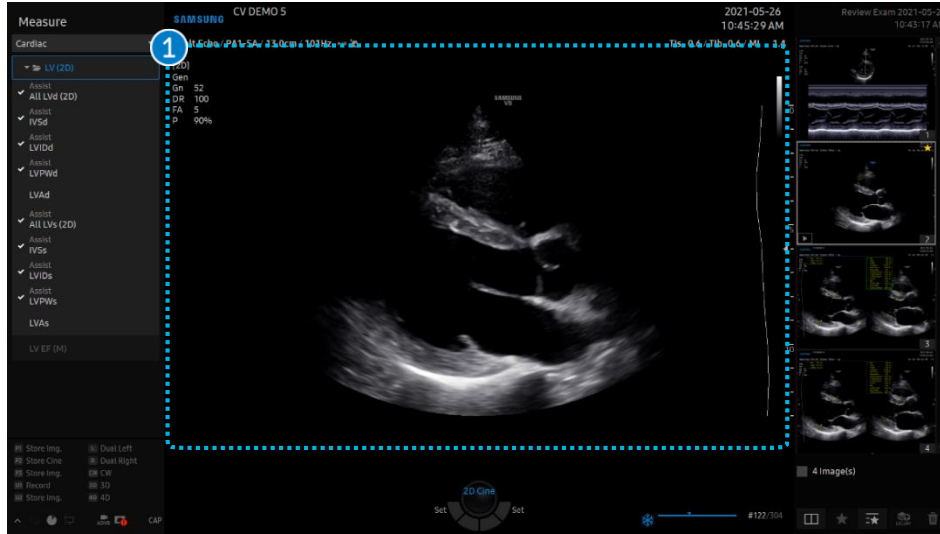
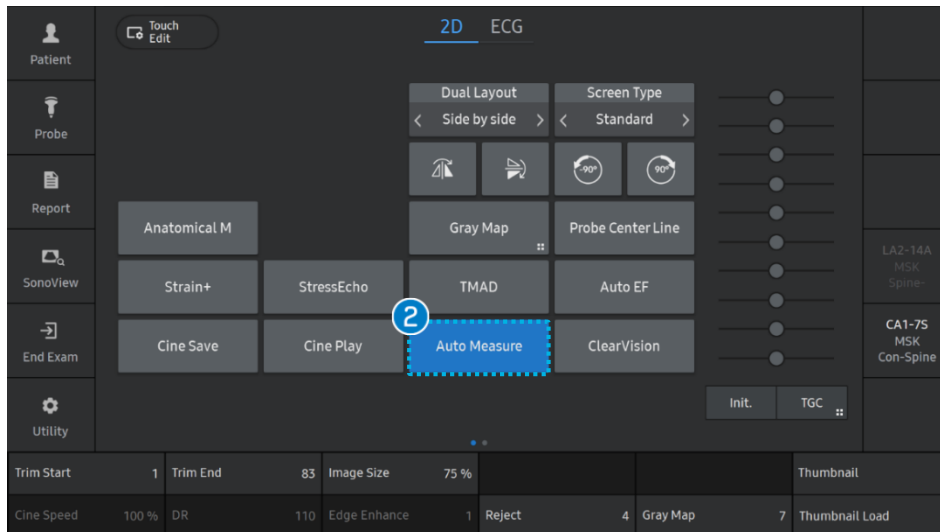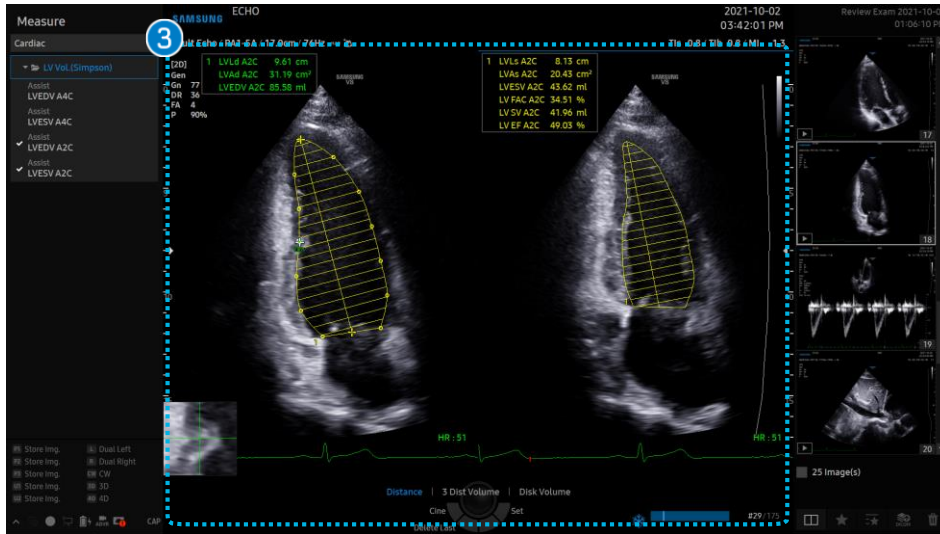|	
❶ Image scan	Acquire the Image or Cine data to start HeartAssist™.
❷ Auto measure	Click the [Auto measure] button on the touch screen or [Measurement] button on the control panel.

★Tips

If you check the box " Activate Assist with Measurement key pressed " in setup page, activate Heart Assist function using measurement button.
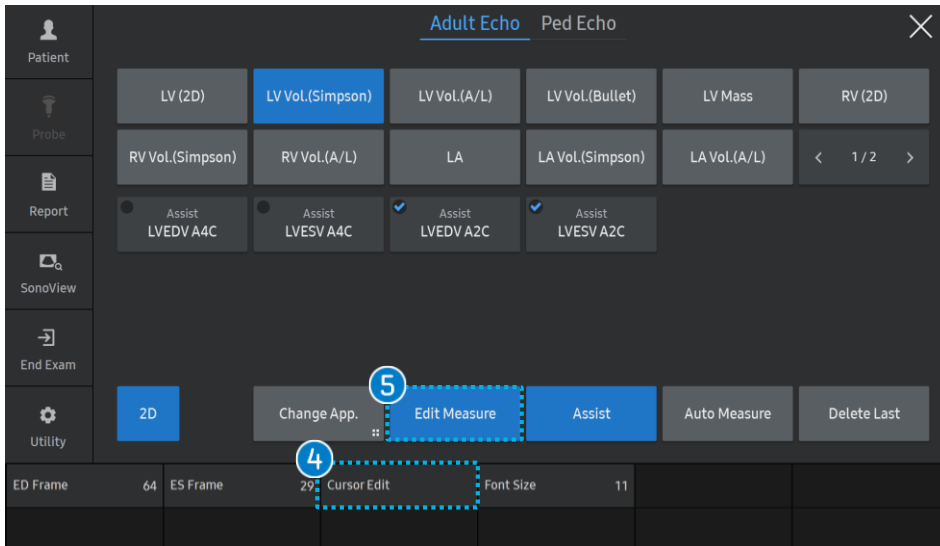
3-2. [B mode] Dual Layout - Workflow

③ Dual Layout

System automatically provides ED and ES frame in Dual Layout.
(Left: End Diastole, Right: End Systole)
Check the Result: System automatically provides the measure results.

④ Cursor Edit

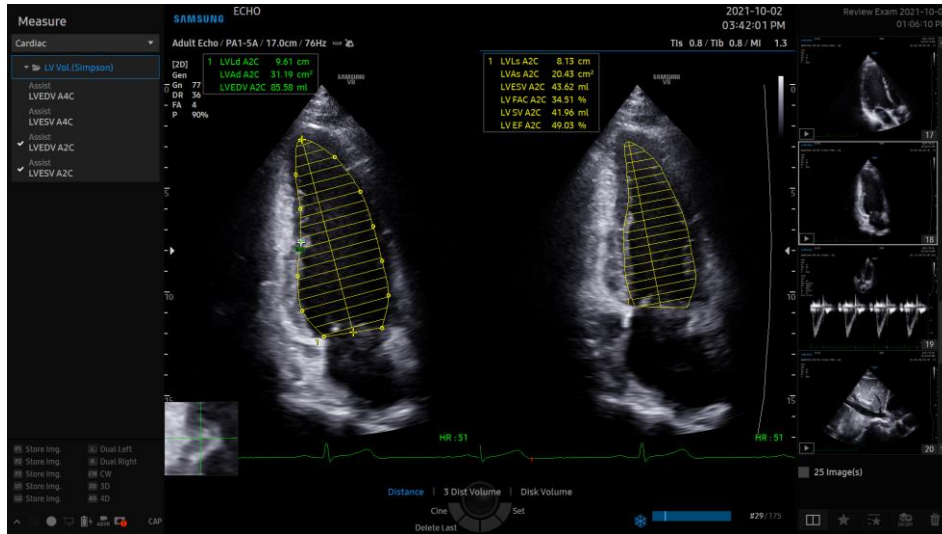You can edit the measure cursor. And also it's available to edit the cursor by using change button.

⑤ Edit Measure

In Simpson's method, [Edit Measure] can be available. When a cursor is close to the point on the border, the point is activated and editable.

Edit Measure (Endocardial boarder)
Change key (Length)
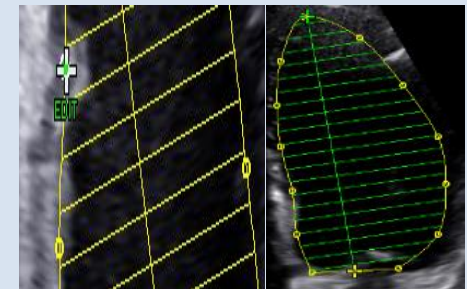
3-3. [B mode] Dual Layout - Workflow

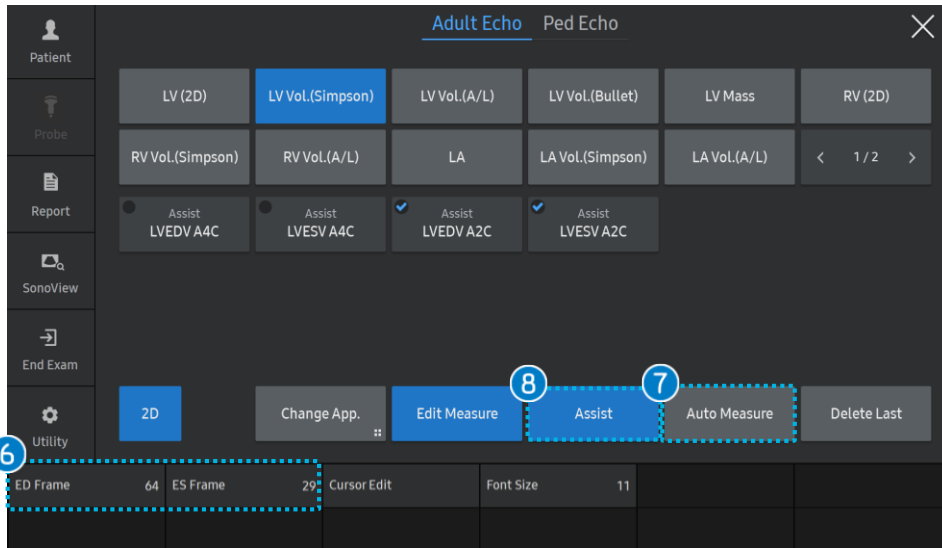|		
6	Edit the Frame (ED/ES)	You can edit the ED/ES Frame by using the toggle key to find more appropriate frame.
7	Auto measure	Click the [Auto measure] button after change the frame to measure.
8	Assist	If you want to measure manually, inactivate the [Assist] button.

★Tips

- The activate/inactivate status will be last remain.
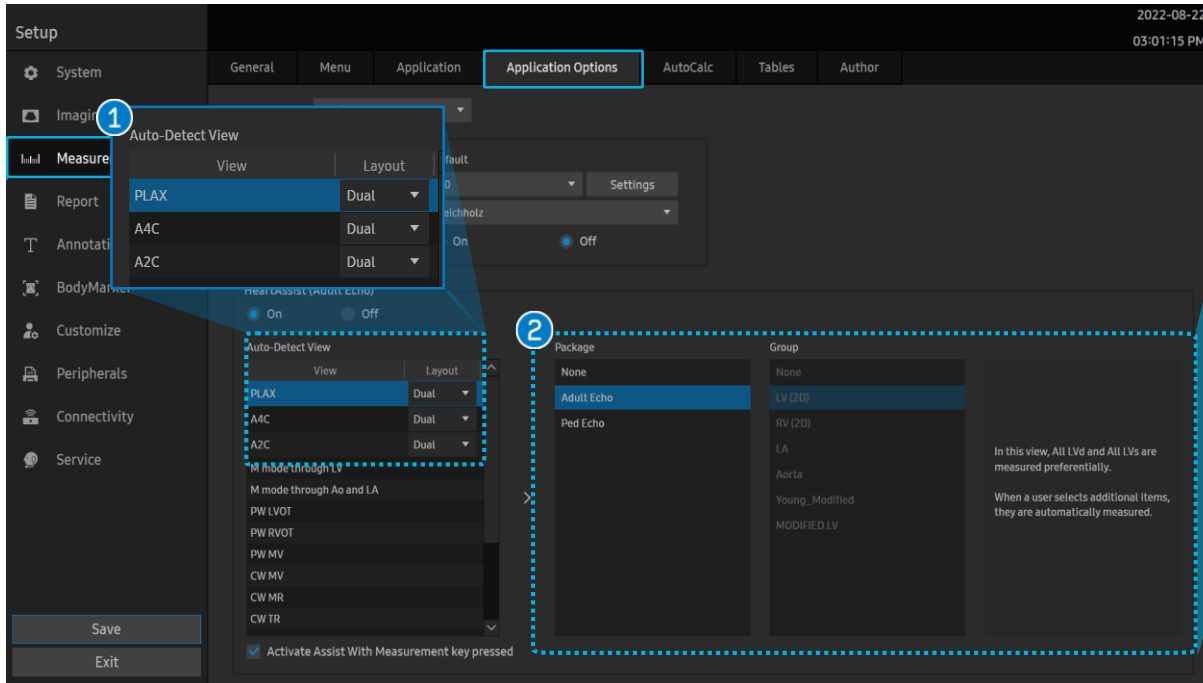- Available to measure Up/Down inverted 4CH/2CH images for Pediatric Echo.

[AP 4CH ED]   [AP 4CH ES]

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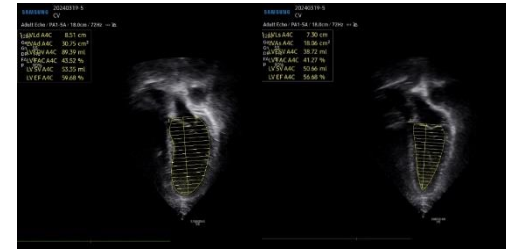
3-4. [B mode] Dual Layout - Setup

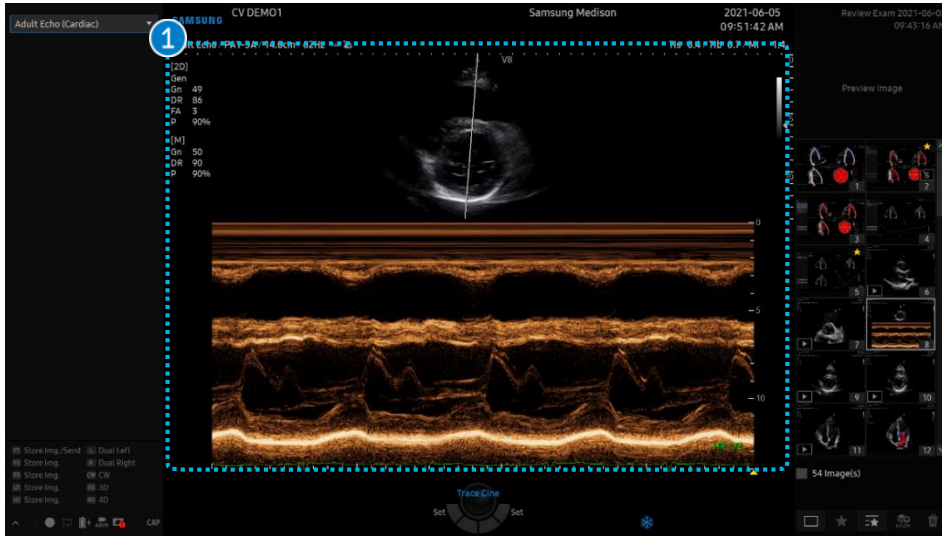|	
❶ Auto-Detect View	Select the Dual layout option. *(Setup > Measurement > Application Options > Cardiac)*
❷ Measure item (B mode _ Dual)	It's only available to set measure package, because the system automatically provides the ED frame and ES frame. And check the default measure item for each view.

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4-1. [M mode] - Workflow
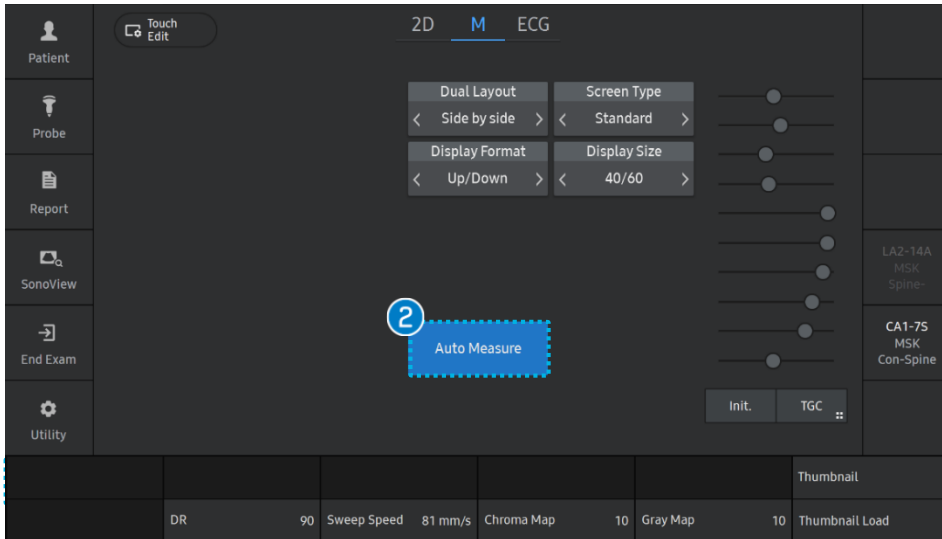

❶ Image scan and Save	Acquire the M-mode data to perform HeartAssist™.
❷ Auto measure	Click the [Auto measure] button on the touch screen or [Measurement] button on the control panel.

★Tips

If you check the box " Activate Assist with Measurement key pressed " in setup page, activate Heart Assist function using measurement button.

4-2. [M mode] - Workflow

❸ Measure Result	The system automatically provides the measure results.	
❹ Cursor Edit	You can edit the measure cursor. And also it's available to edit the cursor by using change button.	
❺ Result Method	Single	You can select desired one cycle.
	Avg.	It provides an average value from selected multiple cycles.
❻ Cycle Edit	You can change the cycle by rotating toggle key.	
	Select/ Unselect	When using [Avg.] of Result Method, [Select/Unselect] is activate. You can select or unselect cycle(s) for desired cycle(s) by rotating and pressing toggle key.

★Tips

If you unselect the cycle(s), unselected cycle(s) is(are) not included as a result.

5-1. [PW/CW mode] - Workflow

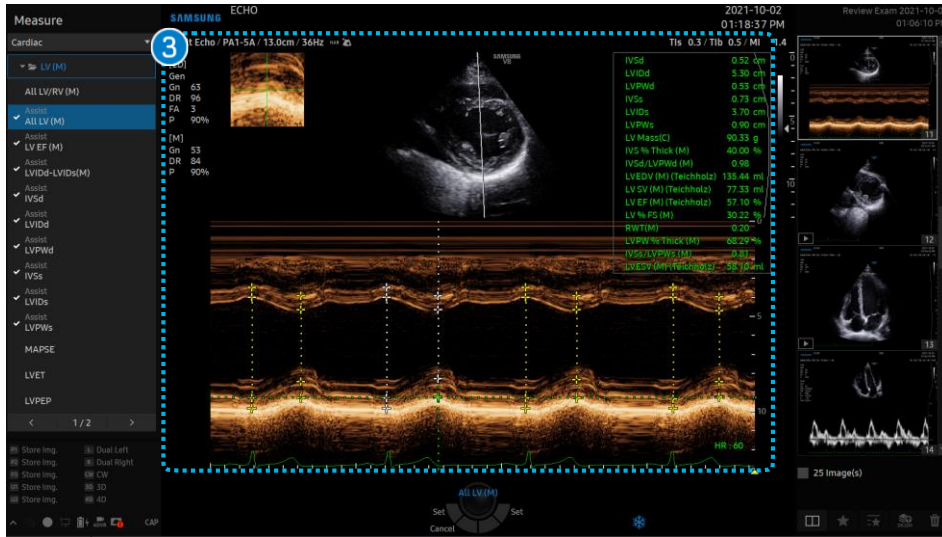| ❶ Image scan and Save	Acquire the PW or CW data to perform HeartAssist™.
❷ Auto measure	Click the [Auto measure] button on the touch screen or [Measurement] button on the control panel.

★Tips

If you check the box " Activate Assist with Measurement key pressed " in setup page, activate Heart Assist function using measurement button.

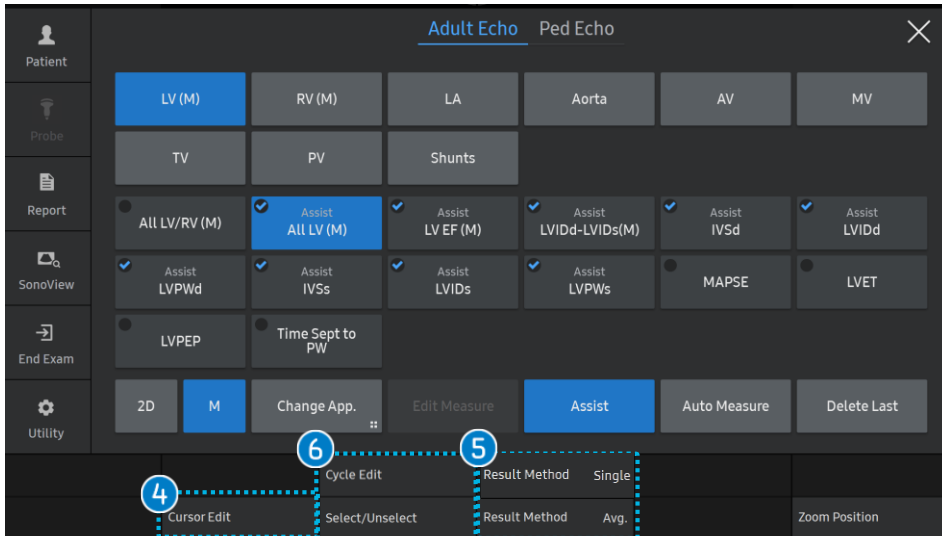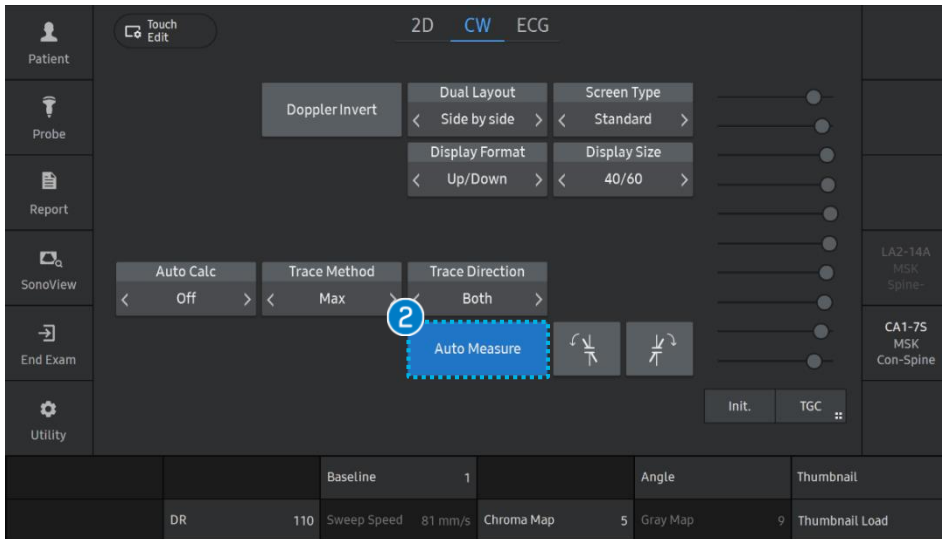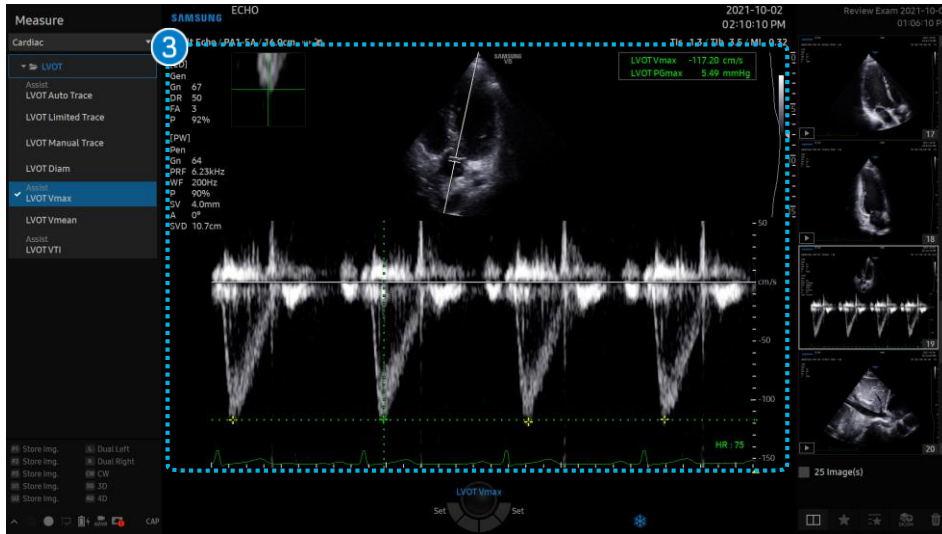| ❸ Measure Result		The system automatically provides the measure results.
❹ Undo/Redo		Easily undo or redo the measure line that system automatically provided.
❺ Result Method	Single	You can select desired one cycle.
	Avg.	It provides an average value from selected multiple cycles.
❻ Cycle Edit		You can change the cycle by rotating toggle key.
	Select/ Unselect	When using [Avg.] of Result Method, [Select/Unselect] is activate. You can select or unselect cycle(s) for desired cycle(s) by rotating and pressing toggle key.

★Tips

If you unselect the cycle(s), unselected cycle(s) is(are) not included as a result.

5-3. [M & CW/PW mode] - Setup
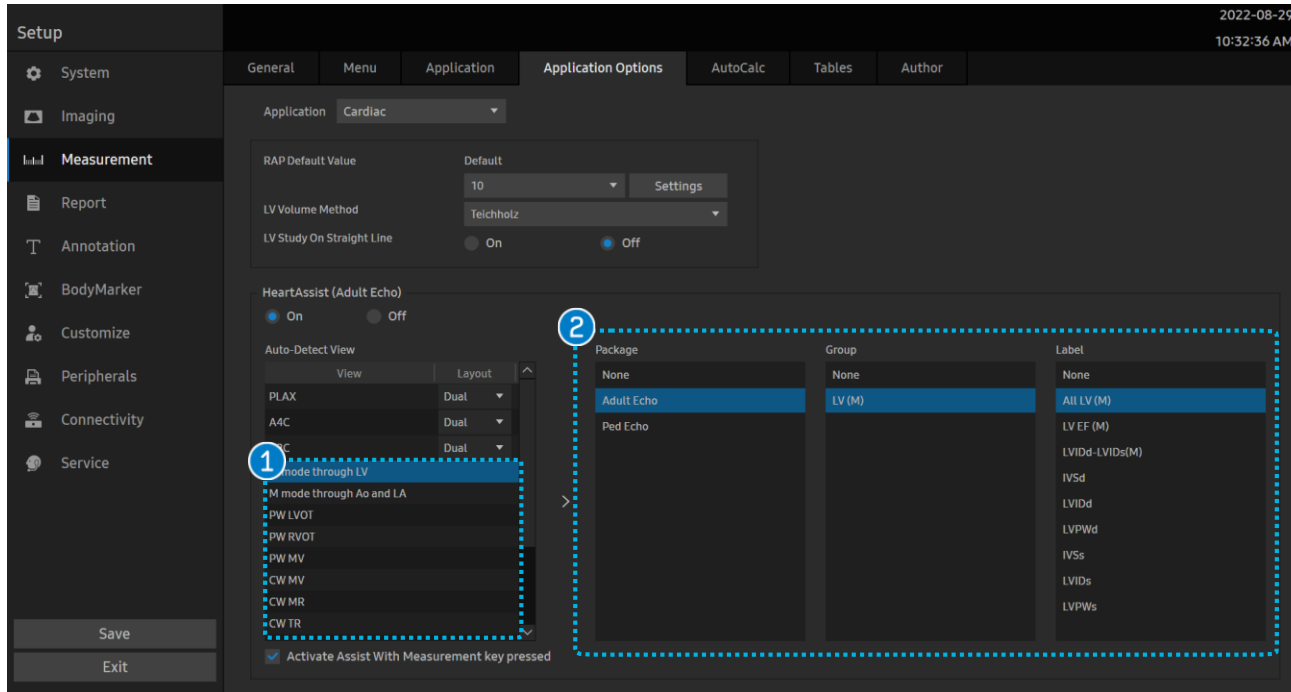
❶ Auto-Detect View	Select the auto detect view for each mode. (e.g. M mode, PW, CW) *(Setup > Measurement > Application Options > Cardiac)*
❷ Measure item	Select the measure package, group and the label.

Appendix.

Supported Views and Measure Items

Mode	View		Measure Item
B-Mode	PLAX	ED	All LVd (2D) IVSd LVIDd LVPWd RVIDd Ao Diam (2D)
		ES	All LVs (2D) IVSs LVIDs LVPWs LA Diam(2D)
	A4C	ED	LVEDV A4C LAEDV A4C
		ES	LVESV A4C LAESV A4C
	A2C	ED	LVEDV A2C LAEDV A2C
		ES	LVESV A2C LAESV A2C

Mode	View		Measure Item
M-Mode	LA/AO		Ao Diam (M) LA Diam(M) LA/AO(M)
	LV		ALL LV(M) LV EF(M) LVIDd-LVIDs(M) IVSd LVIDd LVPWd IVSs LVIDs LVPWs
PW	MV Inflow		MV E-DT-A MV Peak E MV Peak A MV DecT
	LVOT		LVOT Auto Trace LVOT Vmax LVOT VTI
	RVOT		RVOT Auto Trace RVOT Vmax RVOT VTI
TDW	MV Annulus		All LV TDI S' E' A'

Mode	View	Measure Item
CW	MV	MV Manual Trace MV Peak E MV Peak A MV DecT
	MR	MR Auto Trace MR Vmax MR VTI
	TR	TR Auto Trace TR Vmax TR VTI
	AV	AV Auto Trace AV Vmax AV VTI
	AR	AR Vmax AR PHT
	PV	PV Auto Trace PV Vmax PV VTI
	PR	PR Vmax PR End Vel.

- 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 V series 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 V series V1.05.
- Disclaimer: Some Images in this content were obtained from other system.