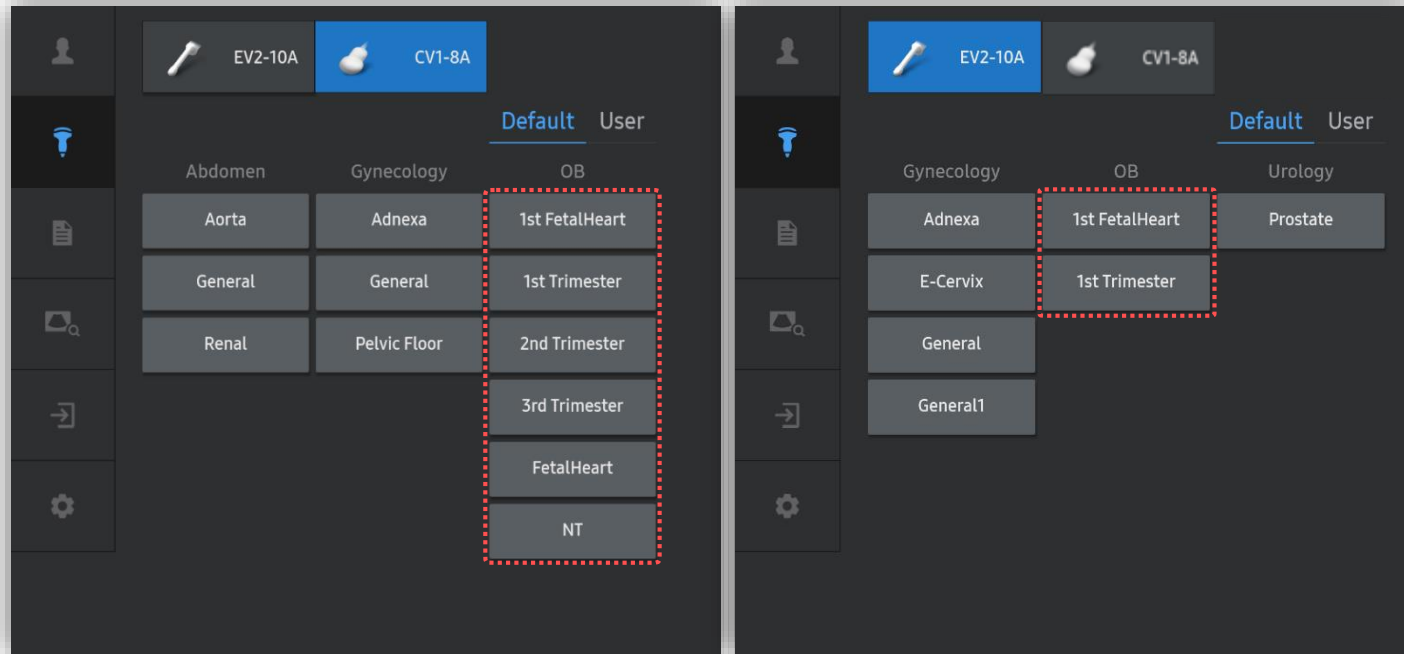


5D Heart Color™

HERA W10 Quick Guide



1. Probe and Preset



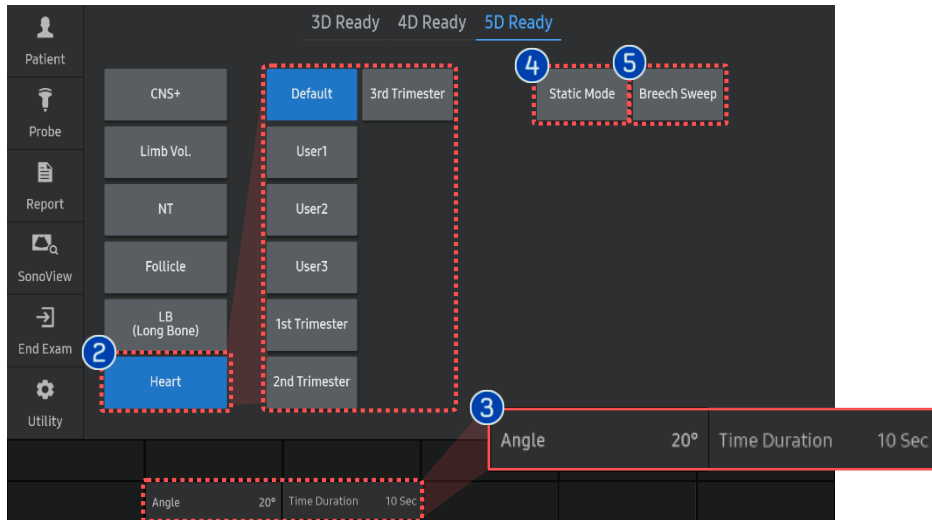
※ 5D Heart Color™ can be operated under the following conditions :

Probe	Application
CV1-8A EV2-10A EV3-10B EV2-12 (Only for W10 Elite)	All OB Application (FetalHeart preset is recommended) * To execute 5D Heart quantification, 5D Heart dongle is needed.

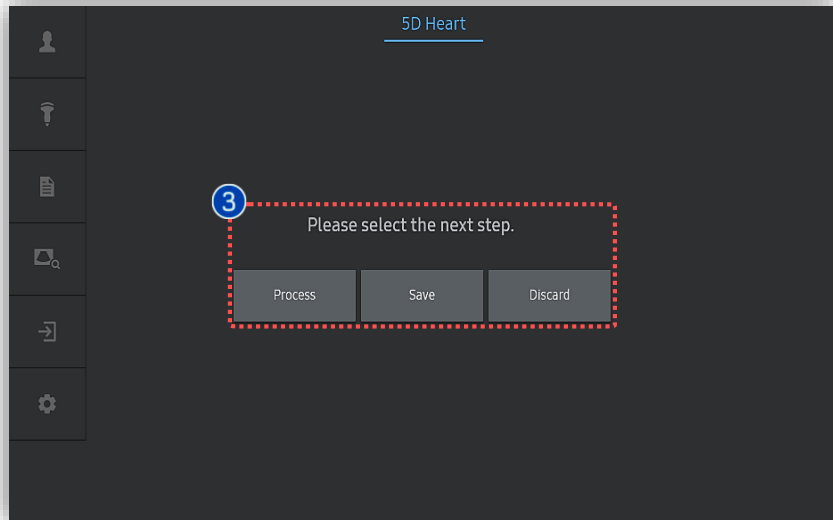
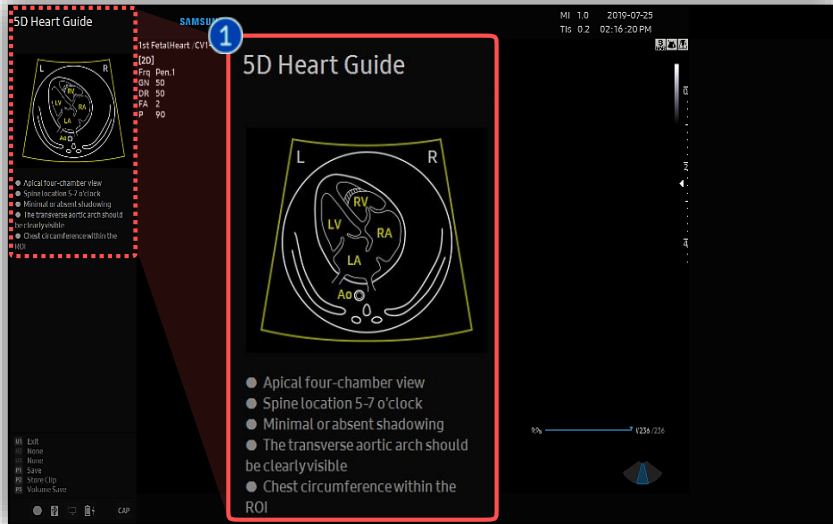
2. Activate 5D Heart™ - 5D Button



① 5D Button	Press [5D] button on the control panel.
② Heart	Tap [Heart] on the touch screen to activate 5D Heart.
③ Parameters	3D scan [Angle] and [Time Duration] are adjustable.
④ Static Mode	To take lesser acquisition time, you may use [Static Mode] which provides a static image of 5D Heart views. <i>(Static mode is available only 5D Heart. Cannot use in 5D Heart Color)</i>
⑤ Breech Sweep	For a breech baby, it allows a scan to be taken from the head to abdomen without changing the probe direction.



3. Acquire 3D Volume data



1 Image acquisition

For more accurate result, try to get the image following the guideline.

- Apical 4 chamber view
- Spine location between 5-7 o'clock
- Minimal or absent shadowing
- Transverse aortic arch should be clearly visible.
- Chest circumference within the ROI

2 Acquisition of 3D images

Press [Freeze] or [Set] on the control panel to start acquisition of 3D images.

3 5D heart Acquisition type

Select one of the 5D Heart acquisition type on the touch screen.

Process

After saving acquisition data, enter 5D Heart mode with the scanned data.

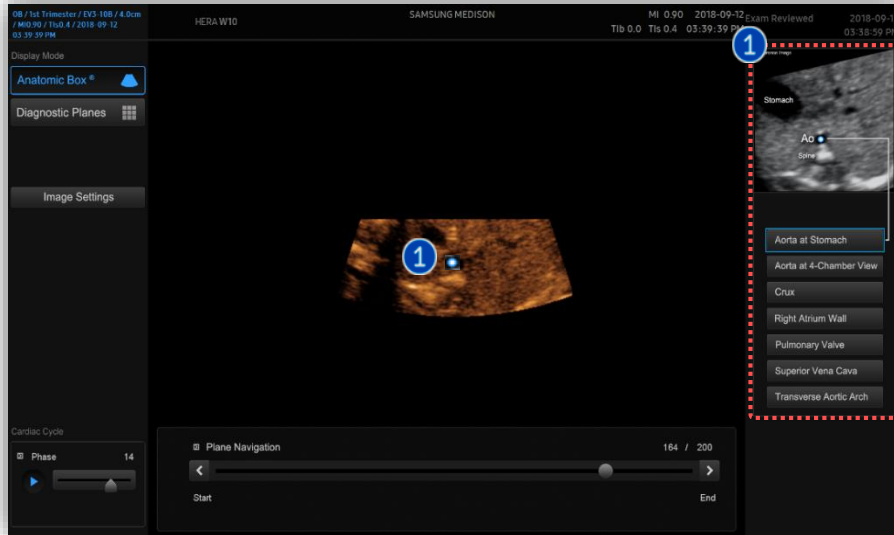
Save

Store acquisition data and go back to 3D standby mode.

Discard

Go to 3D Standby mode without saving the data if the scanned data is incomplete due to the fetus movement.

4. Specify marking points (1)

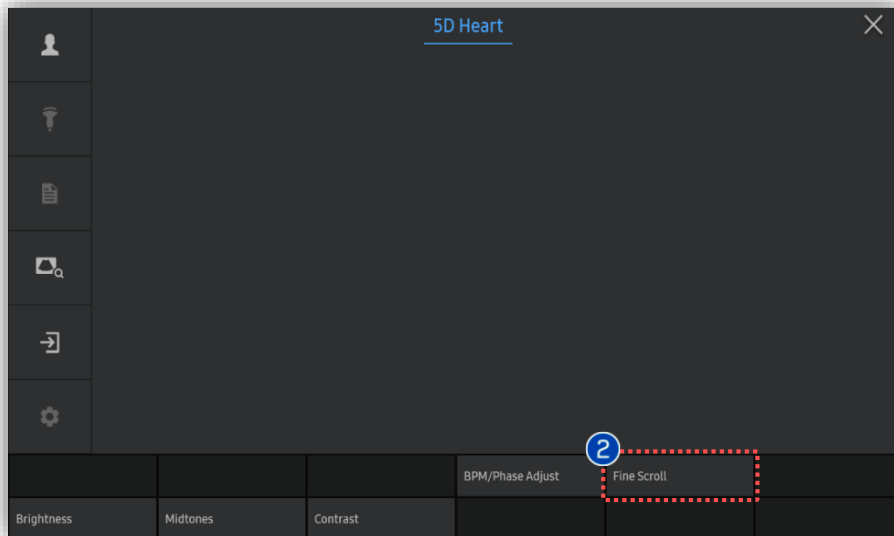


1 Mark

To get 9 standard views of fetal heart, you should select 7 landmarks. On the right side, a guide image is provided. Place the cursor on the point area and press set button and then system will automatically display next image to select the next point.

2 Fine Scroll

Scroll exact frame manually.



4. Specify marking points (2)

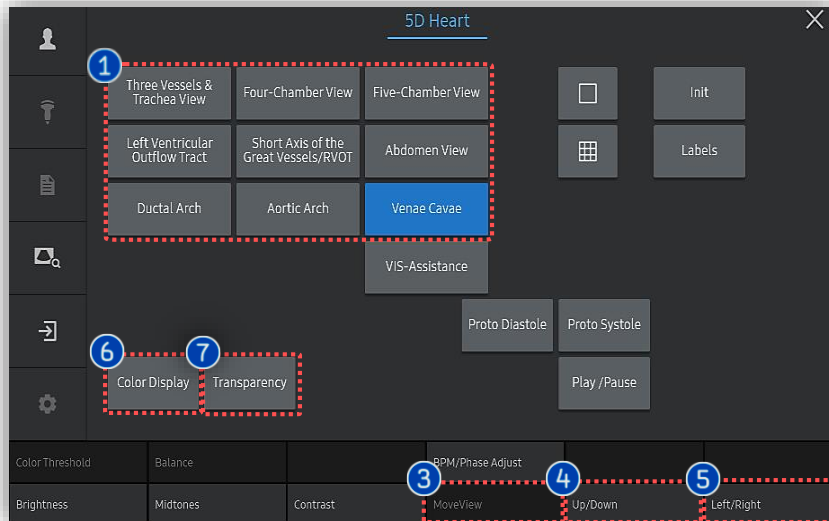
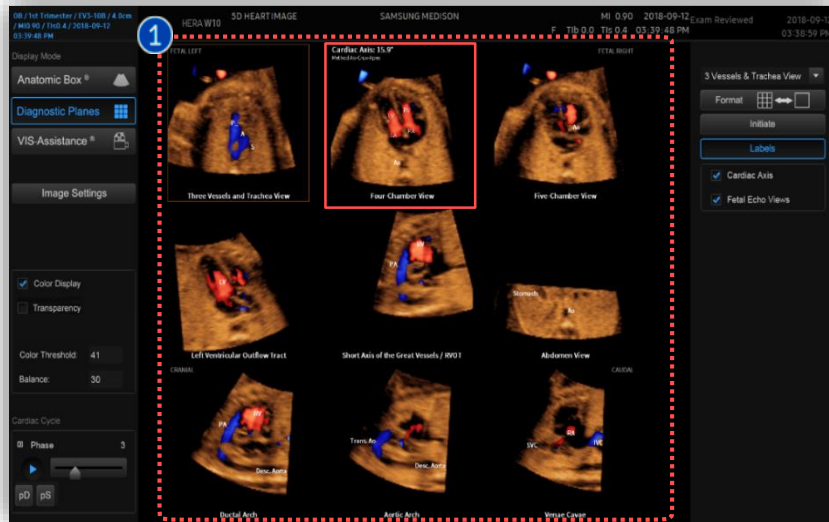


7 Points

You should specify 7 landmarks of anatomical structures to get 9 standard views of fetal heart.

- | | |
|---------------------------|--------------------------|
| ① Aorta at Stomach | ⑤ Pulmonary Valve |
| ② Aorta at 4-Chamber View | ⑥ Superior Vena Cava |
| ③ Crux | ⑦ Transverse Aortic Arch |
| ④ Right Atrium Wall | |

5. Diagnostic Planes (1)



1 View Select

Select one of the 9 standard views to rotate the image or move its reference slice.

2 Rotation

You can rotate the selected image around the X, Y and Z axis by using the [X], [Y] and [Z] dial-button on the control panel.

3 MoveView

Adjust the reference slice of the selected view.

4 Up/Down

Move all the images up and down by using the dial-button.

5 Left/Right

Move all the images left and right by using the dial-button.

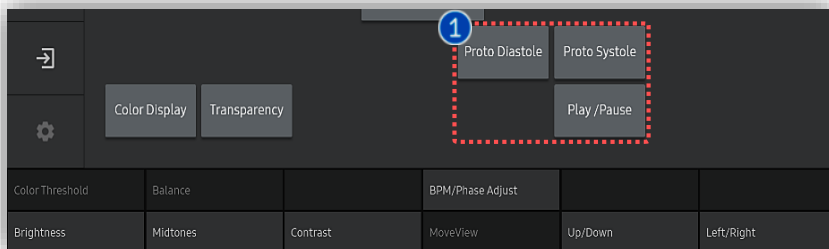
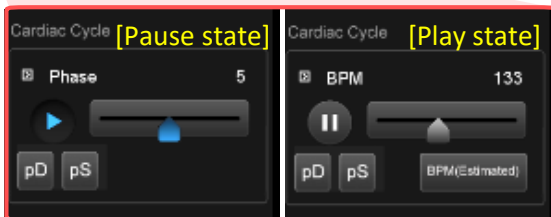
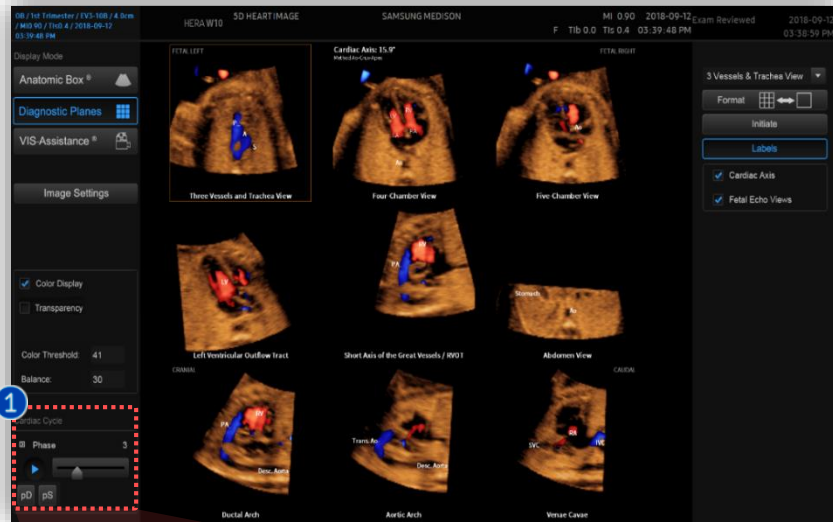
6 Color Display

When it is selected, blood flow is displayed.

8 Zoom

Magnify all the images by using [Zoom] button on the control panel.

5. Diagnostic Planes (2)




- pD/pS (Proto Diastole/ Proto Systole)

Press [pD] or [pS] button to move the cine position to diastolic phase or systolic phase.

pD	Cine Position moves to diastolic phase.
pS	Cine Position moves to systolic phase.

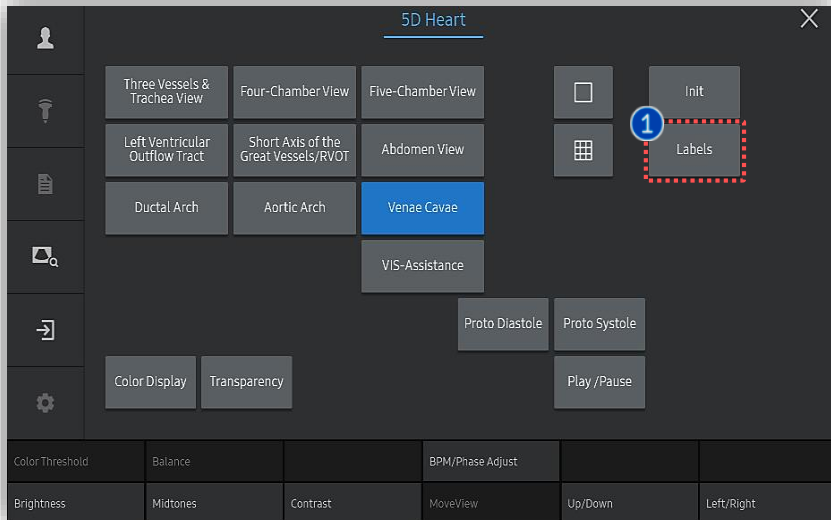
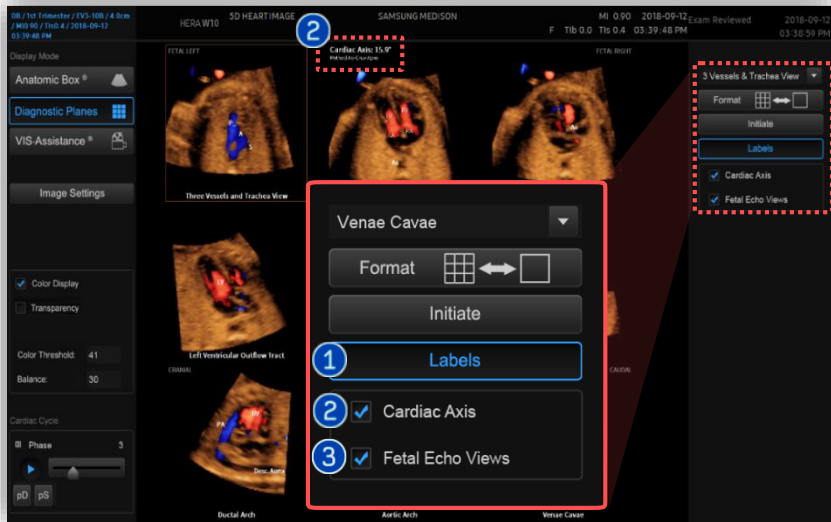
.BPM/Phase adjust

Adjust the speed of playback with [BPM] button and review the entire cardiac cycle with [Phase] button. Press  button to switch [BPM] mode to [Phase] mode.

1 Cardiac Cycle

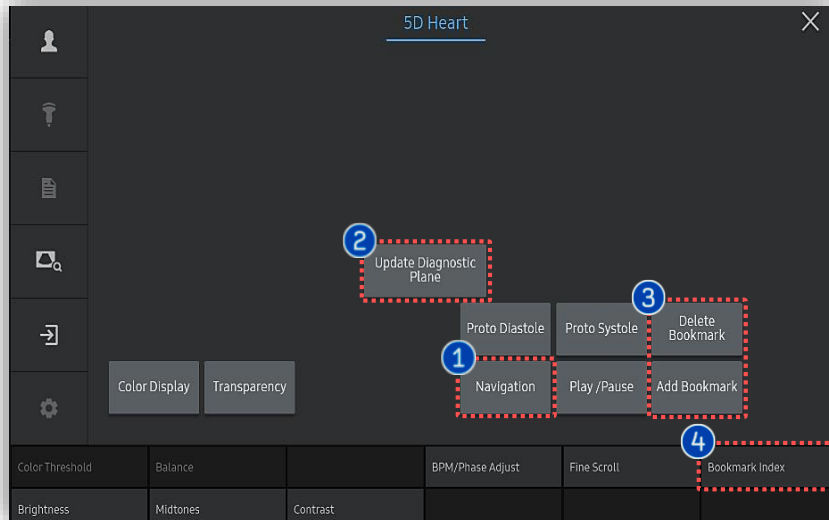
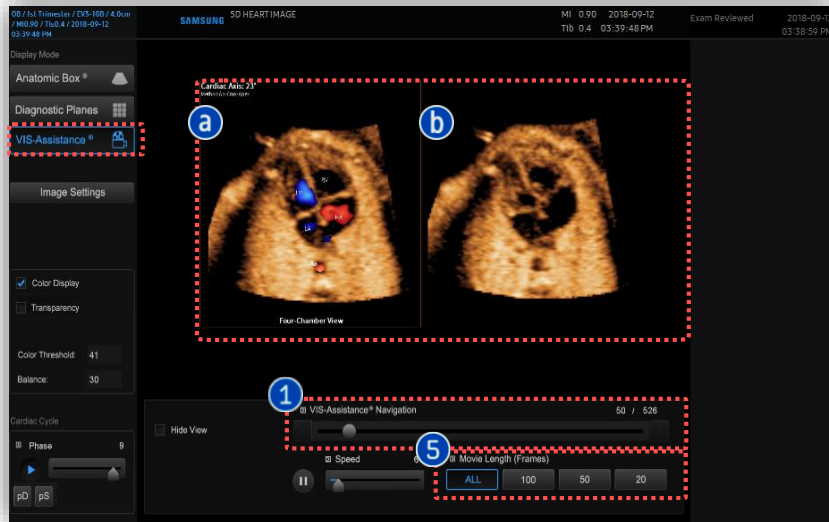
BPM	The heart rate shown is not the original cardiac frequency of the fetus. It is the cycling frequency of the display that purposely is set at 60 BPM (Beats per Minute).
Phase	It is to browse the entire cardiac cycle (Systole-Diastole).
BPM (Estimated)	The system is played a cine as estimated (Estimated) BPM by acquired STIC data.

5. Diagnostic Planes (3)



<p>1 Label</p>	<p>When it is turned 'On', the anatomical labels will be displayed at the anatomical structure.</p>
<p>2 Cardiac Axis</p>	<p>Display 'Cardiac Axis' angle of Aorta-crux and apex. Cardiac Axis: 23° Method Ao-Crux-Apex</p>
<p>3 Fetal Echo Views</p>	<p>Selecting the check box, the name of all fetal echocardiography views, Left/Right sides of the fetus and Cranial/Caudal direction will be displayed at the respective location.</p>

6. VIS-Assistance®



VIS-Assistance® (Virtual Intelligent Sonography Assistance)

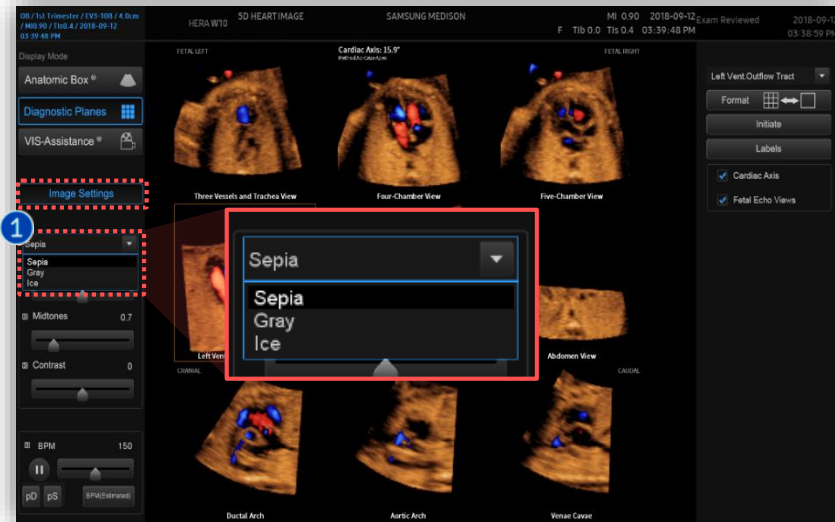
Virtual Intelligent Sonographer Assistance (VIS-Assistance®) is an operator independent tool that allows to provide more appropriate images of each of the nine cardiac Diagnostic Planes.

a Left image: Selected view among nine cardiac diagnostic plane

b Right image: Navigation views of surrounding structure

- | | |
|----------------------------------|---|
| 1 Navigation | Find more appropriate view within entire cine on the Right image(b) by using scroll button. |
| 2 Update Diagnostic Plane | Press the selected plane on the Diagnostic Planes template to replace extracted plane.
(※ This function is only available when Cine Play is paused.) |
| 3 Add/Delete Bookmark | Bookmark a plane to supplant or delete your Bookmark.
(※ This function is only available when Cine Play is paused.) |
| 4 Bookmark index | You can put the Bookmark on a view up to 4 as candidates of extracted view. |
| 5 Movie Length (Frames) | Select the number of Cine frames for movie length. |

7. Image Setting



1 Image Setting

The selected item will be applied to the image color.

2 Brightness

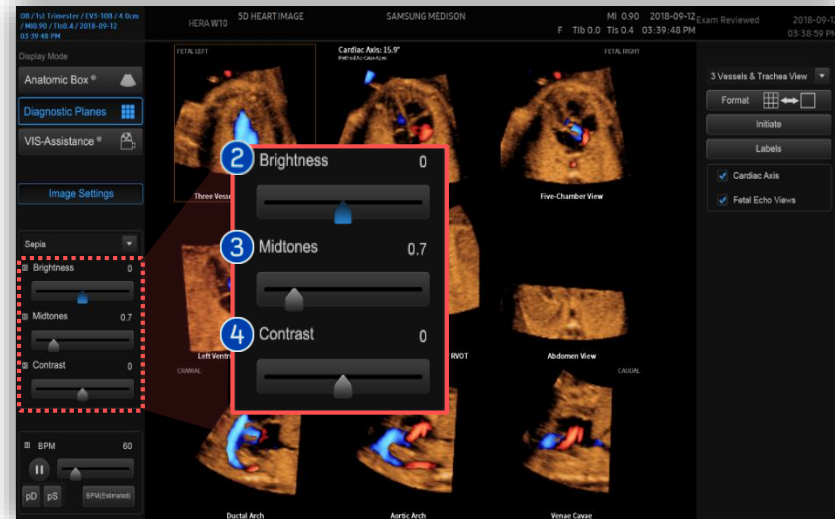
Adjust the brightness of the image.

3 Midtones

The left side of the slide indicates the most emphasized soft tissues and enhances the representation of the diaphragm.

4 Contrast

Adjust the contrast of the image.



- The features mentioned in this document may not be commercially available in all countries. Due to regulatory reasons, their future availability cannot be guaranteed.
- Do not distribute this internal document to customers unless relevant regulatory and legal affairs officers approve such distribution.
- This product is a medical device, please read the user manual carefully before use.
- This document is provided to help you understand the feature.
- This User Quick Guide is based on HERA W10 V1.03.03d
- Disclaimer: Some Images in this content were obtained from other system.

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