

# 5D CNS+™

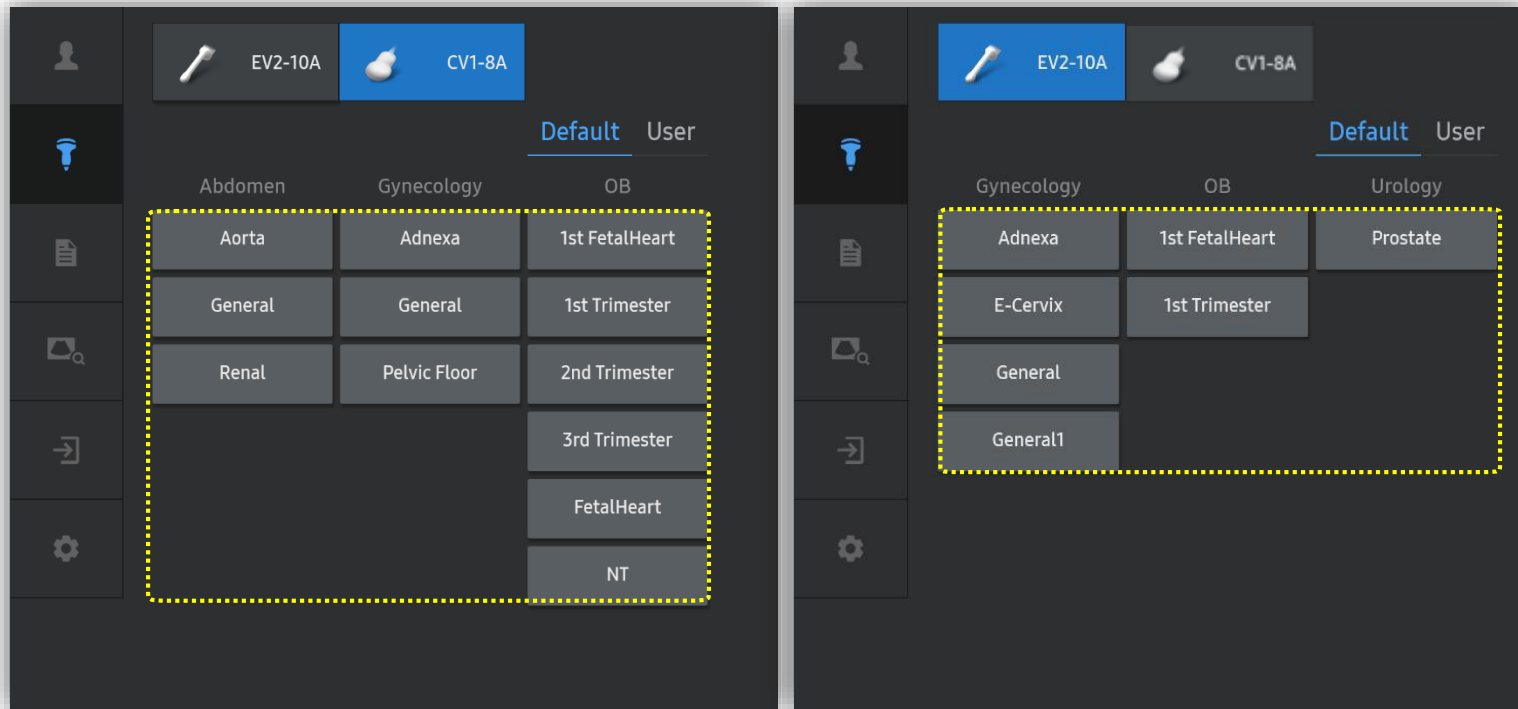
## HERA W10 User Quick Guide



⊗ This User Quick Guide is based on HERA W10 V1.03

⊗ This User Quick Guide does not include all of the details of instruction, nor does it cover every possible situation which may arise during installation, operation, maintenance or usage.

# 1. Probe and Preset



※ 5D CNS+™ can be operated under the following conditions :

Probe	Application
CV1-8A	All Application
EV2-10A	* Select proper preset regarding to fetal gestational age.

## 2. Volume acquisition



### 1 Volume acquisition

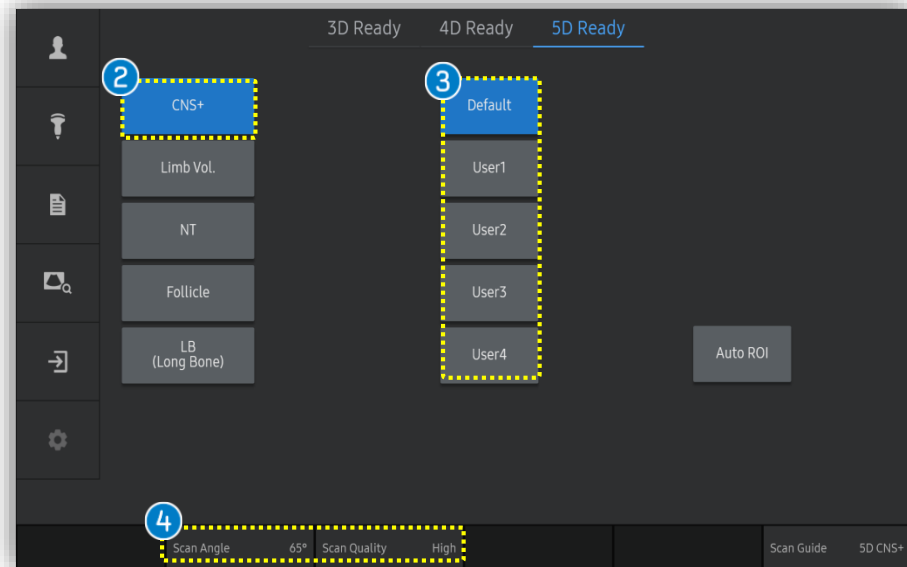
Find true trans-ventricular axial plane or trans-thalamic axial plane before volume acquisition.

# 3. Activate 5D CNS+™ by 5D Button



## 1 5D Button

Press [5D] button on the control panel.



## 2 CNS+

Tap [CNS+] to activate 5D CNS+.

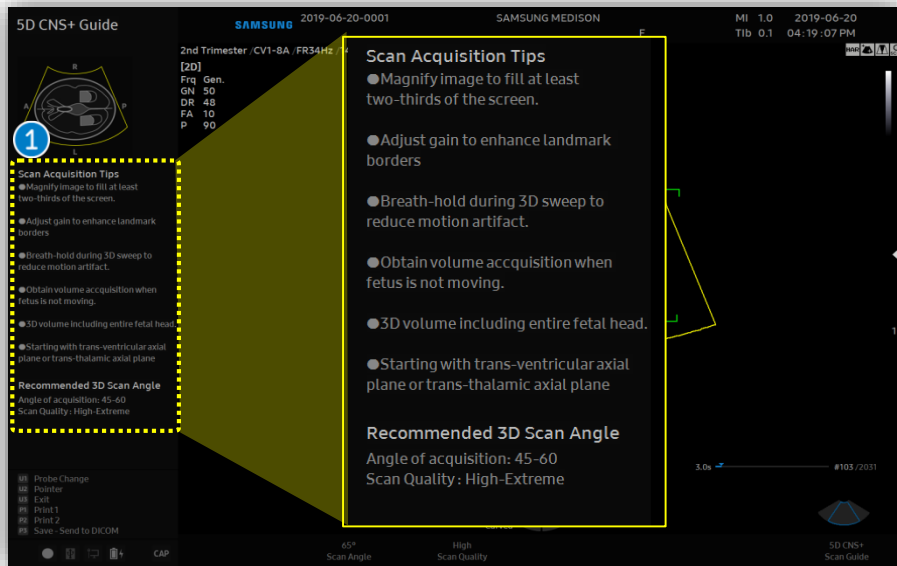
## 3 Preset

Select preferred preset between default and users. Each 5D feature could have own preset parameters.

## 4 Parameters

3D [Scan Angle] and [Scan Quality] are customizable.

# 4. Activate 5D CNS+™ by 5D Quantification SAMSUNG



Before 3D acquisition, refer to the '5D CNS+ Guide' on the left top.

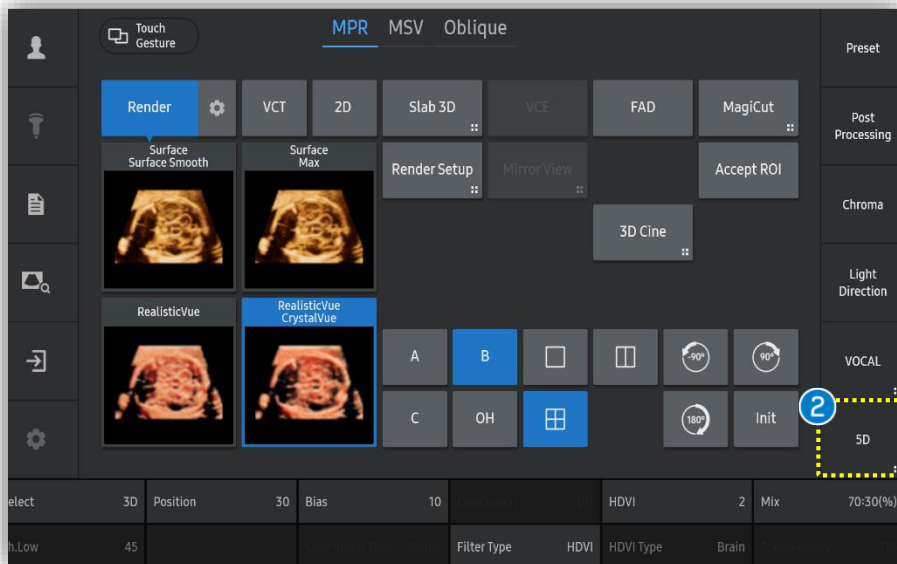
## Scan Acquisition Tips

- Magnify image to fill at least two - thirds of the screen.
- Adjust gain to enhance landmark borders
- Breath - hold during 3D sweep to reduce motion artifact.
- Obtain volume acquisition when fetus is not moving
- 3D volume including entire fetal head.
- Starting with trans- ventricular plane

## 1 Scan Acquisition Tips

## Recommended 3d scan angle

- Angle of acquisition : 45-60
- Scan quality : High- extreme



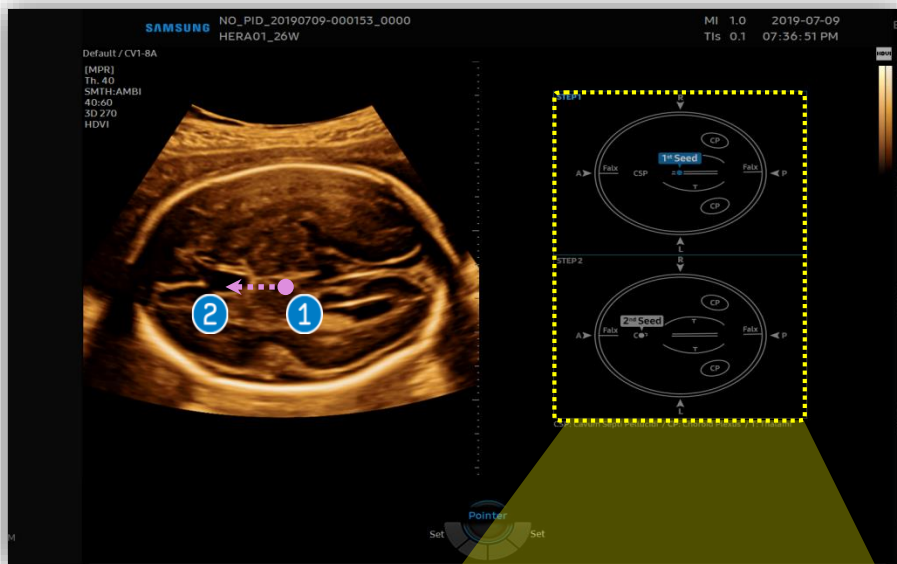
If 3D image acquisition is already done by 3D button as below



## 2 5D Quantifications

Tab to activate [5D] features and select [CNS+].

# 5. Set 1<sup>st</sup> and 2<sup>nd</sup> Seed Point



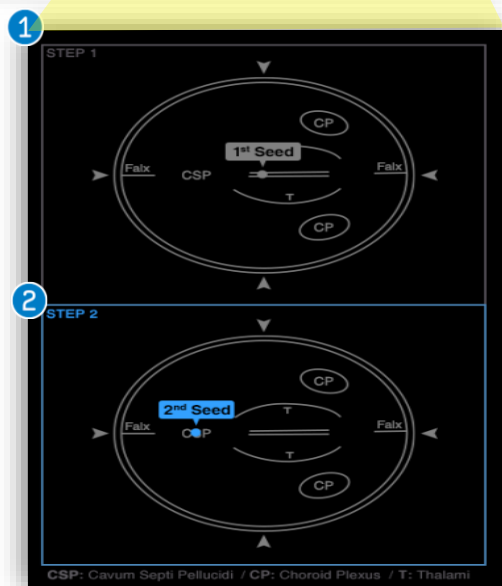
## 1 1<sup>st</sup> Seed

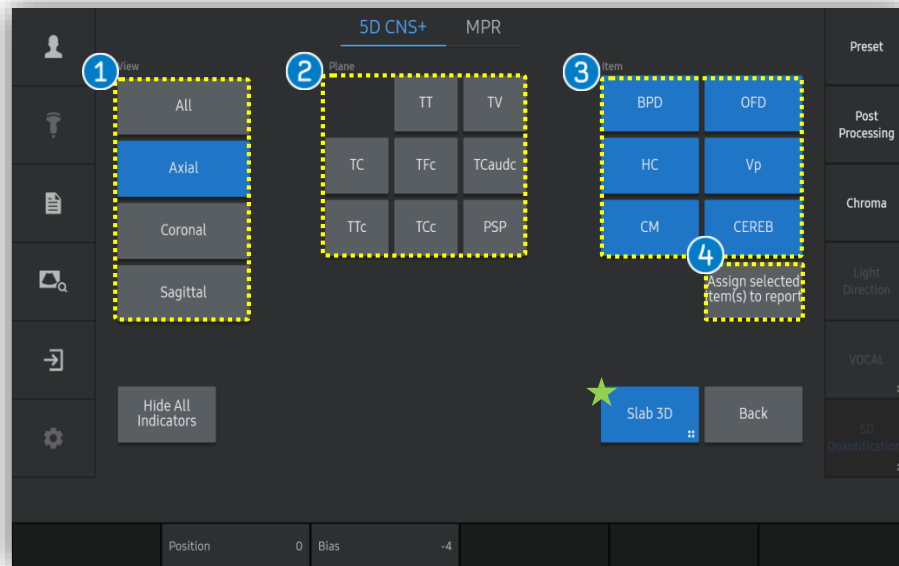
Set the 1st seed point on **Center or Middle of thalami** and drag it toward frontal side.

## 2 2<sup>nd</sup> Seed

Set the 2nd seed point on **CSP (Cavum Septum Pellucidum)**.

It must be put on the middle of CSP (anechoic area).





After positioning seed point, 9-view will be automatically displayed.

- |                                   |  |
|-----------------------------------|--|
| 1 View                            | Images grouped by section planes   |
| 2 Plane                           | Specific 8-plane for fetal CNS evaluation.                                     |
| 3 Item                            | Tap to modify each measurement item.<br>(※ It is only provided on Axial plane) |
| 4 Assign selected items to Report | Select item(s) to assign the report.   |

- |          |   |
|----------|---|
| 5 Report | Selected items will be shown on the report. |
|----------|---|

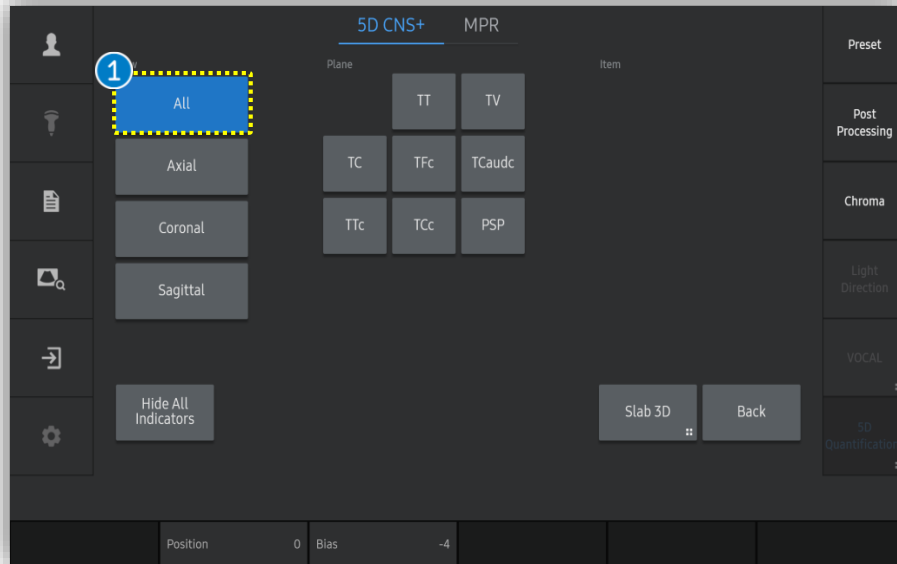
Name		HERA W10 IRB PT 10, 27...		ID	2018-12-13-0003	Exam. Date	2018-12-13
Gender		Female					
Institute		-----					
[OB]							
AUA	19w0d	EDD(AUA)	2019-05-09	Pctl. Criteria	EDD(LMP)		
EFW Author	Hadlock4 (BPD,HC,AC,...	Pctl.(EFW)					
Fetal Biometry		GA	Avg.	Pctl.			
BPD	Hadlock	14w4d±8d	2.66	cm			
OFD	Hansmann	16w6d	4.56	cm			
HC	Hadlock	16w1d±8d	12.44	cm			
Fetal Cranium		GA	Avg.	Pctl.			
CEREB	Hill	28w3d±14d	3.34	cm			
CM			0.53	cm			
Vp			0.46	cm			

### Notes

#### ❖ Slab 3D

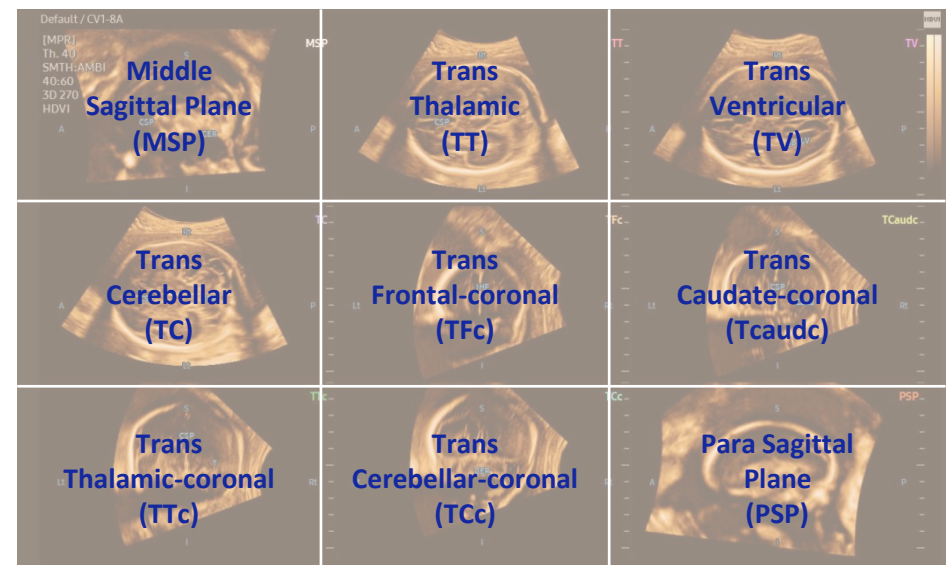
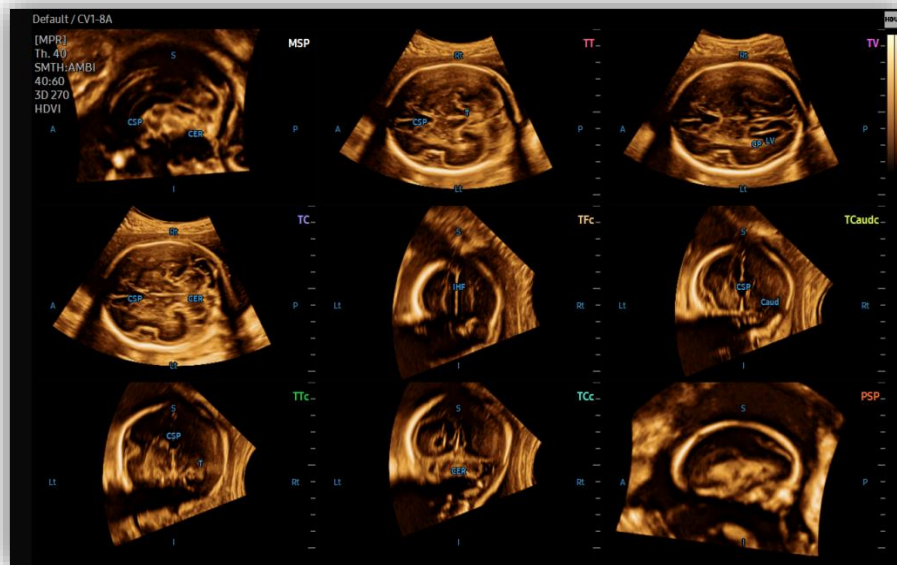
Slices of a 3D image will be displayed as images rendered in 3D. You may select [Slab 3D Type] among Surface, X-ray, Max and Min.

# 7. Result View (All)



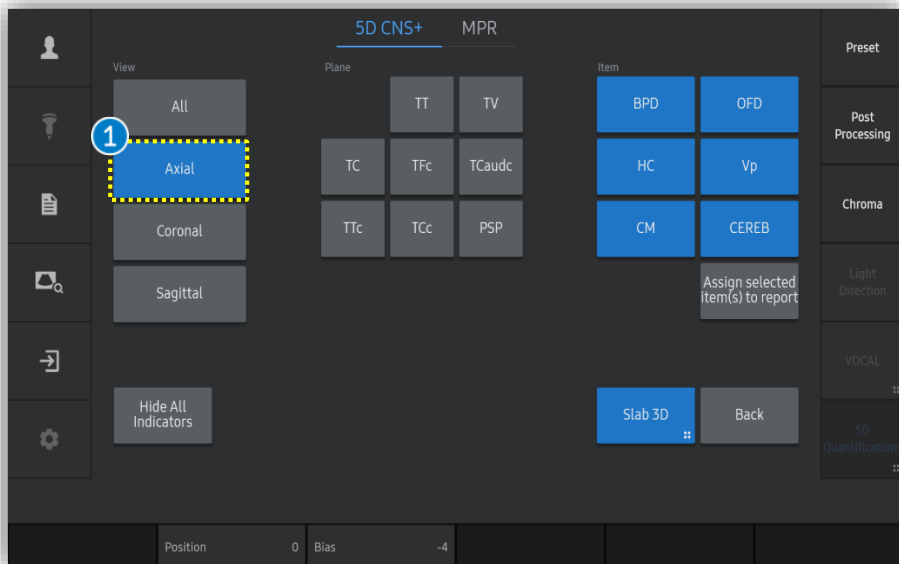
1 All

After placing 1st and 2nd seed point on the image, 5D CNS+ provides 9 planes for fetal head diagnosis, as well as anatomical indicator will be displayed.





## 8. Result View (All)

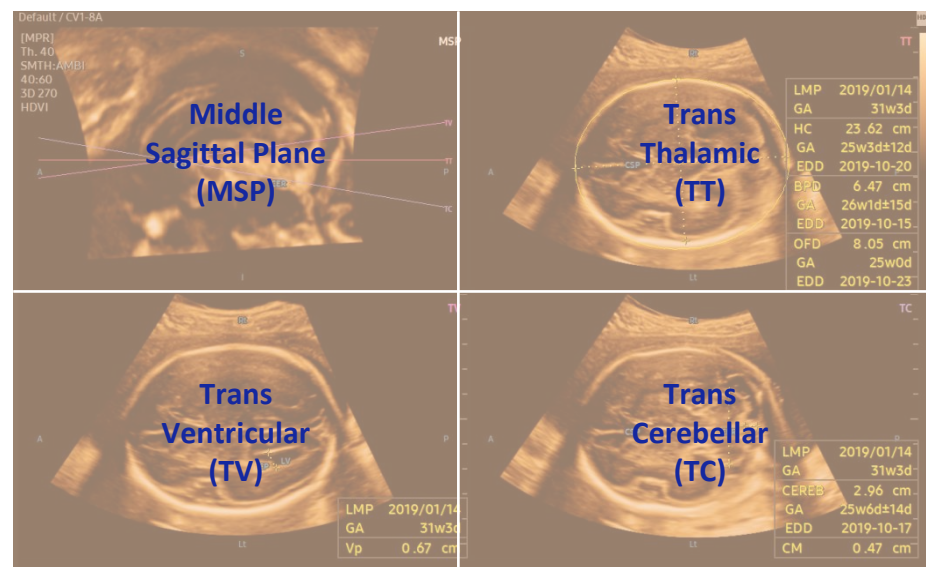
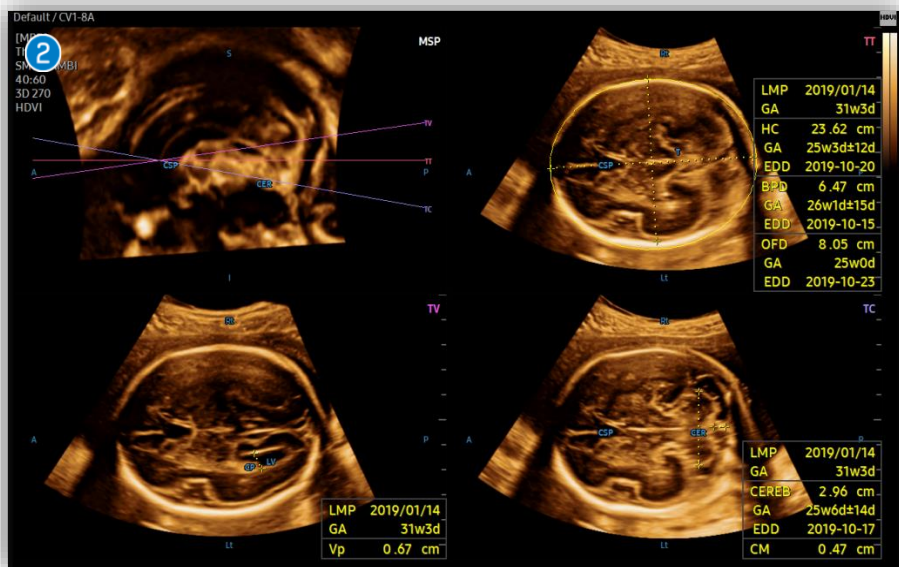


## 1 Axial

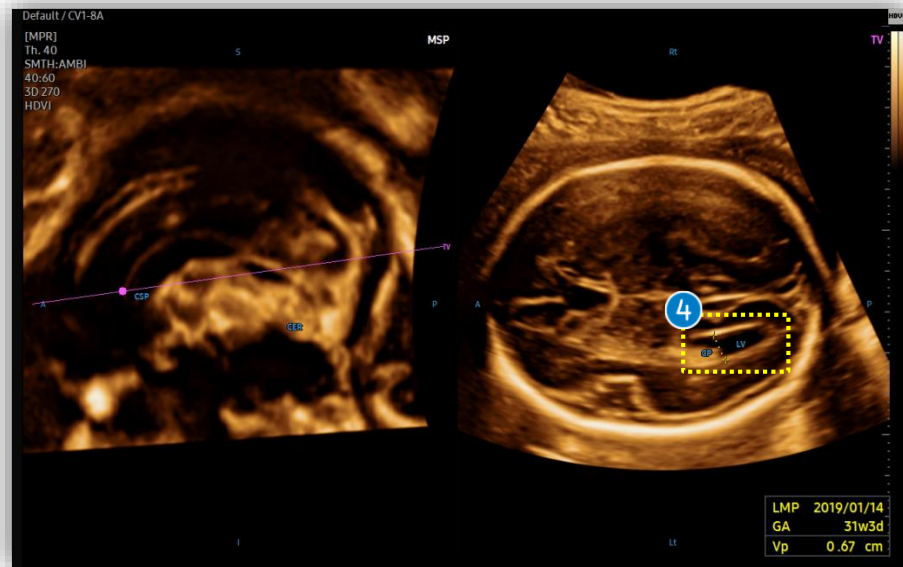
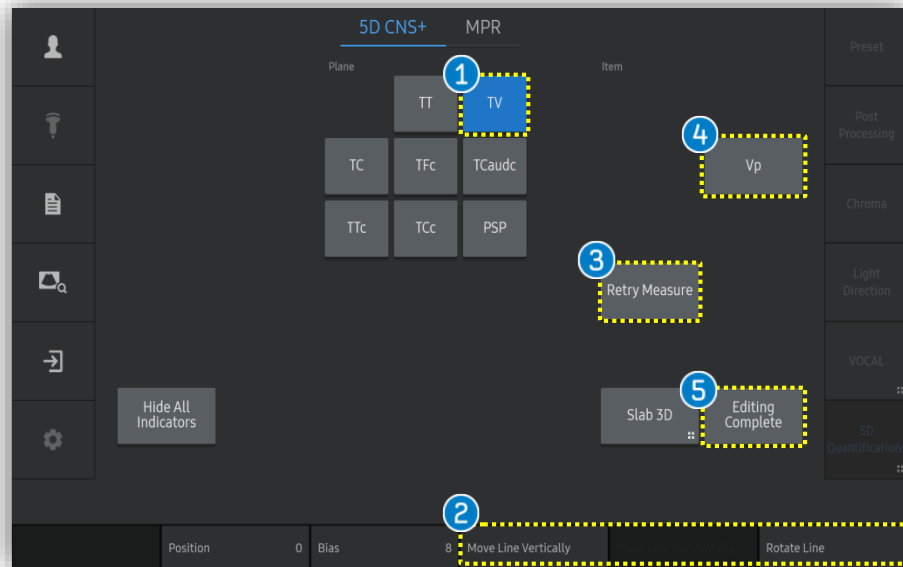
Select Axial to review 3 axial views include TT, TV and TC.

## 2 CNS+ Measurement result

With Axial view, measurement results will automatically displayed on the monitor include HC, BPD, OFD, Vp, CEREB and CM.



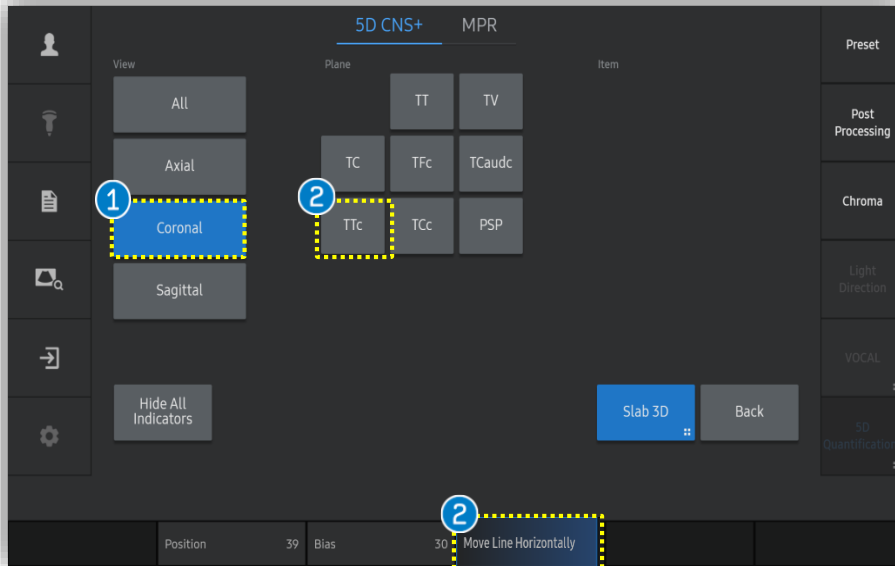
# 9. Result View (Axial-Retry Measure)



In case of re-measurement,

- |   |   |
|---|---|
| ① Plane   | Tap proper plane among [TT], [TV] or [TC] that has measurement data.        |
| ② Move Line Vertically, Move Line Horizontally, Rotate Line | If needed, edit plane by using knob buttons.                                |
| ③ Retry Measure   | Auto measure again on selected plane.                                       |
| ④ Item  | <b>Manual measurement on assigned item.</b>                                 |
| ⑤ Editing Complete  | Once the editing is completed, tap [Editing Complete] to assign the result. |

# 9. Result View (Coronal)

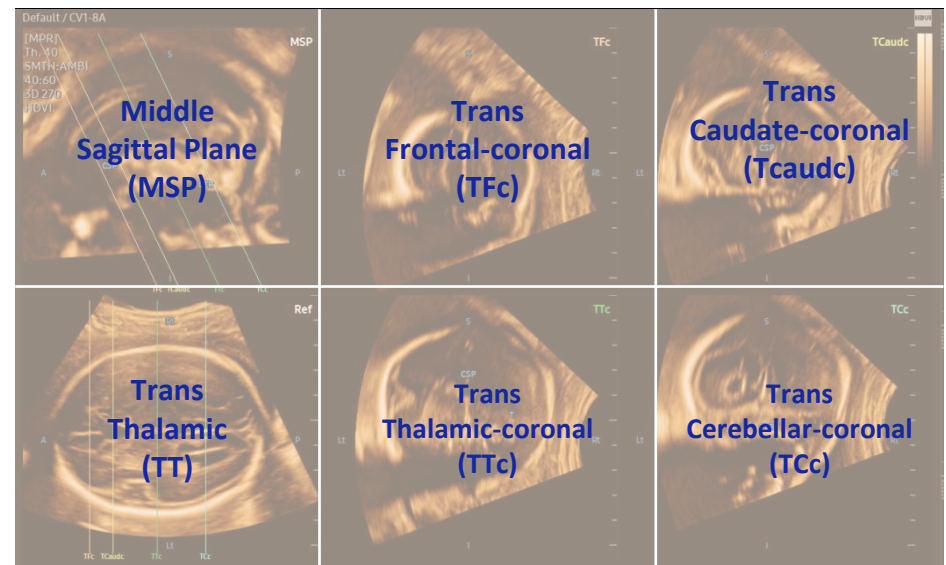
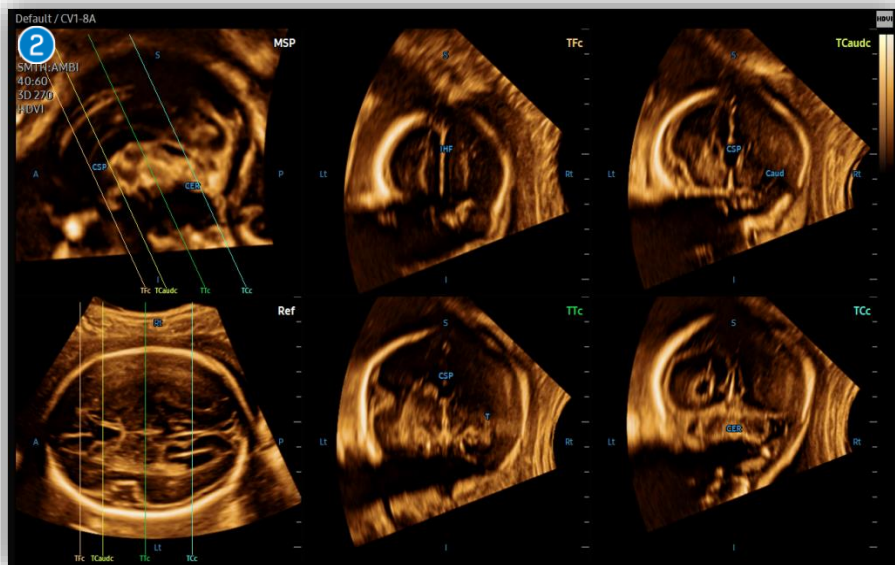


## 1 Coronal

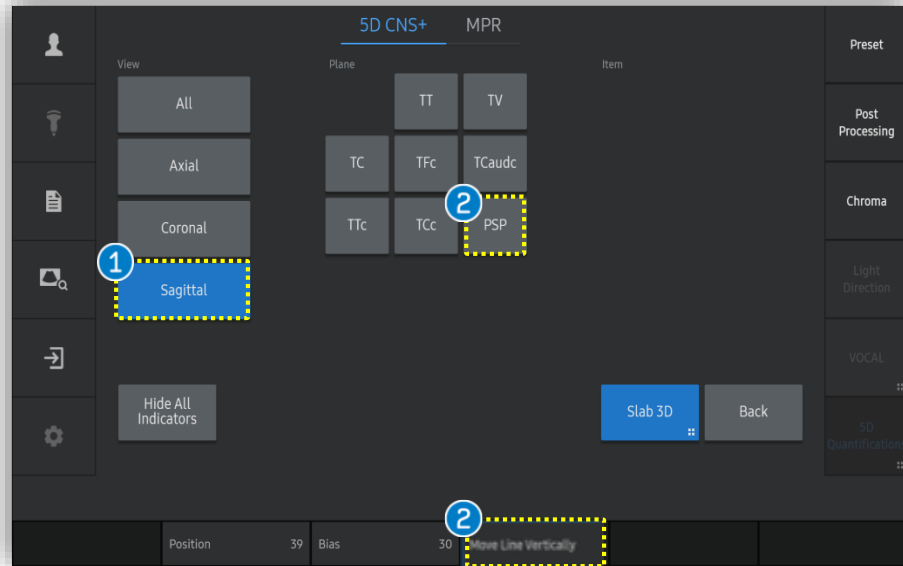
Select Coronal to review 4 Coronal views include TFc, TCaoudC, TTc and TCc

## 2 Move Line Horizontally

Select the plane and if needed, edit plane by using knob buttons



# 10. Result View (Sagittal)

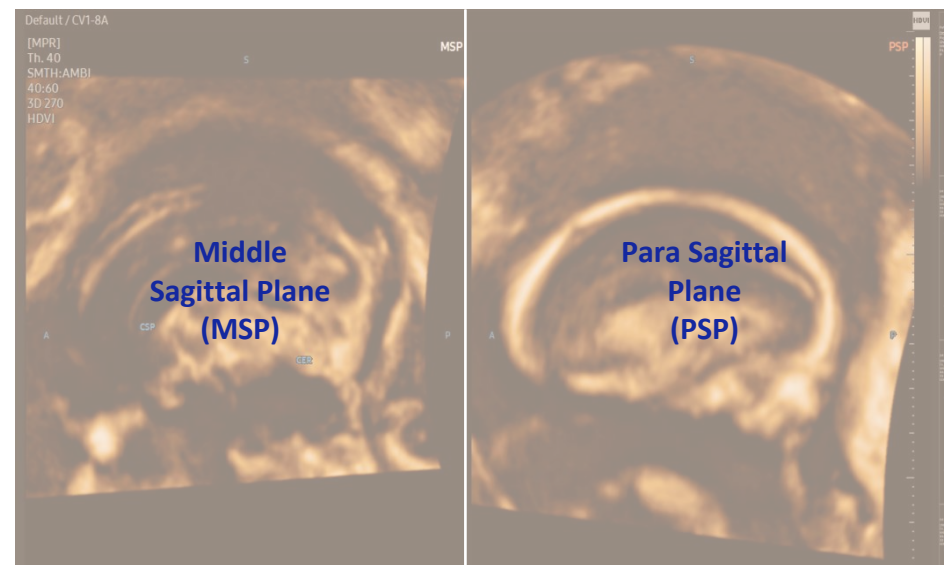
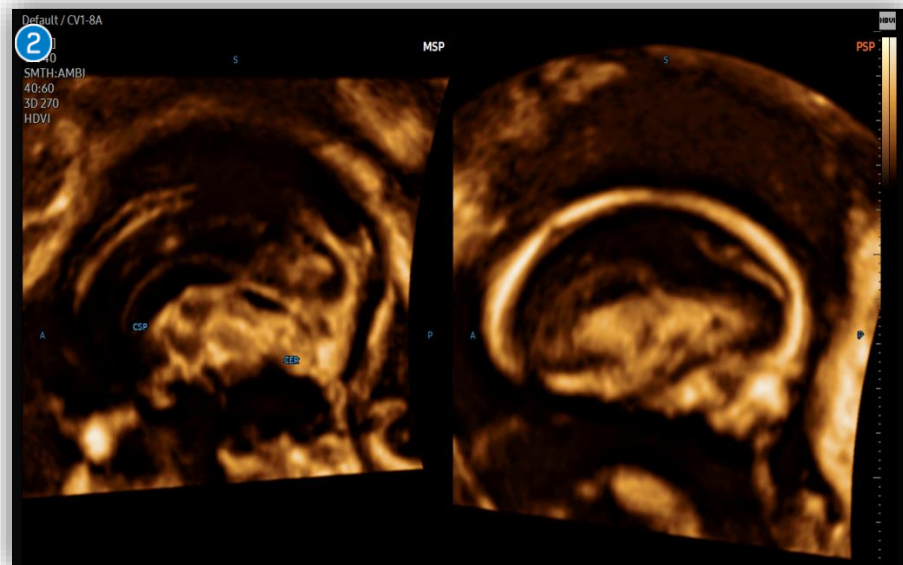


## 1 Sagittal

Select Sagittal to review the Para Sagittal Plane(PSP).

## 2 Move Line Vertically

Select the plane and if needed, edit plane by using knob buttons.



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- \* 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.