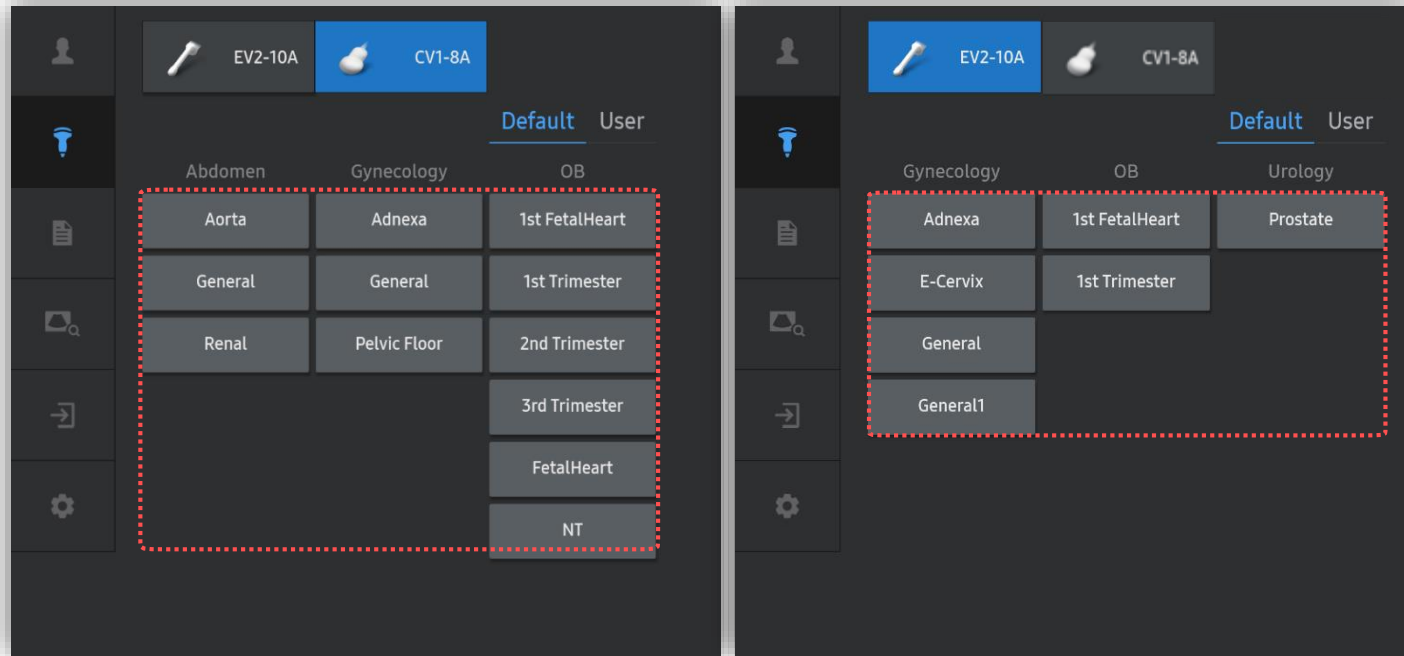


# 5D Limb Vol.™

## HERA W10 Quick Guide



# 1. Probe and Preset



※ 5D Limb Vol.™ can be operated under the following conditions :

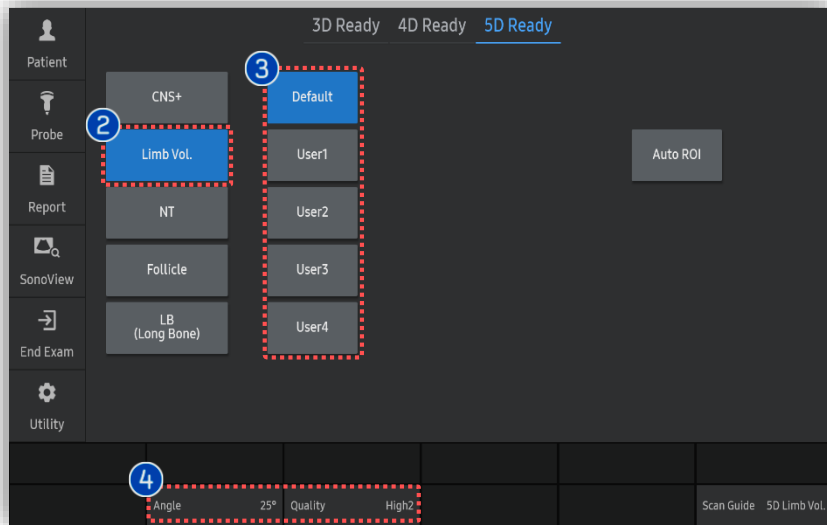
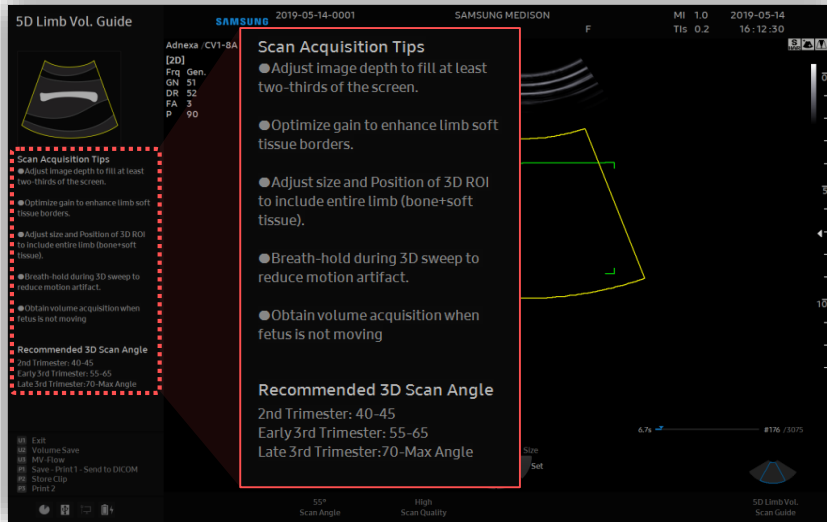
Probe	Application
CV1-8A, EV2-10A EV3-10B, EV2-12 (Elite Only)	All Presets * Select proper preset regarding to fetal gestational age.


★ Tips

To display EFW based on AVol. or TVol., set the EFW Author of fetal weight equation to [Lee1] or [Lee2] in the setup.  
 \*For instructions, refer to the appendix of this manual

5D Limb Vol.™

# 2. Activate 5D Limb Vol.™ (Before 3D Acquisition)

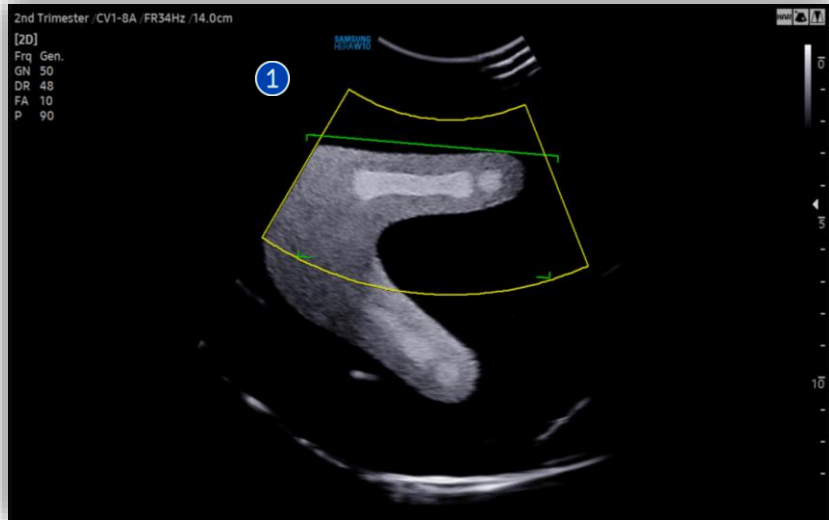


<p>1 5D Button</p>	<p>Press [5D] button on the control panel.</p> 
<p>2 Limb Vol.</p>	<p>Tap [Limb Vol.] to activate 5D Limb Vol.™</p>
<p>3 Preset</p>	<p>Select preferred preset between default and users. Each 5D feature can have its own preset parameters.</p>
<p>4 Parameters</p>	<p>Scan [Angle] and [Quality] are customizable.</p>
<p>5 Image acquisition</p>	<p>Scan the upper arm or thigh of fetus.</p>

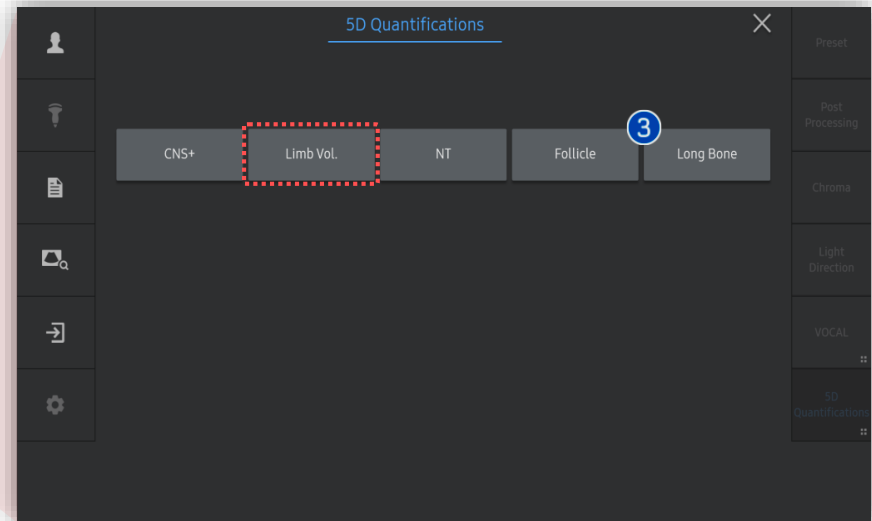
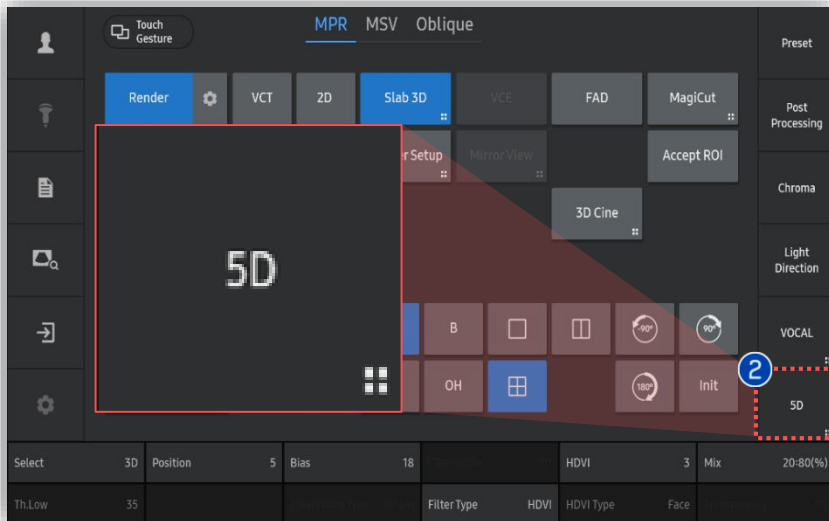
- ★ Scan Acquisition Tips
- Adjust image depth to fill at least two - thirds of the screen.
  - Optimize gain to enhance limb soft tissue borders.
  - Adjust size and position of 3D ROI to include the entire limb (bone + soft tissue).
  - Breath - hold during 3D sweep to reduce motion artifact.
  - Obtain volume acquisition when fetus is not moving.

5D Limb Vol.™

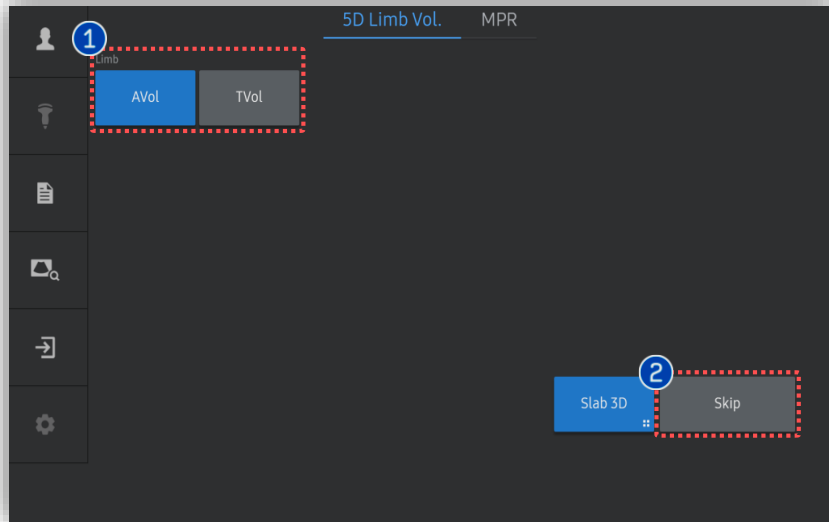
# 3. Activate Limb Vol.™ (After 3D Acquisition)



1 Image acquisition	Scan the upper arm or thigh of fetus.
2 5D	Tab to activate 5D features.
3 Limb Vol.	Tap to activate [Limb Vol.].



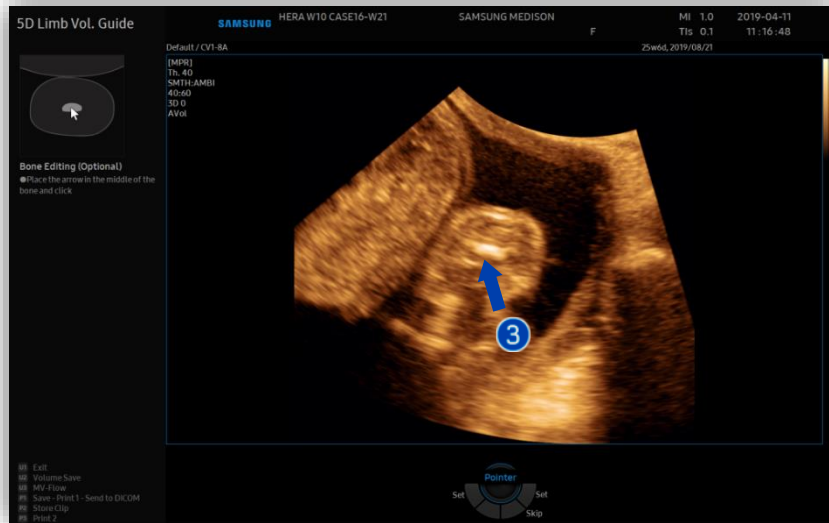
# 4. Bone Editing



1 Limb Type	Select limb type between arm (AVol) or leg (TVol).
2 Skip	To Skip [Bone Editing] process, tap [Skip].

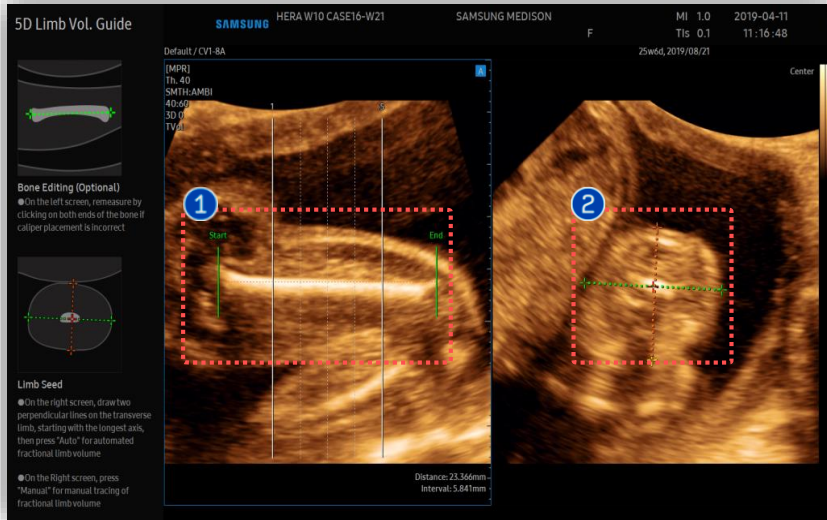
★ Tips

In case of using [Skip] on this progress, next two step which is [Bone Editing] and [Limb Seed Selecting] should be done for more accurate result.

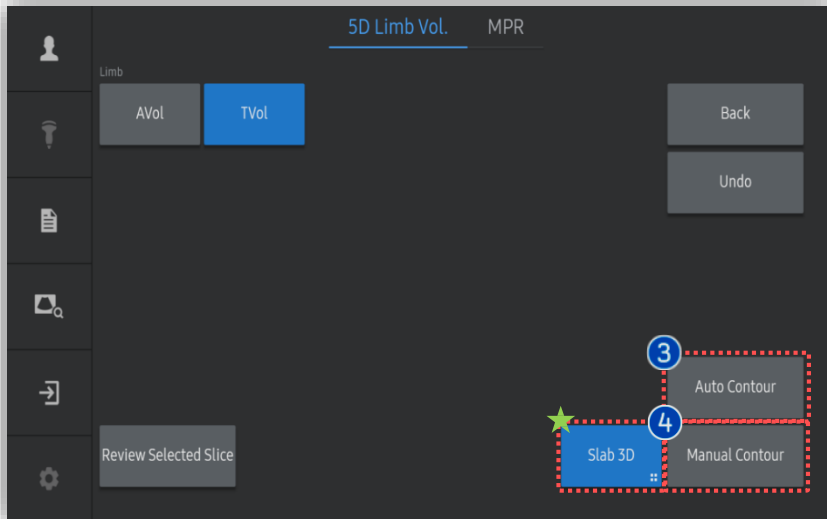


3 Bone Editing (Optional)	If you do not skip [Bone Editing], place the arrow on the <b>middle of bone</b> and [Set].
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# 5. Bone Editing and Limb Seed



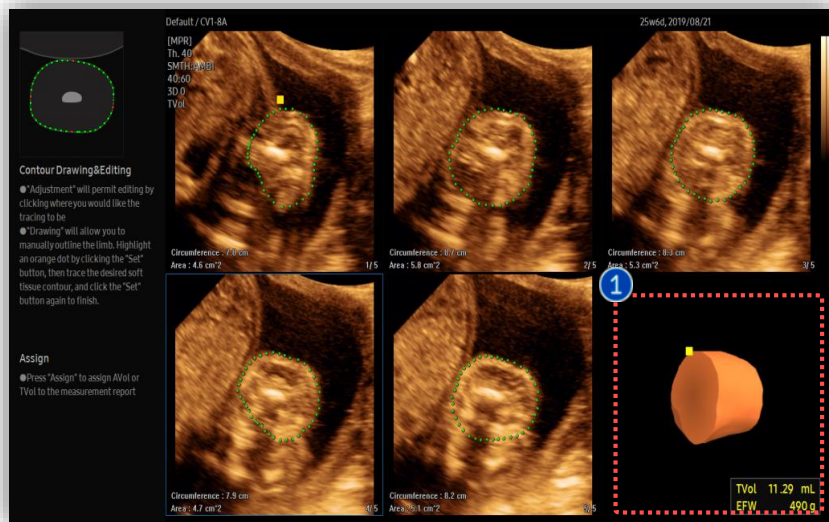
<p>1 Bone Editing</p>	<p>Re-measure by clicking on the both ends of the bone if auto caliper placement is incorrect.</p>
<p>2 Limb Seed</p>	<p>Draw two perpendicular lines on the transverse limb, starting with the longest axis, then press [Auto Contour] or [Manual Contour].</p>



<p>3 Auto Contour</p>	<p>Locate and measure the volume of fetal limbs automatically.  <i>(This method is recommended)</i></p>
<p>4 Manual Contour</p>	<p>Locate and measure the volume of fetal limbs manually by using contour tool.</p>

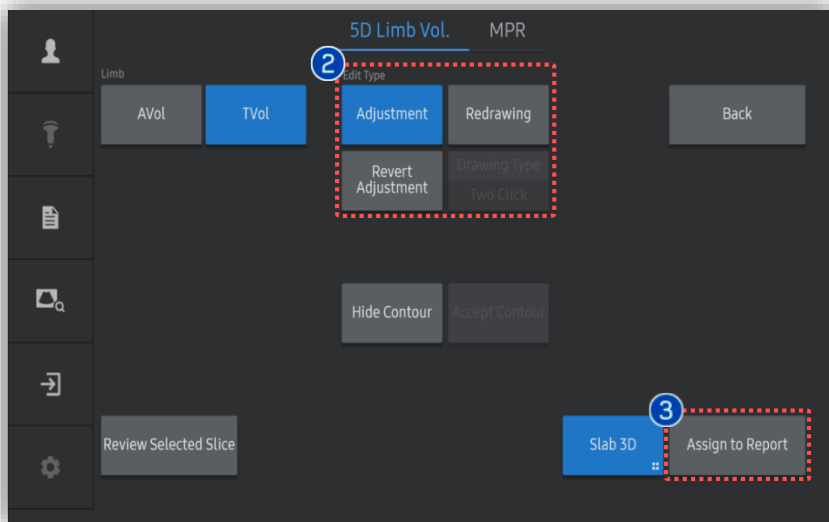
**★ Tips**  
 Slices of a 3D image will be displayed as images rendered in 3D. You may select ★ [Slab 3D] type among Surface, X-ray, Max and Min.

## 6. Result and Edit



### 1 Result

3D rendered limb image and volume data will be provided at the bottom right.



### 2 Edit Type

When edit is needed select proper type of edit among 'Adjustment', 'Redrawing' and 'Revert Adjustment'.

### 3 Assign to Report

Tap to apply calculated result including Limb Vol. and EFW to the report.

5D Limb Vol.™

# 7. 5D Limb Vol.™ Result in Report

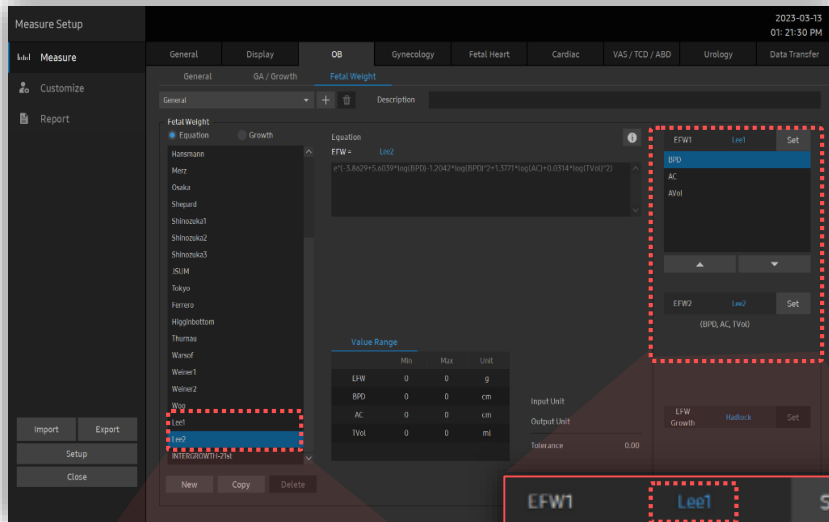
Name	ID		HERA W10 CASE16...		Exam. Date	2
Gender	Female		HR			b
Institute	SAMSUNG MEDISON					
[OB]						
LMP(GA)	2018-11-14	EDD(GA)	2019-08-21	GA	21w0d	
AUA	21w2d	Pctl. Criteria	AUA	EFW	419g±63g	
GA(EFW)	21w1d	Pctl.(EFW)	4796	SD(EFW)	-0.05	
<b>Fetal Biometry</b>						
	GA	Avg.	1	2	3	Pctl.
BPD	Hadlock 21w4d±12d	5.18 cm	5.18			Hadlock 65.62
HC	Hadlock 21w3d±10d	19.18 cm	19.18			Hadlock 46.36
AC	Hadlock 21w2d±14d	16.32 cm	16.32			
FL	Hadlock 21w1d±12d	7.53 cm	7.53			Hadlock 36.25
<b>TVol</b>		11.47 ml	11.29	11.56	11.56	
<b>5D Limb Vol.</b>						
EFW (TVol)		491 g	490	492	492	
Umbilical A	Avg.	1	2	3		Pctl.
PSV	53.34 cm/s	53.34				
EDV	13.42 cm/s	13.42				
TAPV	30.24 cm/s	30.24				
TAMV	15.44 cm/s	15.44				
PGmax	1.14 mmHg	1.14				
PGmean	0.43 mmHg	0.43				
S/D	3.97	3.97				

1 Report

Limb volume and EFW(Estimated Fetal Weight) by obtained limb volume will be displayed.

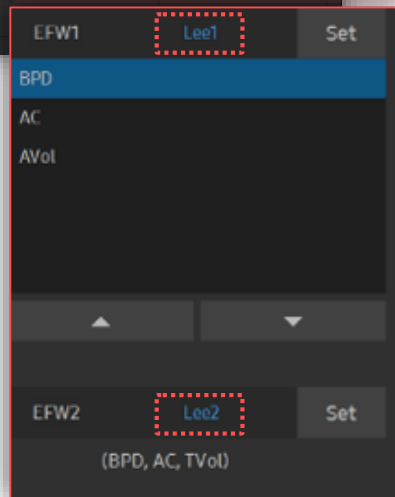
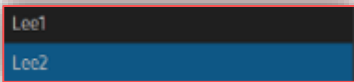
<b>TVol</b>	11.47	ml	11.29	11.56	11.56	
<b>5D Limb Vol.</b>				1	2	3
<b>EFW (TVol)</b>	491	g	490	492	492	

# \* Appendix – Assign EFW table



1 5D Button

Go to [Measure] in the measure setup,  
Measure setup → Measure OB tab → Fetal Weight → EFW1, EFW2  
Assign 'Lee1' or Lee2' EFW table.



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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.
- 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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