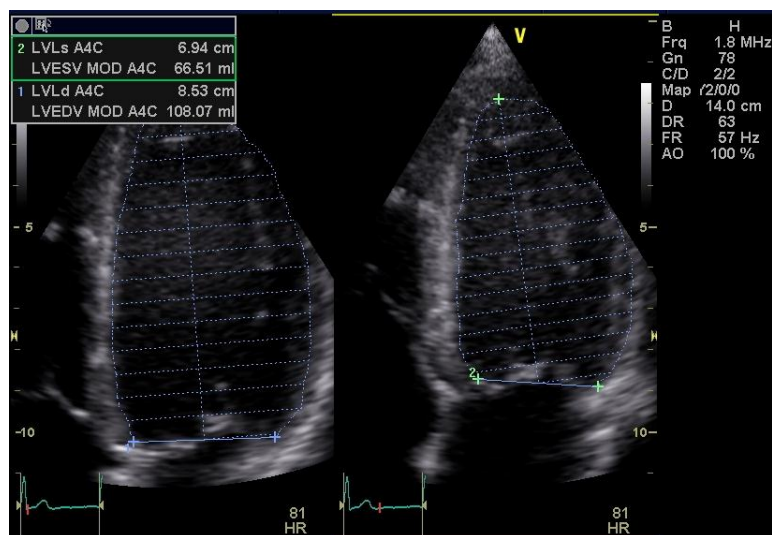


# Calculation of the Ejection Fraction with Vivid P 3



# Calculation of the Ejection Fraction with method of disk (Simpson)

Words marked in red are Hard keys on the Control Panel or Rotary Knobs for the Top Menu Controls.

## Measuring the Ejection fraction of the left Ventricle (EF)

Acquire a 2D image with an apical 4 – chamber or 2 – chamber view.  
The left Ventricle needs to be visualized very well. For a wider field of view in the Near field use **Virtual Apex ( 1 )**.

- 1 Top Menu Controls
- 2 2 D
- 3 Set
- 4 Trackball button
- 5 Measure
- 6 Dual Image
- 7 Pointer
- 8 Worksheet
- 9 Report



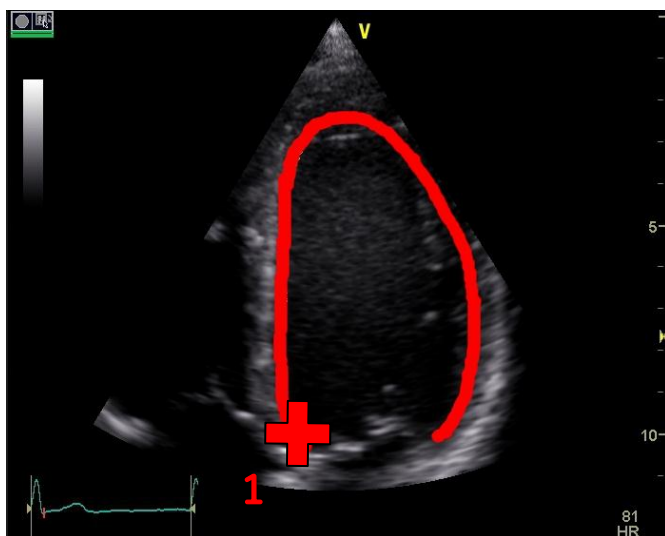
- 4 Trackball button  
Toggles between the different Trackball functions.  
Can be seen on the lower right corner of the Monitor.



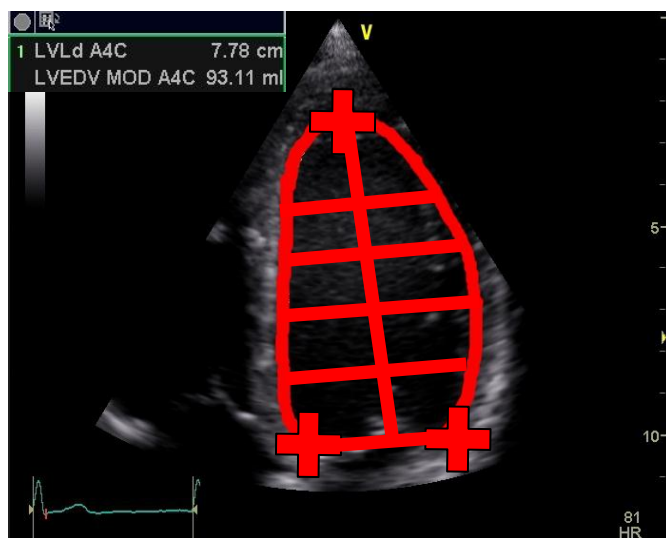
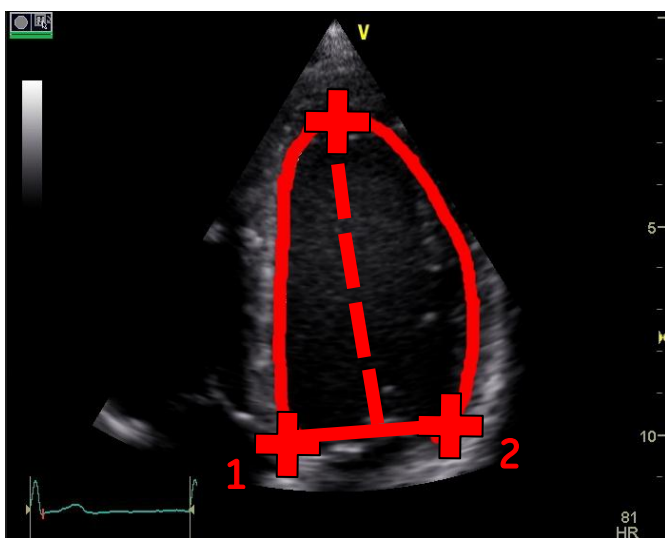
Press **Freeze** and scroll with the **Trackball** or with the **Top menu controls** Frame by Frame through the loop to get the end diastolic image in correspondence with the ECG.

If you recall an image from the Clipboard, turn off the **Pointer** before starting with the procedure.

Open the **Measurement** package. Scroll to **Volume**. Press **Set**. The Measurement starts automatically with **Biplane LVEDV A4C**. Move with the **Trackball** to the MV annulus. **Set** and start tracing of the volume boundary.

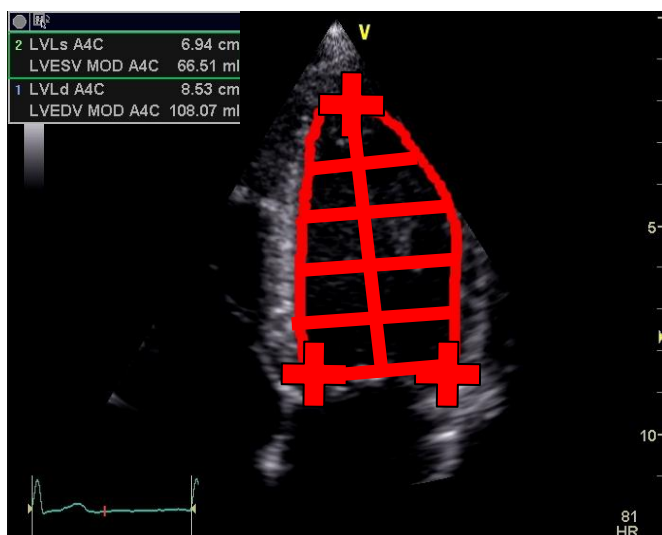


Press **Set** at Position 2 and move the line with the **Trackball** to the endpoint of the longitudinal axis and press **Set** again.



Press the **Trackball button** and Scroll with the **Trackball** or with the **Top menu controls** Frame by Frame through the loop to get the end systolic image in correspondence with the ECG.

Press the **Trackball button**. The Measurement is set automatically to **LVESV A4C**. Repeat the Measurement like in Diastole.



You have the Possibility to make the Measurement also in **Dual Image**. Press the button **L** (left). Recall the Loop from the Clipboard and scroll to the end diastolic image. Press button **R** (right) and scroll to the end systolic image.

Open the **Measurement** package and repeat the Measurement as described.

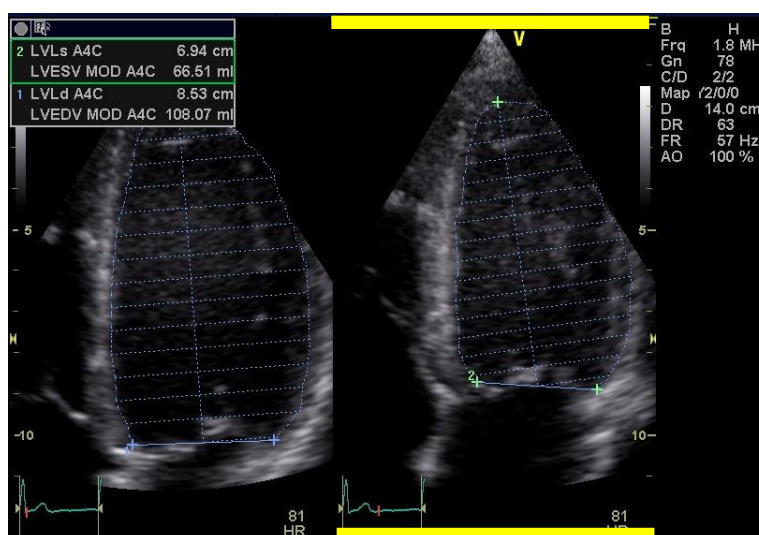


Image marked with the Yellow lines is the active one, f. e. Freeze, Scroll etc.

All the Results are in the **Worksheet**

Parameter	Value	Metho	m1	m2	m3	m4	m5
<b>Biplane</b>							
<b>A4C</b>							
LVLd A4C	7.78 cm	Avg.	7.78				
LVEDV MOD A4C	93.11 ml	Avg.	93.11				
LVLs A4C	6.86 cm	Avg.	6.86				
LVESV MOD A4C	64.11 ml	Avg.	64.11				
LVEF MOD A4C	31.14%		31.14				
SV MOD A4C	29.00 ml		29.00				

or in the **Report**.

**Cardiac report: Medium** GE Healthcare Hospital  
Ultrasound Laboratory

---

Patient Id Test1  
Age  
Birthdate  
Height 0.0 cm  
Weight 0.0 kg  
Sex  
Date  
Diagn.Phys. 0.00  
Tape Vivid P3  
BSA  
BP  
Site Name GE Healthcare

*Image 1*

*Image 2*

*Image 3*

*Image 4*

---

2-D Measurements

LVLd A4C	7.94 cm
LVEDV MOD A4C	107.31 ml
LVLs A4C	7.04 cm
LVESV MOD A4C	65.55 ml

2D Calculations

LVEF MOD A4C	38.92%
SV MOD A4C	41.76 ml

**NOTE**

This hand out is additional training material.  
For more information please refer to the user manual and/or reference manual.