4D Views for 4D TEE

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

4D views for 4D TEE

4D views give the possibility to access standard views from a dataset.
Views of the

- LV (different projections: 4-Ch, 2-Ch, LAX)
- MV (from LA and LV)
- AV (from LVOT and AO)
- Septum

can be achieved just by a push of one button.

How to start

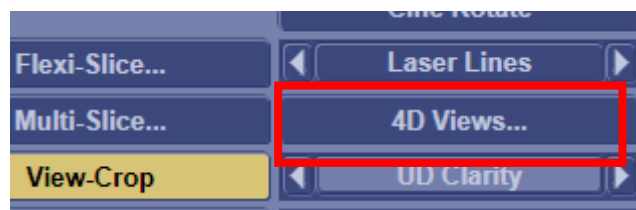Recall any mid esophageal 4D TEE dataset from the entire heart.

Vivid E9

Press the **4D views** button on the touchpanel.

EchoPAC

Select the **4D View** Function from the Menu bar.

ME alignment

The dataset first needs to be aligned manually, to have proper positioning of the LV and MV.
Therefore the alignment state is the first step that needs to be done.

Note

This is different to the transthoracic approach where the alignment can be done automatically.

A triplane image and a short axis view appear on the screen

- The long axis of the ventricle needs to be aligned with the centre red line
- Where axis of the LV should be straight down in the middle of the image
- The blue line needs to be positioned on MV annulus area
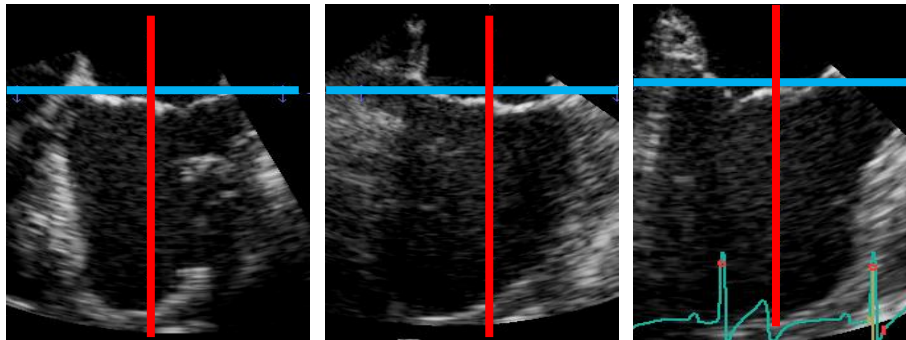
In order to correctly position the dataset manual adjustments can be done by using the trackball / mouse.

Use the to grab the dataset and move it around.

Use the to tilt the views.

Grab the blue line and move it to the MV annulus.

Vivid E9

Another possibility on the scanner is to use the rotational knobs for the adjustments.

Note:

While adjusting the entire 4D dataset will be moved, this means that all views are changing at the same time.

Once satisfied with the alignment press the **Approve** button.

Vivid E9   EchoPAC
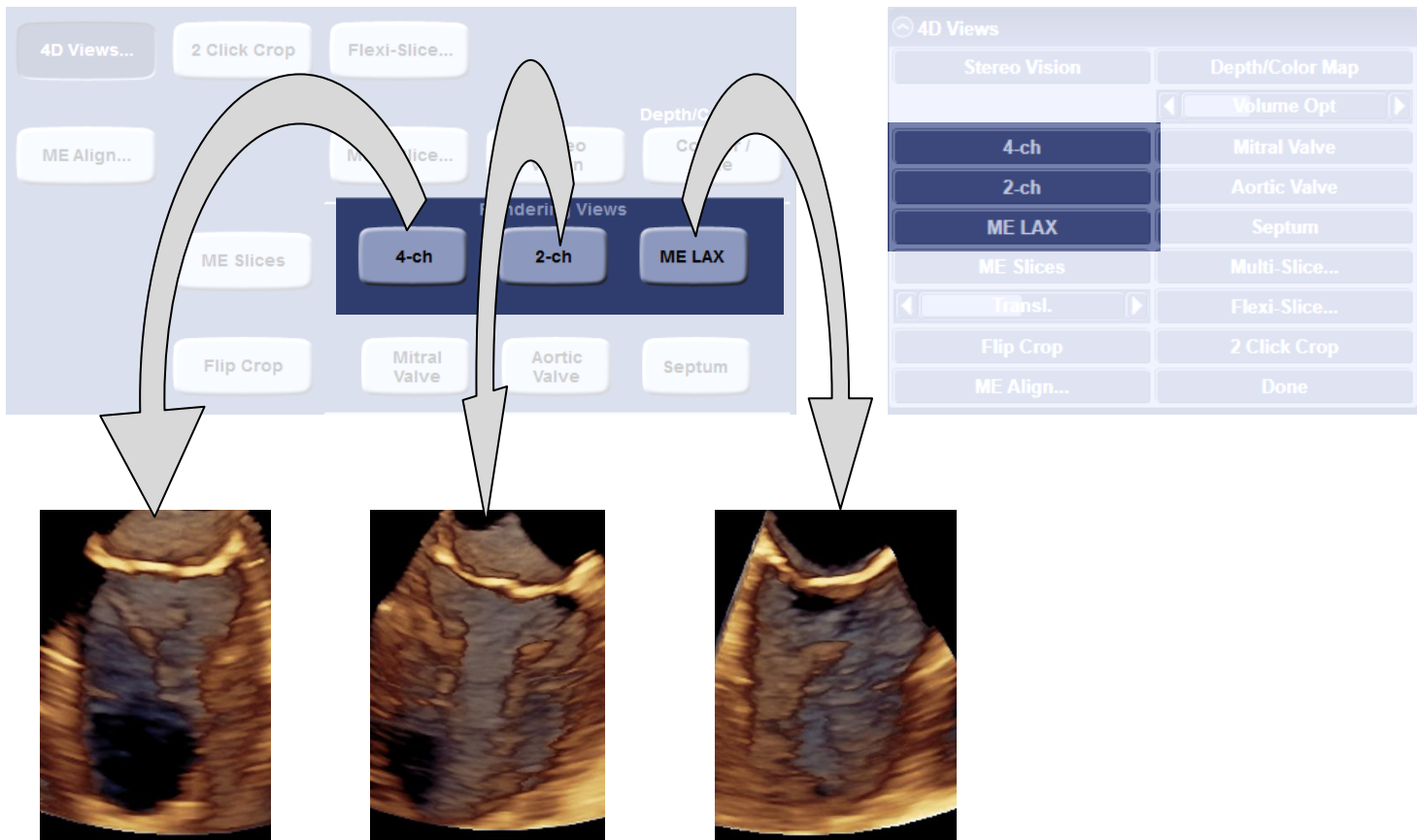

LV views

Select one of the LV views to get rendered

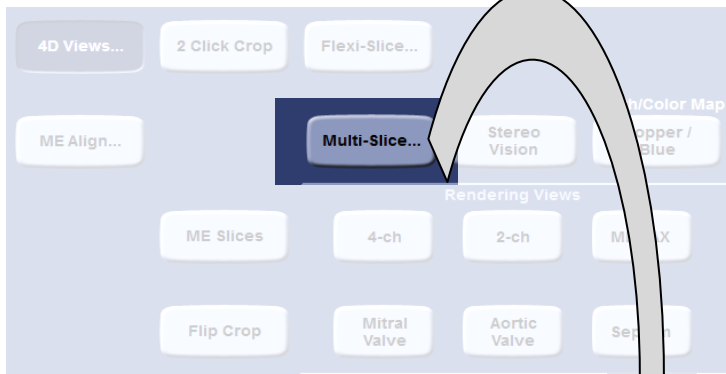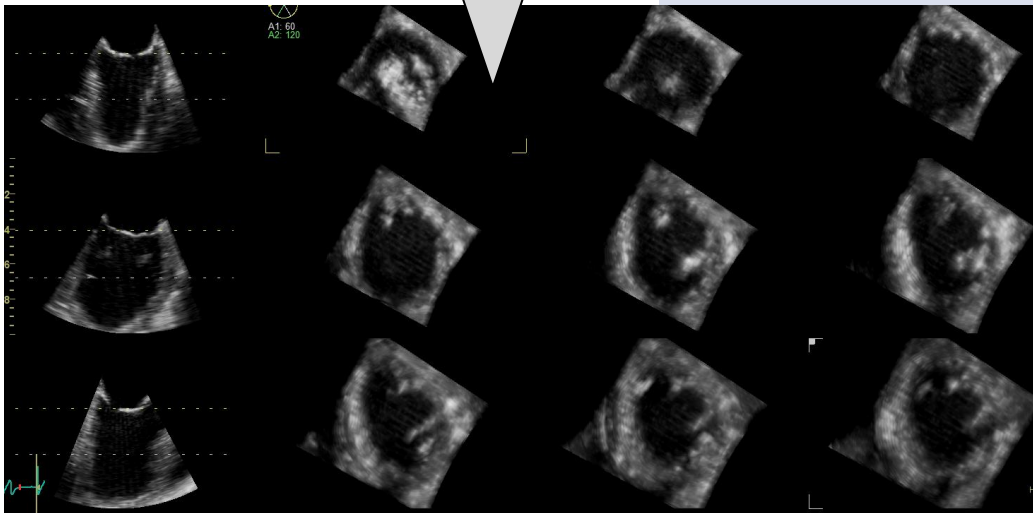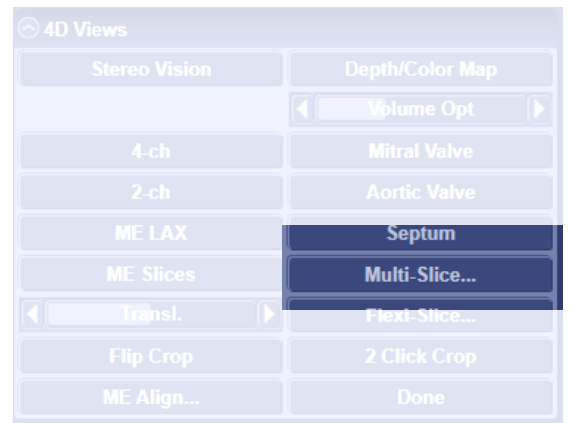images of the LV from the standard projections.

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EchoPAC

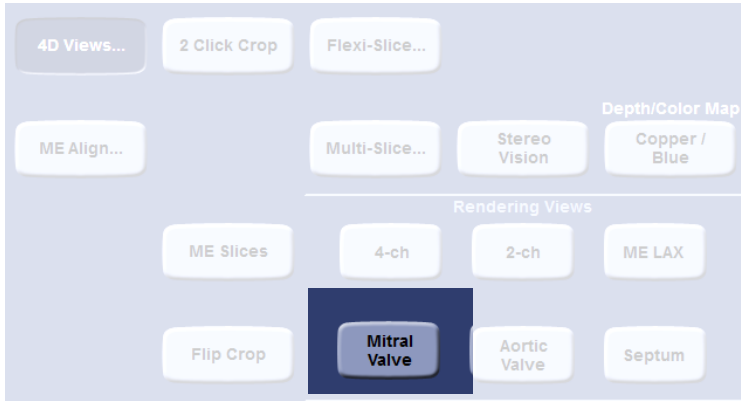To get a quick view on the LV function the Multi-slice mode with 12 slices might be interesting.
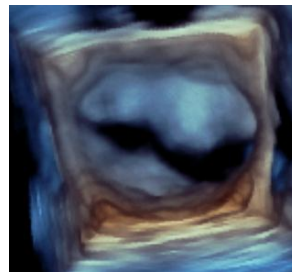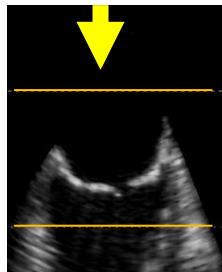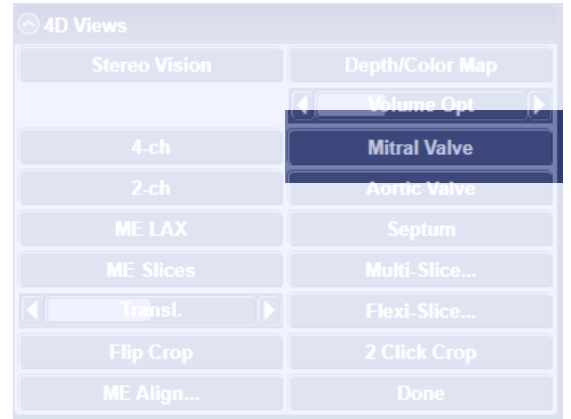
Vivid E9

EchoPAC

Mitral valve

Two different views are available to look onto the Mitral valve.
Press **Mitral valve** to get the first view – seen from the Left Atrium

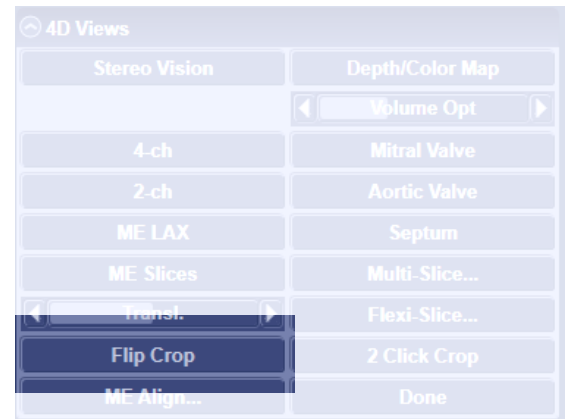**Vivid E9**   **EchoPAC**

If there is an interest to look on the MV from the LV just press **Flip crop**.

Vivid E9   **EchoPAC**

Aortic valve and Septum

Same workflow as for the Mitral valve can be applied to get different views from the Aortic valve (from LVOT or AO) and for the Septum (view from LV or RV)