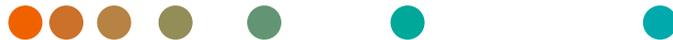


**ACUSON Juniper ultrasound system
VB10 SW Release**

***syngo*[®] Velocity Vector Imaging (VVI)**

Quick Reference Card

siemens-healthineers.com/juniper



Step 1

- For Global Longitudinal Strain (GLS), choose Apical 4 chamber (A4C), Apical 2 chamber (A2C), and Apical 3 chamber (A3C) views
- For Global Circumferential Strain (GCS), choose Parasternal Short Axis at the mitral valve level (SAX MV), papillary muscle level (SAX PM), and apex level (SAX APEX)

Tip: Frame rate range of 60–90 fps is recommended for optimal tracking results.

Step 2

- Enter **Review**
- Select images needed for VVI analysis
- Select **Show Selected** to view selected images
- Select **syngo VVI**

Show Selected

syngo VVI

Step 3

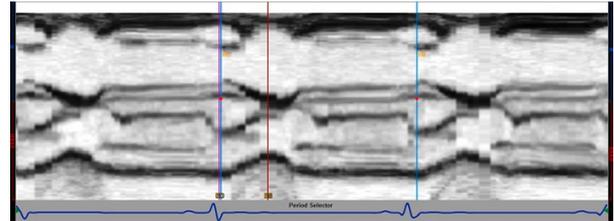
- Select image(s) from the thumbnails and assign to the corresponding views



Tip: To delete an image, select the X in the upper right-hand corner.

Step 4

- To analyze a clip without an ECG or with a poor ECG, select **Sequence / M-mode selection** icon to define one cardiac cycle within the period selector
- If only one cardiac cycle is to be analyzed, drag and drop the red markers to desired cardiac cycle



- Select the gray arrow in the top right corner of the screen to return to the contour page



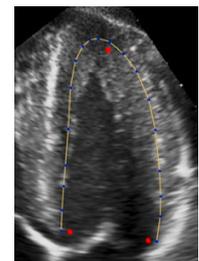
Step 5

- Place markers at endocardial border according to placement guide for systole and then diastole
 - Press **Set** key for medial and lateral annulus
 - Press **Update** key to "End" trace at the apex



Step 6

- For manual trace, place series of markers using **Set** key along the endocardial border in a clockwise rotation for systole and then diastole
- Anchor the last point using the **Update** key to "End" the trace



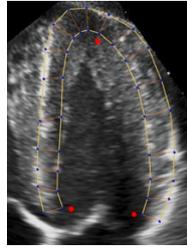
Step 7

- Double click **Set** key or select **Start Analysis** icon to begin analysis for each contour for systole and then diastole



Step 8

- The end systolic contour displays for the user to accept or edit, then the end diastolic contour displays for the user to accept or edit
- To edit the contour, use **Set** key to drag and reposition red or blue markers



Tip: Red markers move a large segment and blue markers move a small segment.

Step 9

- Select the **Accept Changes** icon in the top right corner



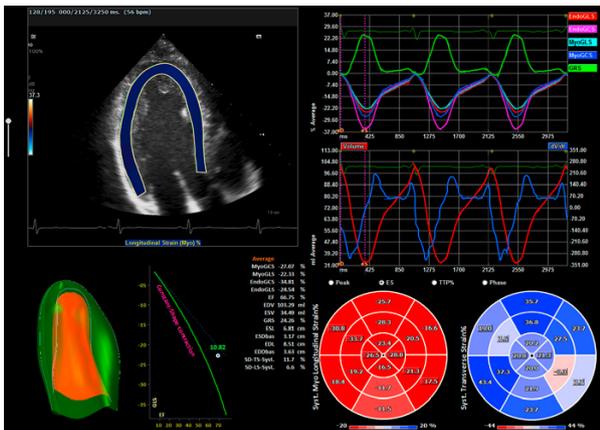
Step 10

- To edit the contour, select the **S** or **D** icon:
 - Once **Correct ES Border** is selected, a new tracking will be initiated
 - If **Correct ED Border** is selected first, the **Correct ES Border** contour tracking will not be initiated



Step 11

- A main analysis page will be displayed



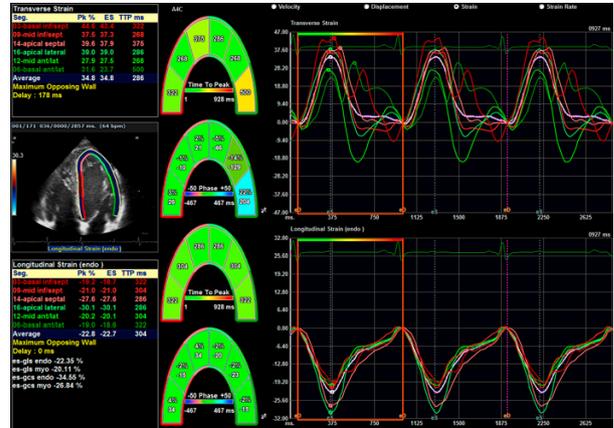
Step 12

- Select **Segmental Analysis** icon



Step 13

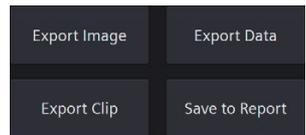
- Evaluate the Segmental Analysis page
- At the top of the page, different parameters can be selected such as **Velocity**, **Displacement**, **Strain**, and **Strain Rate**



Step 14

- Options for analysis are:

- Export Image
- Export Data
- Export Clip
- Save to Report



For the proper use of the software or hardware, please always use the Operator Manual or Instructions for Use (hereinafter collectively "Operator Manual") issued by Siemens Healthineers. This material is to be used as training material only and shall by no means substitute the Operator Manual. Any material used in this training will not be updated on a regular basis and does not necessarily reflect the latest version of the software and hardware available at the time of the training. The Operator Manual shall be used as your main reference, in particular for relevant safety information like warnings and cautions.

Note: Some functions shown in this material are optional and might not be part of your system.

Certain products, product related claims or functionalities described in the material (hereinafter collectively "Functionality") may not (yet) be commercially available in your country. Due to regulatory requirements, the future availability of said functionalities in any specific country is not guaranteed. Please contact your local Siemens Healthineers sales representative for the most current information. The reproduction, transmission or distribution of this training or its contents is not permitted without express written authority. Offenders will be liable for damages.

All names and data of patients, parameters and configuration dependent designations are fictional and examples only. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.

ACUSON Juniper and *syngo* VVI are registered trademarks of Siemens Medical Solutions USA, Inc.

syngo is a registered trademark owned by Siemens Healthcare GmbH.

Siemens Healthineers Ultrasound owns the rights to all images.

At Siemens Healthineers, our purpose is to enable healthcare providers to increase value by empowering them on their journey towards expanding precision medicine, transforming care delivery, and improving patient experience, all enabled by digitalizing healthcare.

An estimated five million patients worldwide everyday benefit from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics and molecular medicine as well as digital health and enterprise services.

We're a leading medical technology company with over 120 years of experience and 18,500 patents globally. With over 50,000 employees in more than 70 countries, we'll continue to innovate and shape the future of healthcare.

Siemens Healthineers Headquarters

Siemens Healthcare GmbH
Henkestr. 127
91052 Erlangen, Germany
Phone: +49 9131 84-0
siemens-healthineers.com

Legal Manufacturer

Siemens Medical Solutions USA, Inc.
Ultrasound
22010 S.E. 51st Street
Issaquah, WA 98029, USA
Phone: 1-888-826-9702
siemens-healthineers.com/ultrasound