



INSIGHT THROUGH *IN VIVO* IMAGING™

VisualSonics Vevo® 2100 Imaging System

Quick Start Guide



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Quick Start Guide

This is a high-level procedure for acquiring and analyzing an image and then exporting your analysis.

You will find this quick start tutorial useful:

- If you are familiar with how ultrasound systems work and you want to jump in and give it a try
- If you haven't used the system in a while and want a refresher tutorial

Before you begin

- Ensure that you have connected a transducer to the transducer port on the front of the cart.
- If you are imaging an animal, ensure that the animal is properly prepared on the animal platform and ensure that the animal is connected to the physiological data monitoring system.



WARNING: Before using the VEVO 2100 any operator must read and observe the Safety Warnings and Precautions in *Safety*.

▶ To acquire and analyze a B-Mode image and export your analysis:

1. On the back of the cart, turn on the **Main Power**.
2. On the left side of the cart press the **Computer Standby** toggle.
The computer operating system starts and then the Vevo 2100 Imaging System software starts and displays the **VisualSonics Vevo® 2100** dialog.
3. In the **Application** box select the type of imaging application: General Imaging or Cardiology.
The system initializes the transducer and opens the **Study Browser** window.
4. Press **B-Mode**.
The **B-Mode** imaging window appears and the system begins acquiring B-Mode data.
5. Refine your image using the various control panel controls such as the **Image Depth** toggle control, the **2D Gain** dial and the **Invert** button.
6. Press **Scan/Freeze** to stop the data acquisition.
7. Press **Cine Store** to save the sequence of images in the system buffer. In the background:

- The system creates a date-stamped new study for you as well as the first image series set, **Series 1**.
 - The system stores a date-stamped cine loop of the B-Mode data you are acquiring
8. Press **Scan/Freeze** again to resume the data acquisition.
 9. Continue freezing and storing as required.
 10. Press **Study Management**.

The **Study Browser** window appears and displays the new date-stamped study, new date-stamped study series and the new time-stamped images.

You can now analyze the image data.

11. In the **Name** column, double-click the **Series 1** row.
The review panel displays thumbnails of the images you stored.
12. Double-click the first thumbnail.
The B-Mode window appears and plays the cine loop you stored.
13. Using the **Cine Loop Review** dial:
 - a. Turn the dial counter-clockwise to slow the loop down until you reach your desired playback rate
 - b. Press down on the dial to toggle the cine loop to stop.
 - c. Turn the dial one way or the other to control the movement of the cine loop frame by frame.
14. Press **Measure**.
The measurement tools appear near the top of the left panel.
15. In the measurement packages list box:
 - d. Click the appropriate measurement package for your study. For example, click **Embryology Package**.
The system displays the list of available measurement protocols.
 - e. Click the appropriate protocol. For example, click **Placenta**.
Under the protocol label, the system displays the list of predefined protocol measurements.
 - f. Click the appropriate measurement. For example, click **Placenta Sag**.
The list box becomes a preview panel and the system highlights the icon for the measurement tool that the system uses for the protocol measurement. For the Placenta Sag measurement, the system uses the **Linear** tool.
16. In the image area, place and complete your measurement.

When you have completed your measurement, the system applies a label or index number to your measurement based on the preferences you set in the Measurement tab of the Preferences window.

The system also displays the value in the **Measured Values** list.

17. Press **Study Management**.

The **Study Browser** appears. The thumbnail of the image you have been adding measurements to displays the most recent frame you worked on, including the measurements.

18. Click the **Series 1** row and click **Report**.

The **Analysis Browser** appears and displays a report of the measurements you made for that series, listed in order by application package.

19. Click **Export**.

The **Export Report** window appears.

20. In the **Export Report** window:

- a. Browse to the folder where you want to export your report.
- b. If you want to create a new folder, select the folder that will hold the new folder, click **New Folder**, type the folder name in the **New Folder Name** dialog box, and then click **OK**.
- c. In the **Options** area, modify the title of the report in the **Save As** box if required.
- d. Click **OK**.

The system exports your report.

You have successfully acquired and analyzed an image, and exported your report.

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