



## Imaging Procedure (Vevo 2100)

### Connecting Transducer

1. To connect the transducer connector to the transducer port, turn the lock handle to the horizontal (unlocked) position.
2. Line up the locking pin on the transducer connector with the lock notch on the transducer port.
3. Push in the connector and then turn the lock handle to the vertical (locked) position.

*To disconnect the transducer: Turn the lock handle to the horizontal (unlocked) position and pull the connector out.*



*The front panel of the Vevo 2100 Imaging System features two passive and one active (rightmost) transducer ports. Transducer is in locked position.*

### Image Acquisition

1. Make sure the probe you plan to use is connected to the active transducer port.
2. If imaging an animal, make sure that physiological monitoring system is on and animal is ready for imaging.
3. Put ultrasound gel directly on area to be imaged. You can also put gel on transducer head.
4. Start imaging and acquiring data in the desired mode. Standard default imaging will be B-mode or brightness mode.



*Lock handle in horizontal (unlocked) position*



*Locking pin*



*Lock notch on transducer port*

5. Feel free to adjust software and rocker switches to better understand the controls. If you get stuck somewhere, just hit the B-mode switch to reset.
6. Capture images and annotate if desired. Save images by pressing Cine Store or Frame Store button on keypad.
7. Press Scan/Freeze toggle control or use foot stepper to stop/resume scanning.

## Exporting/Saving Data

1. Press the *Study Management* button on the upper left side of the keyboard. The Study Browser window opens with a list of saved images/cine loops.
2. Select the files you want to export. You can export a whole series of cine loops or a whole series of images. These are highlighted if you click on the Series name. Hit the EXPORT button.

*Files are exported to the Imaging Shared folder that is currently mapped on the Z drive of the Vevo computer. Create a New Folder with your name if you do not have an existing folder.*

3. If you are exporting a whole series of cine loops, a default base filename is given to the files. You can change this if you wish.
4. If you need to create a new folder to contain the cine loops you are exporting: Click New Folder, Type the name of the new folder and click OK.
5. In the Export Type section, click Cine Loop.
6. In the Options section: In the top box:
  - a. If you are exporting a single image, the system labels this box Save As. You can keep the system defined date and time stamp file name or type a new file name.
  - b. If you selected to export multiple images, the system labels this box File Name Prefix. Type in text to be added to start of all individual image files that you selected to export. This way you can identify and group these exported files more easily.
7. In the File Type box select the AVI format based on your requirements. Uncompressed AVI has the largest file size and original image quality. Compressed AVI MS Video 1 has the smallest file size and good image quality.
8. Wait for your files to be exported. You can Cancel the export if needed.
9. If you want to make sure all your files were exported, open the Windows explorer, and check the files on the Imaging Shared folder (Z).

## Protocol for Cleaning After Imaging

1. Wipe off ultrasound gel from transducers. Then clean with moist KimWipes /disinfectant wipes.
2. Clean mouse platform and keyboard with disinfectant wipes. Do not use ethyl alcohol on electrodes of mouse platform!
3. Wipe down all surfaces that come into contact with the animal (tabletop, workbench) with disinfecting wipes or 95% ethyl alcohol.
4. For vaporizer chamber/induction box, clean with a moist paper towel. Do not use ethanol nor disinfecting wipes to clean. Replace pads (or folded paper towel) and dispose in biohazard container.
5. Dispose of used gloves, surgical tape, gauze, cotton-tipped applicators in biohazard container.