

Vantage Initial Setup

Vantage Product Documentation, 12 March 2019



Congratulations and thank you for purchasing a Verasonics Research Ultrasound System. This document describes how to set up and test the components included in this shipment.

1 Important Notes and Warnings

Note

In addition to the items you've purchased from Verasonics, you will need a monitor, an Internet connection and Ethernet cable, and a valid Matlab and Signal Processing Toolbox license. You cannot use your Vantage system without these items.

Note

Please keep the shipping box and its contents. You must use them when shipping your Vantage system back to Verasonics for upgrades or repairs. The shipping box has been custom designed to keep the system safe during shipping and is expensive. If you require a new box to return your system you will be charged for it.

Note

Your host controller is shipped to you in a ready-to-use state, with the Vantage software pre-installed. The PCI Express host adapter has also been installed in the host controller.

Warning

Please be careful when removing the Vantage Data Acquisition System from its shipping container. A conventional Vantage Data Acquisition System system may weigh up to 44 lbs (20 Kg), while a HIFU Vantage Data Acquisition System may weigh up to 57 lbs (26 Kg.)

2 Initial Setup Procedure

The largest box in your shipment contains the Vantage Data Acquisition System. If you purchased transducers these may also be in this box. The smaller box contains the host controller and accessories.

To setup your system:

1. Connect the PCI Express cable to the appropriate plugs on the back of the Vantage system and the back of the host controller.
Please see *Ensuring Proper PCI Express Connector Seating*, below, for guidance on this critical process step.
2. Connect all other power cables, keyboard, mouse, Internet connection, etc.
3. Confirm that the Vantage system power switch is in "on" position.
4. Turn on the host controller. This will cause your Vantage Data Acquisition System to power up as well.
5. The host controller ships with an initial password of *verasonics*. Enter this password when the host controller requests it.
6. Download Acrobat reader.
7. Refer to the *Vantage User Manual*, which can be found on the desktop of your host controller, for additional instructions if you have difficulty completing the following steps.
8. Activate your Matlab and Signal Processing Toolbox license with Mathworks (<https://www.mathworks.com>).
9. Conduct the acceptance testing protocol, as explained in the *Running the System Acceptance Test* section of this document.

Your Verasonics Vantage system is now ready for use! Refer to the *Vantage User Manual*, which can be found on the desktop of your host controller, for instructions on use of the system, important safety warnings, and a summary of other documentation included with the system.

3 Ensuring Proper PCI Express Cable Seating

It is critical that your PCI Express cables be properly connected and fully seated. Please see the following pictures to ensure that your PCI Express cables are properly connected.

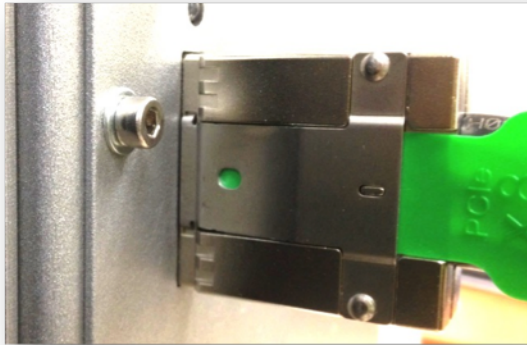
The PCI Express connectors are on the back of the Vantage Data Acquisition System and the host controller.



This is a PCI Express connection where the connector is not fully seated in the chassis.



You will hear a click when the PCI Express connector is fully seated.

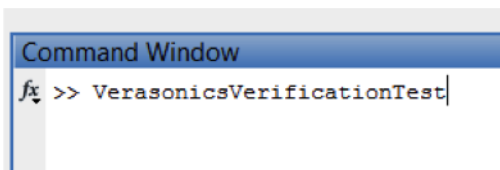


4 Running the System Acceptance Test

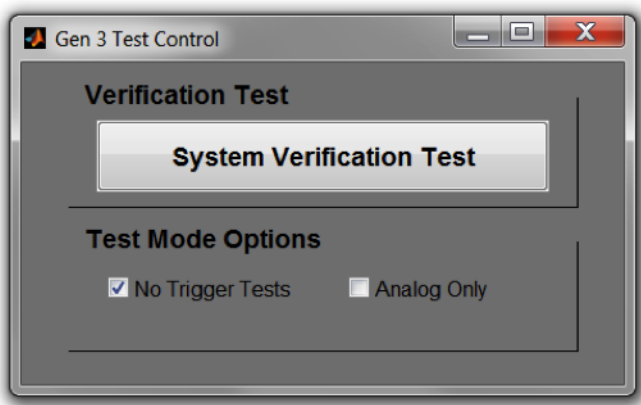
This procedure tests whether your new Vantage system is completely operational.

Please do the following to execute the System Acceptance Test:

1. Power up your host controller if it is not already running. As mentioned previously, this will cause your Verasonics Vantage Data Acquisition System to power up as well.
2. Launch the Matlab application on your host controller.
3. At the Matlab command prompt, type `VerasonicsVerificationTest` and press the Enter key:



4. Select *System Verification Test*:



5. When the test finishes execution, it will print its results to the Matlab output window. Those results should look something like this:

```
-----  
ALL TESTS PASS  
-----  
BOARD ID: Verasonics  
Tests Complete      19-Feb-2014 08:00:21  
=====
```

If you do not see this output, or if there are any other error messages, please contact Verasonics Technical Support (support@verasonics.com) for assistance.

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