Newport AI-6 Guardian Application

Version 1.0.5

Revision Date: April 3, 2018

IMPORTANT NOTES:

Please close all applications on your PC before installing this software.

In order for the USB drivers to install / uninstall correctly, no instruments that use the USB driver can be powered on and connected to the PC during this process.

Manual: The latest manuals for the Newport AI6 Guardian can be found on Newport Corporation's website (see below), on the product specific page.

Newport Corp. World Wide Web Server

You can access a variety of Newport Corporation information sources via the Newport Web Server, http://www.newport.com.

Technical Support

Please review the User's Manual first if you are experiencing difficulties with the product. The following Technical Support information is listed below if you still need help.

Tel: 1-800-222-6440
Fax: 1-949-253-1479
Email: rma.service@newport.com
Internet: http://support.newport.com

Media Contents:

The root folder contains this readme file, the user's manuals, and the setup program to install the software.

The Win32 folder contains setup files for Windows 32-bit operating systems. The x64 folder contains setup files for running applications in 64-bit mode on Windows 64-bit operating systems. The x86Onx64 folder contains setup files for running applications in 32-bit mode on Windows 64-bit operating systems.

Installation:

This software may be installed on the following Microsoft Windows operating systems: Windows XP, Windows Vista, Windows 7, Windows 8 and Windows 10.

If the software is being installed on a 64-bit operating system then there are two choices: (1) 32-bit mode and (2) 64-bit mode. You may separately choose both installations because the 32-bit mode files will be installed to the "Program Files (x86)" folder and the 64-bit mode files will be installed to the "Program Files" folder.

The Microsoft .NET Framework version 3.5 SP1 or later is required to install this software. If it is not already installed then the installer will automatically install it from the vendor's web site. An internet connection is required for this step.

The Newport USB Driver is also required and will automatically be installed if the latest version does not already exist on your PC. When the Newport USB Driver is installed on a 64-bit OS, both the 32-bit and 64-bit driver files are installed.

If a security alert message about the software is displayed (during setup or soon after the setup program is closed), then verify that the software is published by Newport Corporation. If so, then allow the software to be installed.

After all required setup programs have been run and all setup related message boxes have been closed, your software is installed and is ready for use.

Troubleshooting Driver Installation:

There are a few things that you can try on your own that may solve an issue and avoid a call to technical support:

(1) Power on and connect your device to the PC. Then run Device Manager to see if the Newport USB Driver is properly installed.

    a. If your device has a yellow exclamation icon or is an "Unknown" device then right click the icon and select "Update Driver" from the context menu. Then on the first screen of the Wizard, select "Browse my computer for driver software" and then select the Next button on the second screen. If you are running Windows XP then select "No, not this time" on the first screen of the Wizard and then select "Install the software automatically (Recommended)" on the second screen. For more information, see the document named "Changing The USB Driver For An Instrument.pdf" in the \Docs folder.

    b. Right click your device's icon and select "Properties" from the context menu. Select the Driver tab and verify that the driver details are correct. In order for the driver to work properly the Driver Provider must be Newport Corporation, the Driver Date must be at least August 2017 and the Driver Version must be at least 5.x.x. Follow the instructions in "Changing The USB Driver For An Instrument.pdf" in the \Docs folder and select the Newport driver with the highest version number. If you are not running Windows XP then select one with a certificate icon too.

(2) Run the TestUSB application to display the connected devices and to generate a trace log of the device discovery process. This application may fail to load if step #1 above is not yet complete. TestUSB is located in the \Bin folder of the Newport USB Driver installation. There is a desktop shortcut and a Start Menu shortcut for the Newport USB Driver Folder. Run the TestUSB application and connect / disconnect instruments. If your instruments are properly displayed in the output window whenever they are connected or disconnected then USB communication is working. If there is some kind of problem then click the "Open Log Folder" button and find the log file named LogYYYY-MM-DD_Native.txt. This log file contains information about the software's attempt to communicate with the USB devices attached to the PC.

(3) Check the Windows installation log files for errors. The Windows\Inf folder contains "setupapi.dev.log" and "setupapi.app.log". If you are running Windows XP then "setupapi.log" is located in the Windows folder. These installation log files should contain information about the installation of the Newport USB Driver. Search these files for "104D" (Newport's Vendor ID) and find the correct date / time stamp of when the installation error occurred. Any line that starts with "!!!" represents an error.

Installed Files:

Software

Newport Guardian Application	Version 1.0.5
CmdLibAI6.dll	Version 1.0.2
DeviceIOLib.dll	Version 1.0.6
NpEthernet.dll	Version 1.0.7
NpSerial.dll	Version 1.0.4
UsbDllWrap.dll	Version 1.0.11

Documentation

Guardian Samples.pdf	Version 1.0.0

Programming Samples

.NET C# OpenMultipleDevices
.NET C# OpenSingleDevice
.NET C# SampleGetErrors
.NET C# SampleControlGain
.NET C# SampleActiveIsolation
.NET C# SampleTuning
LabVIEW 8.x SampleGetIDMultipleDevice_6.vi
LabVIEW 8.x SampleGetIDSingleDevice_6.vi
LabVIEW 8.x SampleGetErrors_6.vi
LabVIEW 8.x SampleControlGain_6.vi
LabVIEW 8.x SampleActiveIsolation_6.vi
LabVIEW 8.x SampleTuning_6.vi
LabVIEW 2009 SampleGetIDMultipleDevice_6.vi
LabVIEW 2009 SampleGetIDSingleDevice_6.vi
LabVIEW 2009 SampleGetErrors_6.vi
LabVIEW 2009 SampleControlGain_6.vi
LabVIEW 2009 SampleActiveIsolation_6.vi
LabVIEW 2009 SampleTuning_6.vi

What's New

VERSION 1.0.5   April 3, 2018

     Fixes:
1. None.

     Feature Enhancements:
1. Replaced Jungo's WinDriver with Microsoft's WinUSB in the Newport USB Driver. All previous library interfaces and functionality remain unchanged.
2. Added the Diagnostics tab and its testing features.
3. Added a control to plot the Velocity For Channels 1 - 6, or the Velocity In Six Degrees of Freedom.
4. Added a Grid checkbox for plotting.
5. Time Continuous plotting only reads data for the time specified on the Time Scale knob.

VERSION 1.0.4   July 27, 2016

     Fixes:
1. None.

     Feature Enhancements:
1. Added PTP functionality for internal use.

VERSION 1.0.2   March 24, 2016

     Fixes:
1. Updated the AI-6CfgCommands.xml file that is used to save and restore controller settings.

     Feature Enhancements:
1. Enhanced keyboard shortcuts for test scripts.

VERSION 1.0.1   March 14, 2016

     Fixes:
1. None.

     Feature Enhancements:
1. Initial release.