New Focus Picomotor Application

Version 2.0.4

Revision Date: March 13, 2014

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 New Focus Picomotors can be found on Newport Corporation's website (see below), on the product specific page. For your convenience a recent version of the manuals can be found on the installation media and will be installed on your PC.

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, and Windows 8.

If the software is being installed on a 64-bit operating system then make sure to choose the correct installation for your needs. There are two choices: (1) 32-bit mode and (2) 64-bit mode. If you have a 32-bit version of LabVIEW then choose the 32-bit mode installation. If you have a 64-bit version of LabVIEW then choose the 64-bit installation. If you are developing in C# or with a product that produces 64-bit applications then choose the 64-bit installation. You may 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.

If a security alert message about the driver software is displayed (during setup or soon after the setup program is closed), then verify that the driver software is "WinDriver" or that it is published by "Jungo LTD". If so, then allow the driver 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) Run the provided software application or one of the samples to see if the PC is properly communicating with the instrument. If the PC is communicating with the instrument then the software is correctly installed, the drivers are working properly, and all hardware involved in the communication (such as a USB cable) is functional. However, if the provided software and samples cannot communicate with the instrument, then try the other steps below.

(2) If the software is installed on a 64-bit operating system and the provided software application communicates properly, but the samples do not, then verify that the proper drivers (32-bit mode or 64-bit mode) were installed for your application needs. For more information see the "Installation" section above and the document named "Newport USB Driver API User's Manual.pdf" in the \Docs folder of the Newport USB Driver installation folder. The default installation path is: C:\Program Files\Newport\Newport USB Driver\. There is a desktop shortcut and a Start Menu shortcut for the installation folder. This document explains the Newport USB Driver interface, each of its samples, and the log file which can contain helpful information about device communication.

(3) Verify that the Newport USB driver was installed without error by inspecting the two log files that were generated during installation. These two log files are located in the \Bin folder of the Newport USB Driver installation folder. The default installation path is: C:\Program Files\Newport\Newport USB Driver\. There is a desktop shortcut and a Start Menu shortcut for the installation folder. Open both log files (NewportUSBDriver.log and WinDriver.log) with any text editor and verify that the last line in both files is "STATUS_SUCCESS". If the last line in both log files is "STATUS_SUCCESS" then the Newport USB Driver installed correctly. However, if the last line is different in either of these log files then perform the following steps: (a) disconnect any instruments that are powered on and connected to the PC, (b) uninstall the Newport USB Driver software using the Control Panel, and (c) re-install the Newport USB Driver. Then re-inspect the two log files for "STATUS_SUCCESS".

(4) Verify that the proper driver is associated with the instrument by running Windows Device Manager with the instrument powered on and connected to the PC. For instructions on how to associate a driver with your instrument, see the document named "Changing The USB Driver For An Instrument.pdf" in the \Docs folder of the Newport USB Driver installation folder. The default installation path is: C:\Program Files\Newport\Newport USB Driver\. There is a desktop shortcut and a Start Menu shortcut for the installation folder.

Installed Files:

Software

New Focus Picomotor Application	Version 2.0.4
CmdLib8742.dll	Version 1.0.1
CmdLib.dll	Version 2.0.1
DeviceIOLib.dll	Version 1.0.3
NpEthernet.dll	Version 1.0.4
NpSerial.dll	Version 1.0.2
UsbDllWrap.dll	Version 1.0.6

Documentation

Picomotor Samples (Mixed Devices).pdf	Version 1.0.0
Picomotor Samples.pdf	Version 2.0.0

Programming Samples

Mixed Devices Samples
.NET C# OpenMultipleDevices
.NET C# OpenSingleDevice
.NET C# RelativeMove
.NET C# GetPositionAllSlaves
.NET C# EnableClosedLoop
LabVIEW 8.x SampleGetIDMultiple
LabVIEW 8.x SampleGetIDSingle
LabVIEW 8.x SampleRelativeMove
LabVIEW 8.x SampleGetPositionAllSlaves
LabVIEW 2009 SampleGetIDMultiple
LabVIEW 2009 SampleGetIDSingle
LabVIEW 2009 SampleRelativeMove
LabVIEW 2009 SampleGetPositionAllSlaves

Model 8742 Samples
.NET C# OpenMultipleDevices
.NET C# OpenSingleDevice
.NET C# RelativeMove
.NET C# GetPositionAllSlaves
LabVIEW 8.x SampleGetIDMultiple
LabVIEW 8.x SampleGetIDSingle
LabVIEW 8.x SampleRelativeMove
LabVIEW 8.x SampleGetPositionAllSlaves
LabVIEW 8.x Sample8742UI

LabVIEW 2009 SampleGetIDMultiple
LabVIEW 2009 SampleGetIDSingle
LabVIEW 2009 SampleRelativeMove
LabVIEW 2009 SampleGetPositionAllSlaves
LabVIEW 2009 Sample8742UI

Model 8743 Samples
.NET C# OpenMultipleDevices
.NET C# OpenSingleDevice
.NET C# RelativeMove
.NET C# GetPositionAllSlaves
.NET C# EnableClosedLoop
LabVIEW 8.x SampleGetIDMultiple
LabVIEW 8.x SampleGetIDSingle
LabVIEW 8.x SampleRelativeMove
LabVIEW 8.x SampleGetPositionAllSlaves
LabVIEW 8.x Sample8743UI
LabVIEW 2009 SampleGetIDMultiple
LabVIEW 2009 SampleGetIDSingle
LabVIEW 2009 SampleRelativeMove
LabVIEW 2009 SampleGetPositionAllSlaves
LabVIEW 2009 Sample8743UI

What's New

VERSION 2.0.4   March 12, 2014

    Fixes:
1. Fixed NpEthernet.dll v1.0.4 to better handle discovery for multiple host addresses.

    Feature Enhancements:
1. Added samples and documentation for mixed devices.

VERSION 2.0.3   June 25, 2013

    Fixes:
2. None.

    Feature Enhancements:
2. Added documentation for the 8743-CL.

VERSION 2.0.2   June 13, 2013

Fixes:
1. None.

Feature Enhancements:
1. Added support for closed-loop controllers.
2. Added the option to automatically enable closed-loop when a motor is selected.
3. Added RS-485 support.
4. Added features to automatically or manually resolve RS-485 address conflicts.
5. When the current controller is in motion, another controller may be selected as the current controller. This allows multiple controllers to be in motion at the same time.
6. Added the option to perform a motor check when a controller is selected. This will move each motor a minimal distance to determine if a motor is present or not. A message is displayed if there is no motor.

VERSION 1.0.1   November 7, 2012

Fixes:
1. None.

Feature Enhancements:
1. None.