



# New Focus Picomotor Application

Version 2.1.5

Revision Date: July 19, 2018

## IMPORTANT NOTES:

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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.

## 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](mailto: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 USB 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

New Focus Picomotor Application	Version 2.1.5
CmdLib8742.dll	Version 1.1.3
CmdLib.dll	Version 2.1.3
DeviceIOLib.dll	Version 1.0.7
NpEthernet.dll	Version 1.0.7
NpSerial.dll	Version 1.0.4
UsbDllWrap.dll	Version 1.0.12

## Documentation

Picomotor Samples (Mixed Devices).pdf	Version 1.0.2
Picomotor Samples.pdf	Version 2.0.2

## 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 2.1.5      July 19, 2018

#### Fixes:

1. None.

#### Feature Enhancements:

1. The New Focus Picomotor Application can now be run by a user that does not have administrative rights.

VERSION 2.1.4      October 27, 2017

#### Fixes:

1. Fixed the obfuscation attributes on CmdLib.dll and CmdLib8742.dll to allow use in the Visual Studio debugging environment.

#### Feature Enhancements:

1. None.

VERSION 2.1.3      September 21, 2017

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.

VERSION 2.1.2      January 25, 2017

Fixes:

1. The Newport USB Driver 2.2.0, which upgraded WinDriver by Jungo to version 12.3.0 in order to fix the thirty day limitation bug on Windows 10, is installed with this version.

Feature Enhancements:

1. Added the Quasi-absolute Encoder Setup dialog and added the Find Absolute Position button to the Home tab of the main form.

VERSION 2.1.0      August 16, 2016

Fixes:

1. None.

Feature Enhancements:

1. Added the Ethernet Setup dialog so that there is a graphical user interface to choose whether a static IP or a dynamic IP address is used and to set the static IP address, net mask IP address, default gateway IP address and host name.

VERSION 2.0.5      May 13, 2015

Fixes:

1. UsbDllWrap v1.0.7 properly disconnects a device that is using events when the device key is longer than sixteen bytes.
2. NpEthernet v1.0.5 detects a wider variety of IPv6 addresses so that they can be filtered out and properly determines if socket data is available for reading as a response to the UDP broadcast.

Feature Enhancements:

1. None.

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:

1. None.

Feature Enhancements:

1. 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.

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