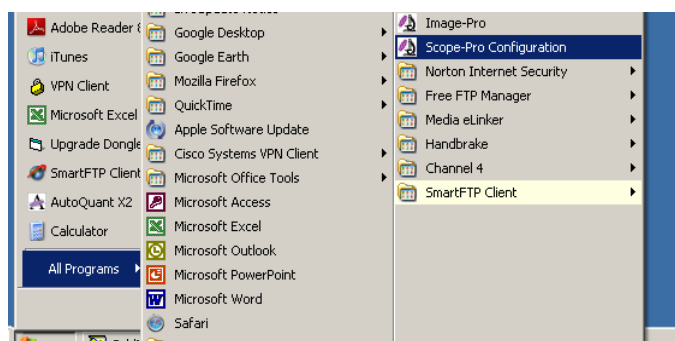


## Using the Prior Lumen Pro in Image-Pro Plus Microscope Control

The new Prior Lumen Pro, with its internal filter wheel and neutral density wedge shutter, together with Media Cybernetics' Image-Pro Plus MC provides an excellent system for multi channel fluorescence imaging. This simple guide aims to help you install and set up the Lumen Pro within Scope-Pro to get you started as quickly as possible.

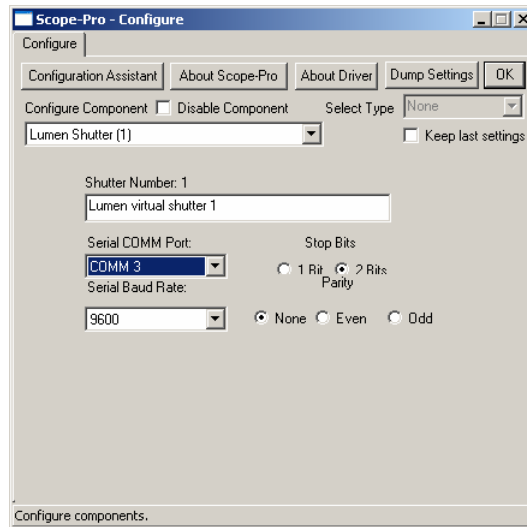
For instructions on connecting the hardware, please refer to Prior installation manual.

1. Connect the Lumen Pro to your Prior controller so that the filter wheel is connected to the Filter 1 connection on the controller and the shutter is connected to Filter 2
2. Turn on the PC and install Image-Pro from the installation disk; we recommend that Image-Pro is installed in its default location of "C:/IPWINxx/"
3. Install the camera drivers for your camera. The most common drivers can be found on the Support section of the Media Cybernetics website ([www.mediacy.com](http://www.mediacy.com))
4. Restart your PC if the camera drivers require it
5. When the PC has been restarted, open the Scope-Pro Configuration application from the Programs section in the Start Menu

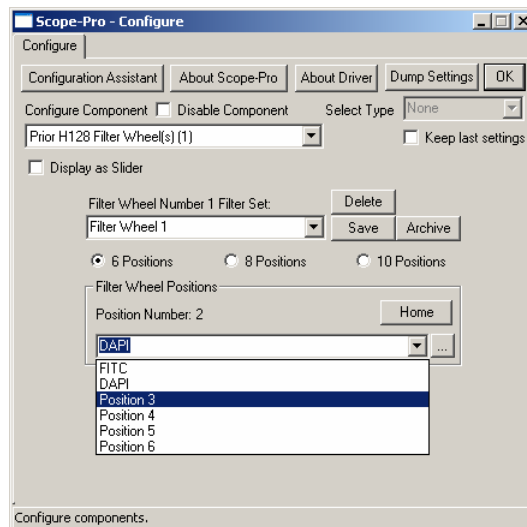


6. Click Next once, then select all the hardware connected to your system that you wish Scope-Pro to control. **DO NOT ENTER ANY NON AUTOMATED COMPONENTS OR NON-EXISTING COMPONENTS.** For example, enter the manual objectives under the manual options if you wish, but do not select an automated objective turret unless your microscope is connected and allows the software to control it.
7. Under the Prior Stage components, select the Lumen Light
8. Click **Next**, tick the **Select All** option, click **Next** then **Finish** to start Scope-Pro in Image-Pro

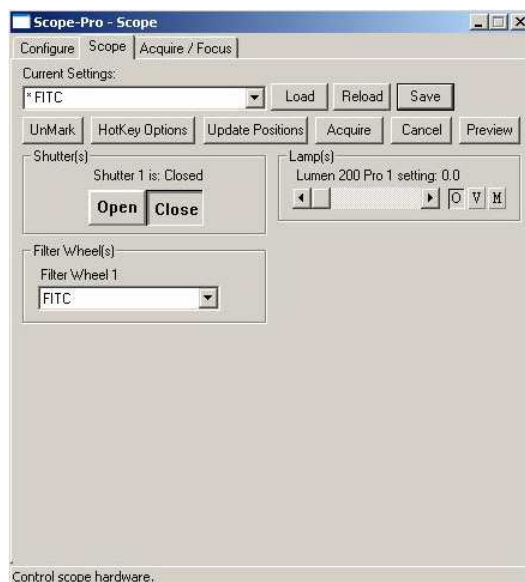
9. In the Scope-Pro **configure** tab, Ensure that the correct COM port settings are selected



10. Select the filter wheel and set it up with 6 Positions as below, renaming the filter wheel positions if necessary



11. Click OK and Scope-Pro will test the connection with the controller. Once the connection test is finished successfully you can control all aspects of the Lumen with Scope-Pro



## Controlling the Lumen

### 1. Filter wheel:

- 1.1. Select the desired filter wheel position from Filter Wheel drop-down menu in the **Scope** tab of Scope-Pro
- 1.2. To Change the filter wheel position labels to reflect the filters, return to the **configure** tab, select the desired position from the Filter Wheel drop-down menu, highlight it with the cursor and then type in the new name

### 2. Shutter:

- 2.1. To open or close the shutter, click on **Open** or **Close**
- 2.2. To open the shutter to a specific aperture, use the slider to select the percentage light emission
- 2.3. To switch between a fully closed, or fully open position to a specific aperture, click on **O** to **M** to open or close, or click on **V** to go to the last manually set aperture position

Additionally, settings files can be created that allow the user to instantly set several components, including the shutter and filter wheel, for specific acquisition settings. To create a new settings file, set the position for the filter wheel, shutter and any other components then press **Save** in the **Scope** tab. These settings can then be loaded directly from the minimised dialog by selecting them in the **Scope** tab and clicking **Mark** to add them to the settings shortcut buttons.



## **MediaCybernetics**

Settings files can be created or overwritten to specify an aperture as well as a filter. Minimising the Scope-Pro gives the user a simplified interface where users can quickly load marked settings files and open or close the shutter.