Precision Rated Optics

Work with a PRO!

CONNECTORVIEW

VIP-45 Software

Operation Guide

V.6.23.16

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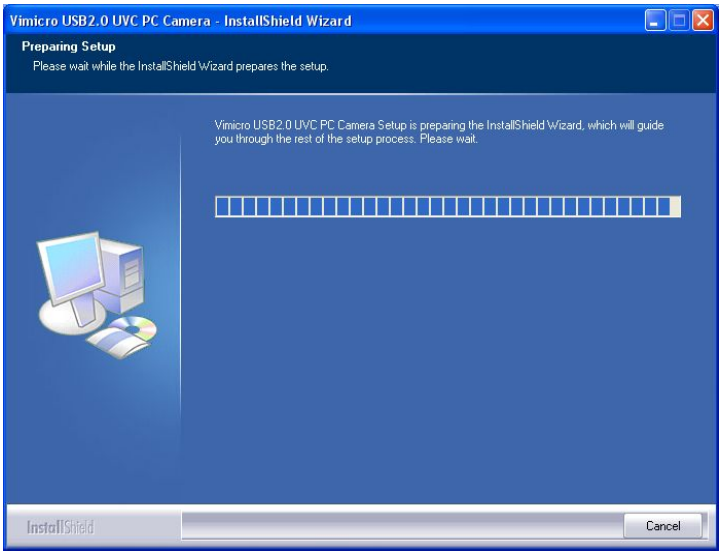
1. VIP-45

The VIP-45 will use a standard Windows driver and does not require manual driver installation.

Windows® XP users, however, may achieve better software performance by installing the PRO provided Vimicro driver.

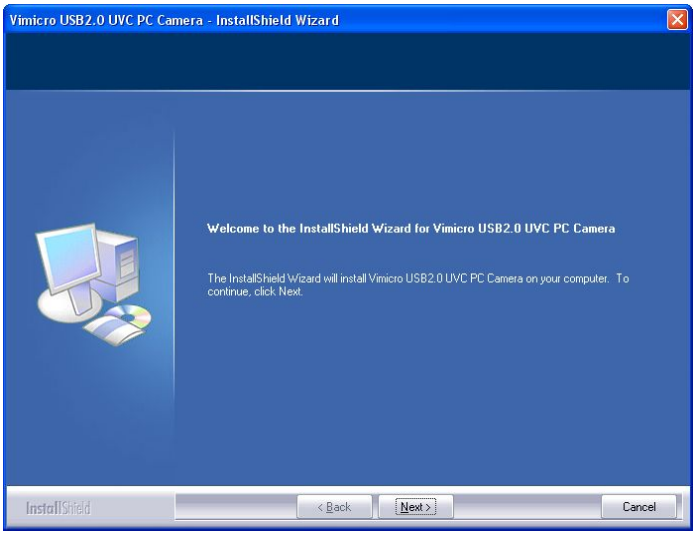
To install the Vimicro driver plug the VIP-45 probe into one of the computer USB ports.

On the ConnectorView Driver & Software CD, open the “VIP-45 folder”, select the appropriate Driver folder and run “Vimicro_Driver_Setup.exe”. The following screen will be displayed.

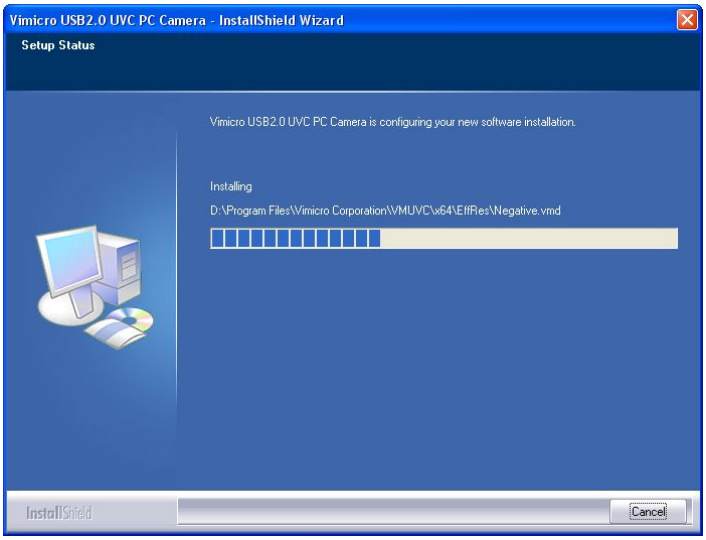


If you did not Plug the VIP-45 probe before run “Vimicro_Driver_Setup.exe”, the following warning will occur.

Plug the VIP-45 probe into one of the computer USB ports and click [Yes] to continue the installation.



Click [Next] to continue the installation.

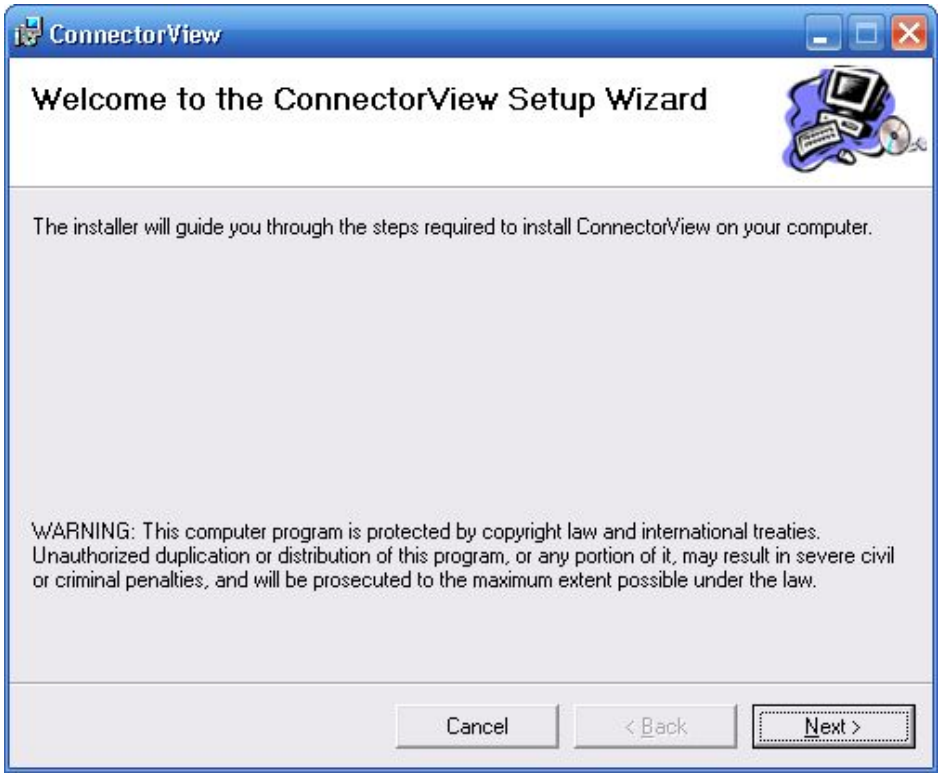


This installation may take several minutes. When the “InstallShield Wizard Completed” screen shows, click [Finish] to close the wizard.

2. Install ConnectorView

(Note: If you are upgrading your existing ConnectorView software to ConnectorView v4.1or if you have a previous version of ConnectorView on your computer, you should first use Windows Uninstaller to remove that previous version. It will not be necessary to reinstall the driver.)

Locate the PRO **ConnectorView Driver & Software** on your computer, and click on the Setup.exe file to start the installation. *(If you are installing from a downloaded file, extract the zipped file and click on the Setup.exe file. Then proceed in the same manner.)* An installation screen will appear: *

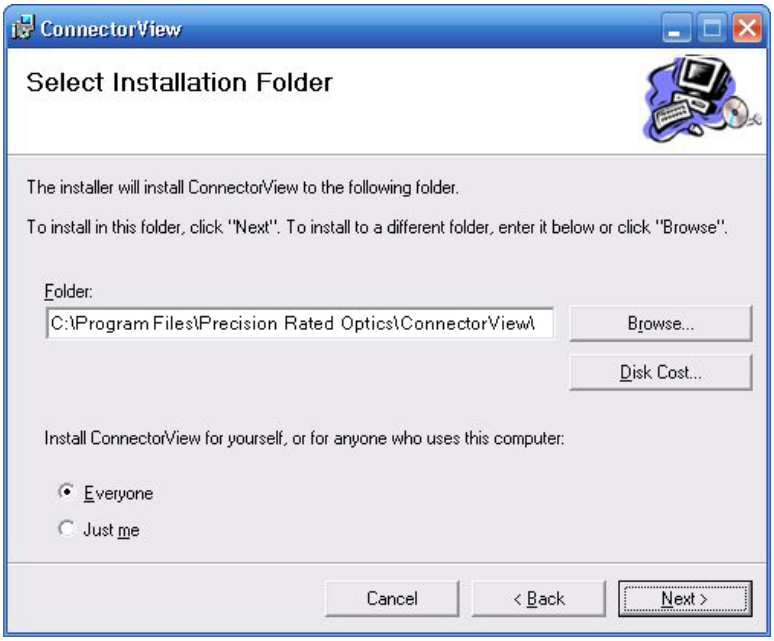


Click [Next].

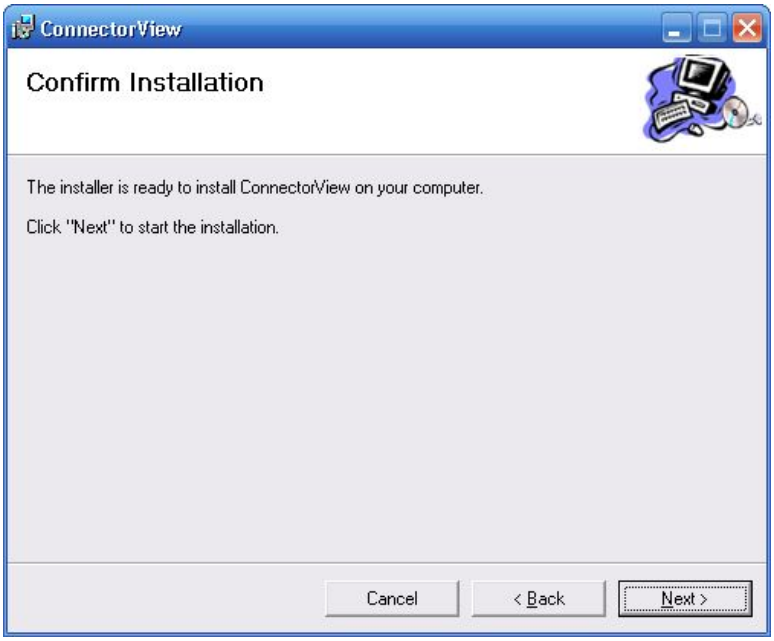
* PRO's ConnectorView software needs the support of .NET Framework 2.0 or higher. If your computer does not have .NET Framework 2.0 or 3.5 installed, you will be prompted to download it from the Microsoft website. Follow the instructions to download and then finish the installation. Alternatively, you can run "dotnetfx.exe" in the ConnectorView Driver & Software CD to install .NET Framework 2.0 onto your computer before running Setup.exe.

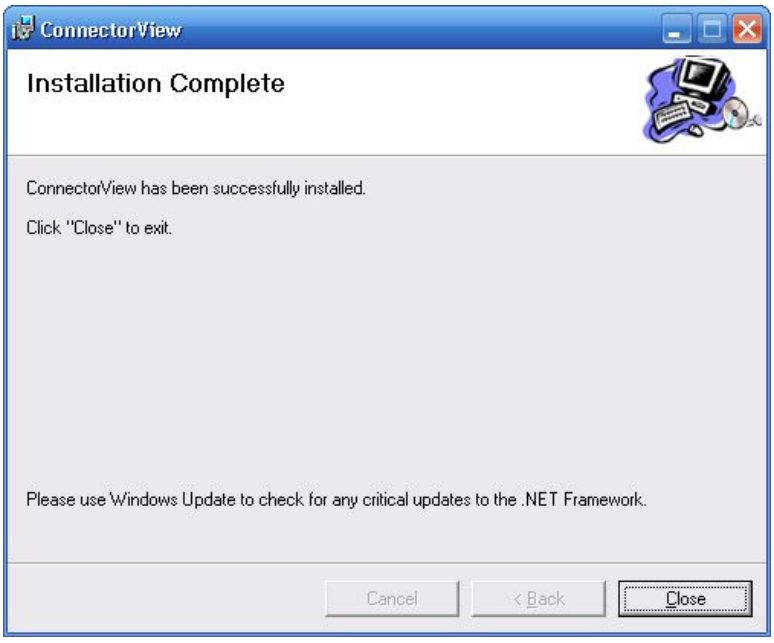
Please read the Freeware License Agreement. You must click “I Agree” to continue the installation process.

Accept the default installation folder “C:\Program Files\Precision Rated Optics\ConnectorView\” or select your own folder. Click [Next].



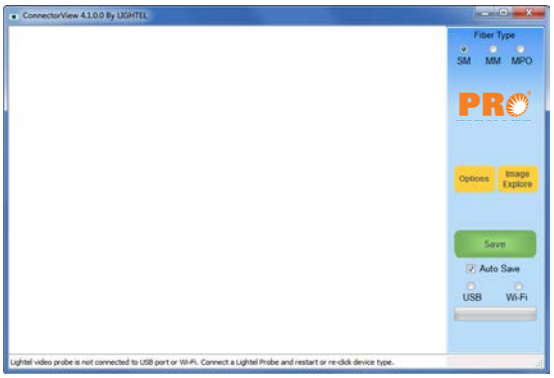
Then click [Next] again to “Confirm the Installation” and start the installation process.





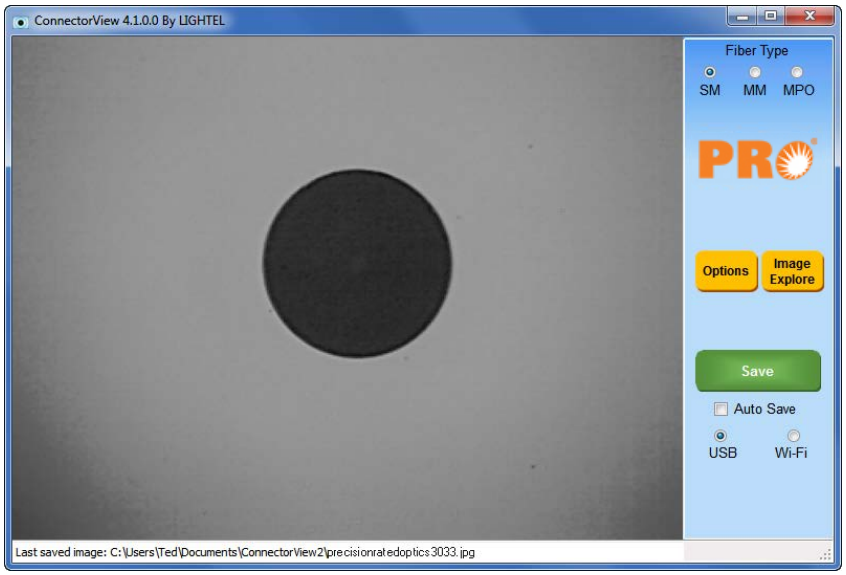
3. General settings

The VIP-45 must be properly connected to your computer or the VIP-45-WIFI adapter **before** opening the software.



If you observe this blank screen, you will need to close the software, reconnect your PRO device and reopen the program.

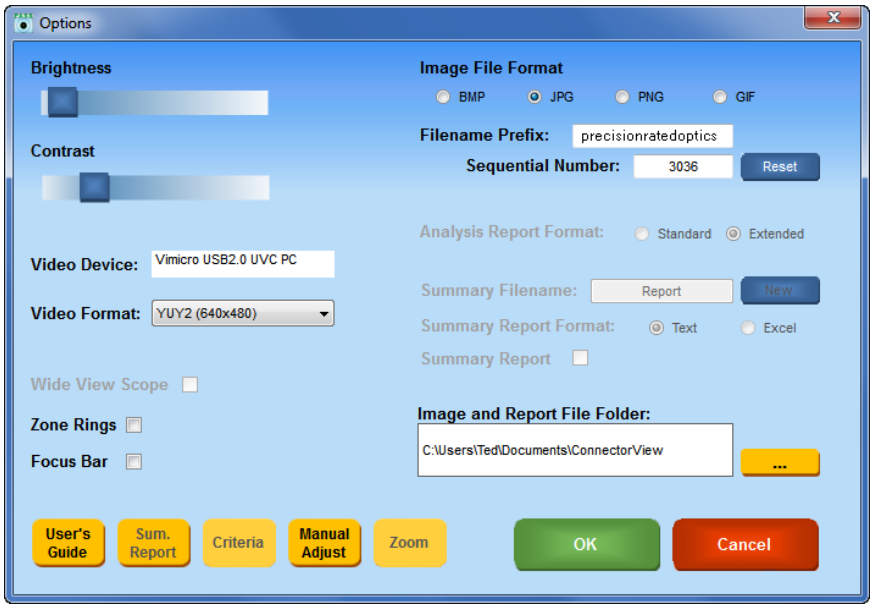
After properly connecting your device, click the “ConnectorView” icon to open the software. The USB or Wi-Fi radio button will be selected based on your type of connection.



The first time you open ConnectorView, you should click the yellow “Options” button to set up your preferences.

3.1 Setting Options

The “Options” window will control most of your choices for ConnectorView settings.*



** Buttons and controls are color coded throughout ConnectorView.*

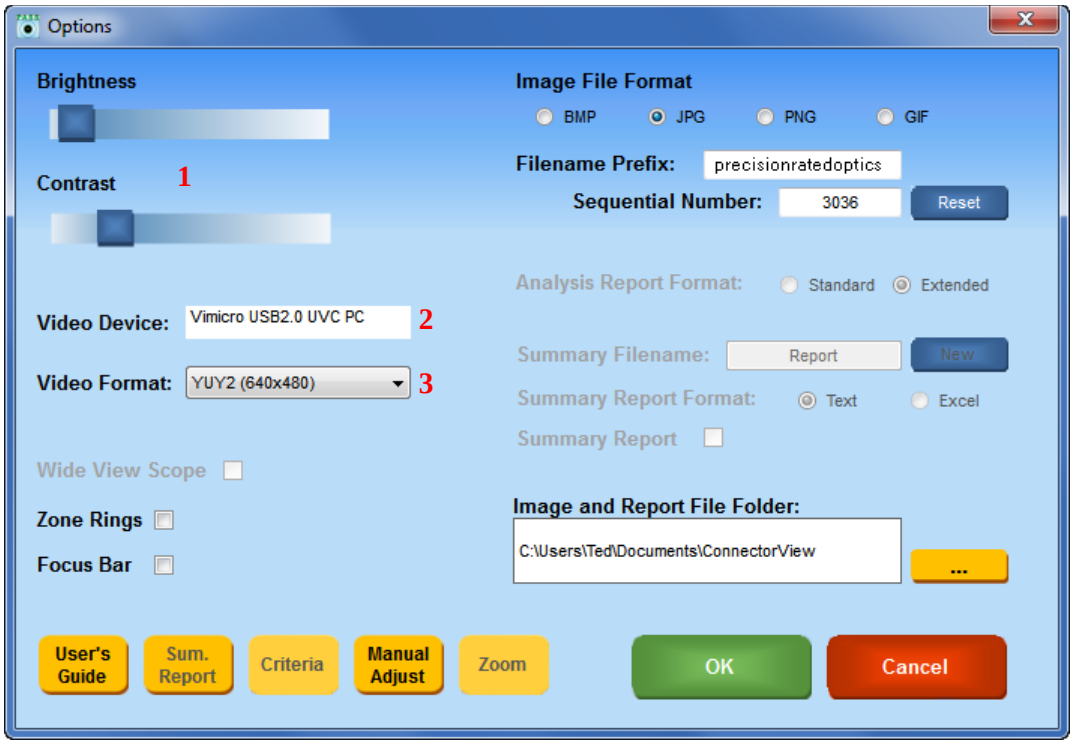
Blue – a control within the same window

Yellow – opens a new window

Green – Yes (Accept, OK, Save)

Red – No (Cancel, Delete, Exit)

Items which are grayed out are only available with a ConnectorView Plus license.



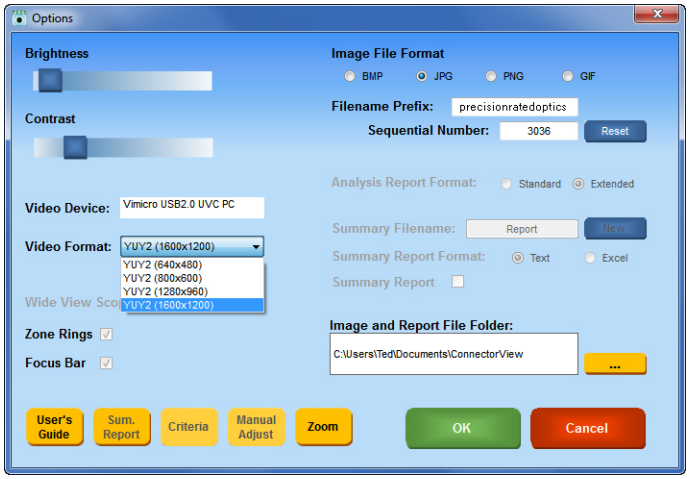
1) These sliders adjust the brightness and contrast of the live video. Moving these sliders will not affect previously saved images or a currently frozen screen.

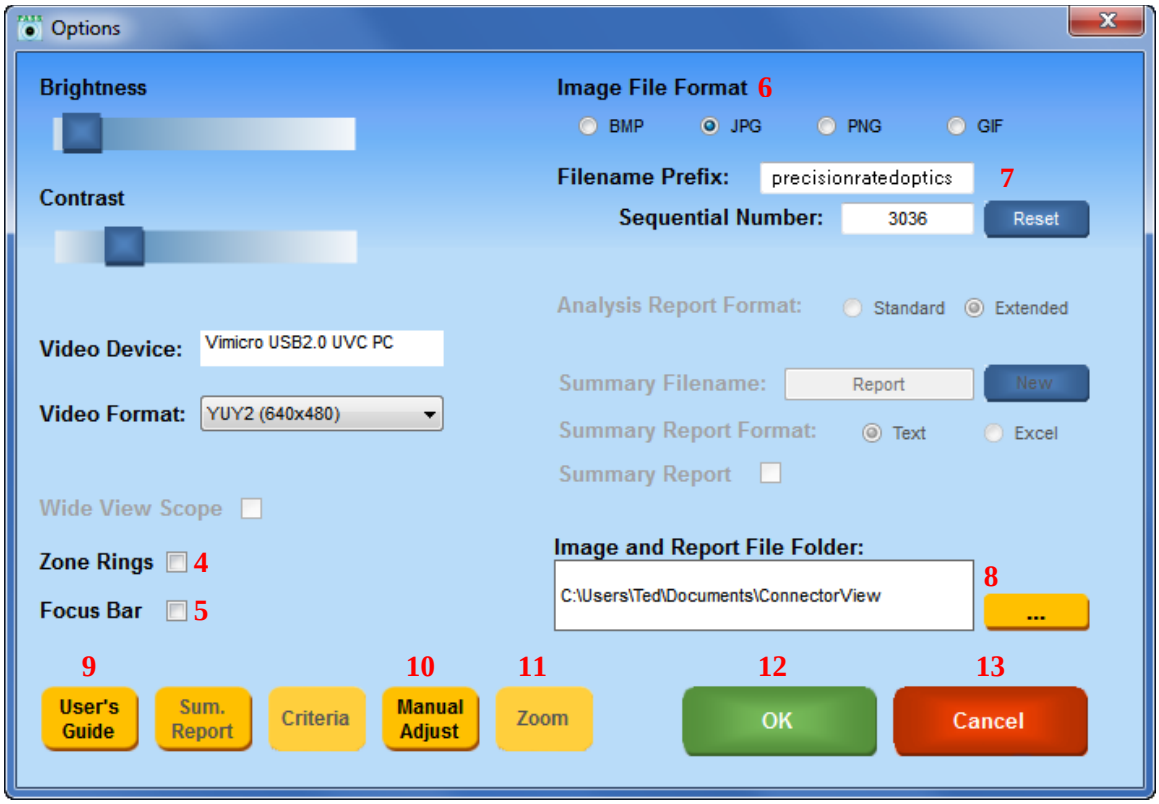
2) Shows the driver being used. VIP-45 should show Vimicro UVC.

3) Shows screen pixel size. The VIP-45 can be set to different screen pixel sizes. Larger sizes will potentially provide a sharper image, but the frame rate will be slower. (Optical resolution does not change.) The Zone Rings are only active at 640 x 480 on the standard view.

   Digital magnification is available on the VIP-45 and the VIP-45L in all video format sizes except 640 x 480.

   (640 x 480 and 1280 x 960 are the only video formats available when using the WiFi connection.)





4) To display the fiber zone rings, select this box. (The Zone Rings feature is disabled when MPO is the selected fiber type in the Main window.)

5) To display the Focus Bar, check this box.

6) These radio buttons allow you to select the image file format for your saved images. (JPG is the default.)

7) Type a Filename Prefix in the box. Up to 18 characters of the Filename will be visible (plus a 4 digit number), although Filenames can be longer. Numbering of the image files will be sequential. You can type in a different starting number if desired. Hitting the [Reset] button returns the 4 digit number to "0001".

8) Browse to select a file location and folder for your Image Files. (Default is the "ConnectorView" folder in your "Documents" or "MyDocuments" folder.)

9) Opens a pdf copy of this User's Guide.

10) Opens the Manual Adjustment window to locate the ferrule position manually.

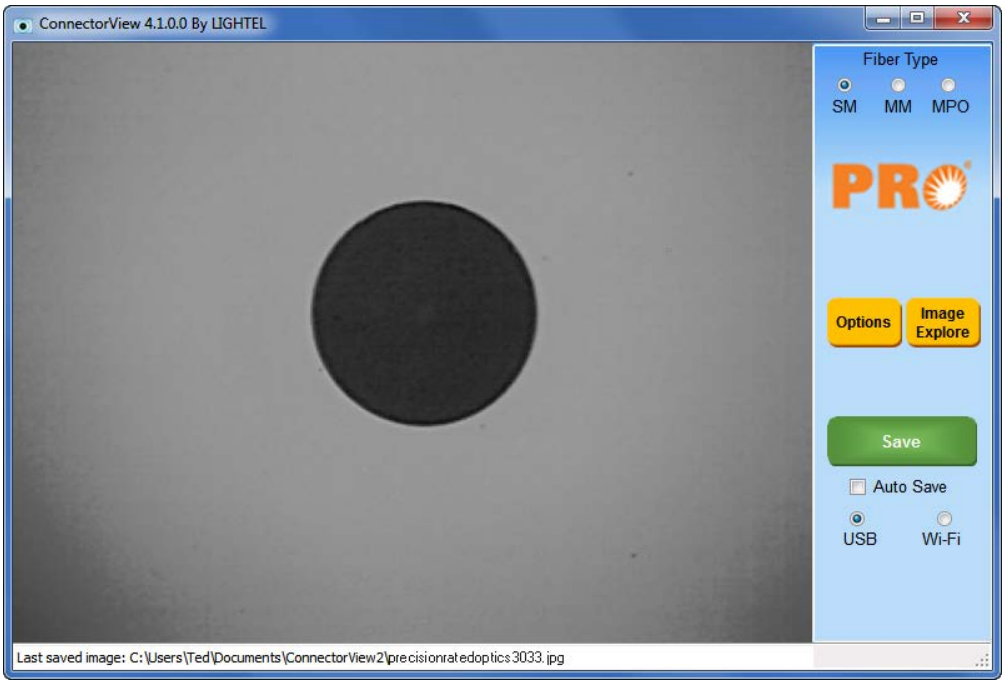
11) Opens the Digital Zoom window. (The button is only activated with VIP-45 and VIP-45L once the Video Format setting has been changed from 640 x 480.)

12) Approves all changes made and returns to the Main window.

13) Cancels all changes made and returns to the Main window

3.2 Main window controls

The Main window is the primary window for viewing and inspecting connectors

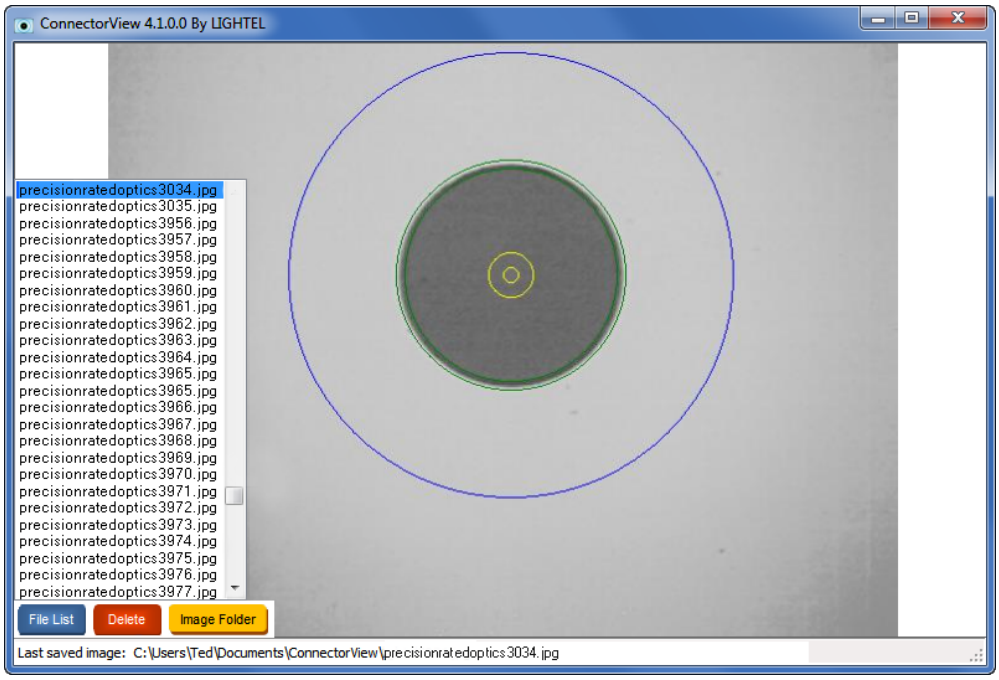


Fiber Type	Select the type of fiber you are inspecting SM (Single Mode), MM (Multimode), or MPO (ribbon, MTP). Single mode is the default. *Zone Rings are not available when MPO is selected.*
Options	Opens the Options window.
Image Explore	Opens a window to view previously saved images
Save	Saves the image currently displayed in the image portion of the the window
Auto Save	Automatically saves each capture
USB/WiFi	Shows the connection type you are currently using. The connection type will be automatically selected when the software is opened. USB is the default.
Focus Bar	Aids in focusing the image. When ConnectorView is started, focus the first connector by sight, then click on the focus bar. This sets the focus bar to that connector type. If you change the type of connector you are inspecting you may want to repeat this procedure. If the focus bar is not displayed, go to the Options window and select the Focus Bar checkbox.

The name and address of the most recently saved image can be found in the lower left corner of the window. The image of the connector currently being inspected is displayed in the large viewing area above it.

3.3 Image Explore

Image Explore allows you to quickly find and view previously saved images.



File List	Opens and closes the list of images in your currently selected storage folder. Files are listed alphabetically. Click on a filename to highlight it and display that file.
Delete	Deletes the currently highlighted file from your computer
Image Folder	Opens the Browse for Folder window so you can select a different folder to view
Last saved image	The location path for the most recently saved image is displayed In the lower left corner of the window.

Clicking on the displayed image will close Image Explore and return you to the Main window.

4. Fiber Zones

PRO's ConnectorView software will display four cleaning zones. They are:

A. Core

B. Cladding

C. Adhesive

D. Contact

These zones have been clearly defined and standardized in the industry. Some organizations may have their own acceptance criteria for connectors. If there is no different organizational standard, PRO suggests using the default standard, IEC 61300-3-35, which is summarized on the following two pages.

Single mode fiber requirements

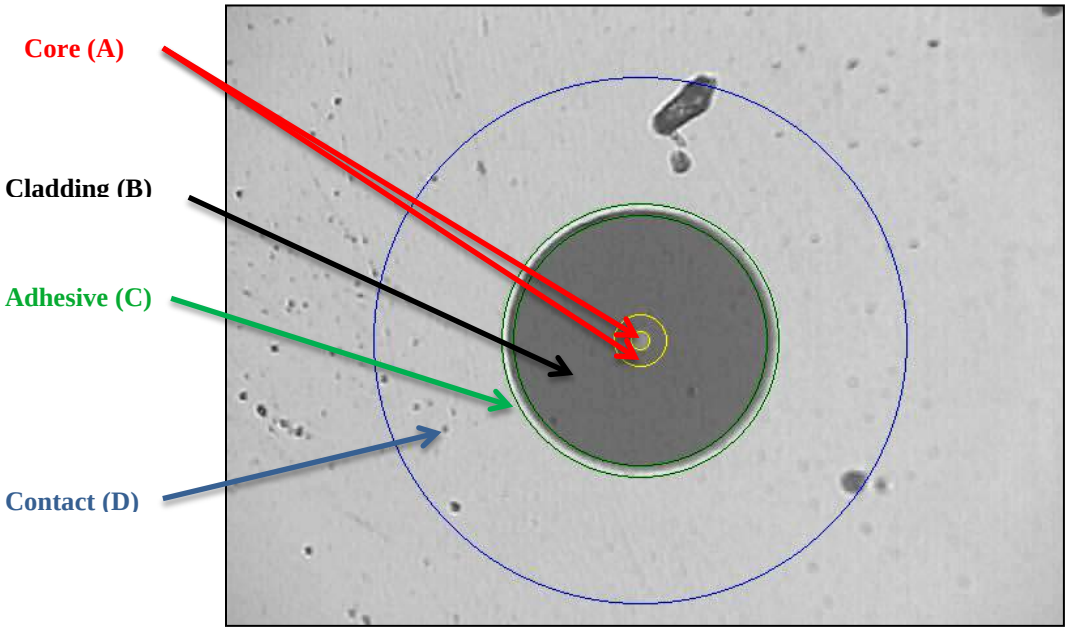
Zone name (diameter)	Scratches	Defects
A: Core (0-9µm, 0-25µm)	None	None
B: Cladding (25-120µm)	No limit	Any < 2µm, 5 from 2 - 5µm, None > 5µm
C: Adhesive (120-130µm)	No limit	No limit
D: Contact (130-250µm)	No limit	None > 10µm

Note 1: For scratches, the requirement refers to width.

Note 2: No visible subsurface cracks in the core or cladding zones

Note 3: All loose particles should be removed. If defect(s) are non-removable, it should be within the criteria above to be acceptable for use.

Note 4: There are no requirements for the area outside the contact zone since defects in this area have any influence on performance. Cleaning loose debris beyond this region is recommended good practice



Multimode fiber requirements

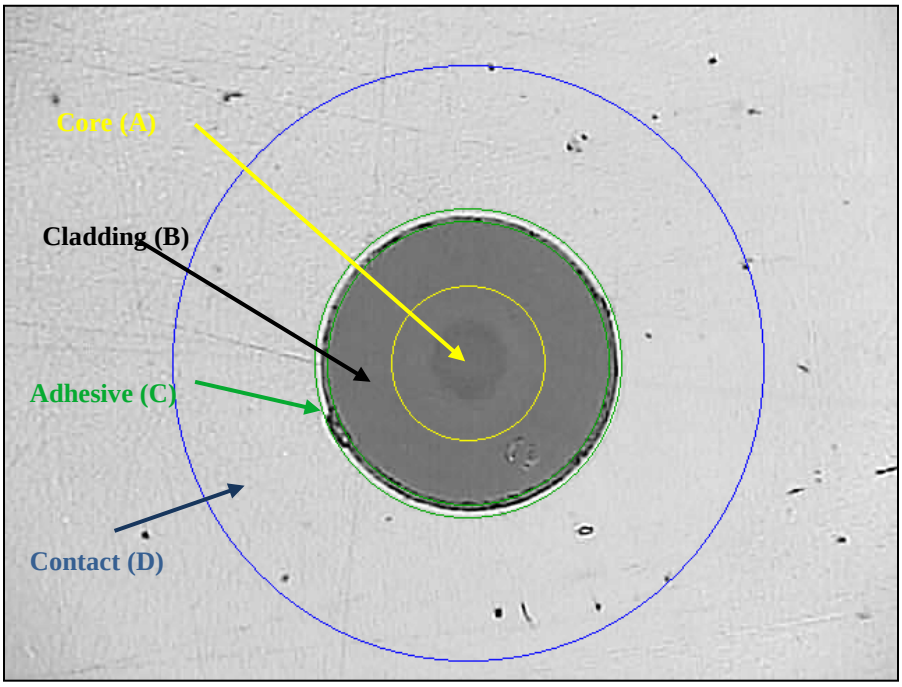
Zone name (diameter)	Scratches	Defects
A: Core (0-65µm)	No limit ≤ 3µm, None > 3µm	4 ≤ 5µm, None > 5µm
B: Cladding (65-120µm)	No limit ≤ 5µm, None > 5µm	Any < 2µm 5 from 2 - 5µm, None > 5µm
C: Adhesive (120-130µm)	No limit	No limit
D: Contact (130-250µm)	No limit	None ≥ 10µm

Note 1: For scratches, the requirement refers to width.

Note 2: No visible subsurface cracks in the core or cladding zones

Note 3: All loose particles should be removed. If defect(s) are non-removable, it should be within the criteria above to be acceptable for use.

Note 4: There are no requirements for the area outside the contact zone since defects in this area have no influence on performance. Cleaning loose debris beyond this region is recommended good practice

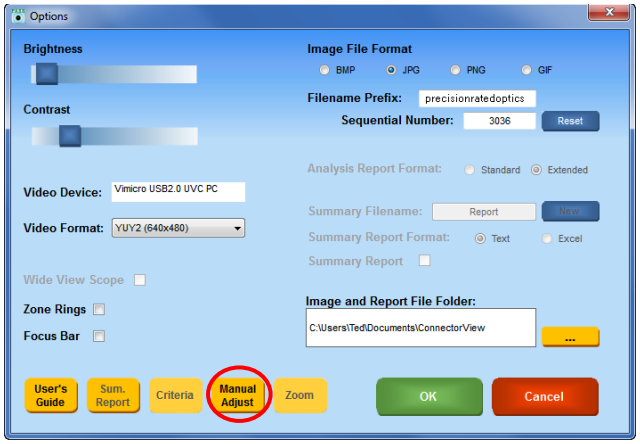


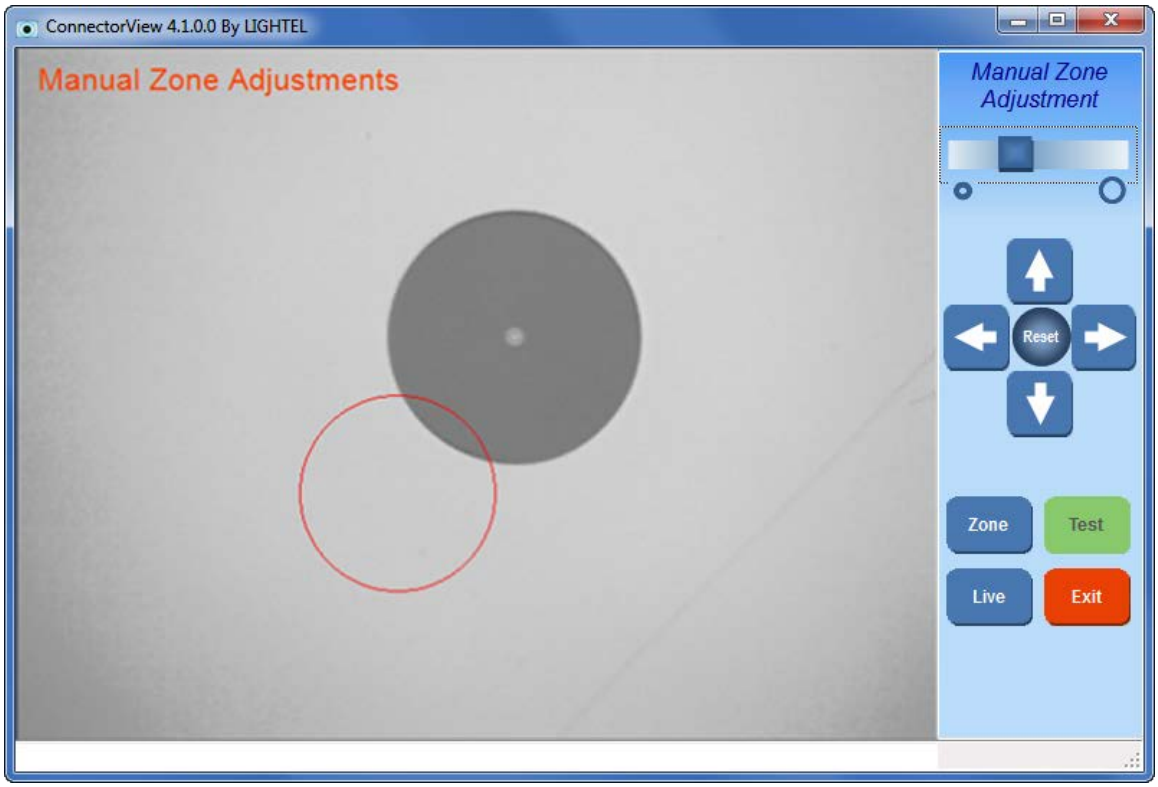
5. Manual Zone Adjustment

PRO's ConnectorView software is designed to allow you to automatically locate the ferrule and display the zone rings.

If a connector is too dirty or too poorly centered, the automatic detection function may not work properly. In this situation, you can clean the connector and retry, or you can use "Manual Zone Adjustment" to correct the ring placement.

Go to Options and click the [Manual Adjust] button or hit the [F11] key on your keyboard



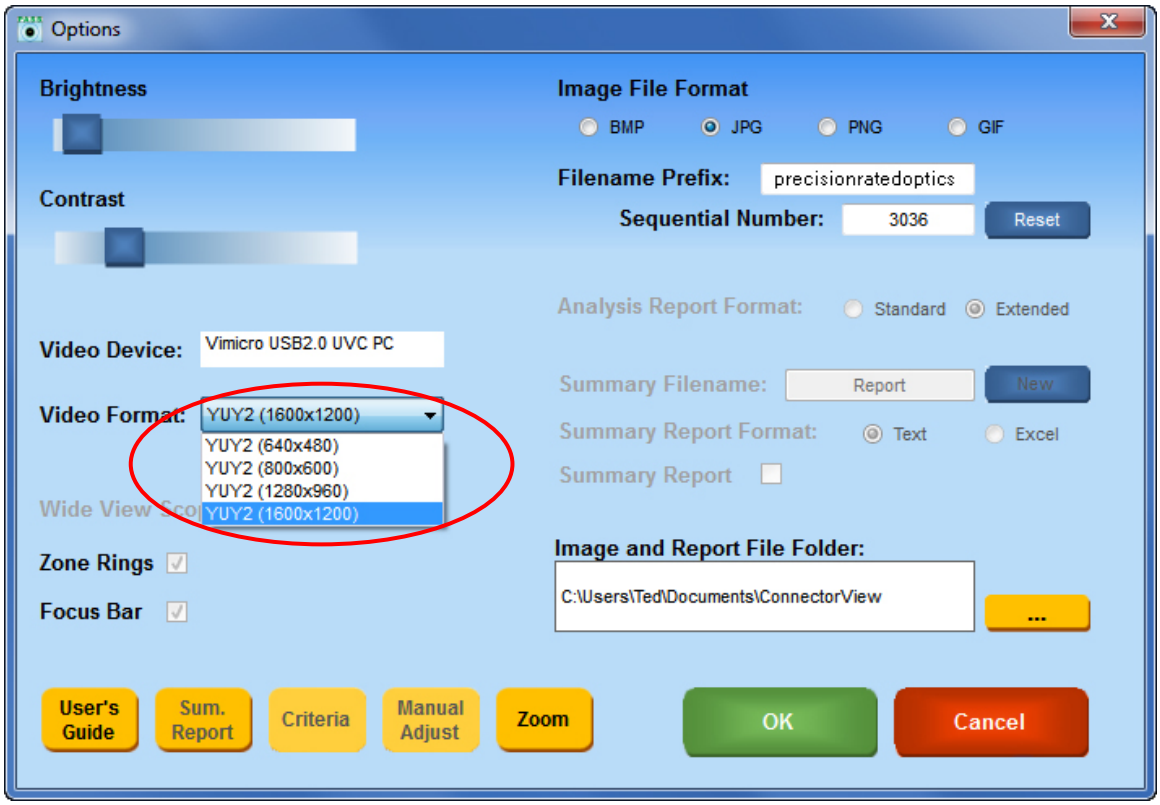


Use your mouse cursor to drag the red target circle to the right position. Use the slider to resize the circle, if necessary. Then use the arrows for fine position adjustments.

6. Digital Magnification (VIP-45 and VIP-45L only)

(Please note that digital magnification does not change the actual resolution.)

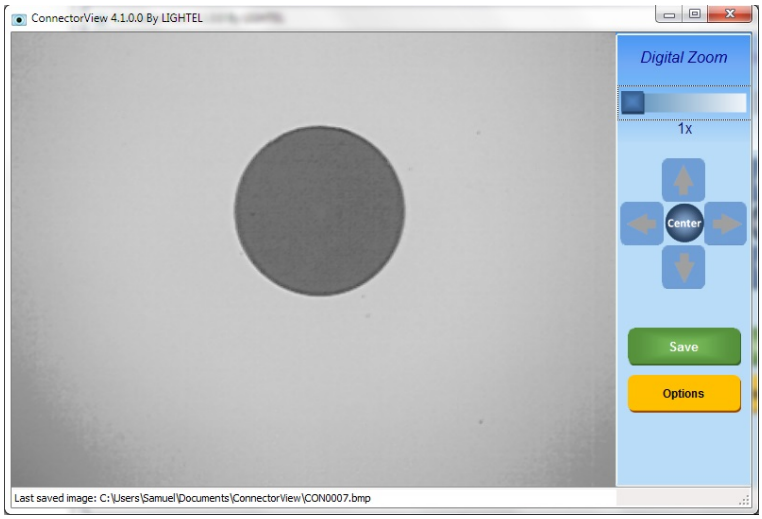
If you wish to activate digital magnification (digital zoom) on the VIP-45, open the "Options" window, and use the dropdown menu to select a different Video Format (not 640 x 480).



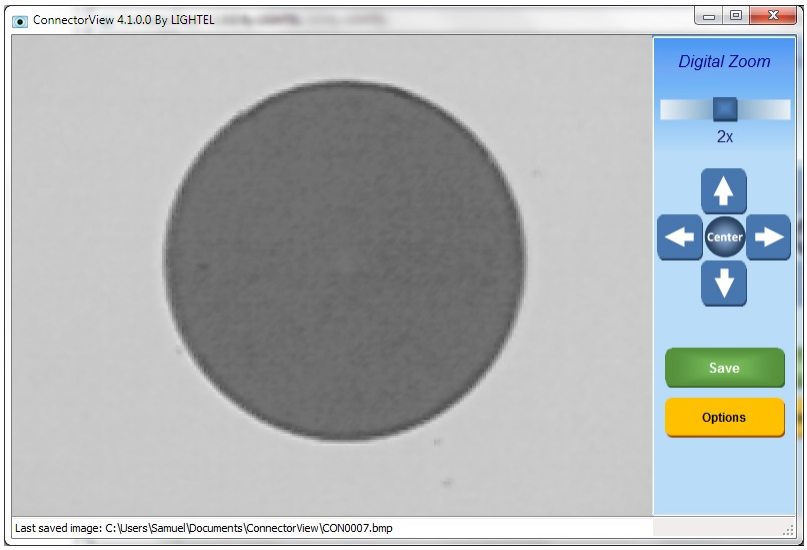
This will activate the yellow [Zoom] button. Click it to open the Digital Zoom window.

Note: The Main window is unavailable while in a "Zoom" video format.

The VIP-45 and VIP-45L both have direct USB connections. They can be easily distinguished from each other by the color of the focus knob label.



Slider	Enlarges or reduces image size. Range is 1x to 3x
Arrows	Move the zoomed image in the selected direction to improve centering. The arrows are not active at the 1x zoom level
Save	Saves the image currently displayed in the window
Options	Closes Zoom window and returns to Options window



7. Saving Video Images

Ways to save images will differ depending on your selected settings. The VIP-45 and the USB Adapter also have hardware buttons allowing them each an additional way to save the image.

7.1 Saving when “Auto Save” is checked

Mouse clicking on the image area, clicking the hardware buttons or hitting the [F12] function key on your keyboard, will cause the image to be saved. If the "Zone Rings" box was checked in "Options," the image will be saved with the ring overlay.

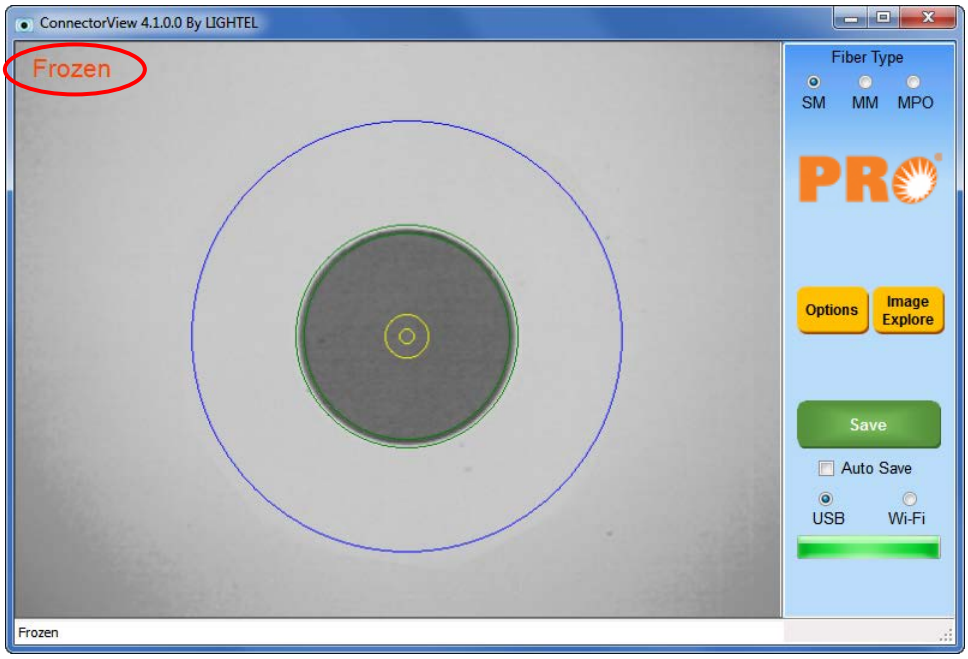
When an image is saved, the file name will be displayed in red in the upper left corner.

The newly saved image will also be shown as the "Last saved image" along with its address at the bottom of the window.

Click on the saved image to return to the live window

7.2 Saving when “Auto Save” is unchecked

Mouse clicking on the image area, clicking the hardware buttons or hitting the [F12] function key on your keyboard, will cause the image to be frozen. If the "Zone Rings" box was checked in "Options," the image will be frozen with the ring overlay.



To save this frozen image click on the [Save] button or hit the [F10] function key on your keyboard. When an image is saved, the file name will be displayed in red in the upper left corner and the newly saved image will also be shown as the "Last saved image" along with its address at the bottom of the window.

Click on the saved image to return to the live window.

If you do not wish to save the frozen image, mouse clicking on the image area, clicking the hardware buttons or hitting the [F12] function key on your keyboard, will cause the window to return to the live image.

Clicking the [Save] button or the [F10] key will save whatever is in the viewing area, whether the image is frozen or live.

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