

# Life Science Software

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## *Quick Start Guide*

Doc-It®LS Image Acquisition Software  
Doc-It®LS Image Acquisition and Analysis Software

VisionWorks®LS Image Acquisition Software  
VisionWorks®LS Image Acquisition and Analysis Software



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**UVP, LLC**  
2066 W. 11<sup>th</sup> Street  
Upland, CA 91786  
(800) 452-6788 or (909) 946-3197  
Fax: (909) 946-3597

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**Ultra-Violet Products Ltd.**  
Unit 1, Trinity Hall Estate, Nuffield Road  
Cambridge, CB4 1TG UK  
+44(0)1223-420022  
Fax: +44(0)1223-420561

Web Site: [www.uvp.com](http://www.uvp.com)

## **THIS QUICK START GUIDE COVERS THE FOLLOWING TOPICS:**

- Minimum System Requirements
- Software Installation
- Enabling Secure User Accounts
- Registering the Software
- Capturing an Image
  - Using Doc-ItLS Software
  - Using VisionWorksLS Software
- Frequently Asked Questions
- Technical Support

**NOTE:** For additional information on the topics listed above and information concerning steps for analyzing captured images, refer to the software Help files.

## **MINIMUM SYSTEM REQUIREMENTS**

- Operating System: VisionWorksLS and Doc-ItLS software require Microsoft Windows 8, Windows 7 or Vista (32-bit or 64-bit).
- Intel Pentium Processor or equivalent, 1.6 GHz or higher
- 1 GB of RAM (4 GB or greater recommended)
- 200 MB of available hard disk space for the program, more for data
- To avail the functionality of 21 CFR Part 11, the partition must be formatted with NTFS
- Color monitor, supporting at least 1024 x 768 resolution and 16-bit or better colors; 24-bit or 32-bit color is strongly recommended

## INSTALLATION

**NOTE:** The term “LS Software,” referred to throughout this manual, pertains to both VisionWorksLS and Doc-ItLS (Life Science) software packages.

1. Log on to the computer with an account that has administrative privileges. It is best if the administrator is present during installation so that certain decisions may be made during the installation process. **These installation instructions will assume that the installer has administrative privileges.**
2. Check for the presence of existing UVP software from **Control Panel > Add Remove Programs**. If a previous version of Life Sciences (LS) Software is loaded on the computer, uninstall the previous version. Contact UVP for specific uninstallation instructions.
3. Insert the LS Software flash drive. Navigate to the **Installation > Setup** folder, then double-click on the **VisionWorksLS Setup.exe** file.
4. Click to accept the license agreement and proceed through all of the software prompts until a window appears which classifies the setup as a network or single access license. Continue to Single-User instructions if LS Software will only be used on one computer, or see Network-User instructions for a network-based LS Software installation.

## ENABLE SECURE USER ACCOUNTS

This section will explain the necessary steps required to ensure users without Windows Administrative permissions can open and use LS Software. **If unsure whether full administrative permissions are provided for computers, consult an IT professional.**

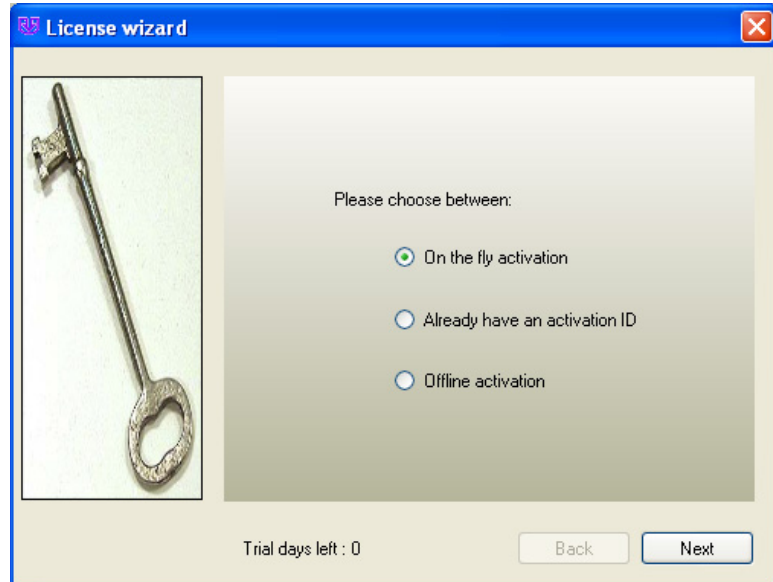
1. Request a **System Administrator** to log into the Windows computer.
2. Open any file folder on the computer. Go to the **Tools** menu and select **Folder Options**. A **Folder Options** window appears. On the **View** tab, select **Show hidden files and folders**. Select **Apply** and then **OK**.
3. Navigate to **C:\Documents and Settings\All Users\Application Data** or **C:\Program Data**, depending upon operating system.
4. Go to the **UVPSettings** folder inside the **Application Data** or **Program Data** folder. Have the System Administrator select **Allow** for all permissions listed for each user or group for either the **UVPSettings** folder or for each file within the folder (depending on the Network Security Policy where the LS Software will reside).
5. If using a 32-bit operating system (if not, proceed to the next step), repeat steps 3-4 for the following folders: **C:\Program Files\Common Files\UVP**, **C:\WINDOWS\system32\pvudata** and **C:\WINDOWS\system32\trdata**.
6. If using a 64-bit operating system, repeat steps 3-4 for the following folders: **C:\Program Files (x86)\Common Files\UVP**, **C:\WINDOWS\SysWOW64\pvudata** and **C:\WINDOWS\SysWOW64\trdata**.

## REGISTER THE SOFTWARE

LS Software must be activated by entering an activation code provided by UVP in order to gain full access rights to the software.

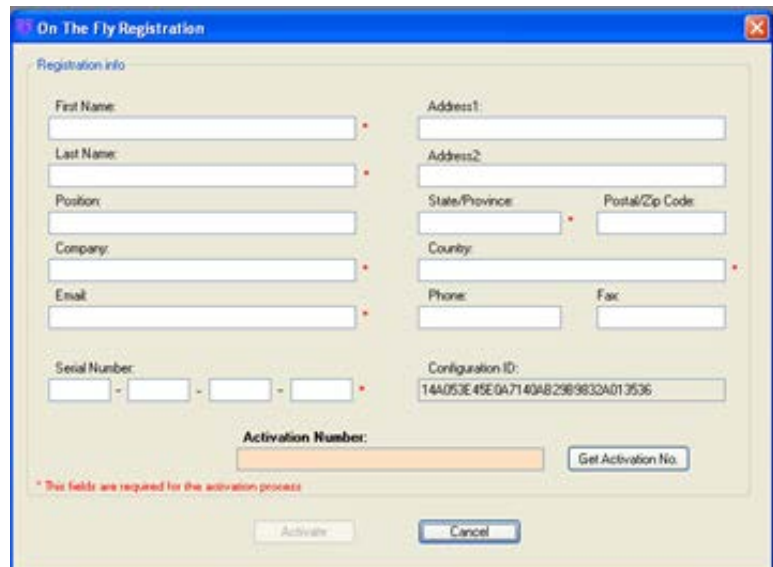
Once the LS Software is installed, it will operate in full-feature trial mode for 14 days. Within the 14-day trial mode, the LS Software must be registered with UVP. Otherwise, the software will only operate in a limited demonstration mode after the 14-day trial period. The demonstration mode limits the software to opening and using only the demonstration images provided by UVP. Refer to the steps below to register the software.

1. To immediately activate the software online, choose **On the fly activation**. If the computer is not connected to the Internet, follow the instructions for **Offline activation** or call UVP to register the software.
2. Click **Next** to continue.



The 'License wizard' dialog box features a blue title bar with the text 'License wizard' and a close button. On the left, there is an image of a silver key. The main area contains the text 'Please choose between:' followed by three radio button options: 'On the fly activation' (which is selected), 'Already have an activation ID', and 'Offline activation'. At the bottom, it displays 'Trial days left : 0' and two buttons: 'Back' and 'Next'.

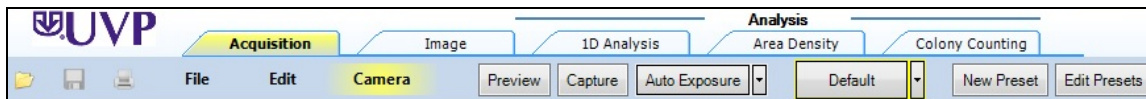
3. Complete all required information on the form.
4. Fill out the **Serial Number** located on the flash drive box. The number should be four sets of six numbers (24 digits total).
5. Click on **Get Activation No.** and then click on **Activate** when the **Activation Number** appears in the box.



The 'On The Fly Registration' dialog box has a blue title bar with the text 'On The Fly Registration' and a close button. It is titled 'Registration info' and contains several input fields: 'First Name', 'Last Name', 'Position', 'Company', 'Email', 'Address1', 'Address2', 'State/Province', 'Postal/Zip Code', 'Country', 'Phone', and 'Fac'. Below these is a 'Serial Number' field with four dashes for input, and a 'Configuration ID' field with the value '14A053E45E0A7140AB29B9832A013536'. An 'Activation Number' field is highlighted in orange. At the bottom, there are buttons for 'Get Activation No.', 'Activate', and 'Cancel'. A red asterisk note at the bottom left states: '\* This fields are required for the activation process'.

## CAPTURE AN IMAGE USING DOC-ITLS

Image acquisition using Doc-ItLS is controlled through the Acquisition Action Tab.

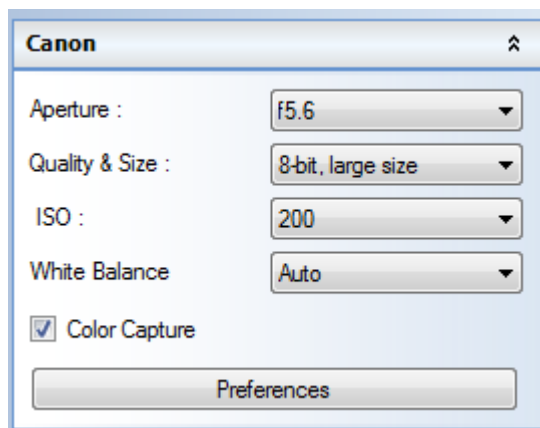


**Doc-ItLS Acquisition Action Tab (Shown Selected in Yellow)**

### Capturing the first image using the UVP focusing target

**Note:** The UVP focusing target is a tool that resembles a gel and is used to practice fluorescent image capture techniques. If the UVP focusing target cannot be located, use a business card or other similar object.

1. Place the UVP focusing target or similar object on the surface where the sample will be imaged.
2. Open the **Acquisition Action Tab** and click on the **Preview** button. Using the image preview on the computer screen, properly position the target. Once the target has been positioned, close the darkroom door.
3. Turn on the white light epi illumination. The camera will adjust the aperture and/or focus automatically. However, additional settings can be accessed through the **Camera Menu**, shown below:

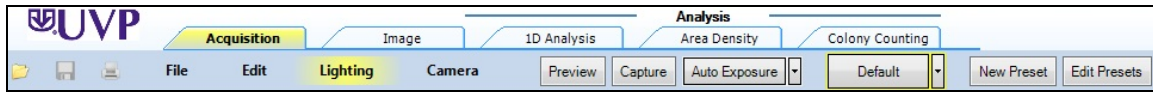


4. When the image is positioned and ready for capture, click on the **Capture** button in the **Acquisition Action Tab**.

**Note:** There are numerous additional techniques for improving the quality of the captured image. See the **Help Files** in the software for additional instructions on the use and function of these features.

## CAPTURE AN IMAGE-USING VISIONWORKSLS

Image acquisition using VisionWorksLS is controlled through the Acquisition Action Tab.

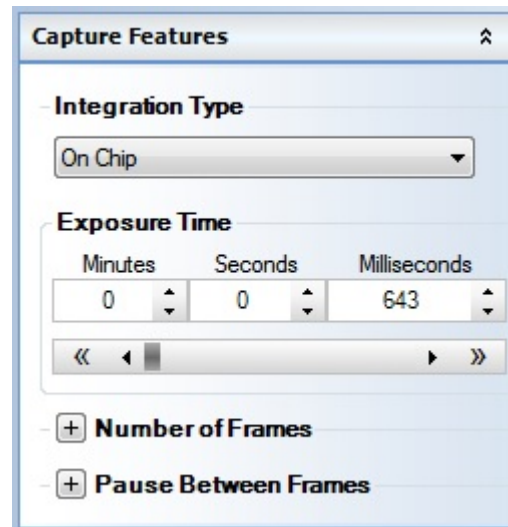


VisionWorksLS Acquisition Action Tab (Shown Selected in Yellow)

### Capturing the first image using the UVP focusing target

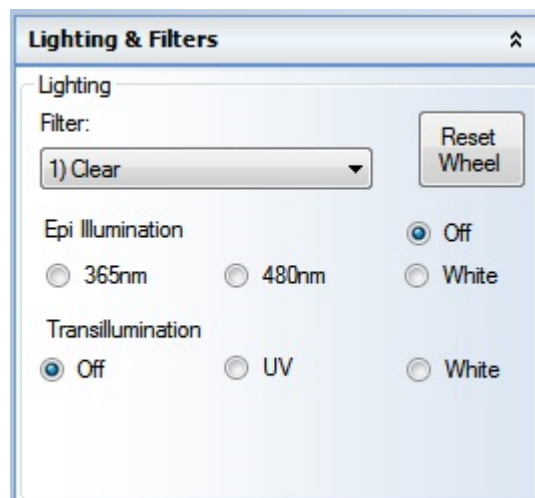
**Note:** The UVP focusing target is a tool that resembles a gel and is used to practice image capture techniques. If the UVP focusing target cannot be located, use a business card or other similar object.

1. Place the UVP focusing target or similar object on the surface where the sample will be imaged.
2. Open the **Acquisition Action Tab** and click on the **Preview** button. Using the image preview on the computer screen, properly position the target. Once the target has been positioned, close the darkroom door.
3. Adjust the camera settings by clicking on the **Camera Menu** button. To brighten the image, increase the exposure time.



Exposure Time Adjustment  
in the Camera Menu

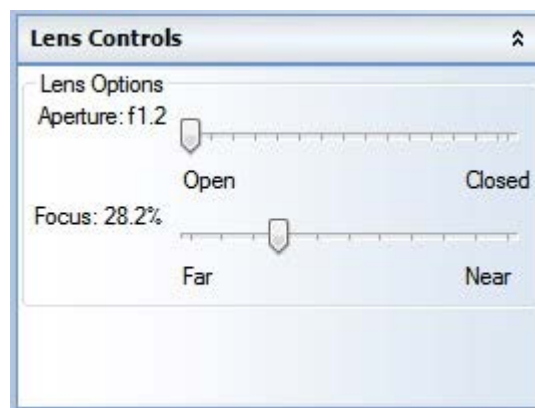
4. If darkroom lighting is manually controlled, turn on the white light **Epi Illumination** switch. If darkroom lighting is software controlled, turn on the white light **Epi Illumination** through the **Lighting Menu**.



**Lighting and Filter Adjustment  
in the Lighting Menu**

5. If using a manual lens, adjust the zoom, aperture and/or focus on the lens at the top of the imaging system.

If the lens is motorized (software controlled), use the slider bars in the **Lighting Menu** to adjust the zoom, aperture and/or focus. After adjusting the aperture, it may be necessary to readjust the exposure time (see Step 3, above).



**Lens Control Adjustment  
In the Lighting Menu**

**Note:** If using a BioSpectrum system with an automated lift, adjust the height of the automated lift platform to increase or decrease the distance from the sample to the camera. To adjust the Tray Height, move the height slider bar in the **Lighting Menu**. After adjusting the tray height, it may be necessary to readjust the focus and/or zoom settings.

6. When the image is positioned and ready for capture, click on the **Capture** button in the **Acquisition Action Tab**.

**Note:** There are numerous additional techniques for improving the quality of the captured image. See the **Help Files** in the software for additional instructions on the use and function of these features.

## FAQ (FREQUENTLY ASKED QUESTIONS)

### The “Camera” portion of the software is not available

- Check that all camera connections are secure, including USB and power cables.
- Ensure that the correct driver has been installed for the camera.
- Ensure that the camera is shown in Device Manager (a Control Panel applet in Microsoft Windows).

### I cannot view captured images in external software programs

- Many of UVP's systems are capable of capturing images greater than 8-bit grayscale. These images are usually saved to their native 12- or 16-bit files but require conversion to 8-bit for compatibility with basic imaging software.

### I see horizontal bars in my images

- In most cases, the horizontal bars in the image are the UV bulbs in the transilluminator. Using the correct emission filter will eliminate the tubes from view. When using a system with a motorized filter wheel, select the appropriate filter from the **Lighting** menu, then click the **Reset Wheel** button to ensure that the filter wheel is properly aligned.

### Other programs don't recognize the changes I've made to the image

- For other programs to display the changes made to the image within LS Software, changes must be burned (or “flattened”) into the new image. To “flatten” layers, go to **Image > Annotations > Layer Actions > Flatten Layers**. Then, save the image using the **File > Save As...** menu. If desired, save this new image with a unique filename so that the new image does not overwrite the original image.

## TECHNICAL SUPPORT

UVP offers expert technical support on all UVP products. If there are any questions about product use, operation or repair, contact UVP's offices as shown below.

If you are in North America, South America, East Asia or Australia:	If you are in Europe, Africa, the Middle East or Western Asia:
Call (800) 452-6788 or (909) 946-3197, and ask for <b>Technical Support</b> during regular business days, between 7:00 am and 5:00 pm, PST.	Call <b>+44(0) 1223-420022</b> , and ask for <b>Customer Service</b> during regular business days between 9:00 am and 5:30 pm.
E-mail your message to: <a href="mailto:info@uvp.com">info@uvp.com</a> or <a href="mailto:techsupport@uvp.com">techsupport@uvp.com</a>	E-mail your message to: <a href="mailto:uvp@uvp.co.uk">uvp@uvp.co.uk</a>
Fax Technical Support at (909) 946-3597	Fax Customer Service at <b>+44(0) 1223-420561</b>
Write to: UVP, LLC. 2066 W. 11 <sup>th</sup> Street, Upland, CA 91786 USA	Write to: Ultra-Violet Products Ltd. Unit 1, Trinity Hall Farm Estate, Nuffield Road, Cambridge CB4 1TG UK