VisionWorks® Acquisition and Analysis Software
Quick Start Guide
THIS QUICK START GUIDE COVERS THE FOLLOWING TOPICS:

- Minimum System Requirements
- Software Installation
- Enabling Secure User Accounts
- Registering the Software
- Capturing an Image Using VisionWorks Acquisition and Analysis Software
- Troubleshooting
- 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: Microsoft Windows 8, Windows 7 or better (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
- For 21 CFR Part 11 support, 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**

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. Insert the VisionWorks flash drive into the computer.

3. Navigate to the **Installation > Setup** folder, then double-click on the **VisionWorksLS Setup.exe** file to begin the installation process.

4. A prerequisites window will display, indicating the software/drivers that may need to be installed. It is recommended to leave settings as they are and click **Next** to continue.

5. Navigate through the prerequisite driver windows by leaving all options in their default settings and hitting **Next**.

6. Once the prerequisites complete, VisionWorks will begin installation. You must agree to “I accept terms of licensing agreement”, to continue and let VisionWorks installation complete.

**ENABLE SECURE USER ACCOUNTS**

This section will explain the necessary steps required to ensure users without Windows administrative permissions can open and use the 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 the folders listed below, one at a time. With each folder, the System Administrator must provide FULL permissions to all Windows user accounts (the location of the software may vary depending on the Network Security Policy).

4. Applying permission can be done by right clicking the folder, selecting the Properties, then selecting the Security tab.

5. For each Group or User Name in the top section, Permissions must be set in the bottom section. Edit the permissions and select the Full Control option. Click **Apply** to set.

6. If using a 32-bit operating system (if not, proceed to the next step), repeat steps 3-5 for the following folders:
   - C:\documents and settings\all users\application data\uvpsettings\n   - C:\program files\analytik jena\visionworks\n   - C:\windows\system32\trdata\n
7. If using a 64-bit operating system, repeat steps 3-5 for the following folders:
   - C:\programdata\uvpsettings\n   - C:\program files (x86)\analytik jena\visionworks\n   - C:\windows\syswow64\trdata\n   - C:\windows\syswow64\pvudata\n
**Registering the Software**

1. Double click the VisionWorks software icon on the desktop.

2. To activate the software, registration is required. To immediately activate the software online, choose **On-the-Fly activation**. Activation can also be done using a smartphone.

3. Activation can also be done at REG.UVP.com using any other web connected device. A Config ID will be needed for this option and can be found by clicking **Next** after selecting **On the fly activation**. It will be displayed under **Configuration ID**.

4. Click **Next** to continue.

5. The **Already have an activation ID** option is useful when reloading the software after receiving an initial activation code.

6. Complete all required information on the form.

7. Fill out the Serial Number located on the box delivered with the flash drive. The number should be four sets of six numbers.

8. Once the form is completed, click on **Get Activation No.** and then click **Activate** once the Activation Number appears in the box.

9. If the computer is not connected to the Internet, click **Offline activation** to register the software. This allows the user to obtain the activation code and enter it at another time.

10. Click **Next** to continue.

11. Click the link provided and complete the form to obtain registration instructions. Click **Finish**.
**CAPTURE AN IMAGE USING VISIONWORKS ACQUISITION AND ANALYSIS**

Image acquisition using VisionWorks Acquisition and Analysis is controlled through the Acquisition Tab.

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**Capturing an image using the Fluorescent Focusing Target**

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

1. Place the Fluorescent Focusing Target or similar object on the surface where the sample will be imaged.
2. Open the **Acquisition Tab** and click on the **Preview** icon. 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. To brighten the image, increase the exposure time.

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**Exposure time adjustment**
4. If darkroom lighting is manually controlled, turn on the white light Epi Illumination switch. If darkroom lighting is software controlled, navigate to the Lighting menu and select White in the Epi Illumination section of the window.

![Lighting & Filters](image)

**Lighting and filter adjustment in the Lighting Menu**

5. If using a manual lens, the camera zoom, aperture and/or focus can be manually adjusted by hand.

If the lens is motorized it is software controlled. In the Lighting menu, the lens can be automatically adjusted for aperture, zoom and focus in the Lens Control. After adjusting the aperture, it may be necessary to readjust the exposure time (see Step 3, above).

![Lens Controls](image)

**Lens control adjustment**

**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 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.
TROUBLESHOOTING

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 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.

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