GelCam 310 Camera

Installation and User Instructions

81-0302-01 Rev A

Introduction

The high sensitivity, non-cooled CCD GelCam 310 Camera is designed for use with a variety of UVP's Imaging Systems. The instruction manual covers assembly of the camera on the darkroom and installation of software.

Refer to the system (manual for additional system information and the VisionWorksLS Software Manual or Help Files for software information.

Components

Specifications   **GelCam 310 Camera**
Type   Monochrome
Resolution   1600 x 1200
Megapixels   2.0
Bit Depth   12/16-bit
PC Interface   USB 2.0

The camera/lens kit components and camera bracket are assembled at the UVP factory. Refer to the packing list.

Installation

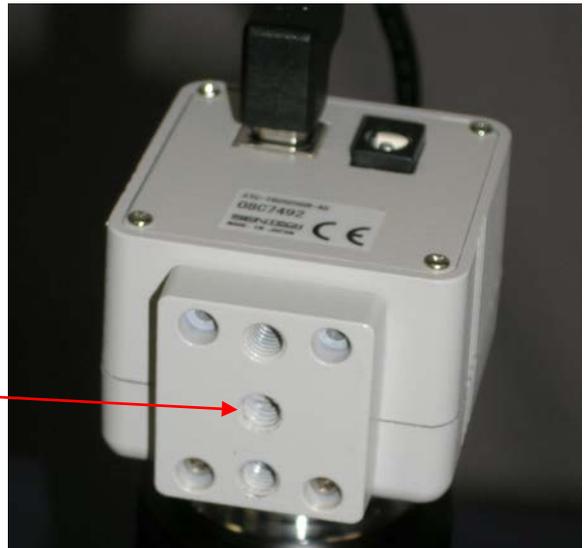## GelDoc-It with Manual Lens

This configuration comes with:
- GelCam 310 Camera
- Manual lens
- +2 diopter
- Bracket
- Base (typically shipped on system)
- USB Cable

1. Align the holes of the gasket and base. Attach the base and gasket to the darkroom using the screws provided. Position the bracket on the mounting base aligning the holes on the base. Using the four thumb screws provided, secure the bracket to the base.

2. Place the camera and lens assembly into the camera bracket. Push the lens through the center hole in the gasket. The gasket forms a seal around the lens. Insert and tighten the knob/washer to secure the camera to the bracket. Be sure to position the knob in the central hole in the camera (refer to the photo callout below).

3. Plug the 90 degree cable into the top of the camera. Leave the other end unplugged until ready to install the Visionworks disk.
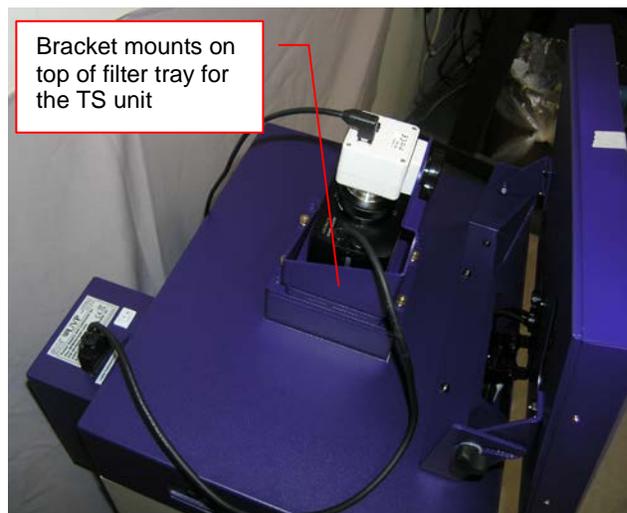
Photo to the right shows the center hole for the knob connection.

GelDoc-It with Motorized Lens

This configuration comes with:
- GelCam 310 Camera
- Motorized lens
- Lens control box
- +2 diopter
- Bracket
- Base (typically shipped on system)
- USB Cable (for connection from camera to PC or TS)
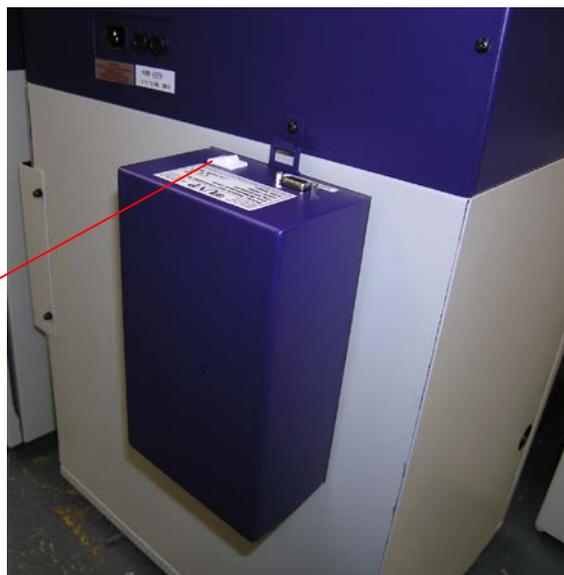- USB Cable (for connection from motorized lens control box to PC or TS)

Bracket mounts on top of filter tray for the TS unit

Note: The above images are for clarification only, and may be different than the system shipped.

Hardware Installation

1. On the back of the darkroom remove the screw and attach the hook to the darkroom (typically a darkroom ships with the hook installed).

2. Mount the lens control box on the hook located at the back of the darkroom.

Power switch for the Lens Control Box

3. Place the bracket on the mounting base aligning the holes on the base. Using the four thumb screws provided, secure the bracket to the base.

4. Slide the camera and lens assembly into the camera bracket.

5. Insert and tighten the knob/washer to secure the camera to the bracket. Be sure to position the knob in the central hole in the camera.

6. Plug in the serial cable from the motorized lens to the lens control box.

7. Plug the 90 degree cable into the top of the camera. Leave the other end unplugged until you are ready to install the Visionworks disk.

8. Connect the cable to the PC connection port on the lens control box. Leave the other end unplugged until ready to install the USB Drivers disk.

9. Connect the power supply to the lens control box and into the power outlet.

Power Connection

PC Connection on the Lens Control Box

Software Installation (for GelDoc-It)

The lens is controlled through VisionWorks®LS software.

Note: Make sure the system has at least a VisionWorksLS Version 7 before continuing with the installation.

Install the Lens Control Driver

1. Turn the switch on the Lens Control Box to the "Off" position.

2. Connect the USB cable to the PC (or the GelDoc-It TS) from the Lens Control Box.

3. Turn the Lens Control Box power switch to "On".

4. A **Found New Hardware** wizard will appear. Select the **yes** option when prompted to allow the wizard to connect to Windows. Update and click **Next**.

5. Once the driver has finished installing, click **Finish**.

Install the Camera Driver

1. Install VisionWorks®LS software.

2. Plug in the 90 degree cable from the camera into the USB port (or the GelDoc-It TS).

3. The computer should display **Found New Hardware**. Click **Yes, Next, Install from a list, Next, Don't search, Next,** double click on **Show all Devices**, click **Have disk**, and then the browse button.

4. Browse to the **C:\Windows \system32\drivers** folder and select the **STUSB.inf** file.

5. Select **Open** and then **OK** to install the camera.

6. Select **Finish**.

Note: the installation may cause a warning message saying that the drivers are "not verified by Microsoft". Select "Continue Anyway" and the drivers will be installed correctly.

BioSpectrum with Motorized Lens
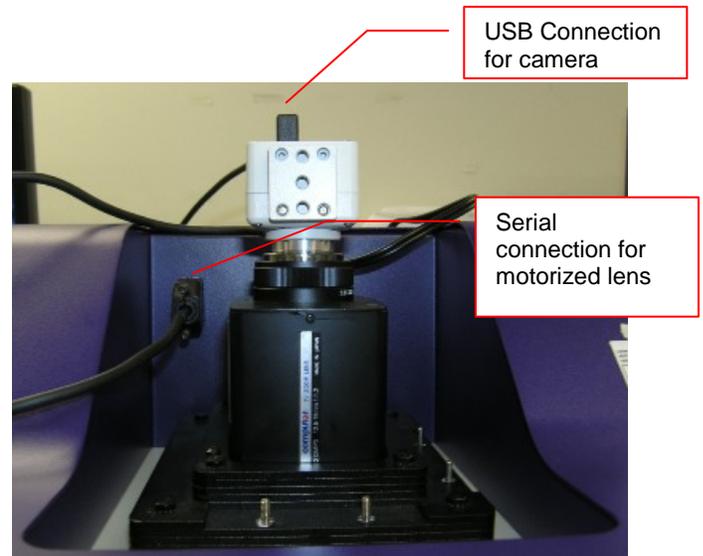
This configuration comes with:
- GelCam 310 Camera
- Motorized lens
- Lens control box
- +2 diopter
- Bracket
- Base (typically shipped on system)
- USB Cable (for connection from camera to PC)

Hardware Installation

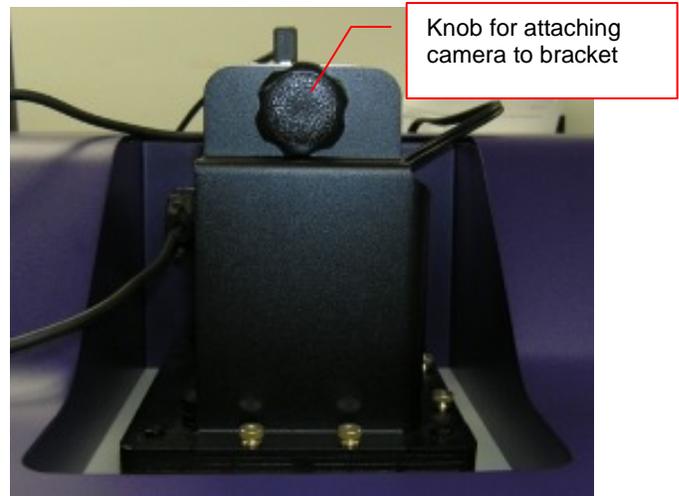Slide the camera and lens assembly into the camera base.

Plug in the serial cable from the motorized lens to the darkroom.

1. Plug the 90 degree cable into the top of the camera. Leave the other end unplugged until ready to install the Visionworks disk.

USB Connection for camera

Serial connection for motorized lens

2. Place the bracket on the mounting base aligning the holes on the base. Using the four thumb screws provided, secure the bracket to the base.

3. Insert and tighten the knob/washer to secure the camera to the bracket. Be sure to position the knob in the central hole in the camera.

Knob for attaching
camera to bracket

Bracket and base securing camera

Software Installation (for BioSpectrum)

The lens is controlled through VisionWorks®LS software.

Note: Make sure the system has at least a VisionWorksLS Version 7 before continuing with the installation.

Install the Lens Control Driver

1. Unplug the Motorized Lens at the top of the BioSpectrum then plug it back in.

2. A **Found New Hardware** wizard will appear. Select the **yes** option when prompted to allow the wizard to connect to Windows. Update and click **Next**.

3. Once the driver has finished installing, click **Finish**.

Install the Camera Driver

1. Install VisionWorks®LS software.

2. Plug in the 90 degree cable from the camera into the USB port on the computer.

3. The computer should display **Found New Hardware**. Click **Yes, Next, Install from a list, Next, Don't search, Next,** double click on **Show all Devices**, click **Have disk**, and then the browse button.

4. Browse to the **C:\Windows \system32\drivers** folder and select the **STUSB.inf** file.

5. Select **Open** and then **OK** to install the camera.

6. Select **Finish**.

Note: the installation may cause a warning message saying that the drivers are "not verified by Microsoft". Select "Continue Anyway" and the drivers will be installed correctly.

Technical Support

UVP offers free lifetime technical support on all of its products and software. Should you have any questions regarding the product's use, operation or repair, contact UVP's offices at the locations below, or visit www.uvp.com.

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