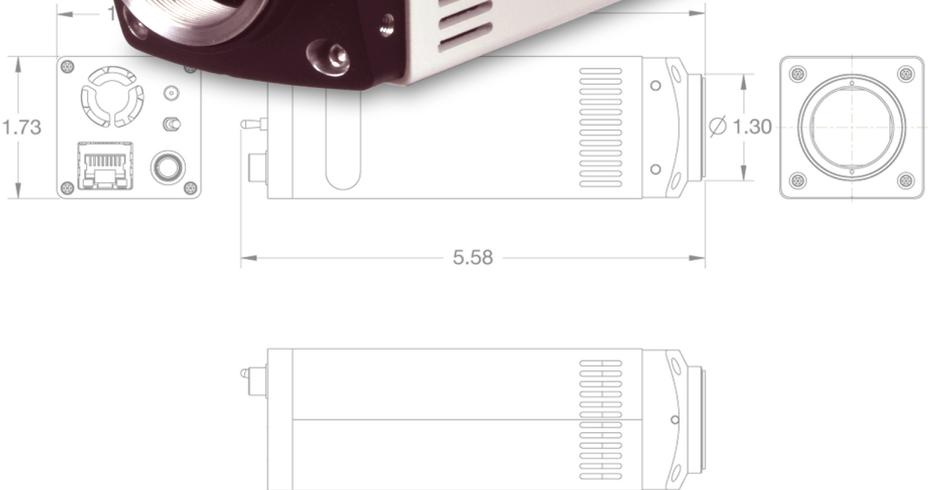


SPOT Insight™ Gigabit Camera

Hardware guide



SPOT Imaging Solutions™

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INTRODUCTION

Thank you for purchasing a SPOT Insight Gigabit camera.

This hardware guide is designed to help you set up your camera. For detailed information about the software functions, please consult the software manual on the SPOT software CD.

MINIMUM SYSTEM REQUIREMENTS

Minimum system requirements can be found on the camera's specification sheet, which is available for download on our website at www.spotimaging.com/literature.

WHAT IS IN THE BOX

- Camera head with dust cap
- Power supply with cable



- Registration card to register your camera and software. You may also register at www.spotimaging.com/registration.
- 2 year limited hardware warranty statement
- Ethernet cable
- One CD-ROM that contains:
 - SPOT Basic Software Installer (for camera operation)
 - PDF version of the Software User Guide
- Gigabit Ethernet switch with cable and power supply (supplied with Insight Gigabit Camera catalog numbers IN3500-GSW and IN3520GSW only)



Note: Computer interface adapters are available to connect the Insight Gigabit to laptops and other computers that don't have an available Ethernet port. If one of these adapters was ordered with your camera, it will also be in the box.

CAMERA BODY

Underside

The underside of the camera has the label with the camera's serial number on it. It also has four mounting holes for securing a 1/4"-20 mounting plate. The mounting plate is available separately.

INSTALLING THE HARDWARE

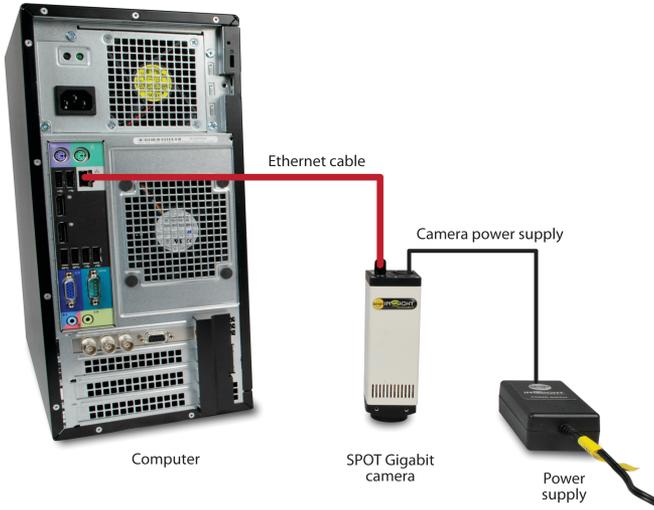
Adapting the camera to the microscope

1. Follow the instructions for assembling your microscope to camera optical adapter.
2. Attach the microscope to camera optical adapter to the camera.
3. Attach the camera/adapter to the appropriate photo port on your microscope.

Connecting the camera to the computer

1. Turn your computer on.
2. Ensure the camera's power switch is in the off position. Connect the power cable to the back of the camera and plug in the power supply to a wall outlet.

3. Connect the Ethernet cable to the camera. If you have an available Ethernet port on your computer, connect the other end to an Ethernet port on your computer.



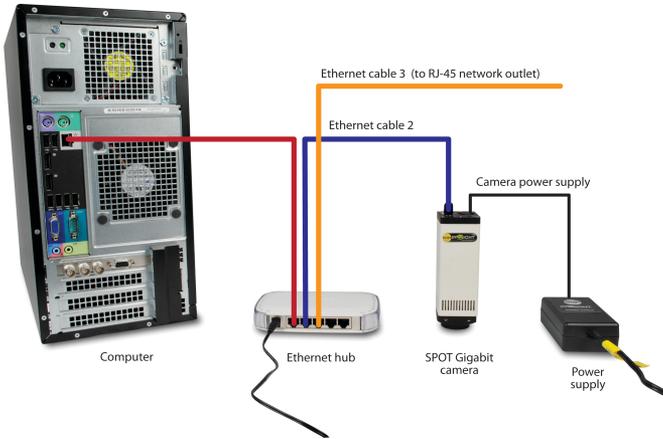
If your computer's Ethernet port is already in use, you will need to use a Gigabit Ethernet switch or another Gigabit Ethernet adapter to connect the camera. These are available from SPOT Imaging Solutions if one wasn't ordered with your camera. To connect to a Gigabit Ethernet switch:

- a) Connect the camera's Ethernet cable to one of the ports on the Gigabit Ethernet switch.



- b) Unplug the cable that is currently using your computer's Ethernet port and connect it to another port on the Gigabit Ethernet switch.
- c) Connect the Gigabit Ethernet switch power cord to the switch and to your power outlet.

- d) Connect the Gigabit Ethernet switch's Ethernet cable to one of its remaining available ports, and connect the other end to your computer's Ethernet port.



4. Push the power switch on the rear panel of the camera to the on position to turn it on.

When the camera is powered on, the green LED light on the top left of the Ethernet port will be on, indicating the camera has power.



When the Ethernet cable is properly connected between the computer and the camera, the green LED light on the top right of the Ethernet port will be on.



When there is communication between the camera and the computer, the left LED light will flash intermittently.

INSTALLING THE SOFTWARE

While the camera is powered on, follow the instructions included with the SPOT Software CD for installing the SPOT Software. The camera power should be left on

while the software is being installed to prevent camera initialization delays.

Once the software installation has completed, you can now launch the SPOT software. If your camera is connected directly to a dedicated Ethernet port on your computer, you can begin capturing images immediately. If your Insight Gigabit camera is connected to an Ethernet switch, pairing will be required before you can begin using the camera.

Pairing

Pairing is a process which creates a one-to-one relationship between the camera and a computer. If your camera is connected to an Ethernet switch, you will see the following dialog box upon starting the software the first time.



After you select **Yes** at this prompt, the camera will then be paired to your computer. The setup is complete and you can now begin using the camera.



Note: For detailed information about the software functions, please consult the software manual on the SPOT software CD.

TROUBLESHOOTING

No cameras or interface cards found

As illustrated in the figures below, there are two different errors of this type depending on whether or not the camera has been paired to a computer. Follow the instructions underneath the error you're receiving to resolve your specific issue.



Figure 1

If you receive the error in Figure 1, the computer has not detected the camera yet, and the camera hasn't been paired to a computer. The Insight Gigabit camera can take more than a minute to initialize. Shut down the SPOT Software, wait a minute and try again. If you still receive the error, check the cable connections and ensure the power is on.

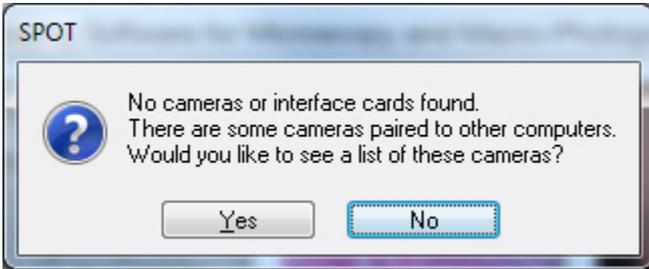
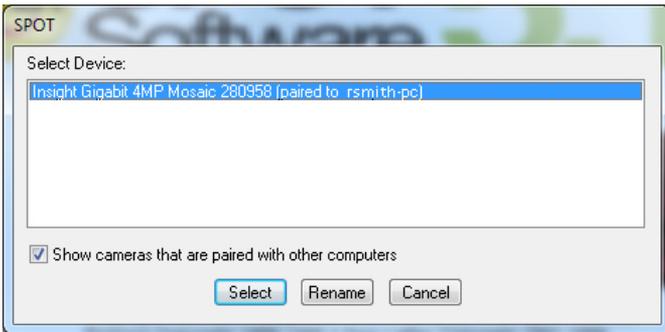
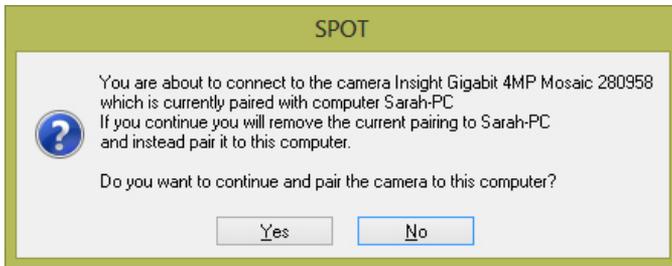


Figure 2

If you receive the error in Figure 2, your computer has not detected your camera yet, and there is at least one Insight Gigabit camera paired to another computer. The Insight Gigabit camera can take more than a minute to initialize. Shut down the SPOT Software, wait a minute and try again. If you still receive the error, check the cable connections and ensure the power is on.

If the camera may have been paired to another computer, click **Yes** to view all of the cameras paired to other computers.





After you choose **Yes**, the software will attempt to pair the camera to your computer. If the camera is not currently in use, it will be paired to your computer and you will be able to use it. If the camera is currently in use, you will receive the error below.

The camera is currently in use

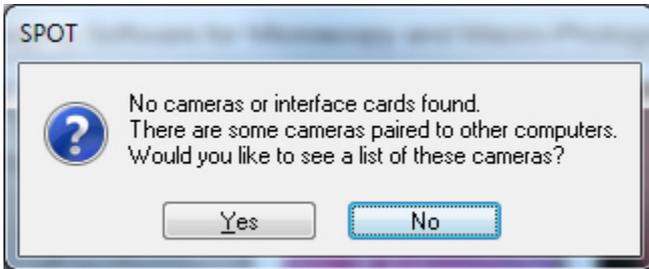


If you receive this error, the camera is currently in use by the person referenced in the error message. In order for you to use the camera, the other person will need to disconnect from the camera by selecting

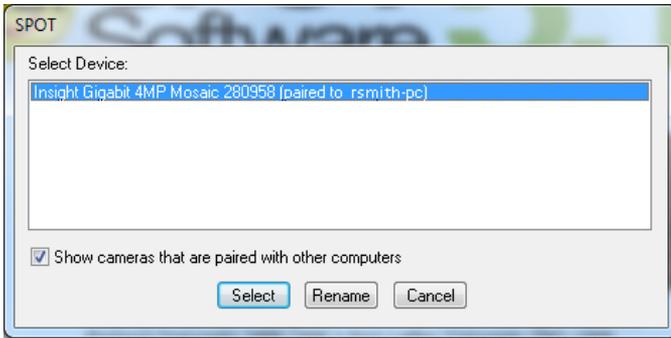
Disconnect from the **Camera** menu in the SPOT Software. The SPOT Software can still be used for editing existing images when disconnected from a camera. Once the other person has disconnected from the camera, you can pair it to your computer and begin using it.

INSTALLING YOUR CAMERA ON ANOTHER COMPUTER

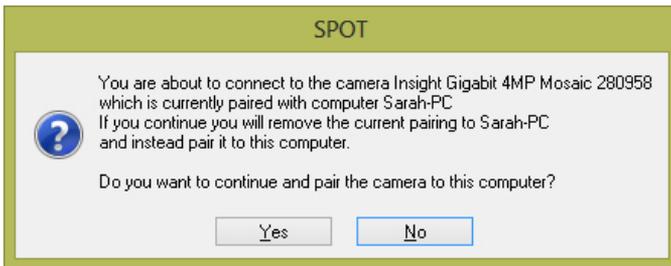
If the camera is moved from one computer to another, it will need to be paired to the new computer before it can be used. Install the hardware and software as described in the previous pages. You will receive the below error when you launch the software for the first time on the new computer.



Since the camera was paired to another computer, click **Yes** to view all of the cameras paired to other computers.



Select your camera from the list. You will then be prompted with a dialog box confirming that you would like to remove the current pairing and pair the camera with your computer instead.



After you choose **Yes**, the software will pair the camera to your computer and you can begin using it.

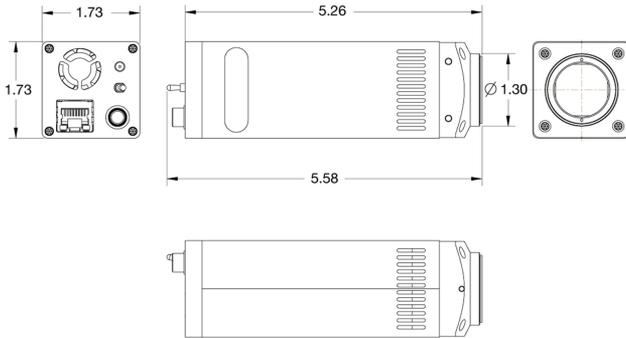
CAMERA SPECIFICATIONS

Below are general specifications for the Insight Gigabit Camera line. Model-specific camera specifications can be downloaded from our website at www.spotimaging.com/literature.

Models: IN3500, IN3520

Lens Mount	4/3" format-C-mount
Sensor Format	4/3"
Sensor Size	15.16mm x 15.16mm (21.43mm diagonal)
Weight	9.7oz (275g)
Size	1.73" x 1.73" x 5.26" (44mm x 44m x 134mm)
Power Requirements	100 – 240 VAC, 50/60 Hz
Power Consumption	9 watts max, 7 watts average
Operating Environment	0°C to +50°C , 0% - 95% relative humidity, non-condensing
Storage Temperature	-20°C to +60°C
Certifications	CE EN60950, EN6100-6-3 :2001, EN55624 :1998, FCC Class A, RoHS

MECHANICAL DIMENSIONS



WARNINGS

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR EXCESSIVE MOISTURE.

Regulatory and Safety Compliance Notes

This equipment complies with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

The equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This product complies with the CE EN 6100-6-3:2001, EN55624:1998 and EN60950 standards.

This camera is designed for research and industrial applications including the imaging of macroscopic or microscopic specimens. It is the responsibility of the user to qualify that this product meets the requirements for their application. In no event and under no circumstances shall the manufacturer be liable to an individual or entity for any indirect, special, consequential or incidental losses or damages, including without limitation, lost profits.

SAFETY INSTRUCTIONS

Do not attempt to use this product in any manner not specified by the manufacturer as the manufacturer will not be held responsible.

This product is designed for indoor use only. Do not expose to rain or excessive moisture.

Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.

Do not defeat the safety purpose of the grounding-type plug. The camera's power supply uses a grounding type plug which has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.

If this camera is going to be installed near running water, this device must be plugged into a GFCI (ground fault circuit interrupter) receptacle.

Only use the attachments/accessories specified by the manufacturer.

Unplug this apparatus when it will be unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug

is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or excessive moisture, does not operate normally, or has been dropped.

Do not allow an impact shock or any objects to fall into the product.

Do not connect too many devices to the same AC power outlet as this could result in fire or electric shock.

Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire.

Periodically examine the cords of the camera system, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the system, and have the cord replaced with an exact replacement part by an authorized servicer.

Be sure to grasp the plug when unplugging the power cord. Do not pull on the power cord to unplug the product.

Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the power supply.

Do not expose the vented openings of the camera to dripping or splashing. Do not place objects filled with liquids such as vases, cups, etc. on or over the camera system (e.g. on shelves above the unit).

Disconnecting the device from the main power source

The main plug is the disconnecting device. The plug must remain readily accessible to be disconnected during service or maintenance.

Be sure there is proper and adequate ventilation where the camera and power supply are installed to minimize the risk of fire when using flammable liquids.

Do not cover camera or power supply with cloth or other materials like plastic while plugged in. Do not install in excessively dusty places. Do not block any ventilation openings.

If you smell smoke or other odors coming from the camera or power supply or hear strange sounds, unplug the power cord and contact customer service.

There are no consumable materials associated with the camera system.

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