

1 Installation

1. Recommended System Configuration

OS	CPU	RAM	VIDEO	PORTS
Windows XP SP1	2.0GHz or equivalent	512mb	AGP 128mb	IEEE-1394a

- Windows XP Service Pack 1
- 512MB of RAM
- Intel Pentium 4 2.0GHz or compatible processor
- AGP video card with 128MB video memory
- 32-bit standard PCI slot for the IEEE-1394 PCI card
- IEEE-1394a PCI card (available in dev kit)
- Microsoft Visual C++ 6.0 (to compile and run example code)

2. Electrostatic Precautions and Camera Care

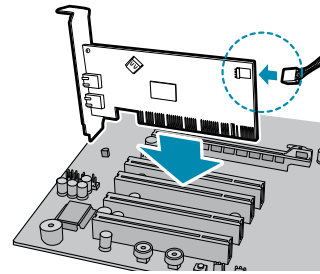
- Users who have purchased a bare board camera should:
 - This product is not intended for use in residential environments.
 - Either handle bare handed or use non-chargeable gloves, clothes or material. Also use conductive shoes.
 - Install a conductive mat on the floor or working table to prevent the generation of static electricity.



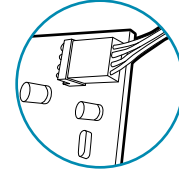
- When handling the camera unit, avoid touching the lenses. To clean the lenses, use a standard camera lens cleaning kit or a clean dry cotton cloth. Do not apply excessive force.
- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesirable operation. This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.
- To clean the imaging surface of your CCD, follow the steps outlined in www.ptgrey.com/support/kb/index.asp?a=4&q=66.
- Extended exposure to bright sunlight, rain, dusty environments, etc. may cause problems with the electronics and the optics of the system.
- Avoid excessive shaking, dropping or mishandling of the device.

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3. Install the IEEE-1394 PCI card

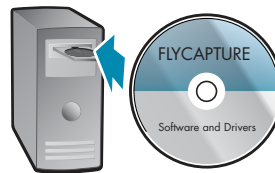


- Turn computer off and place the IEEE-1394 PCI card in an open PCI slot.
- Connect the 4-pin connector on the card to the PC power supply.



- Turn the computer back on and log into Windows.
- In most cases, the Windows IEEE-1394 drivers will be automatically installed for the card, with no user input required. However, in some cases the **Found New Hardware Wizard** will appear. Follow the prompts given by the Wizard to install the card.
- Open Windows Device Manager by going to the **Control Panel > System > Hardware tab > Device Manager**. Ensure the PCI card is properly installed as an **IEEE 1394 Bus host controller**.

4. Install the FlyCapture® Software and Drivers



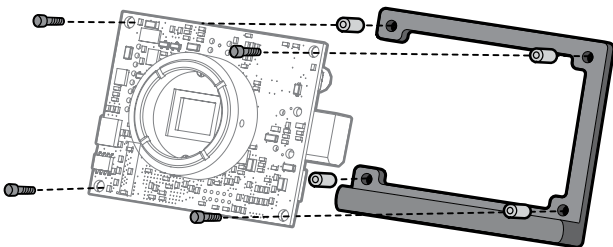
- Insert the FlyCapture software CD-ROM. If the Installation Wizard does not automatically run, browse to your CD-ROM directory and run the **setup.exe** file.

- Follow the installation instructions to install the software.
- A dialog will appear asking if you want to downgrade your Windows XP drivers. If you have installed Service Pack 2, we encourage users to do this. See this Knowledge Base article for further information: www.ptgrey.com/support/kb/index.asp?a=4&q=171

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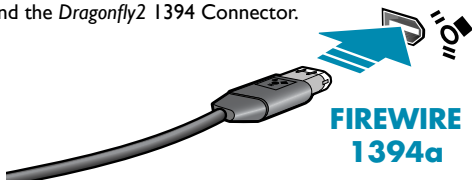
5. Installing the Tripod Mounting Bracket (optional)

- The bracket included with the DR2-OEM-DEVKIT attaches to the bare board camera using the included M3x14 screws and nylon spacers.
- For full instructions, consult the *Dragonfly®2 Technical Reference Manual*.



6. Connect the 1394 PCI Card and Cable to the Dragonfly2

- Plug the 4.5 meter, 6-pin to 6-pin, IEEE-1394 cable into the 1394 PCI card and the *Dragonfly2* 1394 Connector.



NOTE: The camera relies on the 6-pin 1394 cable to provide power. If using an interface card other than that provided, ensure that adequate power is provided.

- If the Microsoft Windows **“Found New Hardware Wizard”** appears, proceed to Step 7. Otherwise, proceed to Step 8.

7. Install the PGR CAM Driver

- Click **“Install from a list or specific location”** and click **“Next”**.
- Select **“Don’t search. I will choose the driver to install”** and **“Next”**.
- Click **“Have Disk”** and browse to **C:\Program Files\Point Grey Research\PGR FlyCapture\driver\signed\<your platform>**, click **“Open”**, then **“OK”**.
- Select the camera model (e.g. PGR Dragonfly2 DR2-COL). Click **“Next”**.
- You will be prompted to continue installation - click **“Continue Anyway”** then **“Finish”** to complete installation.

8. Confirm Successful Installation

- Check the Device Manager to confirm that installation was successful. Go to the *Start* menu, select *Run* and enter “devmgmt.msc”. Verify the camera is listed under “Point Grey Research Devices”.
- To test the camera’s image acquisition capabilities, run the FlyCap demo program. From the *Start* menu, select *All Programs > Point Grey Research > PGR FlyCapture > FlyCap.exe*.

4 Troubleshooting

The FlyCapture® User Guide and other technical references can be found in the *Programs > Point Grey Research > PGR FlyCapture > Documentation* directory. Our on-line Knowledge Base (www.ptgrey.com/support/kb/) also addresses the following problems:

- Article 21: Troublesome hardware configurations
- Article 88: Vertical bleeding or smearing from a saturated portion of an image
- Article 91: PGR camera not recognized by system and not listed in Device Manager
- Article 93: My laptop’s IEEE-1394 port or PCMCIA card doesn’t supply power to my camera
- Article 145: Image discontinuities or horizontal tearing of images when displayed on monitor
- Article 171: Performance of 1394 devices may decrease after installing Windows XP SP2
- Article 188: Image data acquired by my camera is corrupt and displayed images are broken
- Article 189: Image capture freezes after a period of successful image capture
- Article 297: Mounting a heavy lens on a Dragonfly2 may cause damage