

GETTING STARTED Grasshopper[®]2

GigE Digital Camera

I PREPARATION

1. Recommended System Configuration

OS	CPU	RAM	VIDEO	PORTS
Vista or Windows 7	Intel Core 2 dual	2 GB	PCI Express 128mb	GigE

- Windows Vista or Windows 7
- 2 GB of RAM
- Intel Core 2 dual or comparable processor
- NVIDIA GeForce6 or later video card with 128MB RAM or more
- Intel® PRO/1000 Gigabit Ethernet Network Adapter PCI Express
- Microsoft Visual Studio 2005 SPI and SPI Update for Vista (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.



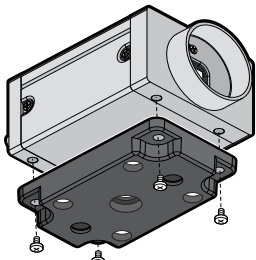
- When handling the camera unit, avoid touching the lenses. To clean the lenses, use a standard camera lens cleaning kit or a clean dry cotton cloth. Do not apply excessive force.
- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device 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.

2 INSTALLATION

1. Make sure your GigE Network Interface Card is installed according to manufacturer instructions. A 1000 Mbps GigE network interface card (NIC) is required. For optimal video streaming and camera control performance, we recommend a PCI Express (PCIe) interface equipped with an Intel PRO 1000 chipset. Point Grey sells a PCIe card for this purpose (Part No. ACC-01-I100). To purchase, visit <http://www.ptgrey.com/products/accessories/index.asp>.

2. Installing the Tripod Mounting Bracket (optional)



- The ASA and ISO-compliant tripod mounting bracket attaches to the camera using the included M2x5 screws. The bracket is included at no extra charge with every Point Grey Grasshopper2.

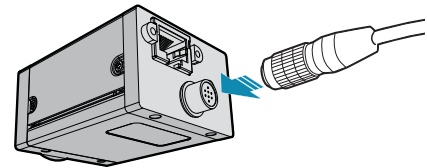
3. Connect a Gigabit Ethernet Network Card and Cable to Camera

- Plug a GigE-compatible Cat5, Cat5e or Cat6 cable into the GigE network interface card and the Grasshopper2. If equipped, the cable jack screws can be used for a secure connection. Cables up to 100 meters can be used.

Point Grey sells a 5-meter high-flex Category 5e cable (Part No. ACC-01-2100). This cable is ideal for GigE Vision systems requiring reliable, high performance flex life and signal transmission. To purchase, visit <http://www.ptgrey.com/products/accessories/index.asp>.

4. Supply Power to the Camera

- Connect a 12-24 V DC power supply to the camera's GPIO port. The power supply wiring harness must be compatible with a Hirose HR25 8-pin female GPIO connector. Point Grey sells a 12 V wall-mount power supply for connecting to the camera (Part No. ACC-01-9006). To purchase, visit <http://www.ptgrey.com/products/accessories/index.asp>.



5. Register for a Customer Downloads Account and Install the FlyCapture[®] Software and Drivers

- Go to the Point Grey downloads page <http://www.ptgrey.com/support/downloads/index.asp>
 - **New customers:** Under Register (New Users), complete the form, then click **Submit**. After you submit your registration, you will receive an e-mail with further instructions on how to activate your account.
 - **Existing customers:** login under **Login with an Existing Account**. You will be taken to the product Downloads page. Scroll to the bottom and complete the form under **Add a new purchased product**.
- After activating your account, login to the Point Grey [downloads page](http://www.ptgrey.com/support/downloads/index.asp) (<http://www.ptgrey.com/support/downloads/index.asp>). After login, you will be taken to the downloads page for the products to which you have access. Expand **Software and Drivers for Imaging Products** for your operating system. Under FlyCapture v2x, click the 32- or 64-bit **Download** link to begin the download and installation.
- After the download is complete, the FlyCapture setup wizard begins. Follow the steps in each setup dialog. In the **Interface Driver Selection** dialog, select the **I will use GigE cameras**. This selection ensures the Point Grey Image Filter driver is installed and enabled. The Image Filter Driver operates as a network service between GigE Vision cameras and the Microsoft built-in UDP stack to filter out GigE vision stream protocol (GVSP) packets. (cont'n on next page...)

