

# GT Vision GXCAM Quick Start Guide



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# **Getting Started**

## Introduction

This manual describes the most important aspects of the GXCAM camera and software installation procedure in the simplest form.

Please take a few moments to read through this manual before you begin using the camera and programs, because it should answer some questions that you may have. You will find a list of common questions and errors at the rear of this guide with the relevant solutions. Please contact GT Vision should you still encounter difficulties after checking this list, or if you have any questions.

# System Requirements:

To use the camera and camera control programs, you need:

- A Intel Pentium 4 2.6GHz or higher processor for use with Microsoft Windows XP, 7 or 8
- GXCAM Camera
- A fully powered USB2 port
- 512MB RAM
- High quality, modern Graphics Card
- Windows XP, 7 or 8
- HDD 1G unused
- Display memory 32MB
- Large, good quality monitor (we recommend 17" minimum LCD)

# Accessories Included (Figure 1):

- GXCAM camera (a)
- Camera Driver and software CD for the control of camera
  on a PC
- USB cable (b) for connection of PC and GXCAM camera
- 0.45X or 0.35x C-mount adaptor (c) for mounting the camera to an eyepiece (Diameter 23.2mm, normally for biological upright microscopes)
- Eyepiece adaptors (d) and (e) for stereo microscopes (Diameter 30mm and 30.5mm respectively, used together with the 0.45X or 0.35x C-mount adaptor)
- Graticule (f), for measurement calibration
- Quick Start Guide





### Installation Procedure:

**PLEASE NOTE** : Underneath the black screw-on cover on the front/bottom of your camera you may find a film of protective plastic over the camera sensor. With the sensor pointing down remove this film by pulling the tag.

Installing your GXCAM camera and associated software programs should only take a few minutes. Please follow the steps below:

- Installing the camera onto your microscope or lens and the software for your camera into your PC:
  - 1. Before you attach the camera always follow these basic rules when handling your camera. When you unscrew the camera cover or when you attach a camera adapter to the camera or when you are generally manipulating the camera <u>ALWAYS</u> hold the face of the camera (ie the hole with the chip inside) pointing vertically downwards, no matter how uncomfortable or awkward it may feel. If you do not do this, tiny particles of dust or swarf from threaded fittings will definitely land on the chip surface and, especially in microscopes, these will be permanently visible in your images. They can be extremely difficult to remove. We recommend that you become obsessive about the cleanliness of your camera, it certainly pays off! Always place a cap on the camera when not in use and unattached.
  - 2. Attach the camera to your microscope, telescope or lens using the appropriate adapter. Do not connect the camera to your PC yet.
  - 3. Insert the disk which contains the GXCAM camera driver and GXCAPTURE software
  - 4. Use Windows Explorer to see the contents of the CD
  - 5. Double click on the driver installation
    - a. You may have a pop-up 'Do you want to allow the following program from an unknown publisher to make changes on this computer?' select 'yes'
    - b. Run through the wizard for the driver installation
      - i. When it asks 'Would you like to install this device software?' click 'Install'
      - ii. Click 'Finish'
  - 6. Connect the camera to a convenient USB2 port, make a note as to which port you are using (changing ports requires re-installation of the driver). It is important that the USB port has sufficient power. The GXCAM draws power from the USB2 port and draws less than the standard amount of power specified for a USB2 port. However we have found, very occasionally, that some ports have insufficient power usually resulting in a black image in the GXCAPTURE application. Disconnecting other USB devices sometimes increases the power available to a port.
  - 7. Double click on the 'GXCaptureSetup.exe' file on the CD.
    - a. You may have a pop-up 'Do you want to allow the following program from an unknown publisher to make changes on this computer?' select 'yes'
    - b. Run through the wizard for the software installation
      - i. When it asks 'Would you like to install this device software?' click 'Install'
      - ii. Click 'Finish'

**Note:**, Reinstallation of driver may be needed when the camera is attached to a different USB port.



### Troubleshooting:

#### ERROR: Windows found that this file is potentially harmful. Windows has blocked the installation

This typically occurs with Windows 7. Windows 7 natively blocks unsigned drivers, preventing the installation of these drivers and making the device you want to install 'useless'. To get around this you must temporarily disable the signature verification process.

#### Solution:

#### Windows 7: Disable signature verification of drivers:

Computers based on the <u>Windows 7</u> operating system can block unsigned drivers, and as a result installation of these drivers is not possible. The problem can be solved if the **signature verification pilot** is temporarily disabled in <u>Windows</u> <u>7</u>. With the help of the **Run command**, some changes have to be made. Once the **PC is restarted**, the problem of installing an unsigned driver can be solved.

Disable signature verification of drivers:

- 1. Go to Start Menu > Run and type the following command:
  - a. bcdedit /set nointegritychecks ON
- 2. If the Run command is unavailable in start menu, please refer to the point below
- 3. Restart the PC and install the unsigned driver
- 4. Note that it is highly recommended to enable the signature verification of drivers
- 5. Go to Start Menu > Run and type the following command:
  - a. bcdedit /set nointegritychecks OFF
- 6. Restart your PC

#### No 'Run' Command?:

As in Vista, the Run command is not present by default in the **Start menu** of <u>Windows</u> 7. You must type **Run** in **Search** to access it.

If you want to show this command permanently in the Start menu:

- 1. Right-click on the Taskbar and select Properties.
- 2. In the **Start Menu** tab, click **Customize** and check **Run command**, then click OK and Apply. The **Run command** will now be permanently displayed in the Start menu (under the Help and Support option).

#### ERROR: 'DLL not found' when trying to open the software

#### ERROR: The software opens but you cannot get a live image: 'no camera found'

Both of these errors usually have the same solution:

#### Solution:

- 1. Do a Windows Update: Control panel system windows update
- 2. Please visit the Microsoft website below and download the corresponding patch: http://www.microsoft.com/en-us/download/details.aspx?id=5555

# ERROR: I can only obtain an image using the GXCAPTURE software if the resolution is set to 632x472. At higher resolutions the screen is just white?

<u>Solution</u>: The camera requires a powered USB port.



#### ERROR: GXCapture repeatedly requests the CD at initialization. Is there a way to avoid this?

**Solution**: I am assuming what is happening is that when you start the software, the software opens and you can see the GXCapture screen but then it asks for the CD. This is because you have the software aiming at the CD drive on the file tree to the left of the screen. Once you have clicked on to another directory, perhaps a camera images folder you create on the desktop as your preferred storage location, you will not see the CD request again.