[BFG Tech]

Graphics Card
Full Install Manual

The Gamer's Choice!
for 3D Graphics Cards and PC Accessories

Table of Contents

Important! Some steps are divided into an A and B step. Read both steps over carefully to determine which is the most appropriate to follow for your installation.

I. Preparing for Installation

Step 1A. If you are replacing an existing graphics card with your new BFG Tech graphics card, you must first uninstall the current drivers for that graphics card. Please consult your system or graphics card documentation for instructions. Most often the task can be accomplished through the **"Add/Remove Programs"** feature in **"Control Panel"**. Look for drivers that match your existing graphics card, click **"Remove"** and select **"Display Drivers"** only if prompted.

Step 1B. If you are adding your new BFG Tech graphics card to a system with integrated on-the-motherboard graphics, you must disable the integrated graphics first. The most effective method is to disable it in the BIOS. Please contact your system or motherboard manufacturer as the method can vary a great deal. You may also be able to disable the integrated graphics in the **"Device Manager"** using the following steps:

Microsoft Windows 2000 or XP

1. Click **"Start" > "Control Panel" > "Performance and Maintenance" > "System" > "Hardware"**.

2. Click on **"Device Manager"** and then click on the **"+"** by **"Display Adapter"**.

3. Right click on the current graphics card and select disable. Click **"Yes"** if asked **"Do you really want to do this"**. Click **"No"** if prompted to restart your system.

4. Close all open windows and shut down your system.

Your system is now prepared for the installation of your new BFG graphics card.

Microsoft Windows 98 or ME

1. Click on **"Start" > "Settings" > "Control Panel"** and then double click on **"System"**.

2. Click on the **"+"** by the **"Display Adapter"**

3. Double click on the video card under **"Display Adapter"** and place a check in the box to disable in hardware profile.

4. Close **"Device Manager"**. Click **"No"** if prompted to restart your system

5. Double click the display icon in **"Control Panel"**.

6. In **"Display Properties"** click **"Settings" > "Advanced"** (this button may vary depending upon the current display drivers and operating system).

7. In the **"Adapter"** tab (again this may vary depending upon the type of video or drivers installed on the computer) click **"Change"** to select a new display adapter.

8. List the **"Display Devices"**, **DO NOT** search or auto-detect the display adapter. If you do not see a listing of various computer video card manufacturers and models select **"Show all hardware"**. In the listing select Standard display types (generally the first listing under manufacturers) and choose standard VGA for the model and follow the on-screen instructions. Do not restart after the installation has finished.

9. Close all open windows and shut down your system. Your system is now prepared for the installation of your new BFG graphics card.

II. Installing the Graphics Card

Important! Have your system, case and motherboard documentation ready should you need to refer to it.

Step 2. Power off both the computer and monitor.

Step 3. Unplug the power cord and monitor from the back of the computer.

Step 4. Remove the computer's side panel or cover.

Step 5. Identify the slot on the motherboard that matches the type of BFG Tech graphics card you purchased.


PCI

AGP

PCI EXPRESS
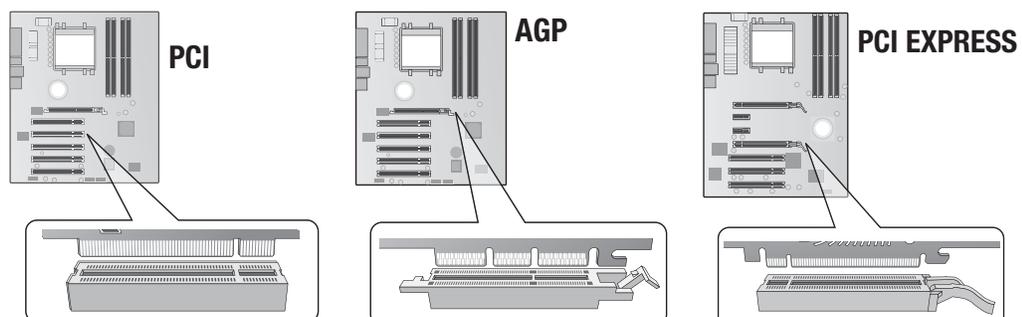
Step 6A. If the identified slot is occupied by another add-in card, first remove any screws and/or retention mechanisms holding it in place, then pull out the card.

Step 6B. If the identified slot is unoccupied, remove the metal cover from the rear of the case that corresponds to the graphics card slot on the motherboard.

Metal Cover

Step 7. Align your new BFG Tech graphics card with the open slot and press firmly until the card is fully seated.

Step 8. Secure the new card in place with the screw and/or retention mechanism you removed in Step 6.

Step 9A. If your new graphics card requires power via a 4-pin Molex connector, find an available matching connector from your power supply and attach it to the graphics card. If you do not have an available 4-pin Molex connector, disconnect a matching connector from another device, attach it to the included power splitter cable, then attach one end of the power cable to the graphics card and the other end to the device you disconnected prior.
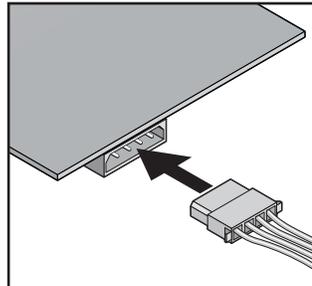
PCI Express

AGP
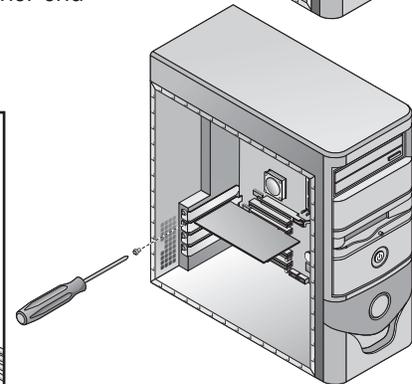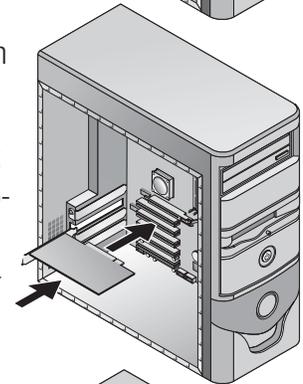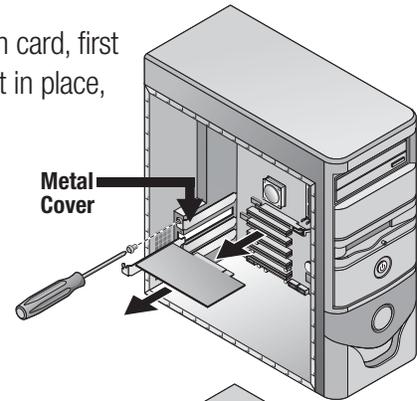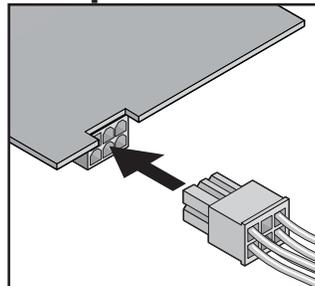
6-PIN PCI Express Power Cable   **4-PIN Molex Power Cable**

Step 9B. If your new graphics card requires power via a 6-pin PCI Express connector, find an available matching connector from your power supply and attach it to the graphics card. If you do not have an available 6-pin PCI Express connector, locate two free 4-pin Molex connectors, attach them to the ends of the included power cable, and then attach the power cable's 6-pin connector to the graphics card.

Step 10. Replace the computer's side panel or cover.

Step 11. Connect the monitor cable to the matching connector on the BFG Tech graphics card you just installed. If your monitor has a DVI-D or DVI-I cable then connect it to the white DVI-I connector. If your monitor has a VGA cable, connect it to either the blue VGA connector or to an included DVI-to-VGA adapter and then to the white DVI-I connector. When you are done, plug the power cord back into the computer.

Power Cord

New Card
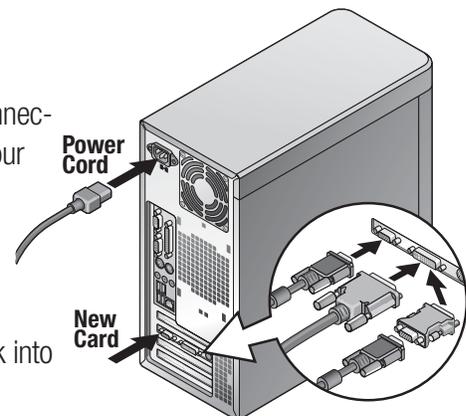
Step 12. Power on the computer and monitor then wait until Microsoft Windows loads.

III. Installing the Drivers

Step 13A. In Windows XP or 2000, click **"Cancel"** if the **"Found New Hardware"** wizard appears

Step 13B. In Windows 98 or ME keep clicking **"Next"** until the wizard is complete, then click **"Finish"** and restart the computer.

Step 14. Insert the BFG Tech Driver CD into your CD/DVD-ROM drive. The CD will auto-run and bring up a menu of language options. If the CD does not auto-run, click **"Start" > "My Computer"** and then double click your CD/DVD-ROM drive.

Step 15. Click on **"Install Drivers"** and follow the on-screen instructions. If a message appears stating that this driver has not passed logo testing, select **"Continue Anyway"**. When prompted to restart the computer, select **"Yes"**.

Step 16. Re-insert the BFG Tech Driver CD or click **"Start" > "My Computer"** and then double click your CD/DVD-ROM drive. After selecting a language, click on **"Install DirectX"**.

You have successfully completed the installation process.

IV. Advanced Driver Installation

Microsoft Windows 2000 or XP

Important! A user with Windows 2000/XP Administrator privileges must install these drivers. Please consult your IT dept. or Microsoft Windows documentation.

1. Click **"Cancel"** if the **"Found New Hardware Wizard"** appears.

2. Disable any Antivirus software that may be running.

3. Click **"Start" > "Control Panel"**.

4. If the **"Pick a category"** menu appears, select **"Performance and Maintenance" > "System"**. Otherwise double click **"System"**.

5. Click the **"Hardware"** and then **"Device Manager"**.

6. Click the **"+"** sign next to **"Display adapter"** and then double click on the device listed.

7. Click the **"Driver"** tab.

8. Select **"Install from a list or specific location"** and then click **"Next"**.

9. Under **"Search for the best driver in these locations"** un-check **"Search removable media"** and check **"Include this location in the search"**.

10. Click **"Browse"** then the **"+"** sign next to my computer. Then click the **"+"** sign next to the CD/DVD-ROM drive that contains the BFG driver CD.

11. Click the **"+"** sign next to the folder titled **"Win_XP_2000"** and then select the **"inf"** file.

12. Click **"Ok"** and then **"Next"**.

13. If prompted to restart, click **"Yes"**.

You have successfully completed the driver installation process.

Microsoft Windows 98 or ME

1. When first booting up Windows might show the **"Add New Hardware Wizard"** after detecting the new hardware

2. Click **"Next"** when the wizard reports finding a **"Standard PCI Graphics Adapter"**, (this device is correct for both PCI and AGP cards), then **"Search for best driver"** and **"Next"**.

3. In Windows 98 ONLY – Uncheck all search location buttons on the **"Search for new drivers"** window, then click **"Next"**. Allow Windows to use the **"Standard PCI Graphics Adapter"**.

4. Click **"Finish"** and **"Yes"** when promoted to restart your system.

5. Right click on **"My Computer"** and select **"Properties"**, then the **"Device Manager"** tab.

6. Click to the **"+"** sign next to **"Display Adapter"** then double click the device listed (should be **"Standard PCI Graphics Adapter"**).

7. In the General Tab click **"Update Driver"** then **"Next"**.

8. Choose **"Display a list of all if the drivers in a specific location…"** then click **"Next"**.

9. Click **"Have Disk"** then click **"Browse"**.

10. Navigate to the CD/DVD-ROM drive containing your BFG driver CD, and find the folder, **'Win98_ME'**.

11. Open the **"inf"** file and then click **"OK"**.

12. Make sure that your newly installed card is highlighted and click **"Next"**.

13. After the files have been installed click **"Finish"**, then **"Apply"**, and finally **"Restart"**.

You have successfully completed the driver installation process.

Microsoft Windows NT 4.0 with Server Pack 5 or 6

1. A user with Windows NT Administrator privileges must install these drivers. Please consult your IT dept. or Microsoft Windows documentation.

2. After booting up and logging in, insert the BFG driver CD.

3. Click **"Start"** then **"Settings"** and **"Control Panel"**.

4. Double-click the Display icon, click on the Settings tab then **"Display Type"** and **"Change"**.

5. Select **"Have disk"** then browse.

6. Navigate to the CD/DVD-ROM containing your BFG driver CD.

7. Open the **"Win_NT4"** folder and Click **"OK"**.

8. Windows will ask you if it is ok to proceed with the installation of a third party driver. Click **"Yes"**.

9. Click **"OK"** then **"Close"** and **"Close"**.

10. When prompted to restart the system click **"Yes"**.

11. The system will restart.

You have successfully completed the driver installation process.

V. Setting up nView and HDTV or Video-Out

Step 1. Power off your computer.

Step 2. Connect an additional display such as another monitor or TV to your graphics card. Refer to your graphics card box to determine your connectivity type and then follow the appropriate connection steps below.

S-Video Out (4-Pin)

1. Connect an RCA video cable to the graphics card and to the display you wish to output an image to.

S-Video In/Out (9-Pin)

1. Connect the included VIVO dongle to the graphics card.

2. Connect a composite or RCA video cable to the appropriate VIVO dongle connector labeled **"out"** and to the display you wish to output an image to.

HDTV Out & S-Video Out (9-Pin)

1. Connect the included HDTV dongle to the graphics card.

2. Connect a composite, component or RCA video cable to the appropriate HDTV dongle connector and to the display you wish to output an image to.

HDTV Out & S-Video-In/Out (10-Pin)

1. Connect the included HDTV dongle to the graphics card.

2. Connect a composite, component or RCA video cable to the appropriate HDTV dongle connector and to the display you wish to output an image to.

Step 3. Power on the computer and wait until Windows loads.

Step 4. After the **"Multi-Display Setup Wizard"** automatically launches, follow the step-by-step setup instructions to take full advantage of nView's multi-display environment. If the wizard does not automatically launch, proceed to the next step.

Step 5A. In Windows 2000 or XP, click **"Start" > "Control Panel"**.

Step 5B. In Windows 98 or ME, click **"Start" > "Settings" > "Control Panel"**.

Step 6. Double click **"NVIDIA nView Desktop Manager"**

Step 7. Click **"Enable"** under **"nView Desktop Manager"**. This will enable nView and add **"nView Properties"** to the pop-up menu when you right click on the desktop.

Step 8. Click **"Setup Wizard"** under **"nView Desktop Manager wizard"** and follow the step-by-step setup instructions to take full advantage of nView's multi-display environment.

You have successfully completed the HDTV/Video-Out setup process.

VI. Setting up Video-In

Step 1. Connect a broadcasting device such as a TV, VCR or gaming console to your graphics card. Refer to your graphics card box to determine your connectivity type and then follow the appropriate connection steps below.

S-Video In/Out (9-Pin)

1. Connect the included VIVO dongle to the graphics card.

2. Connect a composite or RCA video cable to the appropriate VIVO dongle connector labeled **"in"** and to the broadcasting device you wish to input an image from.

HDTV Out & S-Video-In/Out (10-Pin)

1. Connect the included VIVO dongle to the graphics card.

2. Connect a composite or RCA video cable to the appropriate VIVO dongle connector labeled **"in"** and to the broadcasting device you wish to input an image from.

Step 2. Insert the BFG Tech Driver CD into your CD/DVD-ROM drive. The CD will auto-run and bring up a menu of language options. If the CD does not auto-run, click **"Start" > "My Computer"** and then double click your CD/DVD-ROM drive.

Step 3. Click on **"Install VIVO Driver"** and follow the on-screen instructions. If a message appears stating that this driver has not passed logo testing, select **"Continue Anyway"**. When prompted to restart the computer, select **"Yes"**.

Step 4. Insert the Ulead VideoStudio CD into your CD/DVD-ROM drive. The CD will auto-run and bring up a menu options. If the CD does not auto-run, click **"Start" > "My Computer"** and then double click your CD/DVD-ROM drive.

Step 5. Install VideoStudio.

Step 6. Start VideoStudio and select the **"Capture"** tab at the top of the page.

Step 7. Under capture settings ensure that the driver is the **"NVIDIA WDM"**.

You have successfully completed the Video-In setup process for video capture. For VideoStudio technical support, call (310) 896-6391 or visit www.ulead.com/tech/techsupport.htm.

VII. Troubleshooting

Basic Troubleshooting

Important! Please check the following tips before proceeding to the **"Advanced Troubleshooting"** section.

1. Check to see that the system and monitor are plugged in and have power.

2. Check the display cable and make sure it is fastened to the proper display connector on the back of the card.

3. Check to see that that the graphics card is completely seated in the appropriate slot on the motherboard.

4. If your motherboard has an AGP slot, check to see that it is at least AGP 2.0 compliant.

5. Check to see if any on-board graphics processor is disabled. Often it can be disabled in the BIOS or in Device Manager. Refer to the first two steps of this installation manual or to the documentation that came with your system or motherboard.

Advanced Troubleshooting

1. Check to see that your power supply meets the minimum requirements found on the side panel of the BFG Tech graphics card box. While wattage may appear to be sufficient, amperage may not. If it looks like your power supply does not or barely meets the minimum requirements, replace it with a more powerful model. Often times a poor power supply is the cause of graphics card related problems.

2. Do not overclock your graphics card. We understanding the desire to overclock, but it can cause lock-ups, crashing and random restarts, plus it voids your lifetime warranty.

3. If you are having trouble with a particular PC game, visit the game developer's website to download and subsequently install the latest patch.

4. Reinstall your graphics card drivers. Often times this is the best way to resolve an issue. Refer to the following **"Proper Installation or Reinstallation of Graphics Card Drivers"** section for the recommended procedure.

5. Check to see that you have the latest motherboard chipset drivers installed on your computer. Refer to your motherboard or system documentation to determine what motherboard and chipset you have. Once you know your model, visit the appropriate website below to obtain the latest drivers.

NVIDIA - http://www.nvidia.com/content/drivers/drivers.asp

Intel - http://www.intel.com/support/chipsets/

VIA - http://www.viaarena.com/default.aspx?PageID=2

SIS - http://www.sis.com/download/

ALI - http://www.ali.com.tw/eng/support/support.htm

6. Check to see that your motherboard BIOS is up to date and configured properly. Refer to the following **"BIOS Settings"** section for configuration help.

7. Click **"Start" > "Control Panel" > "Performance and Maintenance"** (skip if not listed) **> "System" > "Hardware" tab > "Device Manager"**. Check for conflicts indicated by a yellow exclamation mark.

Proper Installation or Reinstallation of Graphics Card Drivers (Win 2K/XP)

1. Download and install the latest version of Driver Cleaner from http://www.drivercleaner.net/.

2. Download the latest NVIDIA drivers from http://www.nvidia.com and have them ready for step 9.

3. Go to **"Start" > "Control Panel" > "Add or Remove Programs"**.

4. Select **"NVIDIA Drivers"** and click **"Change/Remove"**. If it asks you which NVIDIA drivers you want to remove, make sure you only select graphics card drivers. Click **"No"** if prompted to reboot.

5. While still viewing the **"Add or Remove Programs"** screen, examine the list and make sure that you don't have any other drivers installed from your previous graphics card. If notice graphics card drivers, especially those from ATI, S3, SiS, XGI or 3Dfx, select them and click **"Change/Remove"**. Follow the onscreen instructions to remove them.

6. Reboot your computer. After it has completed the power on self test (POST), but before Windows beings to load, start pressing F8 until you are presented with several Windows XP boot options. Select **"Boot into Safe Mode"**. While this is the preferred way in which to complete steps 7 and 8, you may also simply boot normally into Windows XP if you are unable to access safe mode.

7. Click on **"Yes"** in the safe mode dialog box that appears when Windows XP loads and click on **"Cancel"** in the subsequent new hardware found dialog box.

8. Run Driver Cleaner, select nVidia from the **"Cleaning Selection"** drop down box and click **"Start"**. If you removed any other graphics card drivers in step 5, select them from the Cleaning Selection drop down box and click **"Start"** to remove them as well.

9. Reboot your system normally and install the NVIDIA drivers you downloaded in step 2. If a warning dialog box appears during the installation, click **"Continue Anyways"**.

10. Finish the process by rebooting your system again when prompted after installing the NVIDIA drivers.

BIOS Settings

Important! Always use the latest stable BIOS release version for your motherboard. BIOS updates often resolve compatibility and functionality issues. Refer to your system or motherboard documentation to find out where BIOS files can be downloaded.

Important! To access your system BIOS, refer to your system or motherboard documentation. Often times the BIOS can be access by pressing the **"delete"** key when your system is first powered on.

Important! If you have a PCI Express graphics card, ignore the AGP BIOS settings.

1. IRQ Resources Controlled By – Auto

2. Plug and Play OS – No

3. Assign IRC for VGA – Enabled

4. AGP Aperture – 256MB

5. AGP Mode – Auto

6. AGP Driving Control – Auto

7. AGP Fast Write – Disabled

8. Video RAM Cacheable – Disabled

9. PCI/VGA Palette Snoop – Disabled

VIII. Technical Support

Technical Support is available 24 hrs 7 days a week

In the US and Canada call toll-free 1-866-BFG-FIXX (234-3499)
Outside the US call (toll call, charges apply) 00 + 1.630.637.2459
Technical Support is also available via e-mail at support@bfgtech.com

A Returns Material Authorization number (RMA #) must be issued by BFG Tech Support before any product is returned to BFG Technologies. Product shipped to BFG Technologies without an RMA # will be refused and returned to shipper.

Please allow 2 business days to process all RMA's and 3-5 business days for return shipping. Please pack items properly. BFG is not responsible for damage due to improperly packed items. BFG Technologies recommends using a reputable traceable carrier for RMA shipments.

Appendix A. VCCI

This is a Class B product, to be used in a domestic environment, based on the Technical Requirement of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Please install and use the equipment according to the instruction manual.