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Minimum System Requirements
  • IBM PC or 100% Compatible
  • Intel Pentium III, AMD Duron or Athlon
  • AGP 2.0 or 3.0 compliant* socket, or PCI slot
  • A vacant PCI slot adjacent to the AGP slot for some
    models, these models occupy two slots: 1 AGP & 1 PCI
  • CD or DVD ROM drive
  • Windows 95(OSR2), 98, ME, NT 4.0(SP 5 or 6), 2000, or XP
  • Memory - 128MB
  • 10MB of available disk space (50MB for full installation)
  • 300w power supply or greater, 350w for Ultra and powered
    cards, 480w for 6800 Ultra
  • Some cards require 1 or 2 available hard drive power
    dongles

*some motherboards violate the AGP spec therefore some GeForce cards may not physically fit in these boards

Hardware Installation

I. Prepare for install

[important] If you are replacing an existing graphics card with your new BFG card, you must first
uninstall the current drivers for that graphics card!
Please consult you system or graphics card provider for instructions.
Most often the task can be accomplished through the “Add/Remove Programs” feature in “Control
Panel”. Skip to Step II.

[important] If you are adding your new BFG 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 can also disable the integrated graphics in the “Device Manager” using the following steps:

For Windows 98 or ME

1. Click on “Start” > “Settings” > “Control Panel” and then double click on “System”. Click on the “+” by the
   “Display Adapter”

2. Double click on the video card under “Display Adapter” and place a check in the box to disable in hardware
   profile. Close “Device Manager”; do not restart your computer. Remember, if the computer prompts you to
   restart select "no".

3. While still in the “Control Panel” double click the display icon. In “Display Properties” select the “Settings”
   tab. Now click the “Advanced” button (this button may vary depending upon the current display drivers and
   operating system). 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. 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.
4. Close all open windows and shut down your system. Your system is now prepared for the installation of your new BFG graphics card.

**For Windows 2000 or XP**

1. Click “Start” > “Control Panel” > “Performance and Maintenance” > “System” > “Hardware”. Click on “Device Manager” and then click on the plus sign by “Display Adapter”.

2. Right click on the “Display Adapter” and select disable. Click “Yes” if asked “Do you really want to do this”. Click “No” if prompted to restart your system.

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

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**II. Install the Asylum graphics card**

1. Remove your existing graphics card. Align your new Asylum card with the expansion slot(s) (see above) that matches the type of card you have (AGP = brown off-set slot or PCI = white slot, some AGP models require that the adjacent PCI slot is open) and push it firmly into place until it is fully seated. You may need to remove the cover(s) from the empty expansion slots(s) to allow for insertion. Please note that many newer motherboards have an AGP retention mechanism that will hold your card in place, check to see that the card is not riding on top of the locking tab and is fully seated. Cards requiring a power cable will have one or two 4-pin connectors on the right edge of the card. If your card has one connector follow One Connector Instructions, if your card has two connectors follow the Two Connector Instructions.

**One Connector Instructions**

A. Supply power to the BFG card. Locate an available 4-pin peripheral power connector from your internal power supply and plug it (*see note) directly into the connector on the upper right hand edge of the BFG card.

B. If you do not have an available power connector, use the included Y cable to supply power.
   a. Disconnect the 4-pin peripheral power cable from the hard drive located closest to the BFG card.
   b. Plug this cable into the input end (A) of the Y cable
   c. Plug one 4-pin peripheral connector (B) into the connector on the upper right hand corner of the BFG card.
   d. Plug the other 4-pin peripheral connector into the hard drive which was disconnected in step a.
Two Connector Instructions

A. Supply power to the BFG card. Each connector REQUIRES its own power cable. This cable may share power (see figure 2) with another device such as a hard drive or CD/DVD-ROM drive however **you CANNOT split the power from one power supply cable between the two connectors on the graphics card.**

B. If you have two available 4-pin peripheral power connectors (not on the same cable) you may plug each (*see note) directly into the connectors on the right edge of your BFG card. If you only have one available 4-pin peripheral power connector plug it (*see note) into one of the connectors on your BFG card and use one of the included Y cables and follow steps (a-d) below for the second connector. If you have no available 4-pin peripheral power connectors use both of the included Y cables and follow steps (a-d) below for each connector on your BFG card.

   a. Disconnect the 4-pin peripheral power cable from the hard drive or DVD/CD-ROM located closest to the BFG card.
   b. Plug this cable into the input end (A) of the Y cable.
   c. Plug one 4-pin peripheral connector (B) into one of the connectors on the right edge of the BFG card.
   d. Plug the other 4-pin peripheral connector into the hard drive or DVD/DC-ROM drive which was disconnected.
   e. Repeat if necessary for the second connector.

*Note – Not all models require power cables

*Note – 4-pin peripheral power connectors have a flat bottom and an angled edge on the opposite side and will only fit one way. Never force the connectors together as permanent damage may occur!

2. If your system uses screws to hold down expansion cards insert and tighten the proper screw (s). If your system uses a locking arm/tab close it firmly until it latches.
3. Replace the system cover.
4. Plug the appropriate display cable into your card (see below).
   a) Analog monitors and flat panels use the blue connector or VGA adapter.
   b) Digital displays use the white connector.
   c) TV’s or VIVO cable connect to the round black connector.
5. Connect the power cord to your PC and power up your system.
Driver Installation
* For typical driver installation please follow the included Quick Install Guide, the instructions below are for a more advanced cleaner install.

I. Windows 2000/XP Driver Installation
1. A user with Windows 2000/XP Administrator privileges must install these drivers. Please consult your IT dept. or Microsoft Windows documentation.
2. If the “Found New Hardware Wizard” appears, cancel out of it.
3. Disable any Antivirus software that may be running.
4. Click the Start menu, and then select “Control Panel”.
5. Select “Performance and Maintenance” and then “System”.
6. Select “Hardware” and then “Device Manager”.
7. Click the “+” sign next to the Display adapter (it may appear as an NVIDIA adapter or a VGA Video Controller under Other devices) and right click on the device listed.
8. Select the update Driver tab.
9. Select “Install from a list or specific location” and then “next”.
10. Under “Search for the best driver in these locations” un-check “Search removable media” and check “Include this location in the search”.
11. Click “browse” then the “+” sign next to my computer. Then click the “+” sign next to the CD/DVD-ROM drive that contains the Asylum driver CD.
12. Click the “+” sign next to the folder titled “Win_XP_2000” and then select the “inf” folder.
13. Select “ok” and then “next”.
14. If prompted to restart choose yes.
15. Your Asylum card is now properly installed.

II. Windows 98/ME Driver Installation
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 prompted 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 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 Asylum driver CD, and find the folder, ‘Win98_ME’.
11. Open the folder “inf” 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”.
14. Your Asylum card is now properly installed.

III. Windows NT 4.0 Setup
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 Asylum 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 Asylum 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.
12. Your Asylum card is now properly installed.

**IV. VIVO (video in/out) setup – Cards with 9-pin connector only!**
1. On the Asylum Driver CD open the Video Capture folder.
2. Double click the setup.exe file and follow the on-screen instructions.
3. Install the included Ulead Video Studio software (cd key is on the back of the sleeve).
4. Start Video Studio and select the “Capture” tab at the top of the page.
5. Under capture setting ensure that the driver is the “NVIDIA WDM”.
6. Connect the included video adapter cable to the round connection on the back of the card.
7. Connect the video source to the matching (s-video or composite) Video “In” cable.
8. Begin using Video Studio to create your movie.

**Feature Guide**

To access the Features of the Detonator driver right click on the desktop and select “Properties” > “Settings” > “Advanced” then the “GeForce” tab.
**GeForce Tab**
Informational tab containing the type of GPU on your BFG graphics card as well as the driver version and other informational details.

**Screen Adjustment**
Utility to adjust the positioning and centering of your displayed content.
Display Timing
For advanced users, discrete timing allowed. Leave on Auto-detect unless you have specific need for other timings.

Performance & Quality Settings Tab: Allows for configuration of image and graphical performance settings.
Application Profiles – Allows you to save the settings you prefer by individual application or to all (Global Driver Settings) applications.
Antialiasing Settings: Antialiasing is a technique used to minimize the “stairstep” effect sometime seen along the edges of 3D objects.

- Application Controlled – Allows the application to determine the level.
- Off – disables AA, offers maximum performance
- 2x – offers improved image quality and high performance in 3D applications
- 2xQ – Patented technique that offers 4x-like quality with 2x-like speed.
- 4x – High image quality at the expense of some performance in 3D applications
- 6xs – Higher Image quality with relative performance hit
- 8x – Highest Image Quality in Direct3D and in OpenGL.
Anisotropic Filtering: Additional image quality improvement with an associated performance hit.

- **Application Controlled** – Allows the application to determine the level.
- **Off** – disables Anisotropic filtering
- **2x** – Results in improved image quality at the cost of performance
- **4x** – Results in improved image quality at the cost of performance
- **8x** – Results in best image quality

![Anisotropic Filtering settings](image)

High Performance – use this setting to ensure the highest frame rates, Performance – Use this default setting to get the best compromise between speed and quality, Quality – Use this setting to achieve the highest image quality.
**Vertical Sync** – when enabled this setting will force the graphics card to draw new scenes in timing with the monitor’s refresh rate producing the highest image quality but at a potential performance cost. When disabled the graphics card is free to draw scenes as fast as possible even if the monitor is not ready yet. This results in the highest performance but can cause visual degradation.

- **Application Controlled** – Allows the application to set to on or off
- **On** – enables vertical sync,
- **Off** – disable vertical sync
Show Advanced Settings – when checked the following settings are visible

**Force mipmaps:** none – highest performance lowest image quality, bilinear – smoothes textures by interpolating between neighboring 4 texels some performance impact, trilinear – smoothes textures by interpolating the results of 2 bilinear passes on 2 mipmaps highest impact on performance.

**Conformant texture clamp:** “Texture clamping” refers to how texture coordinates are handled when they fall outside the body of the texture. Texture coordinates can be clamped to the edge or within the image.

**Extension Limit** – sets the OpenGL extension limit by application, do not change unless you have a specific need to.

**Hardware Acceleration:** This option advanced rendering options for single or multi display mode.
Color Correction - Control the color settings of your display's entire visual output. Display correction technology allows users to display on any surface with loss-less picture quality.

Overlay zoom Controls: Use to adjust the level of zoom during video playback.
Overlay color Controls: Use the Overlay Controls panel to adjust the quality of video or DVD playback on your monitor.
Display NVIDIA Settings icon in the taskbar: The NVIDIA Settings icon allows quick access to the following options:

- nView Desktop Manager
- Screen Resolution
- Screen refresh rate
- Color quality (depth)
- Performance & Quality settings
- Custom Color settings
- Rotation Settings
- Desktop Color Controls

*My connected TV is not being detected*: When checked restarts the system to detect and enable a connected TV.
NVRotate: Allows you view your Windows desktop in Landscape or Portrait mode. You can rotate your desktop by 90, 180, or 270 degrees. The following desktop rotations options are available:

- **Landscape** is the "default" mode.
- **Portrait** results in a 90 degree rotation.
- **Inverted Landscape** results in a 180 degree rotation.
- **Inverted Portrait** results in a 270 degree rotation.
- **Restore Default** results in the default "Landscape" mode.
Temperature Settings

Core slowdown threshold: Allows for a fixed value to be set to reduce the speed of the GPU to prevent damage (leave at default)

Allows you to monitor the GPU temperature and ambient temperature.

Refresh Rate Overrides

Allow for setting custom refresh rates for chosen resolutions. Default refresh rate is 60Hz
Change Resolutions
Set resolution, refresh rate, and color depth. Allows for custom resolutions and refresh rates.
Desktop Management
Enable nView, run the nView Desktop Manager Wizard to set up multiple displays properly, display properties allow for modification to settings not related to nView.
Screen Menus
Allows for customization of the menu.

Troubleshooting

I. Basic
Please check the following tips before proceeding to the advanced section.
- Check to see that that system and monitor are plugged-in and have power.
- Check the display cable; make sure it is fastened to the proper display connector on the back of the card.
- Check that the graphics card is completely seated in its matching slot.
- 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 manual that came with your system or motherboard.

- If you have problems during start-up, start your computer in Safe Mode.
- Check that any previous graphics drivers are uninstalled.
- Use the most recent driver available.
  - www.bfgtech.com
  - www.nvidia.com

II Advanced

1. System BIOS (these tips assume your BIOS allows for changes)

To access the BIOS refer to your system or motherboard documentation, often this can be accomplished by holding the F2 or DEL key down during boot-up.

- Always use the latest BIOS for your motherboard.
- If IRQ assignment is allowed let each device have its own.
  - Asylum cards work best on IRQ 11.
- Plug and Play OS – No (unless you have an older non-PnP BIOS)
- Assign IRQ for VGA - enabled.
- AGP aperture - match the memory amount on your Asylum card.
- AGP mode – 4X (8X if available for GeForceFX)
- AGP Driving Control – Auto
- AGP Fast Write – Enabled
- AGP Master 1 WS Write – Enabled
- AGP Master 1 WS read – Enabled
- Video RAM Cacheable – disabled
- PCI/VGA Palette Snoop - disabled
- For installs of Windows XP on a clean hard drive:
  - Under Resource Management select PIC mode rather than APIC.

2. Chipset

- Use the most recent chipset and AGP drivers
  - Nvidia
    - Check the website of the manufacturer of you system for updates.
    - Check the website of the manufacturer of you motherboard.
    - Visit http://www.nvidia.com/content/drivers/drivers.asp.
  - Intel
    - Check the website of the manufacturer of you system for updates.
    - Check the website of the manufacturer of you motherboard.
  - VIA
    - Check the website of the manufacturer of you system for updates.
    - Check the website of the manufacturer of you motherboard.
    - Visit www.viaarena.com and follow the drivers link.
      - The most recent 4 in 1 drivers are highly recommended.
  - AMD
    - Check the website of the manufacturer of you system for updates.
    - Check the website of the manufacturer of you motherboard.
    - Visit www.amd.com and then Technical Resources.
  - SiS
    - Check the website of the manufacturer of you system for updates.
    - Check the website of the manufacturer of you motherboard.
  - ALI
    - Check the website of the manufacturer of you system for updates.
    - Check the website of the manufacturer of you motherboard.

3. Windows

- Check for conflicts in Device Manager, a yellow exclamation mark will indicate a conflict.
  - Windows 9x/ME – Start > Settings > Control Panel, double click System then choose the Device Manager Tab.
    - Click the plus sign next to Display Adapter.
  - Click the plus sign next to display adapter.
  - If the device is listed as “Standard Display Adapter” re-install the drivers.
- Click View > Resources by Connection > then expand “IRQ”.
  - Make sure you have the proper drivers before following these steps.
  - If another device is using IRQ 11, other then “PCI steering” try un-installing it through Add/Remove programs then physically removing it.
  - Reboot and let Windows load. Shut down and re-install the card and driver.

4. Lock-ups
   - Game Lock-ups
     - Update to the latest graphics drivers from BFG or NVIDIA.
       - www.bfgtech.com/tech_redx.html
       - www.nvidia.com
     - Check the website of the manufacturer of the game for updates or patches.
     - Reduce Graphics Hardware Acceleration.
       - Right Click “My Computer” then select “properties”, then the “Performance Tab” then “Graphics”. Move slider to the left.
   - Windows
     - Do not overclock, we understand the desire to overclock but it can cause lock-ups and will void your warranty.
     - Check to see that any previous graphics driver is removed.
     - Asylum GeForce4 cards need at least a 250w power supply (we suggest 300w or greater).
     - Check to see that the AGP slot on your motherboard is 2.0 compliant.
     - Check for any BIOS updates for your motherboard/system (see above).
     - Check for any chipset or AGP driver updates for your motherboard/system (see above).
     - Check for and remove any IRQ conflicts.
     - Perform a completely clean install of Windows.
       - Back-up any needed data, documents or settings
       - Fdisk and format the hard drive
       - Install Windows with only the Asylum card, no others
       - Install any required chipset or AGP drivers
       - Install the Asylum drivers
       - Install any audio devices
       - Install any communication cards (network/modem)
       - Install remaining devices
     - Tip for ALI chipset on Windows 95/98 systems (advanced users only!).
       - Click start > run > type “regedit”
       - Navigate to HKEY_LOCAL_MACHINE > Software > Ali > AGP, then change the value of the frame buffer size from 0 to 10

Forums and Newsgroups
   - Forums
     - www.hardforum.com
     - www.amdmb.com
     - http://forums.anandtech.com
   - Newsgroups
     - alt.comp.peripherals.videocards.nvidia
     - microsoft.public.windowsxp.games

Contact BFG Technologies Tech 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 RMAs 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 trackable 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.