PCI Express – AGP User's Manual

PCI Express / AGP Benutzerhandbuch

Manuel de l'utilisateur de PCI Express / AGP

PCI Expreso / AGP Manual Del Usuario

Manuale Utente PCI Express / AGP

Manual do Utilizador do PCI Express / AGP

PCI Express – AGP 使用者手冊

PCI Express / AGPユーザーマニュアル

PCI Express / AGP 사용자 매뉴얼

PCI Express-AGP 用户手册

PCI Express-AGP. Руководство пользователя.

PCI Express - AGPدليل استخدام بطاقة

Contents

Welcome

Thank you for choosing this SPARKLE video card. We are pleased that you have selected one of the best-engineered, best value-for-money video cards available today.

Thank you for making SPARKLE a part of your PC experience!

Minimum System Requirements

- IBM PC or IBM compatible system
- One VGA PCI Express slot (for use with a PCI Express Card)
- One AGP slot (for use with an AGP Card)
- CD-ROM or DVD-ROM drive
- Minimum 256MB system memory
- 50MB of available hard drive space
- Microsoft Windows XP or 2000
- SVGA multi-frequency compatible monitor

What's in the box?

VGA Card

SmartInstall Installation CD

User's Guide

Video cables (depending on the model VGA card)

Cable adapter(depending on the model VGA card)

Note

The model number and illustrations used in this User's Manual are for reference only, and may be slightly different from your card.

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1 Hardware installation

Removal Instructions (for upgrades):

1. If you are upgrading, it is usually a good idea to uninstall the old video drivers for your system before you shut it down for upgrade. To do this, simply go to your **Device Manager** in your Windows control panel, choose your video card, and click **Un-install**. Then click on **OK** for a messages it shows you.

2. Now shut down your PC.

3. Unplug the monitor and any other connectors from the back of the video card.

4. Take the case cover off and locate the video card (the card your monitor plugs into is your video card).

5. Unscrew the screw that fastens the card to the computer. Save the screw.

6. Gently pull the card from its slot. It may be easier to move the card back and forth a little to pry it loose. Be careful not to damage the slot.

Note

The following step is for systems with integrated video circuitry on your motherboard (so-called on-board video). If you have a separate video card, please skip this step.

In case your motherboard has on-board video, you will need to disable this circuitry before installing a separate video card. You may need your motherboard's manual for this, but most motherboards have a small switch or jumper to disables on-board video.

1. Ensure you insert the video card in the correct slot. PCI-Express cards differ from AGP cards. Make sure that you locate the correct slot or you could cause damage to your PC.

AGP   PCI Express

2. PCI-Express boards could possibly come with two PCI-Express slots, please refer to your motherboard manual for the correct slot location for use with a single card system.

3. Make sure that the slot is not obstructed and all cables are out of the way, and insert the new card. Position the card over the slot, with the monitor connection facing to the back of the PC. Align the pins on the card with the slot. Then gently but firmly push the card into the slot. It may help to insert one side of the card first, then the other.

4. Insert a screw into the corresponding screw hole of the computer chassis and secure the card.

5. Put the case cover back on, connect the monitor and peripherals, and reconnect the power supply. Refer to the documentation of your peripherals if you're having trouble connecting them. You are now ready to boot the computer and install the new driver.

WARNING

Some cards have an additional power cable; if your card has one, ensure that the cable is connected with the power supply, or the card may not work properly!

NOTE

If your VGA card requires direct power and comes with an additional power connector, please make sure you connect the card directly to the power supply. The card may not function properly if the power cable is also connected to another device.
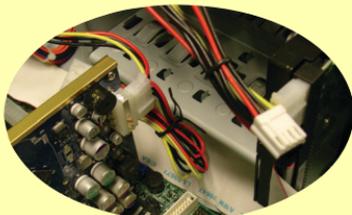
Correct   Incorrect

NOTE

If you want to remove your graphics card from your system, please turn off your power supply and make sure the power switch of your power supply is switched to the "O" position to ensure the power to the system is completely disconnected.

2 Software Installation

SmartInstall is a utility that installs the necessary driver for your SPARKLE GeForce graphic card. SmartInstall is supported under Windows XP, Windows 2000, Windows 98 and Windows Me. For manual driver installation, please see **2.1 Manual Driver Installation on page 7**

> **Note**
> If you have already NVIDIA drivers installed on your system, please remove these drivers before installing new ones. To remove old NVIDIA drivers: click successively on **Start** and **Settings,** then select **Control Panel** and double click **Add or Remove Programs**. A list with drivers will appear. Select **NVIDIA WINDOWS**...from this list, and click **Change/Remove** to remove this driver. Now reboot your system and continue with the next step.

1. Insert the SPARKLE installation CD into your CD or DVD drive. The disk will auto run, and SmartInstall will automatically detect which version of windows is running on your system.

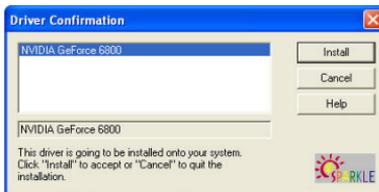2. Select your desired language from the language menu.

3. Click on the **System information** button to view information about your system.

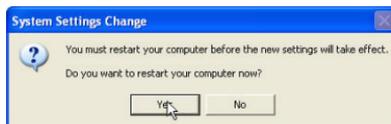4. After reviewing the system information click on the **Install new driver** button.

5. The first **Confirm Installation** screen will appear.

6. Click **OK**.
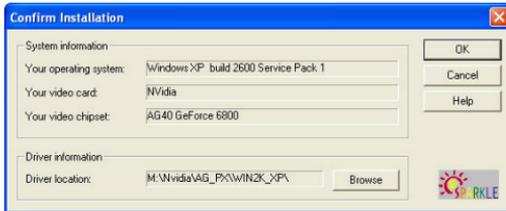
7. The second **Driver Confirmation** screen will appear.

8. Click **Install**.

9. After the driver has been installed a window will ask you to reboot your system.

10. Click **Yes** to reboot your system.

After you have rebooted your system you may want to do install some additional features. Reinsert the SPARKLE CD in your CD or DVD Drive. Once SmartInstall has started click on the **Additional Installations** button to add other additional features to your system.

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Install or set up the additional features you want by selecting them in the main menu and then clicking **Install**. Follow the onscreen instructions for each individual installation. You may need to reboot you computer after installing all of your choices.

2.1 Manual Installation and Setup

Through the Windows setup program you can install and modify all necessary installation files. Follow these steps to manually install drivers for Windows XP.

1. Insert the SPARKLE installation CD into your CD or DVD drive. The disk will auto run, and the SmartInstall main menu screen will appear. Click **Exit** to quit the SmartInstall installation program.

2. Click on **Start** and select **Control Panel**.

3. Double-click on the **Display** icon in the **Control Panel** folder.

4. Click **Settings**, and then select **Advanced**.

   Select **Adapter** from the **Plug And Play Monitor and NVIDIA** window.

5. The **Standard PCI Graphics** (or NVIDIA GeForce) window appears.

6. Click on **Properties**, then select **Driver** from **Adapter Properties**, and click **Update Driver from Driver**.

7. The **Hardware Update Wizard** will appear. Select **Install from a list or specific location (Advanced)**, and then click on **Next**.

8. Per default the Hardware Update Wizard will select **Search for the best driver in these locations**. Please check the **Include this location in the search** box, and select **Browse**. The **Browse for**

folder appears. Select "E:\NVIDIA\xxxxx\win2K XP\" and successively click **OK** and **Next**.

9. The system should now begin the installation of the driver.

10. The **Completing the Hardware Update Wizard** message window appears. Select **Finish**.

11. Now close the **Adapter Properties** window.

12. When prompted in the **System Settings Change** message window, click **OK** and the system will restart automatically.

2.2 Video setup

After you have installed the driver and any additional features you may want to configure the display settings.

1. Right-click your mouse anywhere on an empty space on your Windows desktop. The **Display Properties** window will appear.

Note
You can also access the display properties from the **Display** icon in the **Control Panel**.

Adjusting the screen resolution

2. Select the **Settings** Tab.

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3. You can now set the desired screen resolution by using your mouse to move the slider to either increase the screen resolution (move the slider right towards **More**) or decrease the resolution (move the slider left towards **Less**).
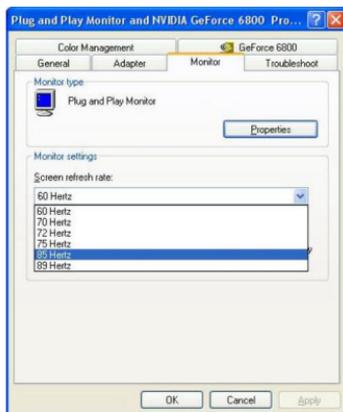
Adjusting the color quality

4. To change the color quality click on the **Color Quality** pull-down menu. It is recommended that you set this at the highest setting possible.

Adjusting your monitor refresh rate

5. Select the **Monitor** tab.

6. Click on the **Screen refresh rate** pull-down menu.

7. Choose the refresh rate in accordance with your monitor capabilities.

Note
If your monitor is not Plug&Play compatible, you will only see "Adapter default" and "Optimal". Please refer to your monitor's User's Manual or supplier for the correct or driver for your monitor. Without the correct driver you will not be able to adjust the refresh rate.

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2.3 nView Display Mode

nView has 5 modes : Standard, Clone, Horizontal Span, Vertical Span and Dualview. If the optional connector is connected, you will be able to choose one as Windows default display device. Only if the device is plugged and functional, will you be able to check the selection box. If you plug the connector after windows boots up, click **Detect Displays** to enable the plugged output device.
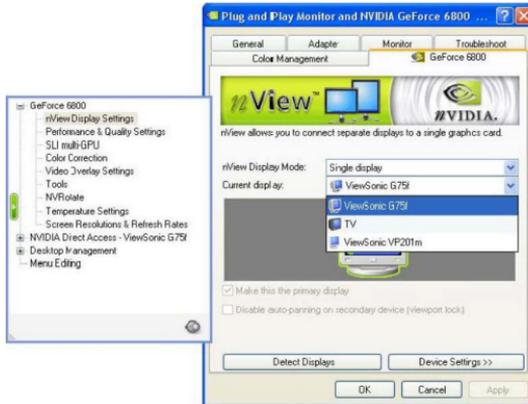
2.3.1 Standard mode
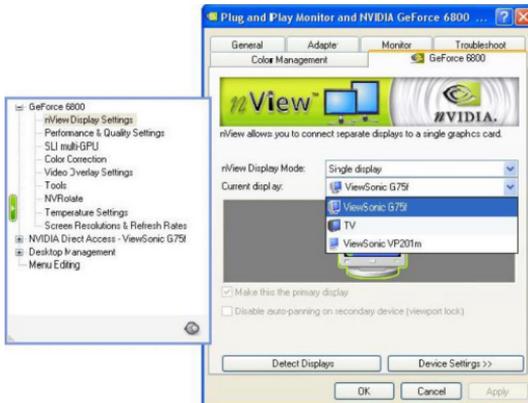
nView disabled, only one monitor will work. Click **Current Displays >>** , you can select output device - CRT, TV and Digital Displays.

Click **Device settings >>, select TV format….,** then select **Advanced..** bar to select S-Video or RCA (Composite Video) output, default is S-Video Out. It is better choose the right out put device, Do not use Auto select.
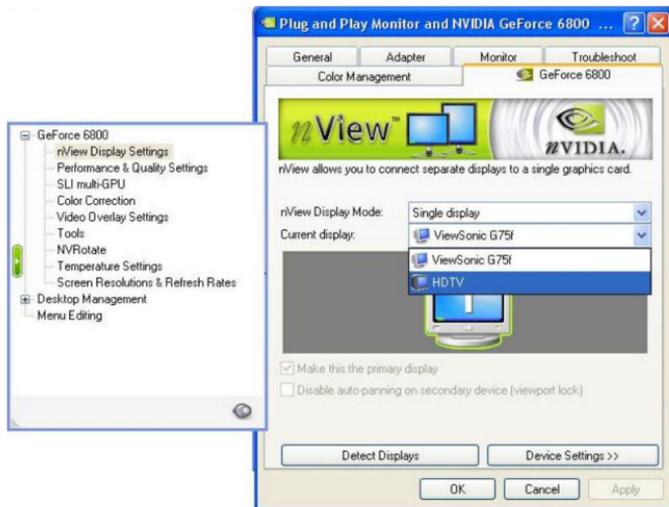
Click **Signal Format** to select your country and TV system - NTSC or PAL, no SECAM.
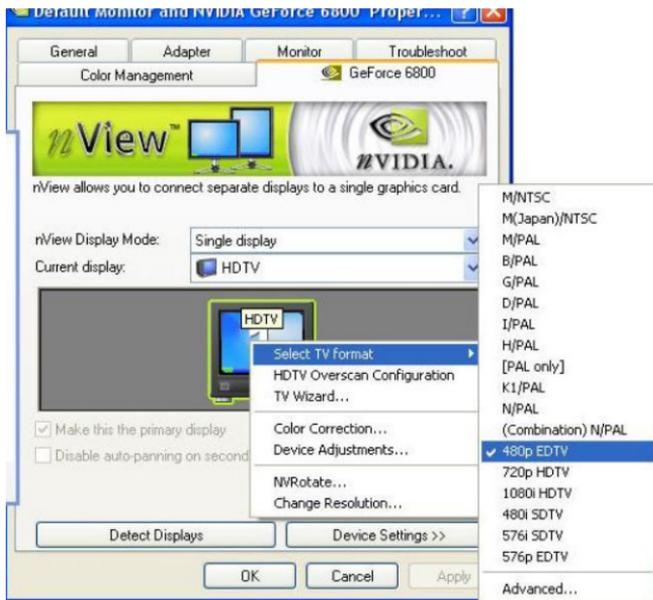
Note:
If you can't switch from PAL back to NTSC, please set resolution to 800x600 and try again

.

2.3.2 Setting HDTV mode

nView disabled, only one monitor will work. Click **Current Displays >>** , you can select output device - CRT / HDTV

Click **Signal Format** to select your country and TV system -
480P˘B720P˘B1080i˘B480i˘B576i˘B576P

.

2.3.3 Device Adjustments

Click **Device Settings >>**, select **Device Adjustment...**
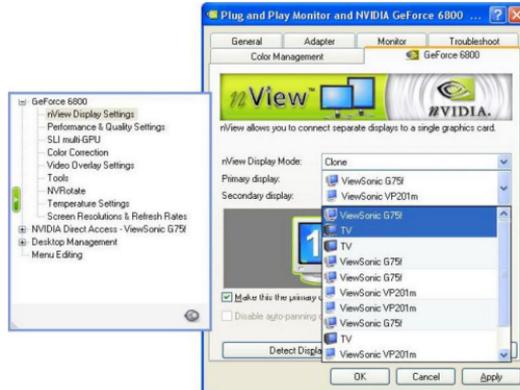You can adjust screen's brightness, contrast, overdrive, flicker and saturation.

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2.3.4 nView enable mode

You need two monitors, one analog monitor (CRT) and one TV or DVI (Optional). All connected well and functional.
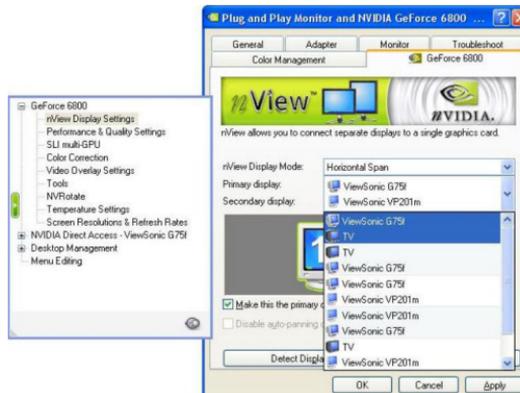
Clone mode:

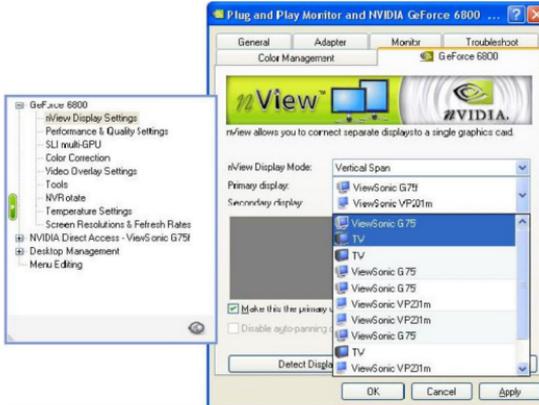2 monitors show the same picture,Select **Clone** and Click **Apply** to activate.

Horizontal span mode:

Picture spans horizontally on 2 monitors.
Select **Horizontal span**, Click **Apply** to activate.
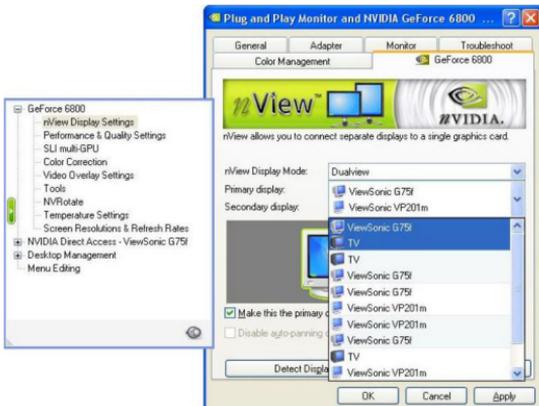
Vertical span mode:

Picture spans vertically on 2 monitors.Select **Vertical span**, Click **Apply** to activate.
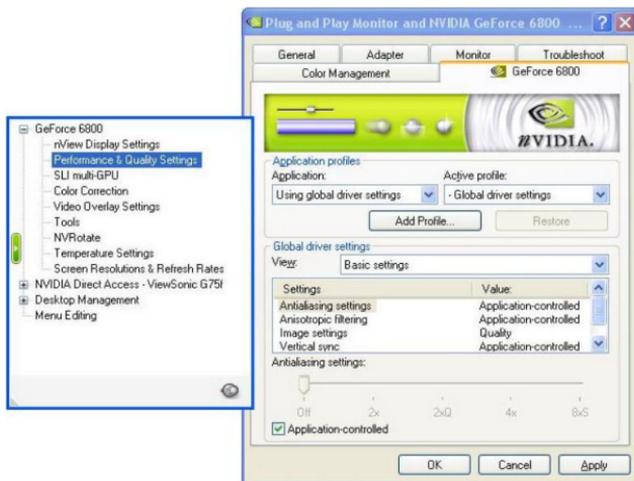

Dualview:

Picture spans horizontally on 2 monitors. Select **Dualview** and Click **Apply** to activate.
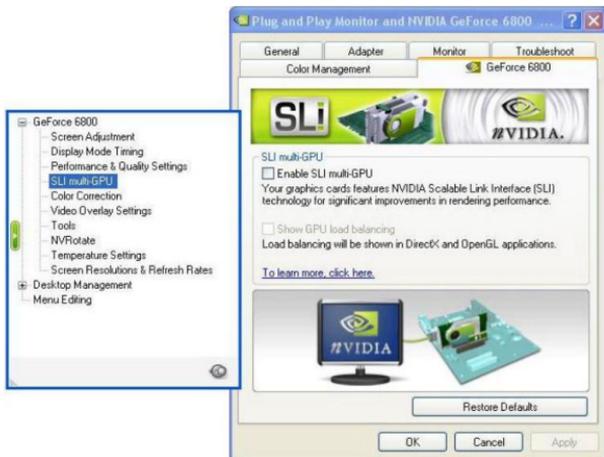
2.3.5 Performance & Quality Setting

You can select different application profiles to make your PC runs more smoothly.
In "Antialiasing settings", you can choose "Off", "2x", "2xQ", "4x" and "8x".

2.3.6 SLI multi-GPU

You can click " Enable SLI multi-GPU " and Show GPU load balancing

and restart your computer

When you enable SLI function , It will appear green line .

2.3.7 Color correction...

Click **Device Settings** >>, select **Color Correction....** This Window shows NVIDIA Digital Vibrance is functional and you can adjust Digital Vibrance,Brightness, Contrast, Gamma and image sharpening and save it as your favorite setting. If you don't like your adjustments, you can check **Restore defaults** to change it back.
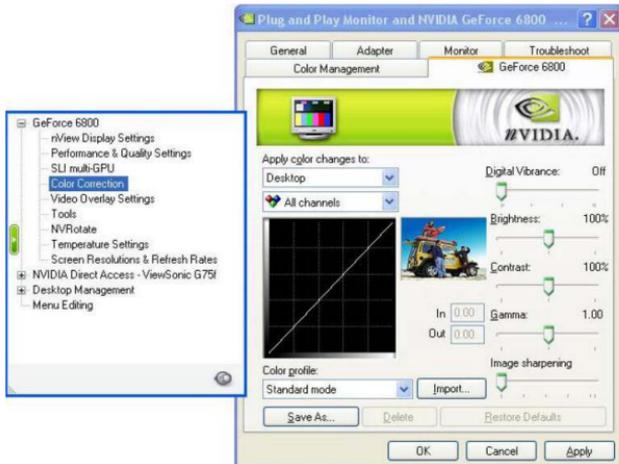
2.3.8 Video Overlay Settings

You can adjust the value in "Overlay zoom controls" and "Overlay color controls".

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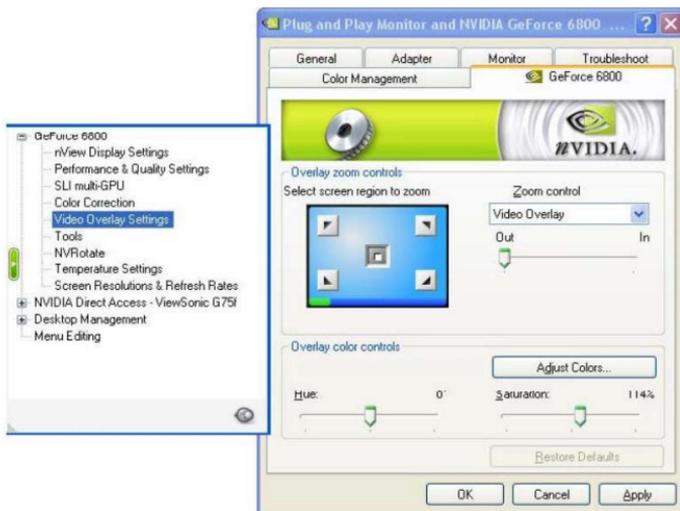
2.3.9 Tools -

You can check "Display the Media Center icon in the taskbar" to allow you to apply any of the custom Direct3D, OpenGL or color settings "on the fly from a convenient pop-up menu. And you can check "My connected TV does not appear in the list", if you're TV had been connected, but you can't use it. The menu also contains items for restoring default settings and accessing the Windows Display Properties dialog box.
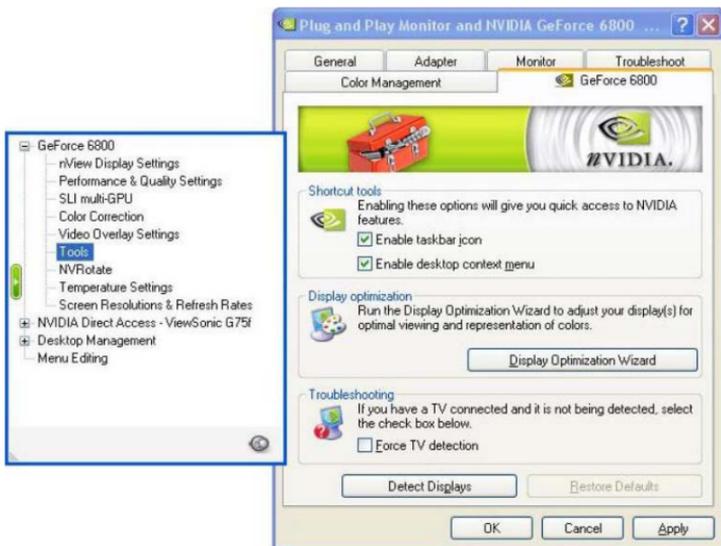
2.4 NVRotate

You are provided with versions in Landscape (0 degree rotation), Portrait (90 degree rotation), Inverted Landscape (180 degree rotation) and Inverted Portrait (270 degree rotation). From these, you can select your own preference.
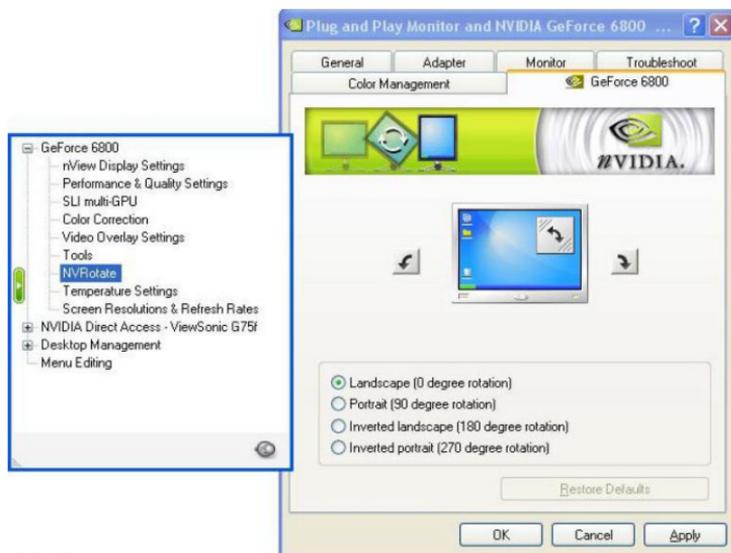
2.4.1 Temperature Settings (optional)

"Core Slowdown Threshold" allows you to set the temperature in order to protect your chipset. "GPU core temperature" shows the current temperature with the GPU. "Ambient temperature" shows the temperature around the VGA card. And you can check "enable Heat Indicator when threshold exceeded" to prevent the temperature damage.
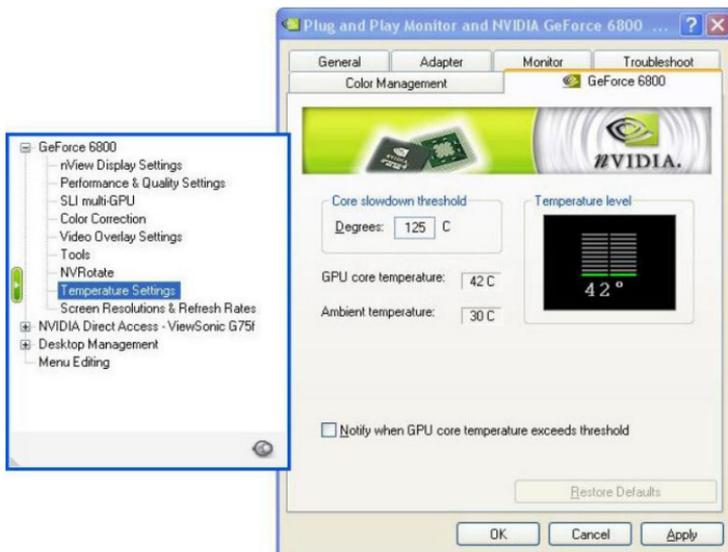
2.4.2 Screen Resolution & Refresh Rate

You can click "Screen resolution & Refresh Rate" to select refresh rate overrides to be used in Direct3D application.
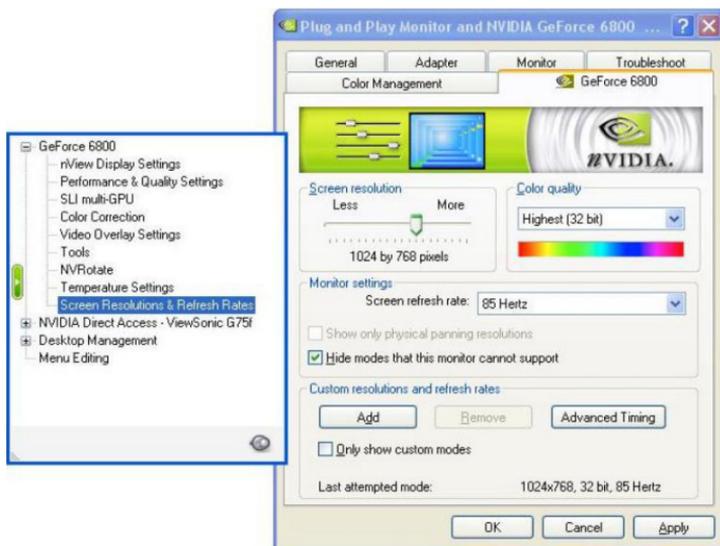
2.4.3 NVIDIA Direct Access

Nvidia detect you Monitor " Manufacturer Name " and " Serial Number "
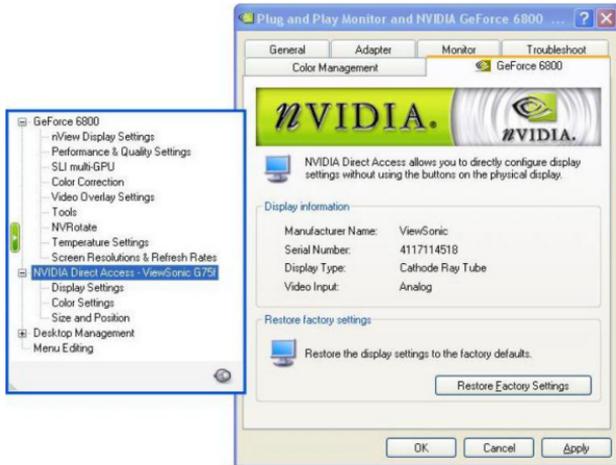
2.4.4 Display Settings

Can lock display buttons
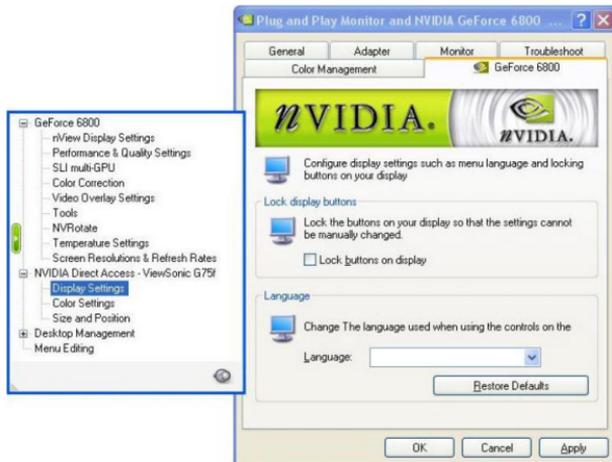
2.4.5 Color Settings

Adjust display " Brightness " and " Contrast "
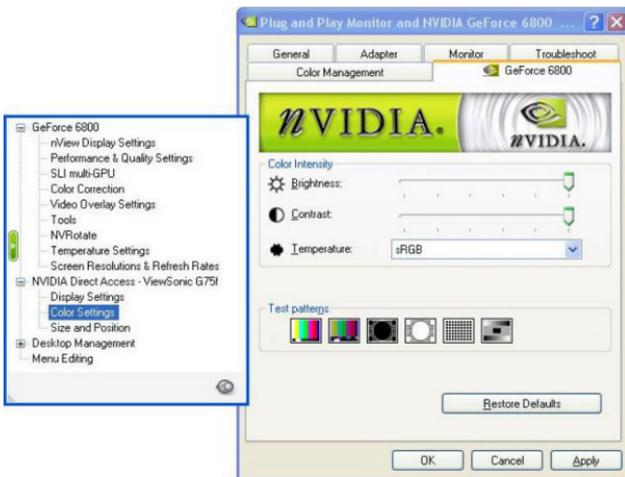
2.4.6 Size and Position

adjust display " Size " and " Position "
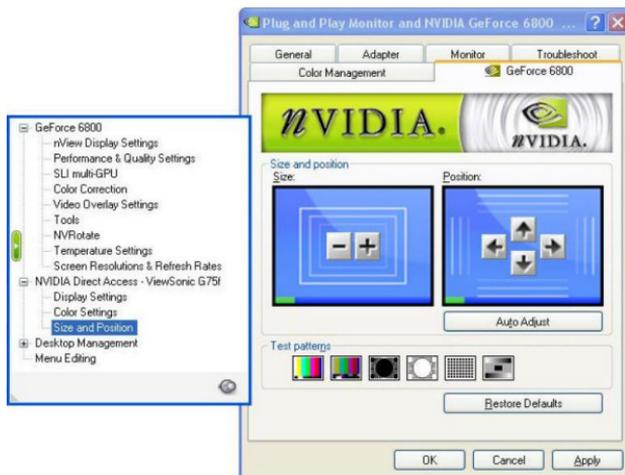
2.4.7 Desktop Management

You can enable your nView Desktop Manager or setup nView Desktop Manager wizard or change your display settings.
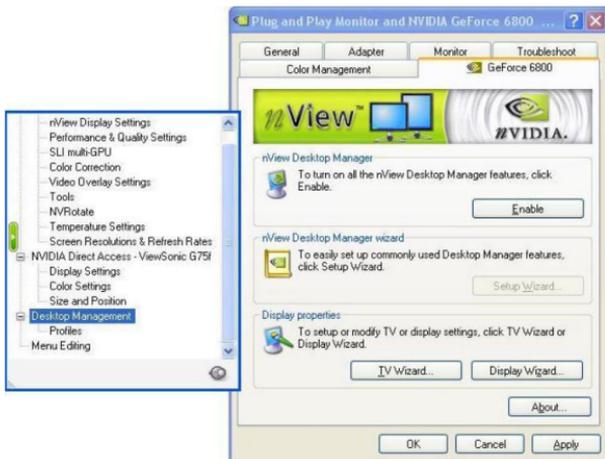
2.4.8 Profiles

You can set personal settings here.
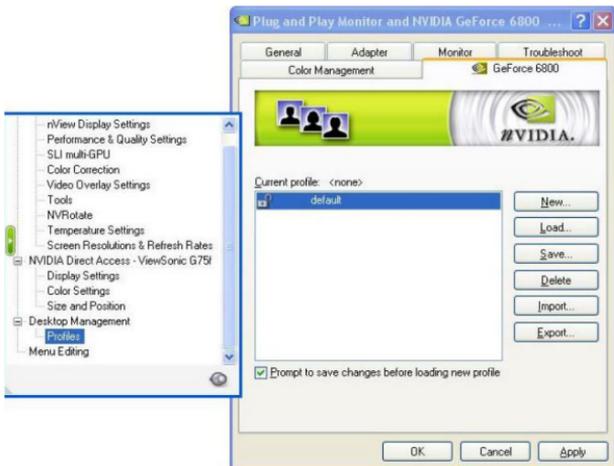
2.4.9 Menu Editing

You can check "Enable screen menu editing" to edit your screen menu.
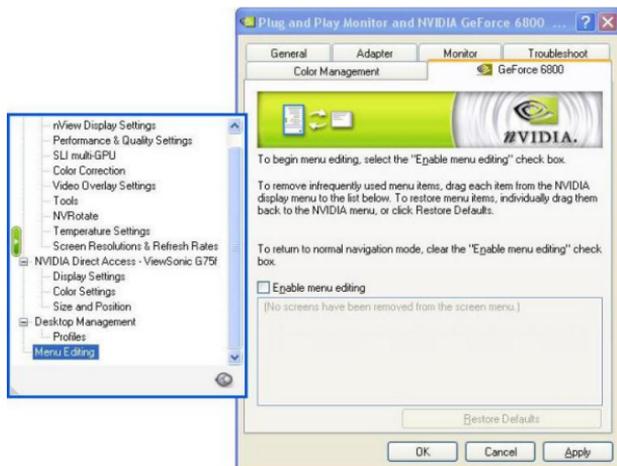
※ For models installed with cable CRT, take SP8834 REV:A2:

2ⁿᵈ CRT (DAC B)

DVI/DVI-I (DAC A)
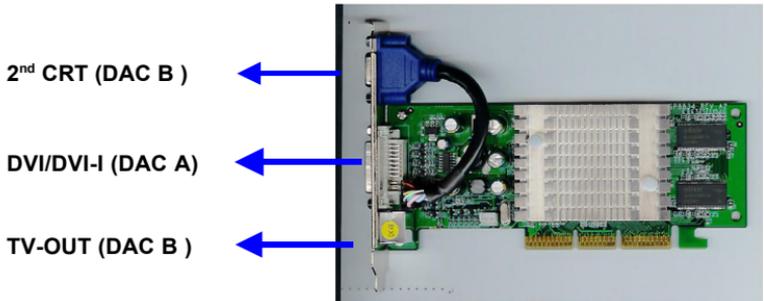
TV-OUT (DAC B)

Description: Cable CRT use the same DAC, so the nView function cannot be used in Windows at the same time, as shown below.
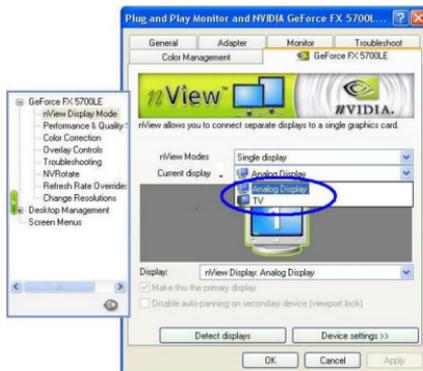
※ The following are conditions when 2 output functions are connected at the same time:

Output	DAC	nView Enabled
DVI + TV-OUT	DAC A + DAC B	•
DVI-I + TV-OUT	DAC A + DAC B	•
DVI + 2nd CRT	DAC A + DAC B	•
DVI-I + 2nd CRT	DAC A + DAC B	•
CRT + 2nd CRT	DAC A + DAC B	•
2nd CRT + TV-OUT	DAC B + DAC B	

PS:
If DT function boards are to be delivered to the customer, adapters to be converted into CRT through DVI can have the CRT +TV OUT - Show nView function in Windows.

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※ PS 2: Description is required for SLI function.
※ SLI Function -GF6600GT and GF6600 / GF6600LE the difference is below
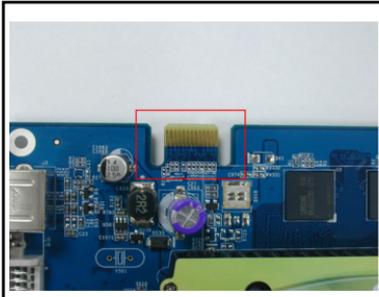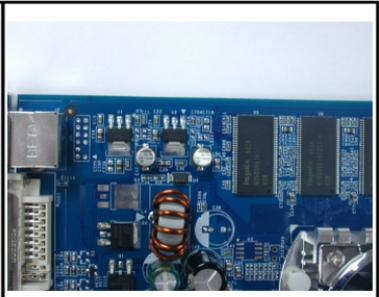
☐ SLI function will be enabled by hardware (through SLi bridge on M/B) while Chipset higher than 6600GT	☐ GF6600 / GF6600LE don't have SLI Connect It enables SLI Function by software driver control

Step1. Please Prepare Pair of VGA card

Step2. After install driver , You Can Click " SLI multi-GPU "
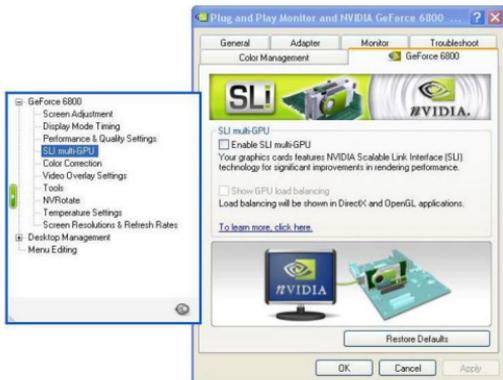
Step3. You Can Click " Enable SLI multi GPU " and " Show GPU load balancing "

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Step4. restart your computer

Restart Required

Enabling SLI requires that you restart your computer now.

Note: Selecting Cancel will clear the "Enable SLI" checkbox.

Restart   Cancel
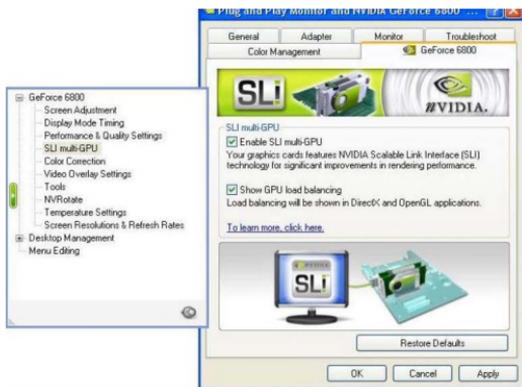
Step5. Enable SLI Function , Run 3D Program –Screen will show green stripe is below

Warranty Statement

Congratulations on your purchase!

Sparkle Co., Ltd. (hereinafter called "SPARKLE") gives the following express warranty to the first consumer purchaser for this SPARKLE brand product, when shipped in its original box and sold or distributed by SPARKLE or by an Authorized SPARKLE Dealer: SPARKLE warrants that this product is free, under normal use and maintenance, from any defects in material and workmanship. If any such defects should be found in this product within one year from the purchase date of this product, SPARKLE shall, at its option, repair or replace the product as specified herein.

This warranty shall not apply to:

(a) Any defects caused or repairs required as a result of abusive operation, negligence, accident, improper installation or inappropriate use as outlined in this User's Guide.

(b) Any SPARKLE product tampered with, modified, adjusted or repaired by any party other than SPARKLE.

(c) Damage caused or repairs required as a result of the use with items not specified or approved by SPARKLE, including but not limited to chemical cleaning agents.

(d) Any damage caused by external or environmental conditions, including but not limited to transmission line/power line voltage or liquid spillage.

This warranty constitutes the entire express warranty granted by SPARKLE and no other dealer, service centre or their agent or employee is authorized to extend, enlarge or transfer this warranty on behalf of SPARKLE. To the extent the law permits, SPARKLE disclaims any and all liability for direct or indirect damages or losses or for any incidental, special or consequential damages or loss of profits resulting from a defect in material or workmanship relating to the product, including damages for the loss of time of productivity. The purchaser will be responsible for any removal, reinstallation, transportation and insurance costs incurred. Correction of defects, in the manner and period of time described herein, constitute complete fulfillment of all obligations and responsibilities of SPARKLE to the purchaser with respect to the product and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise.

For more information on this warranty, SPARKLE products, accessory sales, dealers or service locations, please visit our web site: www.sparkle.com.tw, or contact us at:

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Taipei 10492, Taiwan

Tel: +886 (2) 2741-1196

www.sparkle.com.tw

Supported Colors and Resolutions

Resolution	B.P.P.	Refresh Rates (Hz)
640*480	8	60/70/72/75/85/100/120/140/144/150/170/200/240
	16	60/70/72/75/85/100/120/140/144/150/170/200/240
	32	60/70/72/75/85/100/120/140/144/150/170/200/240
800*600	8	60/70/72/75/85/100/120/140/144/170/200/240
	16	60/70/72/75/85/100/120/140/144/170/200/240
	32	60/70/72/75/85/100/120/140/144/170/200/240
1024*768	8	60/70/72/75/85/100/120/140/144/150/170/200/240
	16	60/70/72/75/85/100/120/140/144/150/170/200/240
	32	60/70/72/75/85/100/120/140/144/150/170/200
1152*864	8	60/70/72/75/85/100/120/140/144/150/170/200
	16	60/70/72/75/85/100/120/140/144/150/170/200
	32	60/70/72/75/85/100/120/140/150/170
1280*960	8	60/70/72/75/85/100/120/140/144/150/170
	16	60/70/72/75/85/100/120/140/144/150/170
	32	60/70/72/75/85/100/120/140/150
1280*1024	8	60/70/72/75/85/100/120/140/144/150/170
	16	60/70/72/75/85/100/120/140/144/150/170
	32	60/70/72/75/85/100/120/140/150
1600*900	8	60/70/72/75/85/100/120/140/144/150
	16	60/70/72/75/85/100/120/140/144/150
	32	60/70/72/75/85/100/120
1600*1200	8	60/70/72/75/85/100/120
	16	60/70/72/75/85/100/120
	32	60/70/72/75/85/100
1920*1080	8	60/70/72/75/85/100
	16	60/70/72/75/85/100
	32	60/70/72/75/85
1920*1200	8	60/70/72/75/85/100
	16	60/70/72/75/85/100
	32	60/70/72/75/85
1920*1440	8	60/70/72/75/85
	16	60/70/72/75/85
	32	60/70/72/75/85
2048*1536	8	60/70/72/75/85
	16	60/70/72/75/85
	32	60/70/72/75/85

Notes
1. B.P.P. stands for bit per pixel.
2. Different drivers support different resolutions. It is possible that not all resolutions listed above are supported by your driver.

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FCC Statement

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. (2)This device must accept any interference received, including interference that may cause undesired operation.

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference in to radiate communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

· Reorient or relocate the receiving antenna

· Increase the separation between the equipment and receiver.

· Connect the equipment into an outlet on a circuit different form that to which the receiver in connected.

· Consult the dealer or an experienced radio/TV technician for help.

Notice

(1) An Unshielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord by used.

(2) Use only shielded cables to connect I/O devices to this equipment.

(3) Changes or modifications not expressly approved by the party responsible for compliance could void the use's authority to operate the equipment.

CE Statement

This product and the original options are designed to observe the related EMC (Electromagnetic compatibility) and safety standards. However, SPARKLE cannot guarantee that this product still observes these EMC standards if options or cables not produced by SPARKLE are connected or implemented. In this case, the persons who have connected / implemented those options / cables have to make sure that the system (PC plus options / cables) still fulfils the required standards. To avoid general EMC problems, the following advice should be observed:

· Only CE marked options should be connected / implemented.

· Only fully shielded cables should be connected.