

# GV-NX85T128P

GeForce™ 8500 GT Graphics Accelerator

## User's Manual

Rev. 101

12MD-NX85T1P-101R



\* The WEEE marking on the product indicates this product must not be disposed of with user's other household waste and must be handed over to a designated collection point for the recycling of waste electrical and electronic equipment!!

\* The WEEE marking applies only in European Union's member states.

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### Trademarks

Third-party brands and names are the property of their respective owners.

### Notice

Please do not remove any labels on VGA card, this may void the warranty of this VGA card

Due to rapid change in technology, some of the specifications might be out of date before publication of this booklet.

The author assumes no responsibility for any errors or omissions that may appear in this document nor does the author make a commitment to update the information contained herein.

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# 1. Introduction

## 1.1. Features

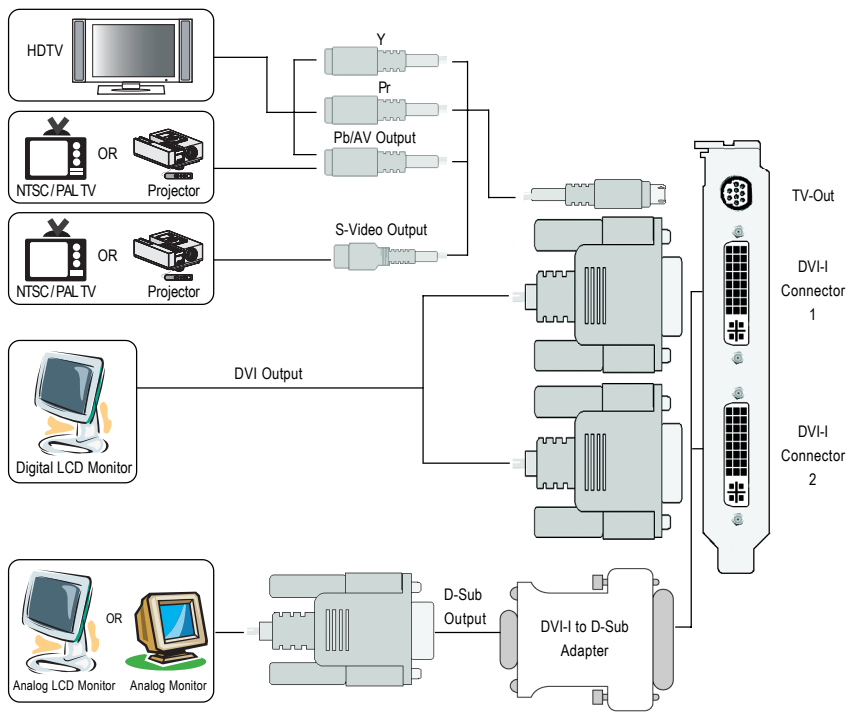
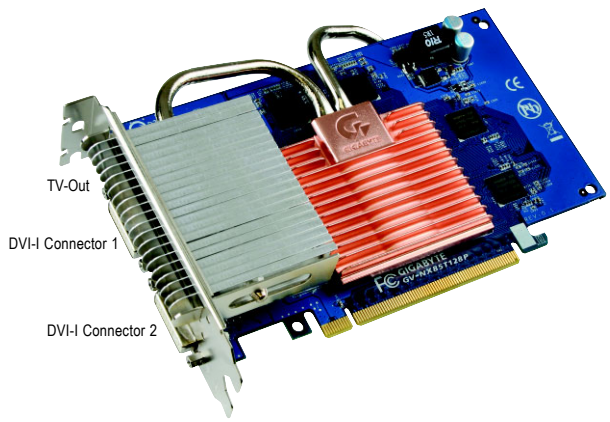
- Powered by **NVIDIA® GeForce™ 8500 GT** Graphics Processing Unit (GPU)
- Supports PCI Express x16
- Integrated with 128 MB GDDR3 memory
- Supports DirectX 9.0c and DirectX 10
- Supports AV / S-Video / TV-Out and HDTV output
- Supports D-sub connector (by adapter)
- Supports 2 DVI-I connectors
- Supports HDCP (High-bandwidth Digital Content Protection) technology

## 1.2. Minimum System Requirements

- **Hardware**
  - Intel® Pentium® 4 or AMD Athlon™
  - 128 MB of system memory; 2 GB or more for best performance
  - Optical drive for software installation (CD-ROM or DVD-ROM drive)
  - A power supply with 450-watt is recommended
- **Operating System**
  - Windows® Vista
  - Windows® XP with Service Pack 2 (SP2)
  - Windows® XP Professional x64 Edition
  - Windows® 2000

# 2. Hardware Installation

## 2.1. Board Layout





Expansion cards contain very delicate Integrated Circuit (IC) chips. To protect them against damage from static electricity, you should follow some precautions whenever you work on your computer.

1. Turn off your computer and unplug power supply.
2. Use a grounded wrist strap before handling computer components. If you do not have one, touch both of your hands to a safely grounded object or to a metal object, such as the power supply case.
3. Place components on a grounded antistatic pad or on the bag that came with the components whenever the components are separated from the system.

The card contains sensitive electric components, which can be easily damaged by static electricity, so the card should be left in its original packing until it is installed.

Unpacking and installation should be done on a grounded anti-static mat. The operator should be wearing an anti-static wristband, grounded at the same point as the anti-static mat.

Inspect the card carton for obvious damage. Shipping and handling may cause damage to your card. Be sure there are no shipping and handling damages on the card before proceeding.

⚡ **DO NOT APPLY POWER TO YOUR SYSTEM IF IT HAS BEEN DAMAGED ON THE CARD.**

⚡ **In order to ensure your graphics card working correctly, please use official Gigabyte BIOS only. Use none official Gigabyte BIOS might cause problem on the graphics card.**

## 2.2. Hardware Installation

Installing Your graphics card.

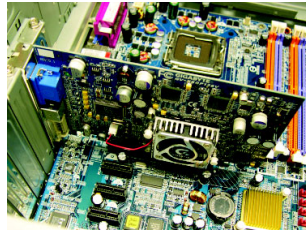
Now that you have prepared your computer, you are ready to install your graphics accelerator card.

### To remove the existing graphics card:

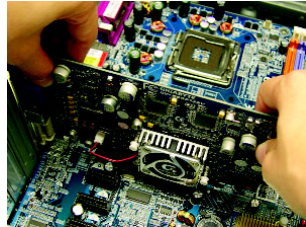
1. Power off the computer and monitor, then disconnect the display cable from the back of your computer.



2. Remove the computer cover. If necessary, consult your computer's manual for help in removing the cover.



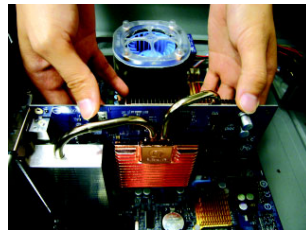
3. Remove any existing graphics card from your computer.



### To install your new graphics card:

1. Locate one PCI Express x16 slot. If necessary, remove the metal cover from the slot; then align your graphics card with the PCI Express x16 slot, and press it in firmly until the card is fully seated.

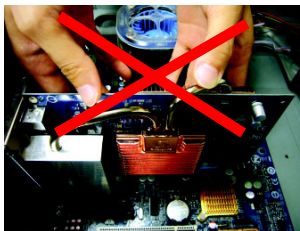
\* Please make sure that the gold edge connectors of the graphics card is securely inserted.



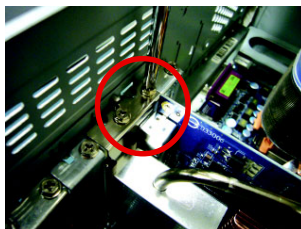


### Warning!

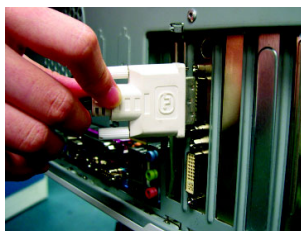
When installing the graphics card, do not push down the heat pipe. This may displace the heat pipe and cause bad contact between the GPU and thermal pad as well as affect the heat dissipation. To avoid system instability, do not touch the graphics card when it is running .



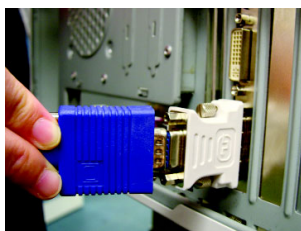
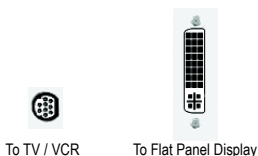
2. Replace the screws to fasten the card in place, and replace the computer cover.



3. Plug the display cable into your graphics card; then turn on the computer and monitor. To connect a flat panel directly to your graphics card, use the DVI-I connector. To connect a D-Sub monitor to the DVI-I connector, plug the DVI-I to D-Sub adapter into the DVI-I connector, then plug the monitor cable into the adapter.



Connect a flat panel

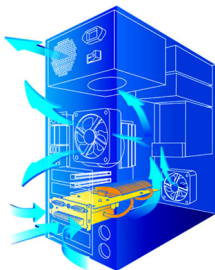


Connect a D-Sub monitor via DVI-I to D-Sub adapter

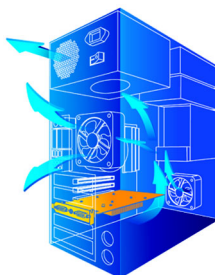
You are now ready to proceed with the installation of the graphics card driver. Please refer to next chapter for detailed instructions.

## GIGABYTE Thermal Solution Guidelines:

1. GIGABYTE established the use of silent pipes on graphics card's thermal solution, and has been the leading company for silent thermal solution. GIGABYTE's passive thermal solution allows system to work perfectly in chassis with 40~50 degrees Celsius through the air flow of the system. Please beware of the other excess component or insufficient system thermal design that may cause high system temperature. Excess high temperature will affect the passive thermal design and thus compromising system stability.
2. GIGABYTE TECHNOLOGY's passive thermal design effectively implemented heat exchange, radiation and convection to improve stability of the system. Please maintain passive thermal sink at a normal and clean environment. Extra dust on heatsink may decrease the effectiveness of the thermal design.



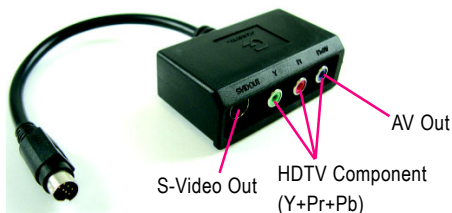
Silent Thermal Technology



Passive Thermal Design



## GIGABYTE Video Adapter for Nvidia Graphics Cards



Connect to the TV-Out port on the graphics card.

### (1) Connecting HDTV

Connect your HDTV cables to the video adapter according to the corresponding color.

(Y= Green, Pr= Red, Pb= Blue)



### (2) Connecting S-Video

If your TV has a S-Video connection, connect the S-Video cable from your TV to the S-Video Out port on the adapter.



### (3) Connecting AV Output

If your TV has a Composite video connection, you can connect the RCA cable from your TV to the AV Out port on the adapter.



## **3. Software Installation**

**In this manual, we assume that your CD-ROM Drive letter to be Drive D:**

The installation of Windows® 2000 / Windows® XP drivers is very simple. When you insert the driver CD into your CD-ROM drive, you can see the AUTORUN window (if it does not show up, run "D:\setup.exe"). Then you can follow the guides to setup your graphics card driver. (Please follow the subsection 3.1.3 "Driver installation" to install the driver for your graphics accelerator.)

### **3.1. Windows® XP Driver and Utilities Installation**

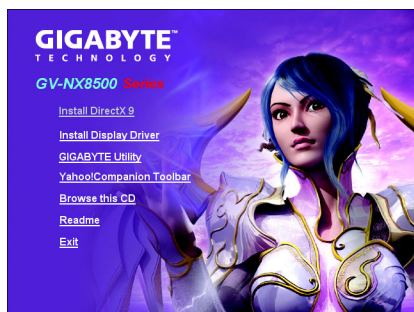
#### **3.1.1. Operating System Requirement**

- When loading the graphics card drivers for the system, please make sure your system has installed DirectX 9.0c or later version.
- If you install the graphics card drivers for the motherboard, which consist of SIS or VIA chipsets, please install the appropriate driver program for that motherboard. Or please contact your motherboard nearest dealer for motherboard driver.

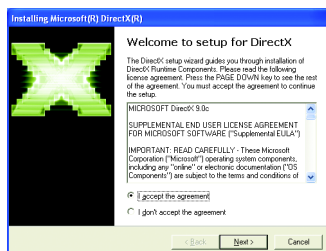
### 3.1.2. DirectX Installation

Install Microsoft DirectX to enable 3D hardware acceleration support for Windows® 2000 or Windows® XP to achieve better 3D performance.

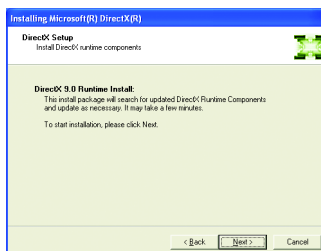
- Note: For software MPEG support in Windows® 2000 or Windows® XP, you must install DirectX first. Users who run Windows XP with Service Pack 2 or above do not need to install DirectX separately.



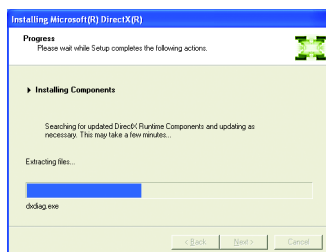
Step 1. When autorun window show up, click the **Install DirectX 9** item.



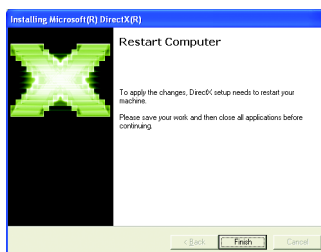
Step 2. Choose **I accept the agreement** and click the **Next** button.



Step 3. Click the **Next** button.



Installing the components.



Step 4. Click **Finish** to restart computer. Then the DirectX 9 installation is completed.

### 3.1.3. Driver Installation

#### A. New hardware found

After the graphics card is inserted into your computer at the first time, the windows will automatically detect a new hardware in the system and pop out a "New Hardware Found" message. The following is the step-by-step installation guide.

#### Step 1: Found new hardware wizard: Video controller (VGA Compatible)

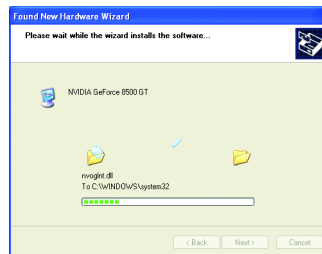


Click the "Next" button to install the driver. (There is a driver CD disk that came with your graphics accelerator, please insert it now.)

Or click the "Cancel" button to install the driver from AUTORUN window.

#### Step 2: Found new hardware wizard: Searching and installing

The wizard will search for the driver and install it automatically.



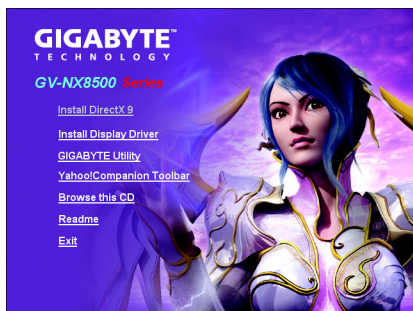
#### Step 3: Found new hardware wizard: Finish

Click the "Finish" button to finish the installation.

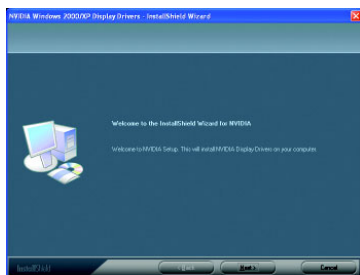


## B. Driver installation (Autorun Window)

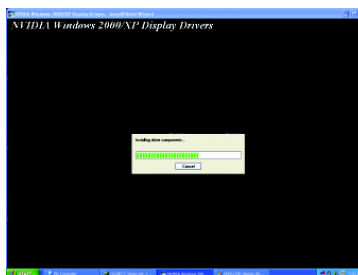
Insert the driver CD disk into your CD-ROM, and then you can see the AUTORUN window. If it does not show up, please run "D:\setup.exe".



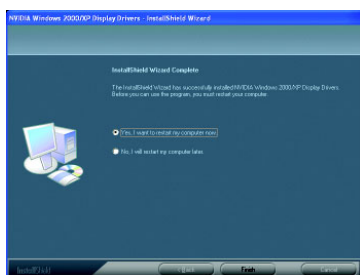
Step 1. When autorun window show up, click **Install Display Driver** item.



Step 2. Click "Next" button.



Windows installing the components.

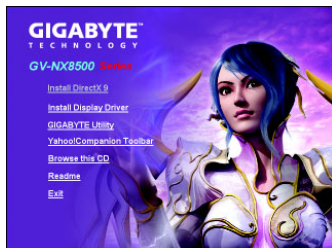


Step 3. Click "Finish" button to restart computer. Then the driver installation is completed.

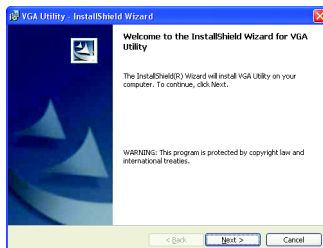
### 3.1.4. Utilities on Driver CD

Insert the driver CD disk into your CD-ROM, and then you can see the AUTORUN window. If it does not show up, please run "D:\setup.exe".

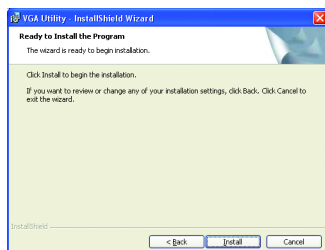
- Install GIGABYTE utilities:



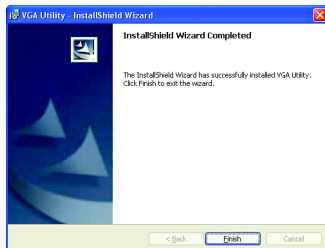
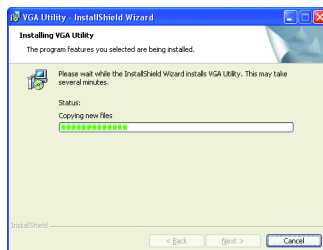
Step 1. When autorun window show up, please click the **GIGABYTE Utility** item.



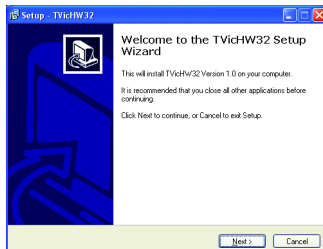
Step 2. Click the **Next** button.



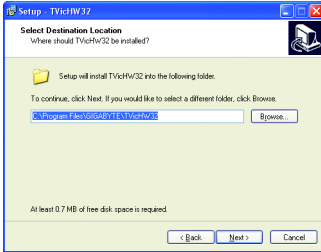
Step 3. Click the **Install** button.



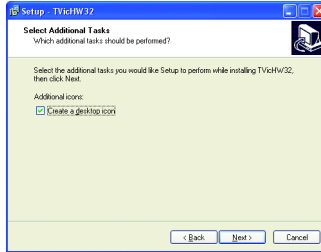
Step 4. Click the **Finish** button.



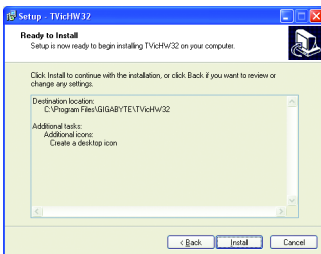
Step 5. Click the **Next** button.



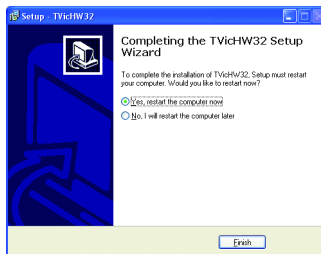
Step 6. Click the **Next** button.



Step 7. Click the **Next** button.



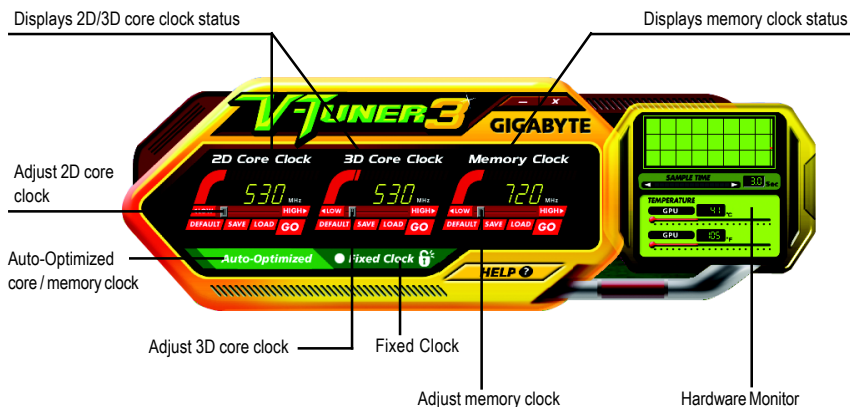
Step 8. Click the **Install** button.



Step 9. Click the **Finish** button to restart computer.  
Then the utilities installation is completed.

## V-Tuner 3


**V-Tuner 3** lets you adjust the working frequency of the graphic engine and video memory (Core Clock and Memory Clock).



Button	Function
DEFAULT	You may click this button to restore to the default setting
SAVE	You may click this button to save the frequency you wanted
LOAD	After saving the specific value, you may click this button to load the frequency you saved last time
Auto-Optimized	The V-Tuner3 clock configuration utility will determine the recommended GPU and memory clock setting your system. If the utility should hang, restart your system and then enter "Auto-Optimized" mode
Fixed Clock	The V-Tuner3 clock configuration utility will lock the GPU and memory clock you choose, whether you restart your system or not. To rechange clock, uncheck the "Fixed Clock" mode and then adjust
Hardware Monitor	If your card have Hardware Monitor function, you will see the extend window. The window will display the GPU temperature and show the thermal curve. Besides, you can move the slider to adjust the frequency-time temperature of GPU, and you will see the change of thermal curve from now on.
HELP	Opens Help page



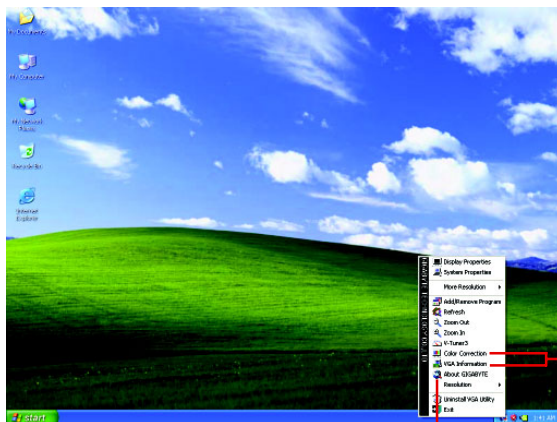
### 3.1.5. Taskbar Icon

After installation of the display drivers, you will find a GIGABYTE icon  on the taskbar's status area. Right-clicking this icon opens the GIGABYTE control panel, showing a menu composed of shortcut of the graphics card's enhanced and other functions.

You may click the **Display Properties** item, and then click **Settings**. Click **Advanced** after clicking **Settings**. Click the appropriate tab to change your display settings.



Right click the icon.

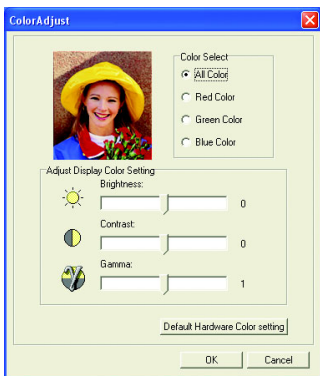


Click the **Color Correction** and **VGA Information** items into the "Color Adjust" and "VGA Info" tabs.

You can link to GIGABYTE website for updated information about the graphics accelerator, latest drivers, and other information.

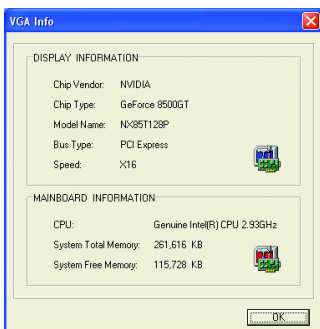
## Color Adjust


**Color Adjust** allows you to make color adjustments, such as brightness, contrast and gamma values for each or all of RGB colors.



## VGA Information

**VGA Info** lists the relevant information about your card.



After installation of the display drivers, you will find a NVIDIA icon  on the taskbar's status area. Click this icon to open the control panel.



Right click the icon.



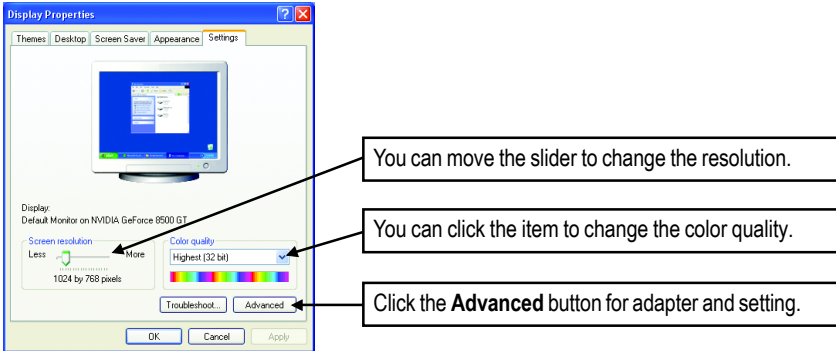
You can adjust the properties of the graphics accelerator from here.

### 3.1.6. Display Properties Pages

To access Display Properties pages, right-click on desktop and then select **Properties**. The **Display Properties** dialog box shows the information of display adapter, color, the range of display area, and the refresh rate.

#### Settings (Resolutions and Color depth for Windows)

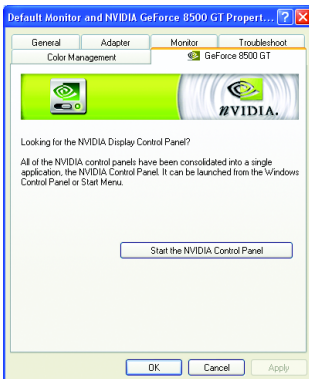
You may adjust the screen resolution and color quality settings in this dialog box.



To access more advanced options, click the **Advanced** button.

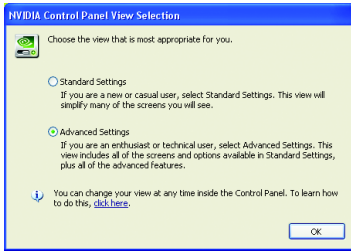
### NVIDIA Control Panel

After pressing the **Advanced** button in **Settings**, you'll see the **Default Monitor and NVIDIA GeForce 8500 GT Properties** dialog box. Click the **GeForce 8500 GT** tab. (You can also click the NVIDIA icon on the taskbar and select **NVIDIA Control Panel**.)



Access the **GeForce 8500 GT** tab page to launch the NVIDIA Control Panel

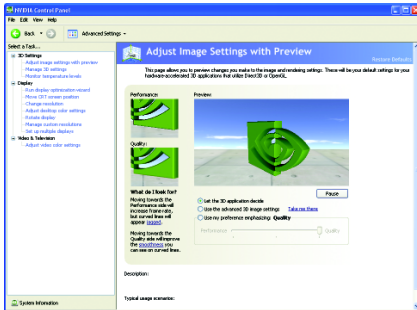
- All of the NVIDIA control panels have been consolidated into a single application, the NVIDIA Control Panel. Click the **Start the NVIDIA Control Panel** button to open the NVIDIA Control Panel.



Select the view of the NVIDIA Control Panel that is most appropriate for you.

- Standard Settings
- Advanced Settings

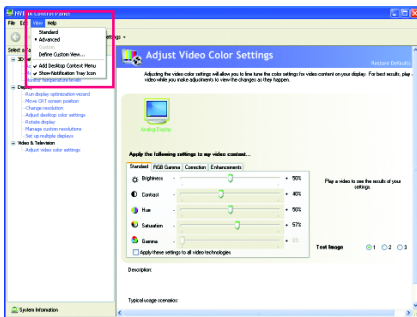
This follow pages provide details on configuring Advanced Settings.



In the NVIDIA Control Panel, select a category to alter specific NVIDIA display settings.

The categories are:

- 3D Settings
- Display
- Video & Television



In the NVIDIA Control Panel, change a view if you want.

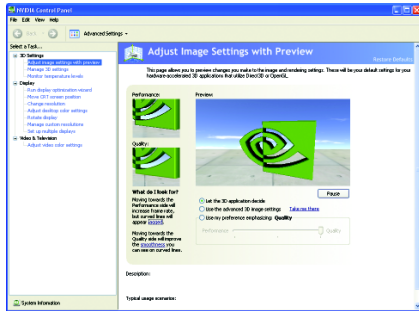
The supported modes are:

- Standard
- Advanced
- Custom

## 3D Settings

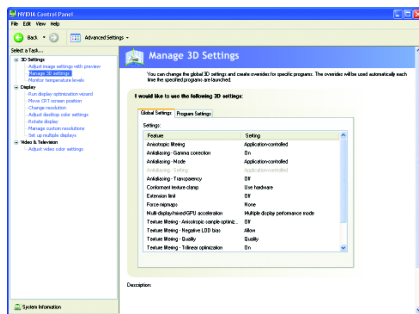
Tasks in the 3D Settings pages allow you to do the following:

- Change the image and rendering settings of your 3D applications and games that utilize Direct3D and OpenGL technology.
- Override the shipped clocked frequencies of your GPU and GPU memory to increase your GPU performance.
- Assign specific 3D settings to a game so that these settings automatically load when a game is launched.



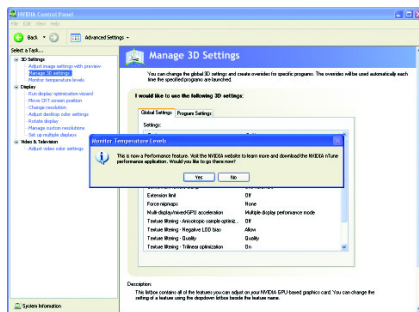
■ Adjust Image Settings with Preview

If you are unfamiliar with 3D technology or not an advanced graphics user, use the Adjust Image Settings with Preview page to preview any changes you make for improved image quality and rendering.



■ Manage 3D Settings <sup>(Note)</sup>

The Manage 3D Settings page enables you to establish default 3D settings to use for all your Direct3D or OpenGL applications and to establish a unique set of 3D settings for a particular game or application.



■ Monitor Temperature Levels

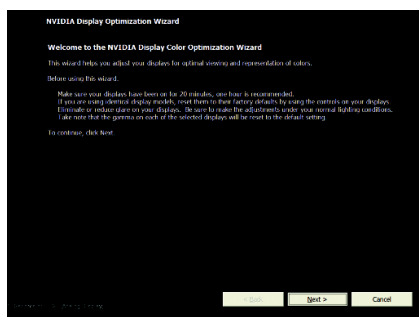
To monitor the current temperature of your NVIDIA GPU using NVIDIA nTune utility, please visit NVIDIA's official web site for more information about nTune.

(Note) This item is present only in Advanced view mode.

## Display

A variety of display features enable you to further manipulate and configure your display settings to optimize the use of your displays. Tasks in the Display pages allow you to do the following:

- Run display optimization wizard
- Move CRT screen position
- Change resolution
- Adjust desktop color settings
- Rotate display
- Manage custom resolutions <sup>(Note 1)</sup>
- Run multiple display wizard <sup>(Note 2)</sup>
- Set up multiple displays

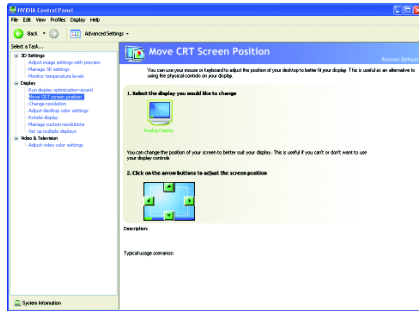


### ■ Run Display Optimization Wizard

This wizard helps you adjust your displays for optimal viewing and representation of colors.

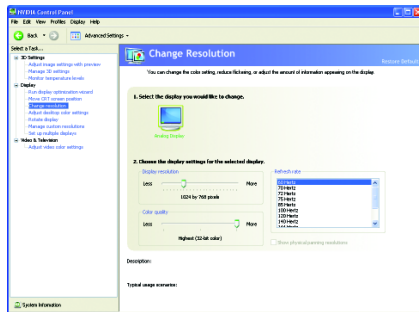
(Note 1) This item is present only in Advanced view mode.

(Note 2) This item will show up when you connect two monitors.



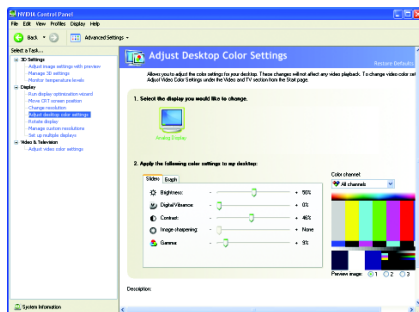
## ■ Move CRT Screen Position

You can use your mouse (by clicking on the arrow keys on this page) or the arrow keys on your keyboard to adjust the position of your desktop to better fit your display. This is a useful alternative to using the controls (buttons) on your actual physical display.



## ■ Change Resolution

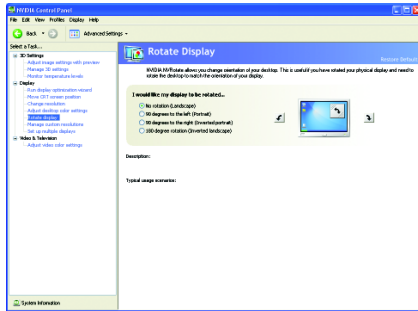
Using the Change Resolution controls, you can change the color setting, reduce screen flickering, or adjust the amount of information appearing on your display.



## ■ Adjust Desktop Color Settings

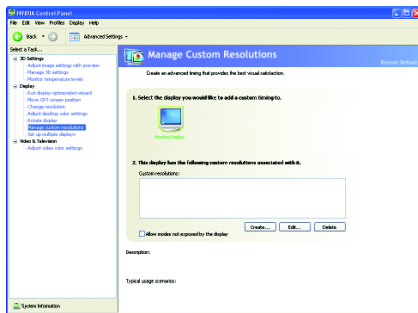
Use this page to set the contrast, sharpness, and color depth (Digital Vibrance) of the images on your desktop. These changes will not affect any video playback. To change video color settings, go to Adjust Video Color Settings under the Video and TV section from the Start page.





## ■ Rotate Display

The NVIDIA Rotate features enable you to change the orientation of your desktop to portrait, landscape, and inverted modes. This is useful if you have rotated your physical display and need to rotate the desktop to match the orientation of your display.



## ■ Manage Custom Timings <sup>(Note 1)</sup>

If you are an advanced user, you can create custom timing modes with the width, height, bit-color depth, and the refresh rate etc. The Advanced Timing page enables you to adjust timings for your graphics card in order to support a variety of different display timings for ultimate flexibility for analog CRT and DVI connections. You can use the advanced Change Resolution Attributes page to view custom display modes you have saved in the Create Custom Timings page.

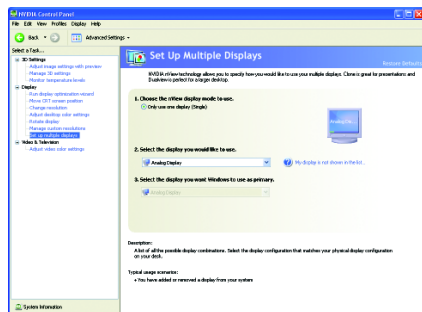


## ■ Run Multiple Display Wizard <sup>(Note 2)</sup>

This wizard will help you enable and customize your multi-display setup.

(Note 1) This item is present only in Advanced view mode.

(Note 2) This item will show up when you connect two monitors.

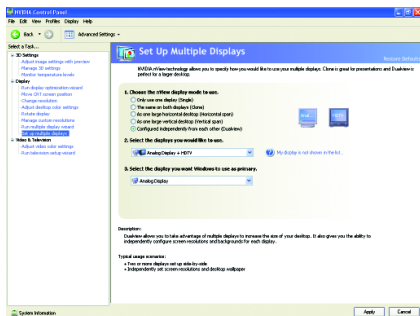


## ■ Set up Multiple Displays

NVIDIA nView technology enables you to view your desktop in one of several multi-display modes to make the best use of the displays (monitors) that are connected to your computer.

## Dual-Monitor Setup :

You can set the display to output from two monitors on the Change Display Configuration page.



Select your preferred nView display modes here.

- Only use one display (Single)
- The same on both display (Clone)
- As one large horizontal desktop (Horizontal span)
- As one large vertical desktop (Vertical span)
- Configured independently from each other (Dualview)

### (1) The same on both display (Clone)

Clone mode indicates that both displays in the display pair show images of the same desktop.



Clone Mode

### (2) As one large horizontal desktop (Horizontal span)

Horizontal Span mode indicates that both displays in the display pair function as one wide virtual desktop. The width of each display is half the width of the total virtual desktop width.

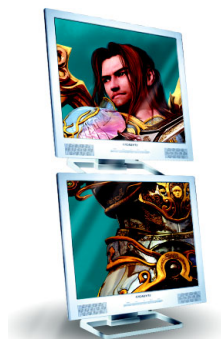


Horizontal Span Mode

### (3) As one large vertical desktop

#### (Vertical span)

Vertical Span mode indicates that both displays in the display pair function as one tall virtual desktop. The height of each display is half the height of the total virtual desktop height.



Vertical Span Mode

### (4) Configured independently from each other

#### (Dualview)

Dualview mode indicates that both displays in the display pair function as one virtual desktop. Unlike Horizontal Span or Vertical Span mode, Dualview treats each display as a separate device. This means that the taskbar will not be stretched across displays and 3D applications are not accelerated as efficiently as when the application spans displays.



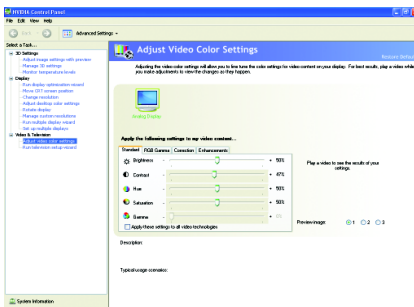
Dualview Mode

Display	Model	GV-NX85T128P
Matrix	CRT+TV	Yes
	CRT+DVI	Yes
	DVI+TV	Yes
	DVI+TV+CRT	No
	DVI+DVI	Yes

## Video & Television

Video and television features are similar to those for analog and digital displays and include features specific to television and HDTV (high definition television) technology for optimal viewing. Tasks in the Video & Television pages allow you to do the following:

- Adjust your television picture quality and video color settings for the best possible viewing in its environment .
- Change the position and size of the desktop video to best fit your television or HDTV (high definition television) screen.
- Change the signal format to use for your standard television or HDTV as well as change country-specific signal or the HDTV format.
- Enable full screen video mirroring.



### ■ Adjust Video Color Settings

Use the controls on this page to fine tune the color settings for video content on your display. Select one of the test images to monitor your changes. For best results, play a video while you make adjustment to view the changes as they happen.



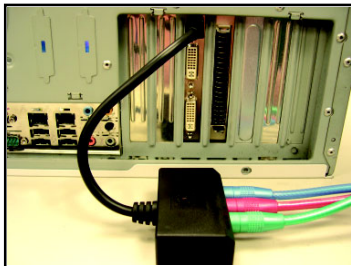
### ■ Run Television Setup Wizard<sup>(Note)</sup>

The wizard will guide you through the steps to configure your television for use with your computer.

(Note) This item will show up when you connect a television.

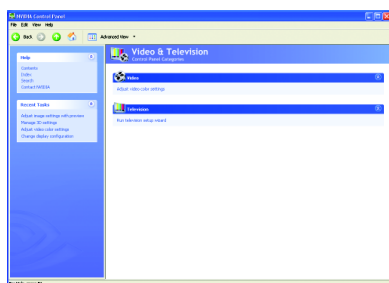
## HDTV Setup

Follow the steps below to connect an HDTV to your system using the included component video adapter.



Step 1:

Connect the HDTV component cable to the adapter according to the corresponding color. (Y= Green, Pr= Red, Pb= Blue). Connect the TV Out cable from the adapter to the TV Out port on your graphics card.



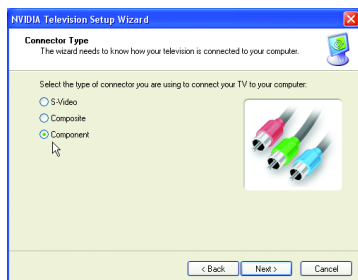
Step 2:

Go to NVIDIA Control Panel. Select the **Run television setup wizard** <sup>(Note)</sup> item in the **Video & Television** page.



Step 3:

When the Television Setup Wizard appears, click **Next**.



Step 4:

Select **Component** in the **Connector Type** screen.



Step 5:

Select a definition type for your HDTV (depending on the specifications of your HDTV) and click **Next**.

(Note) This item will show up when you connect a television.



Step 6:  
Click the **Preview** button to preview the selected settings. Then click **Next**.




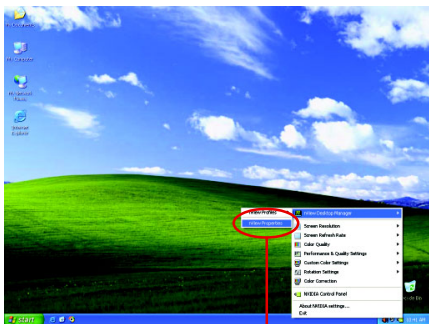
Step 7:  
Click **Finish** to apply the new television settings.

### 3.1.7. nView Properties pages <sup>(Note)</sup>

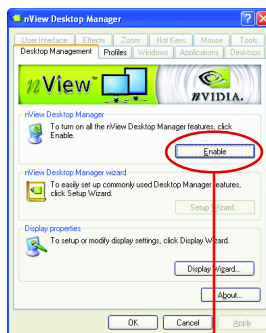
**nView** is a set of desktop tools designed to help you be more productive when using your graphics card. With **nView** you can set up multiple desktops to work with your applications. Multiple desktops give you extra desktop areas on which to run your applications so you won't have to crowd several open application windows on one desktop.

#### Enable the nView Desktop Manager features:

Click the NVIDIA icon  on the taskbar and select **nView Properties** under **nView Desktop Manager**. Click the "Enable" button to turn on all the nView Desktop Manager features.




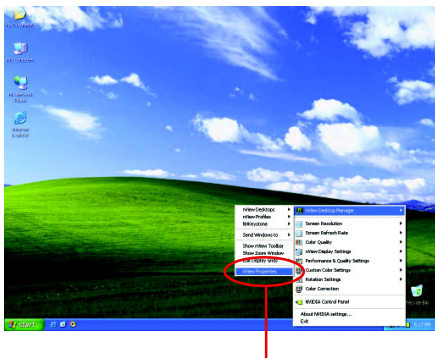
Step 1: Click **nView Properties**.



Step 2: Click **Enable**.

#### Access nView properties page:

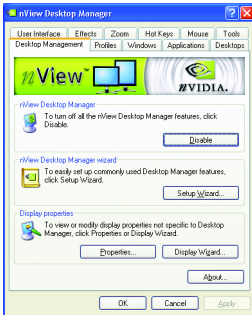
To access the **nView** properties page, you can click the NVIDIA icon  on the taskbar and select **nView Properties** under **nView Desktop Manager**.



Click the item to start configuring nView features.

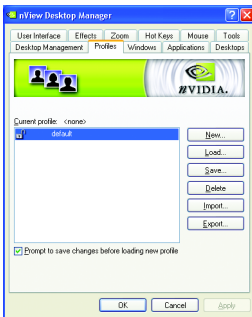
(Note) This item will show up when you connect two monitors.

## nView Desktop Management properties



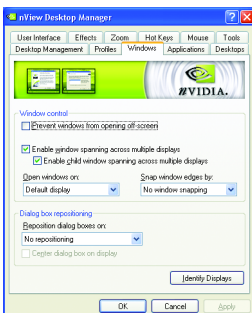
- This tab contains information about the nView Desktop Manager. The setup wizard can also be accessed from this tab.

## nView Profiles properties



- This tab contains a record all nView display settings for easy software setup.

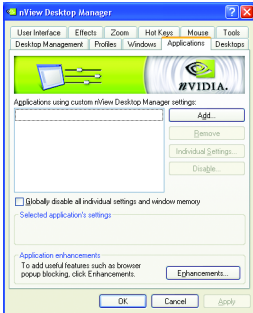
## nView Windows properties



- This tab allows you to control window and dialog box placement when using multiple monitors.

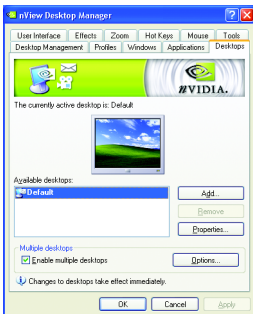


## nView Applications properties



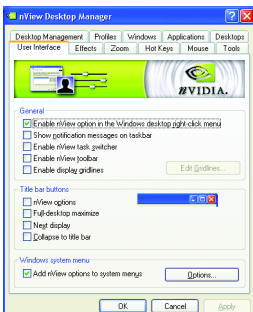
- This tab allows you to control nView settings depending different applications.

## nView Desktops properties



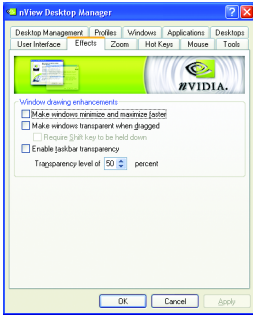
- This tab allows you to create up to 32 unique desktops.

## nView User Interface properties



- This tab allows for customization of the nView user interface.

## nView Effects properties



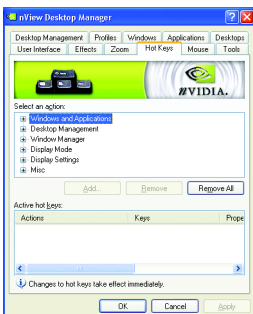
- This tab provides special windows effects that you can apply to your applications.

## nView Zoom properties



- This tab provides dynamic zoom functionality on the desktop. Also enables full screen video playback via the video mirroring control button.

## nView Hot Keys properties



- This tab lets you perform various actions with shortcut keys or key combinations.

## nView Mouse properties



- This tab can modify and extend mouse behavior with kinematic actions.

## nView Tools properties



- This tab can improve nView functionality for mobile and desktop users.

## 3.2. Windows® 2000 Driver Installation

With Windows running on your computer, you need to install the graphics card driver to take advantage of the higher performance, resolutions, and special graphics features of the graphics card. To ensure you install the latest driver, insert the Installation CD that shipped with your graphics card.

To install the graphics card driver for Windows® 2000, please insert the Installation CD. Then the AUTORUN window will show up. Click **Install Display Driver** item, and follow the wizard to install the driver.

If Windows® does not show the CD automatically, please run following steps:

1. Click the Start button on the control bar.
2. Select Run.
3. Type the following: D:\SETUP.exe  
(If D is not your CD-ROM drive, substitute D with the correct drive letter.)
4. Click "OK".
5. Click on "Install Display Drivers" to begin the Installation Wizard.
6. Click "Next".
7. Click "Yes" to the license agreement.
8. Follow the Wizard's on-screen instructions to complete the installation.



Please make sure the Windows® 2000 have installed Windows® 2000 Service Pack (or later) before installing the graphics accelerator driver.

## 4. Troubleshooting Tips

The following troubleshooting tips may help if you experience problems. Contact your dealer or GIGABYTE for more advanced troubleshooting information.

- Check that the card is seated properly in the PCI Express x16 slot.
- Ensure that the display cable is securely fastened to the card's display connector.
- Make sure that the monitor and computer are plugged in and receiving power.
- If necessary, disable any built-in graphics capabilities on your motherboard. For more information, consult your computer's manual or manufacturer.

(NOTE: Some manufacturers do not allow the built-in graphics to be disabled or to become the secondary display.)

- Make sure you selected the appropriate display device and graphics card when you installed the graphics driver.
- Restart your computer.  
Press the F8 key on your keyboard after system starts up. When the Windows Advanced Options Menu appears, select Safe Mode and press Enter.  
After getting into Safe Mode, in Device Manager check whether the driver for the graphics card is correct.
- For more assistance, use the Troubleshooting Guide located in the Windows® Help or contact your computer manufacturer.



If necessary, adjust your monitor's setting by monitor's adjust panel to make the screen looks focused, crisp, and sharp. (Please refer to the monitor's manual.)

## 5. Appendix

### 5.1. How to Reflash the BIOS in MS-DOS mode

1. Extract the downloaded Zip file to your hard disk(s) or floppy disk. This procedure assumes drive A.
2. Restart the computer in MS-DOS mode. (For Windows 2000/XP, you need a startup disk to restart the computer in MS-DOS mode.)
3. Change the command prompt to A:\>.
4. To back up the current BIOS, at the A:\> prompt, type [BIOS flash utility name] -s [BIOS file name] **(example: gvf19 -s x85t1p.f1)** and press **Enter**.
5. To flash BIOS, at the A:\> prompt, type [BIOS flash utility name] -p [BIOS file name] **(example: gvf13 -p x85t1p.f1)** and press **Enter**.
6. Wait until it's done, then restart your computer.

## 5.2. Resolutions and Color Depth Table (In Windows® XP)

GeForce 8500 GT Single Display Standard Modes

Display Screen Resolution	Refresh Rate (Hz)	Color Depth (bpp) 8bpp(256 color) Standard mode	16bpp(65K color) High mode	32bpp(16.7M) True mode
<b>320 x 200</b>	60~75	✓	✓	✓
<b>320 x 240</b>	60~75	✓	✓	✓
<b>400 x 300</b>	60~75	✓	✓	✓
<b>480 x 360</b>	60~75	✓	✓	✓
<b>512 x 384</b>	60~75	✓	✓	✓
<b>640 x 400 (16:10)</b>	60~75	✓	✓	✓
<b>640 x 480</b>	60~240	✓	✓	✓
<b>720 x 480</b>	60	✓	✓	✓
<b>720 x 576</b>	50~60	✓	✓	✓
<b>800 x 600</b>	60~240	✓	✓	✓
<b>848 x 480</b>	60~240	✓	✓	✓
<b>960 x 600 (16:10)</b>	60~240	✓	✓	✓
<b>1024 x 768</b>	60~200 240	✓ ✓	✓ ✓	✓ X
<b>1088 x 612 (16:9)</b>	60~200 240	✓ ✓	✓ ✓	✓ X
<b>1152 x 864</b>	60~170 200	✓ ✓	✓ ✓	✓ X
<b>1280 x 720 (16:9)</b>	60~150 170	✓ ✓	✓ ✓	✓ X
<b>1280 x 768</b>	60~150 170	✓ ✓	✓ ✓	✓ X
<b>1280 x 800</b>	60~150 170	✓ ✓	✓ ✓	✓ X
<b>1280 x 960</b>	60~150 170	✓ ✓	✓ ✓	✓ X
<b>1280 x 1024</b>	60~150 170	✓ ✓	✓ ✓	✓ X
<b>1360 x 768</b>	60~150 170	✓ ✓	✓ ✓	✓ X
<b>1600 x 900 (16:9)</b>	60~120 140~150	✓ ✓	✓ ✓	✓ X
<b>1600 x 1024</b>	60~100 120	✓ ✓	✓ ✓	✓ X

To be continued...

Display Screen Resolution	Refresh Rate (Hz)	Color Depth (bpp)		
		8bpp(256 color) Standard mode	16bpp (65K color) High mode	32bpp (16.7M) True mode
<b>1600 x 1200</b>	60~100	✓	✓	✓
	120	✓	✓	X
<b>1920 x 1080 (16:9)</b>	60~85	✓	✓	✓
	100	✓	✓	X
<b>1920 x 1200 (16:10)</b>	60~85	✓	✓	✓
	100	✓	✓	X
<b>1920 x 1440</b>	60~85	✓	✓	✓
<b>2048 x 1536</b>	60~85	✓	✓	✓
<b>2560 x 1600 (Dual-Link)</b>	60	✓	✓	✓

\* This table is for reference only. The actual resolutions supported depend on the monitor you use.