Declaration of Conformity We, Manufacturer/Importer (full address)

G.B.T. Technology Trading GMbH Ausschlager Weg 41, 1F 20537 Hamburg, Germany

declare that the product (description of the apparatus, system, installation to which it refers)

VGA Card

GV-NX76T128D-RH

is in conformity with (reference to the specification under which conformity is declared) in accordance with 89/336 EEC-EMC Directive

□ EN 55011	Limits and methods of measurement	区 EN 61000-3-2	Disturbances in supply systems caused
	of radio disturbance characteristics of industrial, scientific and medical (ISM) high frequency equipment	⊠ EN 61000-3-3	Disturbances in supply systems caused by household appliances and similar electrical equipment "Voltage fluctuations"
□ EN 55013	Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment	⊠ EN 55024	Information Technology equipment-Immunity characteristics-Limits and methods of measurement
□ EN 55014-1	Limits and methods of measurement of radio disturbance characteristics of household electrical appliances,	□ EN 50082-1	Generic immunity standard Part 1: Residual, commercial and light industry
	portable tools and similar electrical apparatus	□ EN 50082-2	Generic immunity standard Part 2: Industrial environment
□ EN 55015	Limits and methods of measurement of radio disturbance characteristics of fluorescent lamps and luminaries	□ EN 55014-2	Immunity requirements for household appliances tools and similar apparatus
□ EN 55020	Immunity from radio interference of broadcast receivers and associated equipment	□ EN 50091- 2	EMC requirements for uninterruptible power systems (UPS)
⊠ EN 55022	Limits and methods of measurement of radio disturbance characteristics of information technology equipment		
□ DIN VDE 0855 □ part 10 □ part 12	Cabled distribution systems; Equipment for receiving and/or distribution from sound and television signals	~~	
⊠ CE marking		(EC co	nformity marking)
·	The manufacturer also declares the with the actual required safety stan		
□ EN 60065	Safety requirements for mains operated electronic and related apparatus for household and similar general use	□ EN 60950	Safety for information technology equipment including electrical business equipment
□ EN 60335	Safety of household and similar electrical appliances	□ EN 50091-1	General and Safety requirements for uninterruptible power systems (UPS)
	Manufact	urer/Importer	Signature : <i>Fimmy Huang</i>
(Stamp)	Date : Jun. 30, 20	006	Name :

DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2.1077(a)



Responsible Party Name: G.B.T. INC. (U.S.A.)

Address: 17358 Railroad Street City of Industry, CA 91748

Phone/Fax No: (818) 854-9338/ (818) 854-9339

hereby declares that the product

Product Name: VGA Card

Model Number: GV-NX76T128D-RH

Conforms to the following specifications:

FCC Part 15, Subpart B, Section 15.107(a) and Section 15.109 (a), Class B Digital Device

Supplementary Information:

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 and (2) this device must accept any inference received, including that may cause undesired operation.

Representative Person's Name: <u>ERIC LU</u>

Signature: <u>Eric Lu</u>

Date: Jun. 30, 2006

GV-NX76T128D-RH

GeForce[™] 7600 GT Graphics Accelerator

User's Manual

Rev. 101 12MD-NX76T1R-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.

Copyright

© 2006 GIGABYTE TECHNOLOGY CO., LTD

Copyright by GIGA-BYTE TECHNOLOGY CO., LTD. ("GBT"). No part of this manual may be reproduced or transmitted in any form without the expressed, written permission of GBT.

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.

Macrovision corporation product notice:

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

Table of Contents

1. Introduction	3
1.1. Features	
1.2. Minimum System Requirements	3
2. Hardware Installation	4
2.1. Board Layout	4
2.2. Hardware Installation	
3. Software Installation	10
3.1. Windows [®] XP Driver and Utilities Installation	10
3.1.1. Operating System Requirement	10
3.1.2. DirectX Installation	10
3.1.3. Driver Installation	
3.1.4. Utilities on Driver CD	
3.1.5. Taskbar Icon	
3.1.6. Display Properties pages	
3.1.7. nView Properties pages	
3.2. Windows [®] 2000 driver installation	30
4. Troubleshooting Tips	
5. Appendix	
5.1. How to Reflash the BIOS	32
5.1.1. Reflash BIOS in MS-DOS Mode	32
5.1.2. Reflash BIOS in Windows Mode	32
5.2. Connecting to a HDTV	33
5.3. Resolutions and Color Depth Table (In Windows [®] XP)	34

1. Introduction

1.1. Features

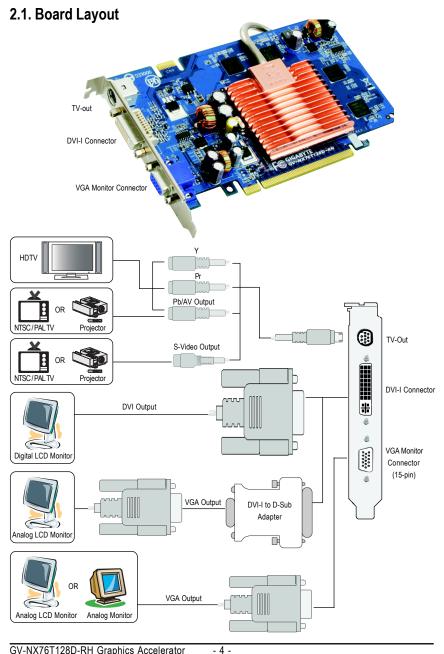
- Powered by NVIDIA[®] GeForce[™] 7600 GT Graphics Processing Unit (GPU)
- Supports the newest PCI Express x16
- Integrated with 128MB DDRIII memory
- Supports DirectX 9.0c
- Supports NVIDIA[®] SLI[™] (Scalable Link Interface) technology ^(Note)
- Supports AV / S-Video and HDTV output
- Supports D-sub connector
- Supports DVI-I connector

1.2. Minimum System Requirements

- IBM[®] or 100% PC compatible with Pentium[®] III 650MHz or AMD Athlon 650MHz class processor or higher
- One PCI Express x16 slot
- Operating Systems Windows[®] 2000 / Windows[®] XP
- 64MB system memory
- 50MB of available disk space for full installation
- CD-ROM or DVD-ROM drive
- Minimum power supply 300W (To set up an SLI system with the graphics cards, please use a power supply of 400 watt or above)

(Note) SLI technology requires a PCI Express motherboard with two x16 physical connectors. Graphics cards working in an SLI configuration must be with the same model name (i.e. GV-NX76T128D-RH) and from the same vendor (i.e. GIGABYTE TECHNOLOGY).

2. Hardware Installation





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.
- 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.

Set DO NOT APPLY POWER TO YOUR SYSTEM IF IT HAS BEEN DAMAGED ON THE 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.

Or, if your computer has any on-board graphics capability, you may need to disable it on the motherboard. For more information, please see your computer documentation.







To install your new graphics card:

 Locate two PCI Express x 16 slots. If necessary, remove the metal covers from the slots; then align your graphics card with the PCI Express x 16 slots, 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.

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 runnnig.

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





 Plug the display cable into your card; then turn on the computer and monitor. If your graphics card came with a DVI-I connector, you can connect a flat panel display to the appropriate connector, as shown below...





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

GIGABYTE Component Video Adapter for Nvidia Graphics Cards (HDTV Cable)



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

(1) Connecting HDTV Connect your HDTV cables to the component 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.

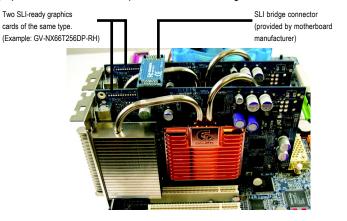


(3) Connecting AV Output If your TV has a Composite video connection, you can connect the RCA cable from your TV to the AV Out port on the adapter.



How NVIDIA[®] SLI[™] (Scalable Link Interface) technology works:

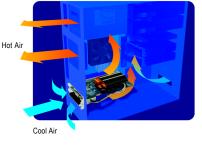
In an SLI configuration, two SLI-ready graphics cards of the same model and the same manufacturers are connected together via SLI bridge connector in a system that provides two x16 PCI Express slots to scale graphics performance. The picture below shows that two graphics cards are linked in parallel in an SLI configuration.



GIGABYTE Silent Pipell Features:

The GV-NX76T128D-RH are powered by GIGABYTE's Silent Pipe II technology, which provides the following features:

- Proprietary front-flow thermal module
- High-precision die-casting forming design
- Natural convection design
- SLI and soundless optimization
- High performance heatpipe with sintered powder wicks
- Design for heavy 3D performance loading
- Integrated architecture design



Precautions:

The Silent-Pipe II technology features the silent heatpipe design. The Silent-Pipe II technology artfully uses the temperature difference between the inside and outside of chassis and spreads out the surplus heat efficiently, creating natural system convection. When using Silent Pipe II graphics cards to set up an SLI configuration, please do close your system chassis in order to achieve optimal thermal performance. For more information about the hardware configuration of an SLI system, please refer to motherboard user manual.

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.



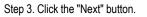
Step 1. When autorun window show up, click the **Install DirectX 9** item.



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









Installing Microsoft(R) Dir	setX(R)
×	Restart Computer To apply the charges. Directly server meditions machine. Respess serve your write and then close all applications before commany
	< Back Finish Cancel

Installing the components.

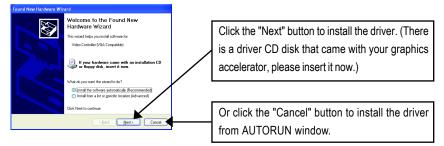
Step 4. Click "Finish" to restart computer. Then the DirectX 9 installation is completed.

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.

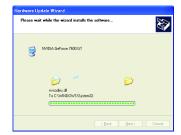
Step 1: Found new hardware wizard: Video controller (VGA Compatible)



Step 2: Found new hardware wizard: Searching and installing

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

Found New Hardware Wizard	
Please wait while the wizard searches	
Video Controller (VIGA Compatible)	
Cgade Net 2	Cancel



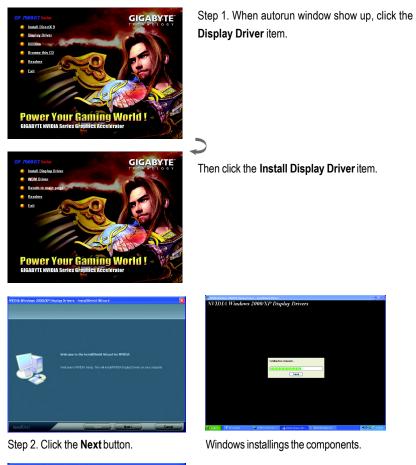
Step 3: Found new hardware wizard: Finish

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".



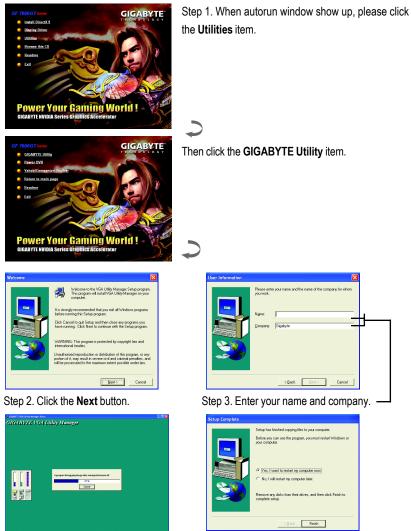


Step 3. Click the **Finish** button to restart computer. Then the driver installation is completed.

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".

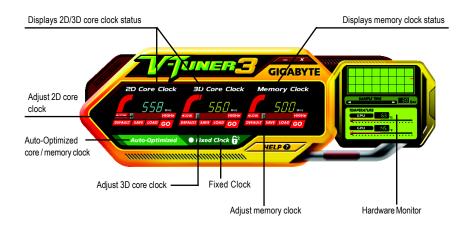
• Install GIGABYTE utilities:



Step 4. 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 2D core clock, 3D core clock and memory clock.

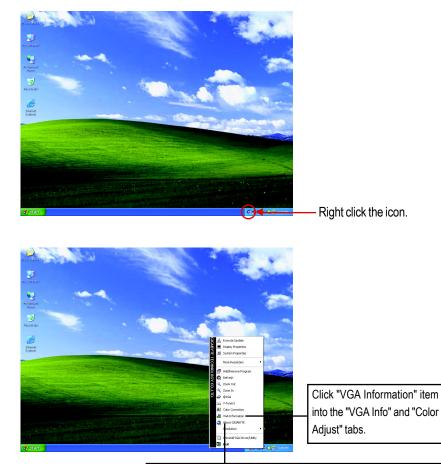


Button	Function
DEFAULT	You may click this button to restore to the default setting
SAVE	You may click this button to save the frequency you wanted
LOAD	After saving the specific value, you may click this button to load the
	frequency you saved last time
Auto-Optimized	The V-Tuner3 clock configuration 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 has 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 **G** on the taskbar's status area. Right-click this icon to open 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.



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

VGA Information

VGA Info lists the relevant information about your card.

Default Format			×
😹 VGA Info 📃 Color	Adjust		
DISPLAY INFORMA	TION		
Chip Vendor: Chip Type: Model Name : Bus Type:	GF7600GT GV-N×76T1:	28D-RH	1
MAINBOARD INFO	RMATION-	AMD	
System T	otal Memory:	261,616 KB	
System Fr	ee Memory:	133,272 KB	1
		0	Cancel

Color Adjust

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

Default Format
JE VGA Info LColor Adjust
Adjust Display Color Setting
€ Contrast 0 ∰ Garmar 1.00
Default Hardware Color setting
OKCancel

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



Right click the icon.



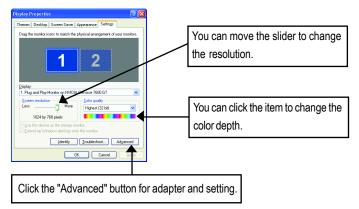
You can adjust the properties of the graphics accelerator from here.

3.1.6. Display Properties pages

To access Display Properties pages, right-click the GIGABYTE icon on the taskbar and select **Display Properties** or 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)

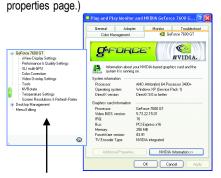
You may adjust the screen resolution and color quality settings in this dialog box.



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

GeForce 7600 GT properties

After pressing the "Advanced" button in **Settings**, you'll see the **Plug and Play Monitor and NVIDIA GeForce 7600 GT Properties** dialog box. Click the **GeForce 7600 GT** tab. (You can also click the Nvidia icon on the taskbar and select **Nvidia Display** to access the GeForce 7600 GT



 This page shows the Adapter, System and Driver version information.

You can select other properties from the pop-out menu.

nView Display Settings properties *



- nView allows you to connect separate displays to single graphics card.
 - nView Display mode: select your preferred nView display modes here. Options: Single display/ Clone/ Dualview
 - Primary/Secondary display: select a single display or display pair. The selected display combination will appear in the graphical representation below.
 - Make this the primary display: Specifies that the display corresponding to the icon you selected above is the primary display.
 - Click Apply to apply settings or click OK to save settings.
- If TV is chosen as the display, you will need to select the proper TV format. To do this, click "Device Settings" followed by "Select TV format". Select the format for your television and then click "Apply" followed by "OK".
- "*" Only **Single display mode** is available when SLI mode is enabled.

Display	Model	GV-NX76T128D-RH
Matrix	CRT+TV	Yes
Matrix	CRT+DVI	Yes
	DVI+TV	Yes

Dual-Monitor Setup:

You can set the display to output from two monitors on the nView Display Settings page. The GV-NX76T128D-RH supports the following modes.

(1) Clone Mode:

Clone mode indicates that both displays in the display pair show images of the same desktop. Select **Clone** from the **nView Display Mode** list and click **Apply**.

(2) Dual View Mode:

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.

Select **DualView** from the **nView Display Mode** list and click **Apply**.



Clone Mode



Dual View Mode

(3) Horizontal Span Mode:

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.

Select Horizontal Span from the nView Display Mode list and click Apply.

(4) Vertical Span Mode:

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.

Select Vertical Span from the nView Display Mode list and click Apply.



Horizontal Span Mode



Vertical Span Mode

Performance and Quality Settings properties



SLI multi-GPU *



- The sliders lets to decide whether your application should use quality or high performance texture.
 - Application profiles: Select the application profile from the list of profiles.
 - Global driver settings: Select the Settings item and move the slider below to set the degree of antialiasing to used in Direct3D and OpenGL applications.
 - Antialiasing settings value: allows to set the degree of the Global Driver Settings.
- To enable SLI mode, select the Enable SLI multi-GPU check box and click Apply after installation of two GV-NX76T128D-RH graphics cards on an SLI-capable motherboard. Then restart your system when prompted.
 - *" Only Windows XP operating system supports the SLI mode. Please do not enable SLI multi-GPU in Windows 2000.

Color Correction properties



The Color Correction Properties is used to compensate for variations in luminance between a source image and its output on a display device. Adjust the color correction settings to provide more accurate color reproduction of images (such as photographs) on your display device. Also, many 3Daccelerated games may appear too dark to play. Increasing the brightness and/or the gamma value equally across all channels makes these games appear brighter and more playable.

Video Overlay Settings properties

Plug and Play Monitor	and NVI	DIA GeFore	e 7600 G.	? 🔀
General Adapter	r 📃	Monitor	Trouble	shoot
Color Management		💁 Gel	Force 7600 G	T
Overlay zoon controls Select screen region to zoon		Zoom o Video Ovel Out		A. In
Overlay color controls	0" 	Saturation:	just Colors	1142
. (OK	Car	xcel	Apply

The Video Overlay Settings Properties can adjust Overlay zoom controls and Overlay color controls. There is only one video overlay, which is only available on the Primary display. The video overlay controls are automatically activated during playback of any video file type that supports overlay adjustments. The "Adjust Colors" button will access "Color Correction" properties page.

Tools properties

💶 Plug and Pla	y Monitor and	NVIDIA GeFo	rce 7600 G ?
General	Adapter	Monitor	Troubleshoot
Color Ma	nagement	<u>@</u> 6	eForce 7600 GT
	1		WVIDIA.
€2 featu ⊡E			k access to NVIDIA
Pisplay optinic Bun optin		esentation of co	djust your display(s) for lors. mization Wizard
💦 the c		sted and it is not	being detected, select
	Detect Displays		Bestore Defaults
		ж с	ancel <u>Apply</u>

- The NVIDIA settings taskbar utility lets you conveniently access various features and presets you've configured in the Display Properties directly from the Windows taskbar.
 - Shortcut tools

The Desktop Manager provides enhanced nView multidisplay functionality and helps you organize your applications for use with multiple displays and desktops.

- Display optimization Run the Display Optimization Wizard to adjust your display(s) for optimal viewing and representation of colors.
- Troubleshooting This option can be used to force detection of an attached TV set which does not report its presence to the graphics card.

Plug and Play Monitor an General Adapter Color Management	Id NVIDIA GeForce 7600 G ? X
	NVIDIA.
<u>ب</u>	د
Landscape (0 degree ro Portsait (90 degree rotati Inverted landscape (180 Inverted portrait (270 de	on) I degree rotation)
	Bestore Defaults OK Cancel Apply

- The NV Rotate Properties is used to rotate the screen. If your monitor is capable of operating in either Landscape or Portrait mode, you can adjust the screen by this properties.
 - Landscape (0 degree rotation)
 - Portrait (90 degree rotation)
 - Inverted landscape (180 degree rotation)
 - Inverted portrait (270 degree rotation)

NV Rotate properties

Temperature Settings properties



The Temperature Properties can auto detected the GPU Core temperature. You can select the Notify when GPU core temperature exceeds threshold check box.

Screen Resolutions & Refresh Rates properties



The Screen Resolutions & Refresh Rates Properties allows you to adjust the screen resolution, color quality and monitor settings (screen refresh rates). Or you can customize resolutions and refresh rates.

Menu Editing properties



The Menu Editing Properties can remove infrequently used screens by dragging them from the screen menu to the list below. Restore screens to the menu by dragging them individually, or click Restore Defaults.

To begin, select the **Enable menu editing** check box. To return to normal navigation mode, do not select the check box.

3.1.7. nView Properties pages

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:

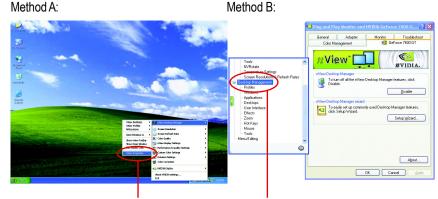
Right-click on desktop and choose Properties>Settings>Advanced>GeForce 7600 GT> Desktop Management



Click the "Enable" button to turn on all the nView Desktop Manager features.

Access nView properties page:

To access the **nView** properties page, you can click the NVIDIA icon an on the taskbar and select **nView Properties** under **nView Destop Manager** (Method A). Or right-click on Desktop, select Properties>Settings>Advanced>GeForce 7600 GT. Double-click **Desktop Management** item on the pop-up menu (Method B).



Click the item to start nView Properties.

Double-click Desktop Management to see more nView properties.

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



nView Tools properties

Het Keyz Mouse To WVIDIA.
desktop right-click menu
a NVKeystone hot key.
o-adjusting your flat panel displa creen, press Esc or the Spaceb
Calibration Screen
skbar to a specific display, click
Move to Display, click

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

 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

5.1.1. Reflash 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:\>.
- To back up the current BIOS, at the A:\> prompt, type[BIOS flash utility name]
 -s [BIOS file name] (example: gvf18 -s x76t7dr.f1) and press Enter.
- To flash BIOS, at the A: > prompt, type [BIOS flash utility name] -p [BIOS file name] (example: gvf18 -p x76t7dr.f2) and press Enter.
- 6. Wait until it's done, then restart your computer.

5.1.2. Reflash BIOS in Windows Mode

1. After installing the display drivers, you will find a GIGABYTE icon in the lower-right corner of the Taskbar. Right-click to select the @VGA utility.





@VGA flash BIOS utility.

- 2. Update BIOS through the Internet
 - a. Select the Live Update check box and click Flash. Then @VGA will automatically download the BIOS for your card from GIGABYTE @VGA server and do the update for you.(@VGA will not download/update the BIOS if it detects the current BIOS on your card is the latest one.)
- 3. Update BIOS NOT through the Internet
 - a. Download the BIOS ZIP file for your card from GIGABYTE website and extract it to your hard disk (or floppy disk).
 - b. Select the From Local File check box and then click Flash.
 - c. Select the BIOS file from your hard disk (or floppy disk).
 - d. Complete the update procedure following the on-screen instructions.

5.2. Connecting to a HDTV

Use the included component video adapter to connect a HDTV to the graphics card.

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:

After installation of the graphics card driver, right-click on Desktop and select **Properties**. When **Display Properties** dialog box appears, select the **Settings** tab. In **Settings**, click the **Advanced** button.

Step 3:

Click the **Geforce 7600 GT** tab when advanced properties dialog box appears. Select **n-Viewe Display Settings** from the side menu and select **HDTV** from the **Current display** list. Then click **Apply**.

Step 4:

Right-click on the HDTV icon and select TV format depending on your HDTV. Then click **Apply** to complete the settings.









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

Display	Refresh	Color Depth (bpp)		5	
Screen	Rate	8bpp(256 color)	16bpp(65K color)	32bpp(16.7M)	
Resolution	(Hz)	Standard mode	High mode	True mode	
320 x 200	60~75				
320 x 240	60~75	 ✓	· 	· 	
400 x 300	60~75	\checkmark	✓	√	
480 x 360	60~75	√ 		√	
512 x 384	60~75	\checkmark	\checkmark	\checkmark	
640 x 400 (16:		\checkmark	√	√	
640 x 480	60~240	\checkmark	√	\checkmark	
720 x 480	60	\checkmark	\checkmark	\checkmark	
720 x 576	50~60	\checkmark	\checkmark	\checkmark	
800 x 600	60~240	\checkmark	\checkmark	\checkmark	
848 x 480	60~240	\checkmark	\checkmark	\checkmark	
960 x 600 (16:	10) 60~240	\checkmark	\checkmark	\checkmark	
1024 x 768	60~200	\checkmark	\checkmark	\checkmark	
	240	\checkmark	\checkmark	Х	
1088 x 612 (16:9) 60~200		\checkmark	\checkmark	\checkmark	
	240	\checkmark	\checkmark	Х	
1152 x 864	60~170	\checkmark	\checkmark	\checkmark	
	200	\checkmark	\checkmark	Х	
1280 x 720 (16	: 9) 60~150	\checkmark	\checkmark	\checkmark	
	170	\checkmark	\checkmark	Х	
1280 x 768	60~150	\checkmark	\checkmark	\checkmark	
	170	\checkmark	\checkmark	Х	
1280 x 960	60~150	\checkmark	√	\checkmark	
	170	\checkmark	\checkmark	х	
1280 x 1024	60~150	\checkmark	✓	✓ · · · ·	
	170	\checkmark	\checkmark	х	
1360 x 768	60~150	\checkmark	\checkmark	\checkmark	
	170	\checkmark	\checkmark	х	
1600 x 900 (16	-	\checkmark	√	√	
	140~150	√	· √	x	
1600 x 1024	60~100	· ·	·	×	
1000 A 1024	120	v √	↓	x	
	120	•	•	Λ	

GeForce 7600 GT Single Display Standard Modes

To be continued...

Display	Refresh	Color Depth (bpp)		
Screen	Rate	8bpp(256 color)	16bpp (65K color)	32bpp (16.7M)
Resolution	(Hz)	Standard mode	High mode	True mode
1600 x 1200	60~100	\checkmark	\checkmark	\checkmark
	120	\checkmark	\checkmark	Х
1920 x 1080 (16:9) 30~85	\checkmark	\checkmark	\checkmark
	100	\checkmark	\checkmark	Х
1920 x 1200 (16:10) 60~85		\checkmark	\checkmark	\checkmark
	100	\checkmark	\checkmark	Х
1920 x 1440	60~85	\checkmark	\checkmark	\checkmark
2048 x 1536	60~85	\checkmark	\checkmark	\checkmark

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