User's Manual

For

MVGA-NVG256A
MVGA-NVG256AR
MVGA-NVG256AL
MVGA-NVG256AM

DOC NO: 54-0G256-04 Rev.C

00/03/30

FCC Requirement

This device has been certified to comply with the limits for a Class B computing device pursuant to Subpart J of Part 15 of the FCC Rules. See instructions if interference to radio reception is suspected.

WARNING: This equipment generates and uses radio frequency energy and, if not installed or used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio or television reception.

It has been tested and found to comply with the limits for a Class B compliant device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation.
However, there is no guarantee that interference-will not occur in a particular installation.

If this equipment does cause 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 the receiving antenna
- Relocate the computer away from the receiver
- Move the computer away from the receiver
- Plug the computer into a different outlet so that the computer and the receiver are on different branch circuits
- Ensure that the card's mounting screws, attachment connector screws, and ground wires are tightly secured
- Ensure that slot covers are installed in all unused slots

If necessary, consult your dealer, service representative, or an experienced radio/television Technician for additional suggestions.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. It is the responsibility of the user to correct such interference.
The user may find the following booklet prepared by the Federal Communications Commission helpful:
How to Identify and Resolve Radio-TV Interference Problems.
This booklet is available from the Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

NOTE: You must use shielded interface cables with a ferrite bead in order to maintain compliance with the limits for a Class B device.

CAUTION:	CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT

Notice

The information in this document is subject to change in order to improve reliability, design, or function without prior notice and does not represent a commitment on the part of this company.

In no event will we be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or the inability to use the product or documentation, even if advised of the possibility of such damages.

Trademark Acknowledgements

All brand names and trademarks are the property of their owners.

Limited Warranty

Our company warrants this product against defects in materials and workmanship for a period of one (1) year from the date of purchase. During the warranty period, a product determined by us to be defective in form or function will be repaired or at our option, to be replaced at no charge. This warranty does not apply if the product has been damaged by accident, abuse, misuse, or as a result of service or modification other than by us.

This warranty is in lieu of any other warranty expressed or implied. In no event shall we be held liable for incidental or consequential damages, such as lost revenue or lost business opportunities arising from the purchase of a this product.

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1. Introduction

The MVGA-NVG256A/AR/AL/AM are the ultimate 3D graphics processors. Its innovative architectures combine, transform, and light technology with a rendering engine that delivers 4 pixels per clock. The nVIDIA GeForce256 not only speed up graphics processing for richer 3D graphics, it also frees up CPU bandwidth, to the computer systems use.

MVGA-NVG256A/AR/AL/AM graphics controller delivers stunning visual quality and performance, with its 256 bit true-color engine and 32 bit Z/Stencil capability.

The MVGA-NVG256A/AR/AL/AM provides outstanding 2D and video acceleration as well.

1.1 Features

- ☐ Integrated transform and lighting engine.
- ☐ 32/64MB memory on board.
- ☐ Integrated true-color 350MHz RAMDAC interface.
- ☐ Supports high screen resolutions up to 2048x1536@75Hz.
- ☐ 1MB Flash-ROM on board.
- ☐ 256-bit graphics architecture.
- ☐ AGP 4X with Fast Writes.
- ☐ 32-bit color ARGB with destination alpha.
- ☐ Cube environment mapping.
- ☐ Separate hue, saturation, and brightness controls for the video overlay.
- ☐ Video DMA for efficient VIP Host operations.
- ☐ DVD and HDTV- ready motion compensation for MPEG-2 decoding.
- ☐ OpenGL ICD for full OpenGL support.
- ☐ Alternate OS support for OS/2, Linux , and BeOS.
- ☐ Drivers for Windows 2000, Windows NT 4.0, Windows 98, Windows 95.

1.2 System Requirements

- ☐ Any motherboard with AGP bus.
- ☐ Microsoft Windows 95 (OSR2.1) / Windows 98 / Windows 2000 or Windows NT 4.0 with service pack 3.
- ☐ DirectX 7 and OpenGL Features.

1.3 Package Contents

MVGA-NVG256A

- ☐ MVGA-NVG256A adapter.
- ☐ AutoRun Driver CD-Title.
- ☐ User's Manual.
- ☐ IVI's WinDVD CD-Title. (Optional)
- ☐ S-Video Cable 3M. (Optional for TV-OUT)
- ☐ S-Video to composite. (For TV-OUT)
- ☐ RCA Cable 3m. (For TV-OUT)

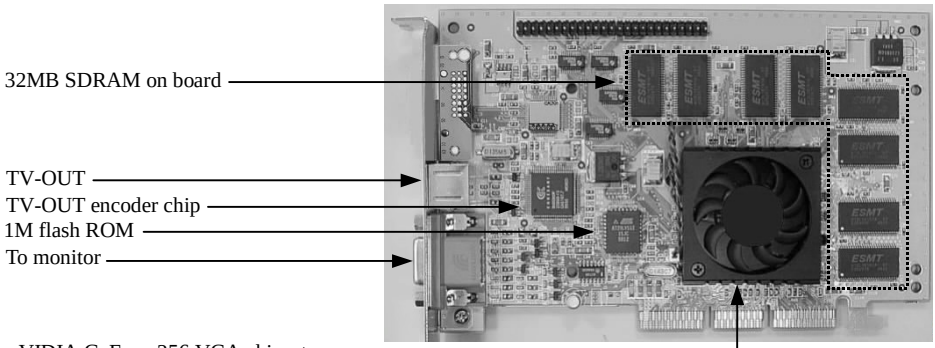
MVGA-NVG256AR/AL/AM

- ☐ MVGA-NVG256AR/AL/AM adapter.
- ☐ AutoRun Driver CD-Title.
- ☐ User's Manual.
- ☐ IVI's WinDVD CD-Title. (Optional)
- ☐ S-Video Cable 3M. (Optional for TV-OUT)
- ☐ RCA Cable 3m. (For TV-OUT)
- ☐ 1 to 2 Mulit line cable. (For TV-OUT)

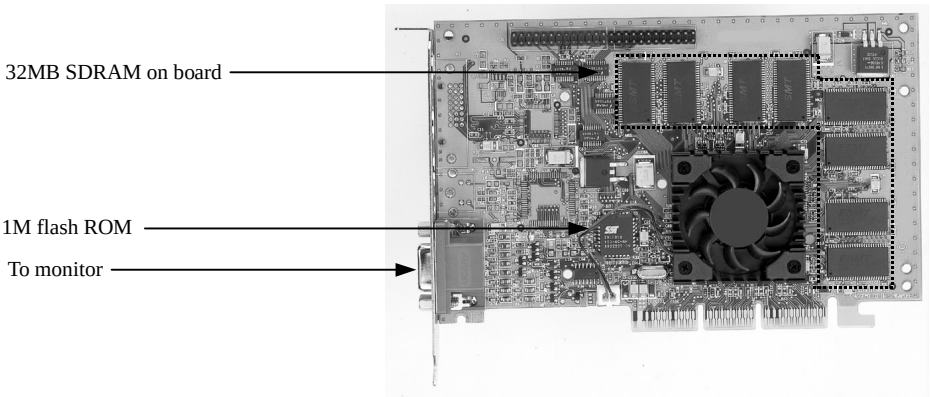
2. Hardware Installation

2.1 Adapter Configuration

MVGA-NVG256A

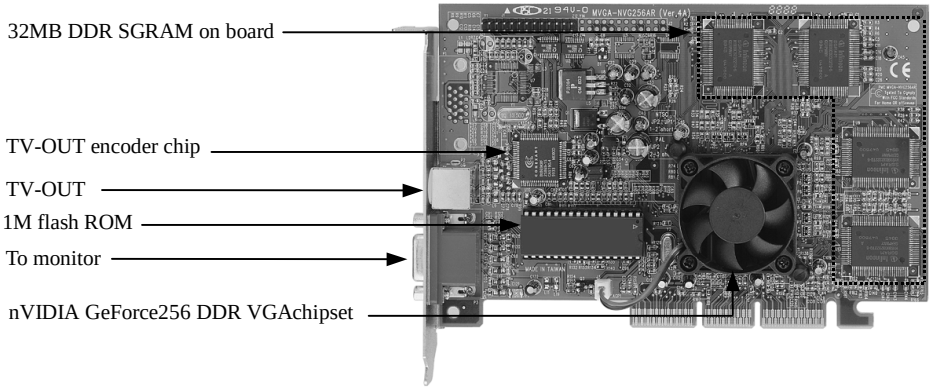


MVGA-NVG256A (w/ TV-OUT)



MVGA-NVG256A (w/o TV-OUT)

MVGA-NVG256AR



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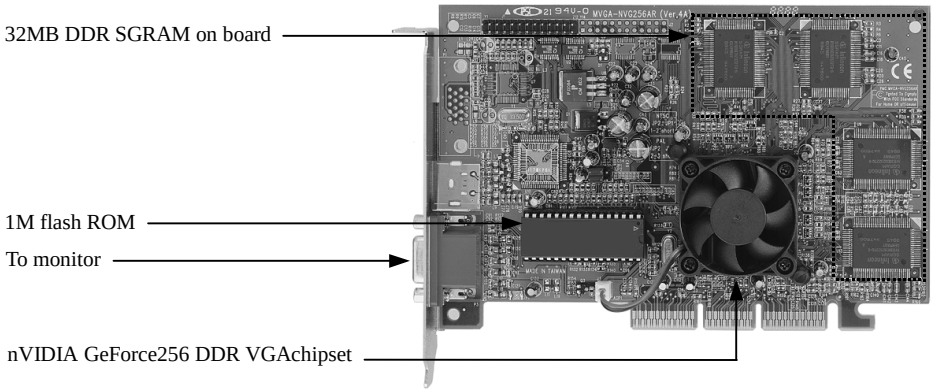
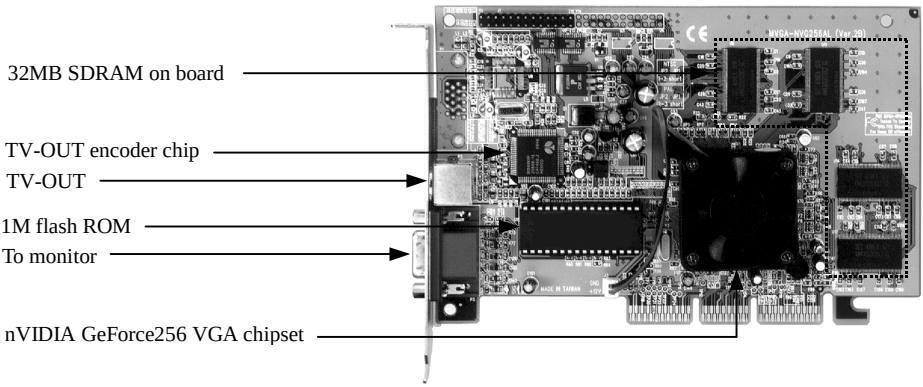
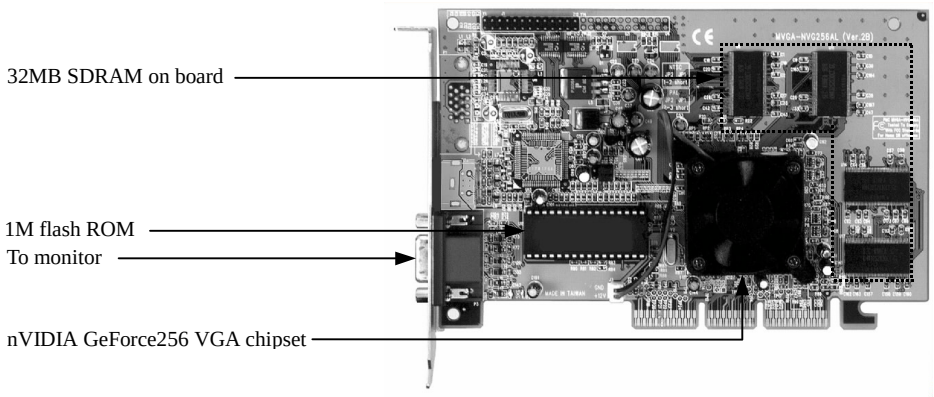


MVGA-NVG256AR (w/o TV-OUT)

MVGA-NVG256AL
Type 1

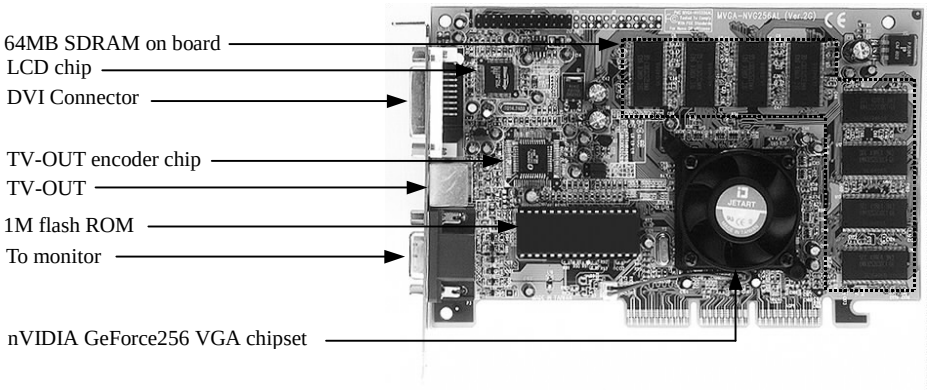


MVGA-NVG256AL (Rev.2X , w/ TV-OUT)

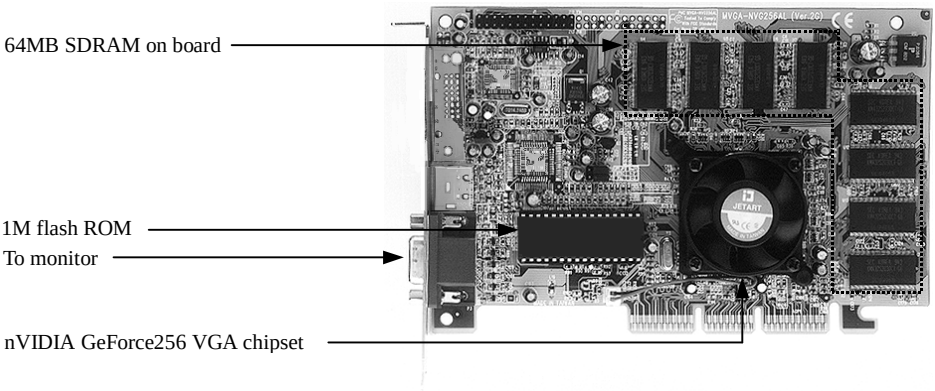


MVGA-NVG256AL (Rev.2X , w/o TV-OUT)

MVGA-NVG256AL
Type 2

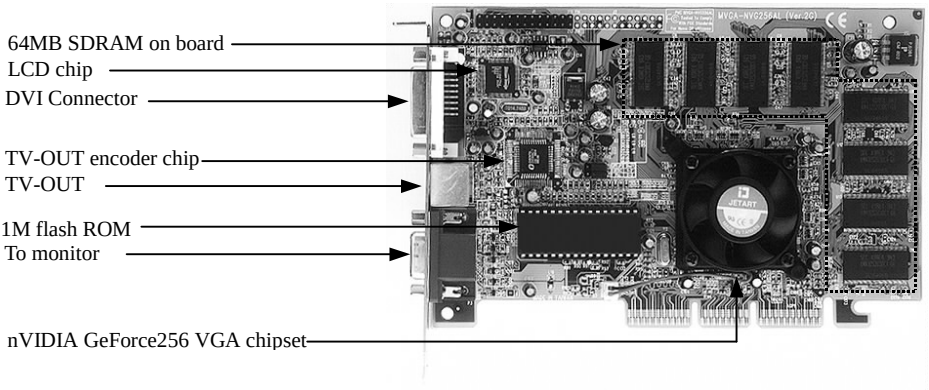


MVGA-NVG256AL (Rev.6X ,w/ TV-OUT)

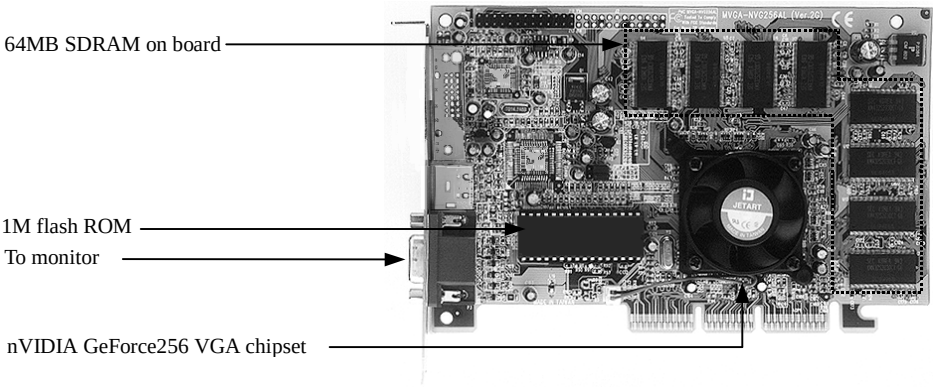


MVGA-NVG256AL (Rev.6X ,w/o TV-OUT)

MVGA-NVG256AM



MVGA-NVG256AM (w/ TV-OUT)



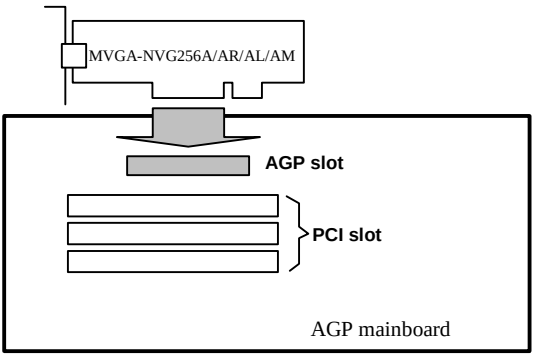
MVGA-NVG256AM (w/o TV-OUT)

2.2 Installing your VGA adapter

1. Turn OFF your computer, remove the computer case, and then assert yourself by touching the power supply of the computer.

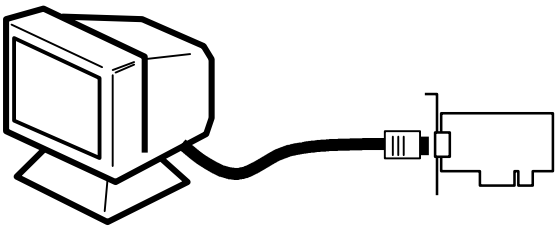
Note:	Before installing the MVGA-NVG256A/AR/AL/AM VGA card you must first set the VGA option to either standard VGA or Standard Display VGA.

2. Remove your old graphics card, and install your new MVGA-NVG256A/AR/AL/AM card into the AGP slot.



3. Align and secure the mounting bracket of the card to the computer and replace the computer case.

4. Connect the monitor cable to the DB-15 connector of the card.



5. Turn ON your computer.

3. Software Installation

3.1 AutoRun Instructions

1. Insert the AutoRun CD-ROM driver (wait a few seconds). You will see the windows which is shown on the screen. Please choose the model that you want.

2. Click-on '**Install Driver**' to install the VGA driver.

☐ Click-on '**DirectX**' to install Microsoft DirectX onto your Windows 95/98 system. It is not necessary to reinstall, if it has already been installed in your system.

☐ Click-on '**Readme**', to view detailed information regarding the various Drivers/Programs and FAQ located on the CD.

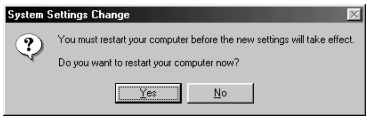
☐ Click-on '**Browse CD**' to view the contents of the CD.

☐ Click-on '**Exit**' to exit the AutoRun tool.

3.2 Installing driver on Windows 95/98

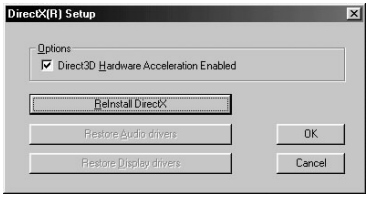
1. Insert the AutoRun driver into the CD-ROM drive, and click-on '**Install Driver**' to setup the VGA driver. Click '**OK**'.

2. After the installation is complete, the system will ask you whether you want to restart your computer now. Click '**Yes**', to reboot your system and activate the program.

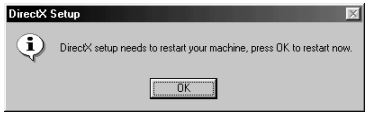


3.3 Installing DirectX on Windows 95/98

1. There is no need to re-install DirectX, if it is already on your system. However, if you do not have it and want to install it click-on '**ReInstall DirectX**' to install the DirectX program.



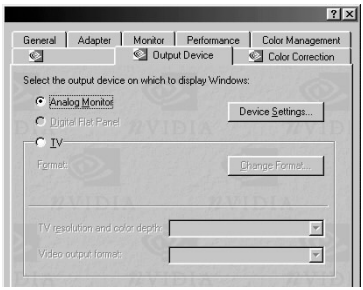
2. When it is done, please click '**OK**' to reboot windows.



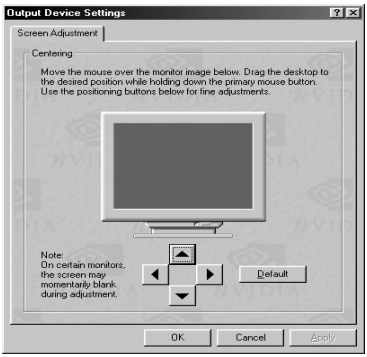
3.4 TV-OUT Function Instructions

3.4.1 How to adjustment screen position?

1. Click on **'Display'** of Control Panel.Select **'Settings'** page and click **'Advanced Properties'. Y**ou will see the windows.



A. When the output of your VGA is set to Monitor, You can click '**Device Setting**' to adjust the screen position

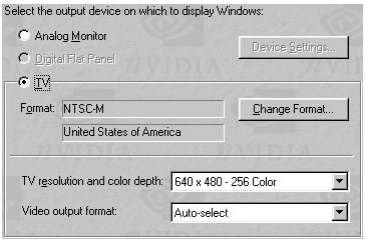


WARNING:

The Monitor display may become scrambled if you adjust the screen position over the required range.

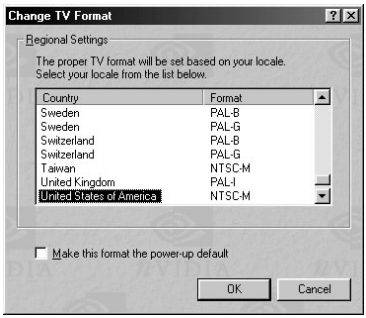
3.4.2 How to change TV setting?

1. You can click '**TV**' to switch VGA output to TV.



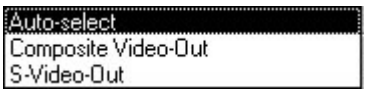
A. Click '**Display Format**' to select which standard TV you want.

   When you select '**Make this format the power-up default**'; the System will change BIOS default to the format, when you boot-up next time.

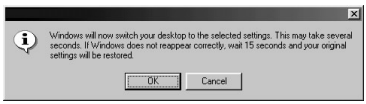


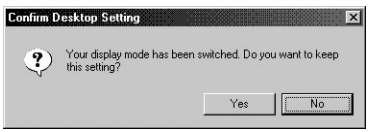
B. Select '**TV resolution and color depth**' to change resolution and color depth.

C. Click '**Video output format**' to select output from Composite or S-Video.



D. Click '**OK**' to switch your display mode.





3.5 Installing driver on Windows NT 4.0

1. Start Windows NT, switch display properties to VGA mode (16 colors, 640x480 pixels), then restart your computer to make the change.

2. After your computer restarts, right-click the desktop and click **'Properties'**.

3. Click the **'Settings'** tab.

4. Select **'Display Type'**.

5. Select **'Adapter Type'** and click **'Change'**.

6. Click **'Have Disk'**.

7. Insert the AutoRun driver into the CD-ROM drive.

8. Click (assuming your CD-ROM disc driver X) **'Browse CD'** to select the path **'X:\ NVG256A \NT40'** of the display driver for Windows NT.

9. You will see a list of NVG256A/AR/AL/AM Series driver. Select NT4.0 driver and then click **'OK'**.

10. Windows NT will once again prompt for confirmation. All appropriate files are then copied to the hard disk. When all files are copied, go back to the **'Display Properties'** box by clicking **'Apply'** or Click **'Close'**.

11. The **'System Setting Change'** dialog box is displayed. Click **'Yes'** to restart Windows.

12. Windows NT will restart with the default settings. The display applet will then appear to allow for mode selection.

4. Display Information

Resolutions Supported				
Resolution	**Vertical Frequency**	**Color Depth**		
		256 colors Standard	65K colors Standard	16.7M colors Standard
640 x 480	60Hz	V	V	V
	70Hz	V	V	V
	72Hz	V	V	V
	75Hz	V	V	V
	85Hz	V	V	V
	100Hz	V	V	V
	120Hz	V	V	V
	140Hz	V	V	V
	144Hz	V	V	V
	150Hz	V	V	V
	170Hz	V	V	V
	200Hz	V	V	V
	240Hz	V	V	V
800 X 600	60Hz	V	V	V
	70Hz	V	V	V
	72Hz	V	V	V
	75Hz	V	V	V
	85Hz	V	V	V
	100Hz	V	V	V
	120Hz	V	V	V
	140Hz	V	V	V
	144Hz	V	V	V
	150Hz	V	V	V
	170Hz	V	V	V
	200Hz	V	V	V
	240Hz	V	V	V
1024 X 768	60Hz	V	V	V
	70Hz	V	V	V
	72Hz	V	V	V
	75Hz	V	V	V
	85Hz	V	V	V
	100Hz	V	V	V
	120Hz	V	V	V
	140Hz	V	V	V
	144Hz	V	V	V
	150Hz	V	V	V
	170Hz	V	V	V
	200Hz	V	V	V
	240Hz			

1152 X 864	60Hz 70Hz 72Hz 75Hz 85Hz 100Hz 120Hz 140Hz 150Hz	V V V V V V V V V	V V V V V V V V V	V V V V V V V V V
1280 X 1024	60Hz 70Hz 72Hz 75Hz 85Hz 100Hz 120Hz 140Hz 150Hz	V V V V V V V V V	V V V V V V V V V	V V V V V V V	
1600 X 1200	60Hz 70Hz 72Hz 75Hz 85Hz 100Hz	V V V V V V	V V V V V V	V V V V V	
1920 X 1080	60Hz 70Hz 72Hz 75Hz 85Hz 100Hz	V V V V V V	V V V V V V	V V V V	
1920 X 1200	60Hz 70Hz 72Hz 75Hz 85Hz	V V V V V	V V V V V	V V V V	
1920 X 1440	60Hz 70Hz 72Hz 75Hz 85Hz	V V V V V	V V V V V	V V V V	
2048 X 1536	60Hz 70Hz 72Hz 75Hz	V V V V	V V V V	V	

5. MVGA-NVG256A/AR/AL/AM FAQ

Q: While installing on a Windows 95 or 98 operating system, my computer loses the Vertical Sync.

A: Please check your monitor's specifications. Some monitors connect the DDC signal to ground: Which causes the BIOS not to detect your monitor. Therefore, causing your MVGA-NVG256A/AR/AL/AM not to receive any data or refresh rates.

Q: I can't install the driver on my Windows 95 system.

A: If your operating system isn't the OSR2.1 version, you won't be able to install the driver.

To fix the problem:

Please change your operating system to the OSR2.1 version.

Windows 95 OSR2.1 Installation.

1. Install Windows 95 OSR2.1
2. Execute USBSUPP
3. Install DirectX ver 5.X or higher
4. Install the VGA driver

Q: The image on my monitor keeps on flickering and the driver can't change the refresh-rate.

A: The problem is due to a failed DDC monitor detection.

To fix the problem:

1. Go to '**Settings**' ⇒ '**Control Panel**' ⇒ '**Display**'
2. Select '**Settings**' page
3. Click '**Advanced Properties**'
4. Select '**Monitor**' page
5. Select '**Change**'
6. Select '**Show All Devices**' and choose your monitor type. If your monitor type is not listed, please select one that is similar as possible.

Q: How do I change the resolution, color, and refresh-rate on my Windows 95/98 system?

A: Open the '**My Computer**' folder and select the '**Control Panel**' icon. Double-click on '**Display**' then select '**Settings**'. A new menu will appear, choose '**Color Palette**' to change the Color values. Choose '**Desktop area**' to change the Resolution (screen image size). From the same screen click-on '**Advanced Properties**' to access the Refresh-rate.

Q: How do I change the resolution, color, and refresh-rate on my Windows NT system?

A: The procedure is basically the same as above, for the 95 & 98 system. Except that you must select '**Test**' then '**OK**', so that the changes can take affect.