

Overview

Congratulations and thank you for selecting this graphics card — one of the finest 2D and 3D graphics and video accelerators available on the market today. Designed for personal computers featuring an advanced PCI or PCI/AGP bus architecture, and bundled with accelerated drivers and powerful support software, the graphics card is highly optimized for 32-bit Windows and Direct3D games. An intelligent Plug and Play design ensures problem-free installation and use, with advanced support for the latest VESA standards (VBE), display power management (DPMS), and Plug and Play monitors (DDC), and compatibility with all major 3D APIs.

System Requirements

The minimum system requirements for installing the graphics card are as follows:

- a personal computer with a Pentium, Pentium II or compatible microprocessor and at least 8MB of memory
- a VGA analog monitor supporting a minimum 60Hz vertical refresh rate
- a free AGP bus slot
- a CD-ROM drive

Features

- Enhanced 64-bit graphics engine
- Integrated 230MHz RAMDAC
- Enhanced Streams Processor™ technology for hardware-assisted high-quality video playback of two video streams against a graphics background
- Supports simultaneous display of graphics and video of different color depths
- 110MHz Streams Processor operation permits video resolution support of up to 1280x1024x256 @60Hz refresh
- 133MHz Baseline AGP bus (Trio3D-2X AGP)
- Bus Mastering
- Resolution support of up to 1152x864x16M, 1600x1200x64K
- 100MHz Memory Clock support functionality for high performance, support SGRAM block write
- BIOS support for VESA Display Power Management Signaling (DPMS) monitor power savings modes, DDC monitor communications support

Software Support

- Windows 95
- Windows 98
- Windows NT

Hardware Installation

CAUTION !

Static electricity can severely damage electronic parts. Take these precautions:

- Before touching any electronic parts, drain the static electricity from your body. You can do this by touching the internal metal frame of your computer while it's unplugged.
- Don't remove a card from the anti-static container it shipped in until you're ready to install it. When you remove a card from your computer, place it back in its container.
- Don't let your clothes touch any electronic parts.
- When handling a card, hold it by its edges, and avoid touching its circuitry.

Before You Begin

Before you proceed further, make sure your computer system meets the peripheral requirements and switch to the standard VGA display driver.

Prepare Your Computer for Installation

Prior to working on your computer, make sure the power of the computer and any related equipment is turned off.

Select a Vacant Expansion PCI (AGP) Slot

Most AGP (PCI) bus computers have a combination of AGP (PCI) and ISA expansion slots. AGP (PCI) are usually made with plastic of a contrasting brown color (beige color), and are shorter than other slots in your computer. Your system manual should identify the AGP (PCI) slots. Plugging your Graphic card into a non-AGP (PCI) slot could damage the card, your computer, or both.

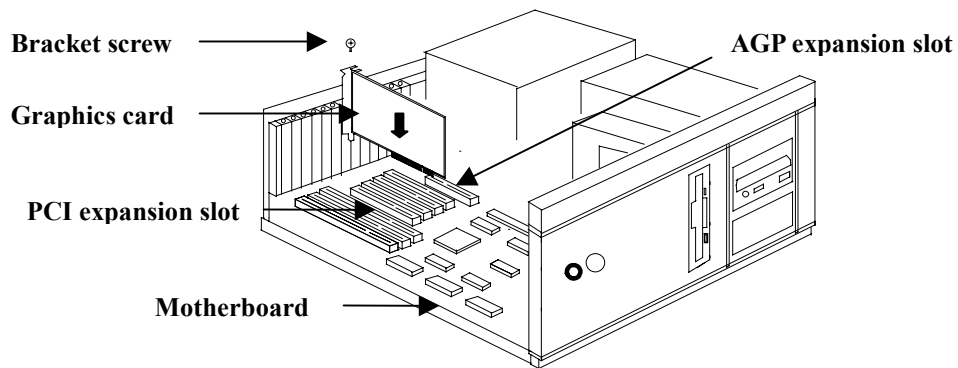


AGP vs. PCI vs. ISA expansion slots

2 Hardware Installation

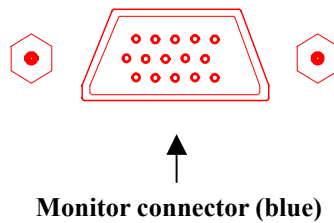
Insert your Graphic Card

Remove the cover for the slot you intend to use and save the screw for the mounting bracket. Then, pick up the Graphic card and position it over the expansion slot you've chosen. Push the card with firmly and evenly until it's fully seated in the slot. Replace the screw to secure the bracket of the Graphic card to the computer chassis.



Connect the monitor

Plug your monitor cable into the monitor connector on your Graphic card. Make sure the other end of the monitor cable is properly connected to your monitor.



3 Installation

Microsoft Windows 95/98 Drivers

- ☞ Before installing the Display driver, make sure your Windows 95 is installed in VGA mode and work fine.
- ☞ Please install the DirectX before you want to play the MPEG Movie Player.
- ☞ The pictures as below are only for reference under Windows 95.

Setup VGA Mode

Click the right mouse button anywhere on the Windows 95/98 desktop and select **Properties** from the pop-up menu that appears on screen. Select **Settings | Change Display Type** (If you use the OSR2, please select **Settings | Advanced Properties**. If you use the Windows 98, please select **Settings | Advanced**) and then click the **[Change]** button for Adapter Type. When the **Select Device** dialog box appears on the screen, please select **[Standard display types]** from the manufactures and select **Standard Display Adapter (VGA)** from the Models then click **OK** button. (Figure 1)

Setup Driver

1. Turn on your computer and start Windows 95/98.
2. Insert the **Driver CD** into your CD-ROM drive.
3. Click the **Start** button on the task bar. Select **Run** and type **D:\Cdsetup.exe [Enter]** in the **Run** dialog box. (D is the letter of your CD-ROM drive)
4. The **PowerStrip Setup Wizard** dialog box will appear on the screen, please click **Next** button to begin the installation. (Figure 2)

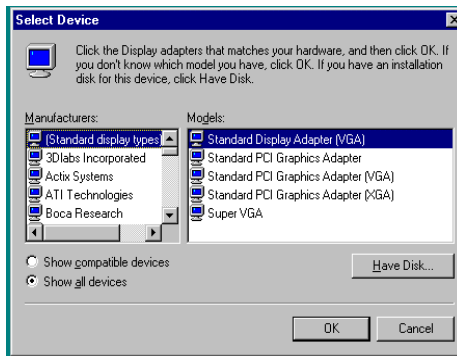


Figure 1



Figure 2

5. Choose the **Select all for removal (files will not be deleted)** check box as Figure 3 and then click **Next** button to continue the installation.
6. Finally, click **Finish** button as Figure 4 to complete the PowerStrip Setup.

3 Installation

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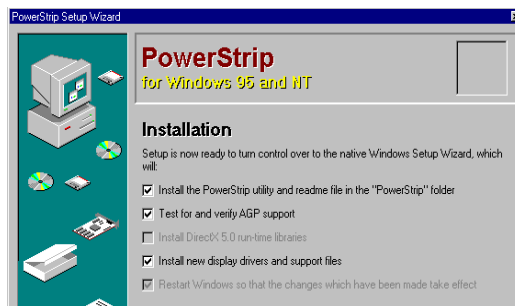




Figure 3

Figure 4

7. At the same time during the installation, the driver will also choose the correct path and VGA card automatically so that you can easy to finish the installation. Click **OK** button. (Figure 5) In **Advanced Display Properties** dialog box, click **Close** button.
8. If the driver doesn't choose the correct path and VGA card automatically, please click the right mouse button anywhere on the Windows 95/98 desktop and select **Properties** from the pop-up menu that appears on screen. In **Display Properties**, select **Settings** | **Change Display Type** (If you use the OSR2 please select **Settings** | **Advanced Properties**.) and then click the **Change** | **Have Disk** button and enter the path to the driver installation diskette (e.g., D:\win95). Click **OK** button and follow the instructions on screen to install.
9. When the **Display Properties** dialog box appears on the screen, please click **OK** button to restart your computer so that the settings you choose can take effect. (Figure 6)



Figure 5

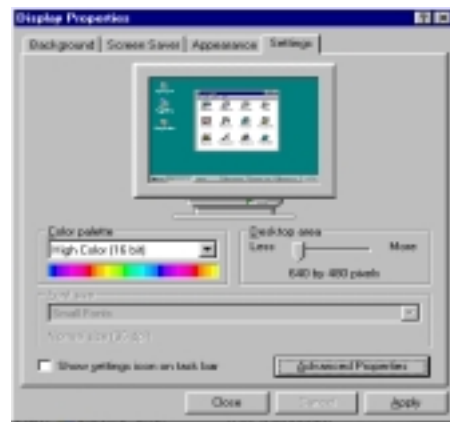


Figure 6

3

Installation

- ☞ If you use the Win98 please select **Settings** | **Advanced** | **Adapter** . Click the **Change** | **Next** button, In **Update Device Driver Wizard** dialog box, choose the

second checkbox: Display a list of all the drivers in a specific location, so you can select the driver you want. Then click "**next**" and click "**Have Disk**" button and follow the instructions on screen to finish the installation.

Microsoft Windows NT4.0 Drivers

If you are running Windows NT, please note that drivers for NT are not compatible with earlier releases of NT, and *vice versa*. Consult your dealer, local user support groups or on-line services from time to time to ensure you have the latest release for the version of NT you are running.

☞ **To use an AGP graphics card with NT4.0, you may need to pre-install NT with Service Pack 3 (SP3) before installing the AGP card.**

Setup Driver

1. Turn on your computer and start Windows NT.
2. Insert the **Driver CD** into your CD-ROM drive.
3. Click the **Start** button on the task bar. Type `D:\Cdsetup.exe` [Enter] in the **Run** dialog box. (D is the letter of your CD-ROM drive)
4. The **PowerStrip Setup Wizard** dialog box will appear on the screen, please click the **Next** button to begin the installation.
5. Finally, click **Finish** button to complete the PowerStrip Setup.
6. At the same time during the installation, the driver will also choose the correct path and VGA card automatically so that you can easy to finish the installation.
7. If the driver doesn't choose the correct path and VGA card automatically, please click the right mouse button anywhere on the Windows NT desktop and select **Properties** from the pop-up menu that appears on screen. In **Display Properties**, select **Settings** | **Display Type** and then click the **Change** | **Have Disk** button and enter the path to the driver installation diskette (e.g., D:\WINNT4). Click **OK** button and follow the instructions on screen to install.
8. When the **Display Properties** dialog box appears on the screen, please click **Close** button to restart your computer so that the settings you choose can take effect..

Windows 95/98/NT Display Properties

Windows 95/98/NT allows you to select resolution, color depth, refresh frequency and font size using the standard Windows 95/98/NT Display Properties sheet, which can be accessed by right clicking anywhere on the Windows 95/98/NT desktop, and then selecting **Properties** from the pop-up menu that appears on screen.



PowerStrip for Windows95/98/NT4.0

The PowerStrip is a display control and desktop enhancement utility for Windows

95/98/NT, specially designed and optimized for use with your graphics accelerator or monitor. You should think of the PowerStrip as a kind of supplementary "device driver" which works in conjunction with your accelerator's display driver, and allows you to get the most from your monitor.

☞ **For maximum compatibility and flexibility, the PowerStrip program and drivers are loaded and unloaded *dynamically*, but note that many of the features the program provides are only available while the PowerStrip is running.**

Starting the Power Strip

1. When you install the PowerStrip, the program and on-line documentation is added to the **PowerStrip** folder under the Windows **Start** menu.
2. To start the PowerStrip, click **Start | Programs | PowerStrip | PowerStrip**.
3. Change the PowerStrip interface to the language of your choice at any time, by clicking the **PowerStrip | Advanced options | About the PowerStrip | Appearance**.

Removing the PowerStrip from your system

1. To subsequently remove the PowerStrip, click the **Start | Settings | Control Panel | Add-Remove Programs**.
 2. The **Add/Remove Programs Properties** dialog box will appear on screen, select **PowerStrip (remove only)** from the list of programs on the **Install/Uninstall** page.
 3. Then click the **Add/Remove** button.
- ☞ **Before removing the PowerStrip from your system, please close the PowerStrip file. When you uninstall the PowerStrip, you remove all program files related to the program.**

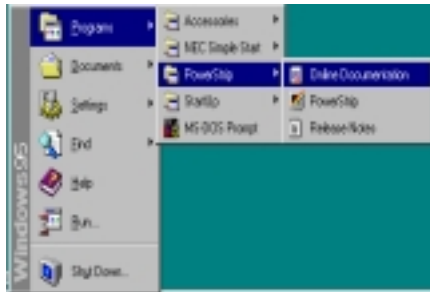


Figure 7

Figure 8

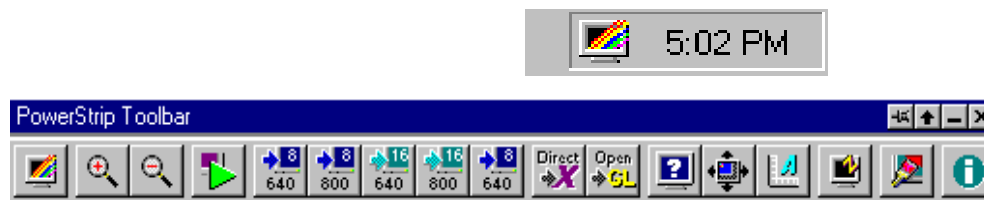
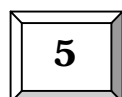


Figure 9



Technical Information

Display Memory Configuration Memory-Resolution/Color

This table only for reference.

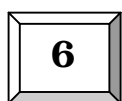
	4MB		
	256 color	64K color	16.7M color
640x480	85Hz	85Hz	85Hz
800x600	85Hz	85Hz	85Hz
1024x768	85Hz	85Hz	85Hz
1152x864	85Hz	85Hz	85Hz
1280x1024	85Hz	85Hz	85Hz
1600x1200	85Hz	85Hz	-

Monitor Connector Pin Assignments

Pin no.	Function	Pin no.	Function
1	Red Video	9	+5V
2	Green Video	10	Sync Return (ground)
3	Blue Video	11	NC
4	NC	12	DDC DATA
5	Ground	13	Horizontal Sync
6	Red Return (ground)	14	Vertical Sync
7	Green Return (ground)	15	DDC CLOCK
8	Blue Return (ground)		

VMI Pin Assignments

Pin no.	Function	Pin no.	Function
1	D0 (LPB Data Bus)	18	GND
2	GND	19	NC
3	D1 (LPB Data Bus)	20	GND
4	GND 21		THSYNC
5	D2 (LPB Data Bus)	22	GND
6	GND 23		TVSYNC
7	D3 (LPB Data Bus)	24	NC
8	HREF (HSYNC)	25	GND
9	D4 (LPB Data Bus)	26	NC
10	NC 27		NC
11	D5 (LPB Data Bus)	28	NC
12	VS (VSYNC)	29	I ² CLK
13	D6 (LPB Data Bus)	30	GND
14	NC 31		I ² CDAT
15	D7 (LPB Data Bus)	32	-ODDIN (odd/Even Field Indicator)
16	GND 33		EN1
17	VCK/CK (LPB, CLOCK)	34	EN2



Trouble Shooting

Problem: After installation and restarting, Windows 95 informs me that display setting is still incorrect. What can I do?

There may be conflict between previous and current display drivers.

This is caused by not complete removal of previous display driver. Try the following steps to remove it:

Solution:

- (1) Use right button of mouse to click on "My Computer" icon on desktop.
- (2) Select "Properties" and "System Properties" box appears
- (3) Click on "Device Manager" tab
- (4) You will see a list of devices on your computer.
- (5) Open "Display adapters" in the list (double click it).
- (6) You will find two (or more) conflicted adapters listed here.
- (7) Remove all previous adapters by selecting them and press "Remove"
- (8) Close Device Manager and restart Windows 95.
- (9) Now display driver will work correctly.

Problem: After installing the driver, Windows 95 doesn't prompt me for restarting and the driver still doesn't work after I reboot it by myself.

You may have installed similar drivers before. Try the following steps to install:

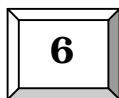
Solution:

- (1) Use right button of mouse to click on "My Computer" icon on desktop.
- (2) Select "Properties" and "System Properties" box appears
- (3) Click on "Device Manager" tab
- (4) You will see a list of devices on your computer.
- (5) If "Display adapters" appears in the list, click it.
If "Display adapters" doesn't appear, jump to step 9 and continue.
- (6) The name of your card will be listed in the box. Double click it.
- (7) The properties box of your card appears. Select "Driver" tab.
- (8) Click "Change Driver.." and follow the installation steps.
- (9) Click "Other devices" you will see your card is listed.
- (10) Click on the name of card, the properties box appears.
Select "Driver" tab.
- (11) Click "Change Driver.." and follow the installation steps.

Problem: When the system is starting up, there is a series of prolonged beeps.

Solution:

The VGA card may not be firmly inserted into the expansion slot. Ensure that the gold-stripped bus connector of the graphics card is properly inserted into the expansion slot. Ensure this by pressing the card gently and evenly into the slot. Alternatively, remove the card and re-insert it.



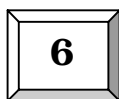
Trouble Shooting

Problem: Monitor display flickers after Windows 95 or Windows 98 starts.

Solution:

Your monitor may not support the resolution or refresh rate that you have set. Use display settings supported by the monitor. To change the display settings:

- (1) Restart your system in Windows 95/Windows 98 Safe mode. To do so:
 - a. Restart your system and when the message "Starting Windows 95/98..." appears, press F8. A list of options such as Safe Mode and Command Prompt Only Mode appears.
 - b. Select Safe Mode and press ENTER.
- (2) Lower your monitor's resolution.
For the resolutions supported by your monitor, refer to its manual.



Trouble Shooting

When you need advanced technique service, please Complete this form and FAX to your dealer.

Your name: _____ **Phone :** _____

Product S/N: _____ **P/ N:** _____

HARDWARE CONFIGURATION	
Mainboard Chipset:	CPU Clock: MHz
Mainboard CPU:	VGA Memory Brand:
Mainboard Memory: MB	VGA Memory MB
Mainboard Brand:	VGA BIOS:
CD Version:	VGA Driver:
Cache Memory: KB	Resolution:
Monitor:	Resolution Rate:
O.S.:	Horizontal Freq. : kHz to KHz Vertical Freq. : Hz to Hz
Other Cards on Mainboard:	
Note:	

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Trouble Shooting

SOFTWARE CONDITION
CONFIG.SYS:
AUTOEXEC.BAT:
Operation System or Test Program:
Application Software or Test Program:
Problem Description:
Note:

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