



Your Reliable Partner

Siluro GF4 MX Series

Graphics Accelerator

(MX-8X, MX-8X LP, MX-SE, MX-SE T)

User's Manual

4200-0368-11

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If you do not properly set the Graphics Accelerator settings causing the motherboard to malfunction or fail, we cannot guarantee any responsibility.

Siluro GF4 MX Series Graphics Accelerator

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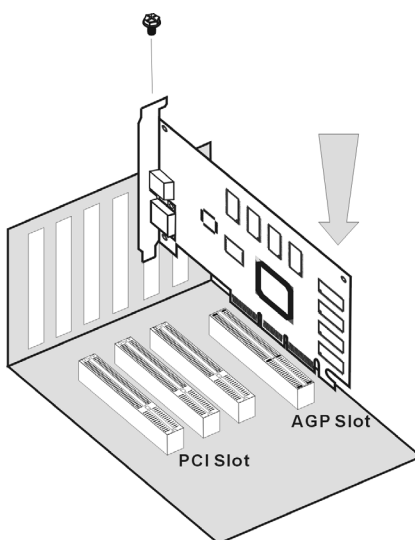
Schnellinstallationsanleitung

Installation der Karte

Diese Grafikkarte kann nur auf Motherboards mit AGP-Steckplatz installiert werden. Bitte behandeln Sie diese Karte vorsichtig und vergewissern Sie sich, die Netzversorgung Ihres Systems vor der Installation abzutrennen.

Neue Systeme:

1. Trennen Sie alle Netzkabel von Ihrem Computer.
2. Nehmen Sie den Computergehäusedeckel ab.
3. Finden Sie den AGP-Steckplatz auf Ihrem Motherboard.
4. Entfernen Sie die Metallklammer des AGP-Steckplatzes. Bewahren Sie die Schraube gut auf.
5. Richten Sie die Karte mit dem AGP-Steckplatz aus. Halten Sie ihn an seinen Rändern fest und stecken die Karte in den Steckplatz, ohne Gewalt anzuwenden oder Druck auf Komponenten der Videokarte auszuüben. Achten Sie darauf, dass der Anschluss der Karte fest und ganz im Steckplatz sitzt.
6. Sichern Sie die Halteklammer der Karte mit der anfangs von der Metallklammer entfernten Schraube an der Rückwand des Computergehäuses.
7. Setzen Sie den Gehäusedeckel wieder auf.



Das Layout der VGA-Karte kann sich je nach Modell unterscheiden.

Systeme mit vorhandener VGA-Karte:

1. Ändern Sie den Anzeigetreiber zu “Standard VGA”.
2. Schalten Sie Ihren Computer aus und trennen alle Netzkabel ab.
3. Ersetzen Sie die bestehende VGA-Karte mit dieser neuen Karte.

Die Installation Ihrer Grafikkarte ist nun vervollständigt. Verbinden Sie einen PC-Monitor oder ein anderes Anzeigegerät mit dieser Karte, bevor Sie den Computer neu starten (siehe Kapitel 2-2 “Geräteverbindung”).

Treiberinstallation

Starten Sie nach der Verbindung Ihren Computer neu und installieren dann die Treiber und Utility-Software. Klicken Sie auf “Driver”, um die Einstellung des Treibers für diese Karte zu starten. (Detaillierte Installationsvorgänge finden Sie im Kapitel 3 “Treiberinstallation”.)



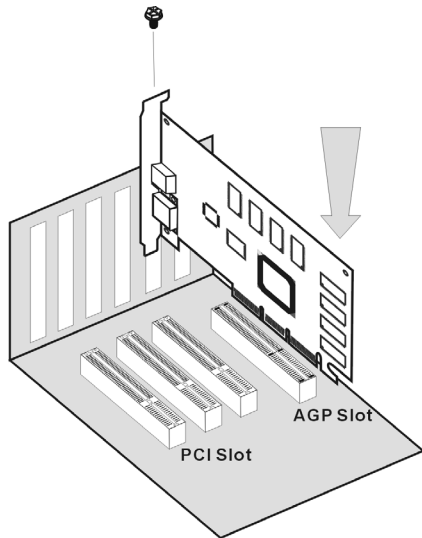
Guide d'Installation Rapide

Installation de la Carte

Cette carte graphique ne peut être installée que sur une carte disposant d'un slot AGP. Veuillez manipuler cette carte avec précautions et assurez-vous de débrancher la source d'alimentation de votre système avant l'installation.

Nouveaux Systèmes:

1. Débranchez tous les cordons d'alimentation de votre ordinateur.
2. Enlevez le couvercle de votre boîtier.
3. Localisez le slot AGP de votre carte mère.
4. Enlevez le cache en métal correspondant au slot AGP. Gardez la vis.
5. Alignez la carte sur le slot AGP. Tenez la carte par ses extrémités et insérez la dans le slot AGP sans force excessive ou pression sur ses composants. Assurez-vous qu'elle soit fermement et complètement fixée dans le slot.
6. Vissez ensuite la carte sur le panneau arrière du boîtier avec la vis que vous aviez auparavant mis de côté.
7. Remettez en place le couvercle du boîtier.



Le schéma de la carte VGA peut varier en fonction des modèles

Systèmes avec déjà une carte VGA:

1. Changez le pilote d'affichage en VGA Standard.
2. Eteignez votre ordinateur et débranchez tous les câbles d'alimentation.
3. Remplacez la carte VGA actuelle avec la nouvelle.

Votre carte graphique est maintenant installée. Avant de relancer votre ordinateur, connectez le moniteur PC ou tout autre périphérique d'affichage à cette carte (voir Chapitre 2-2 "Connexion des Périphériques").

Installation du Pilote

Après la connexion, relancez votre ordinateur et installez les drivers du logiciel ainsi que les utilitaires. Cliquez sur "Driver" pour commencer la définition du driver pour cette carte. (Pour connaître la procédure d'installation détaillée, veuillez vous référer au Chapitre 3 "Installation du pilote".)



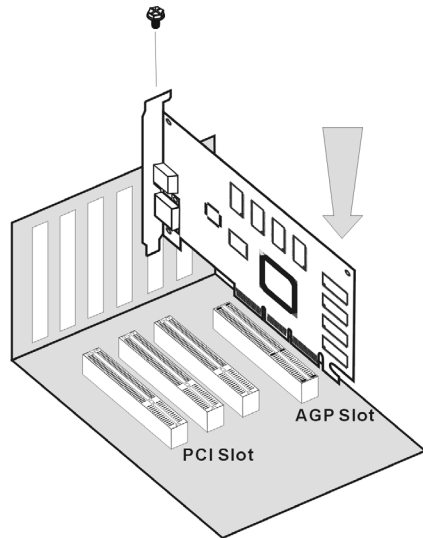
Guida all'installazione rapida

Installazione della scheda

Questa scheda grafica può essere installata solamente su schede madri che abbiano uno slot AGP. Maneggiare la scheda con cura ed assicurarsi di scollegare l'alimentazione del sistema prima dell'installazione.

Sistemi nuovi:

1. Scollegare tutti i cavi d'alimentazione del computer.
2. Rimuovere la copertura del telaio.
3. Localizzare lo slot AGP sulla scheda madre.
4. Rimuovere i supporti in metallo che corrispondono allo slot AGP. Conservare le viti.
5. Allineare la scheda nello slot AGP. Tenere la scheda per i lati ed inserirla nello slot senza utilizzare una forza eccessiva, o premendo qualsiasi componente sulla scheda. Assicurarsi che la scheda sia inserita completamente e con sicurezza nello slot.
6. Assicurare i supporti della scheda al pannello posteriore del telaio del computer, utilizzando le viti rimosse dal supporto di metallo.
7. Rimettere la copertura al telaio.



La disposizione della scheda VGA può variare secondo i modelli

Sistemi con una scheda VGA esistente:

1. Cambiare il driver schermo su Standard VGA.
2. Spegnerne il computer e scollegare tutti i cavi d'alimentazione.
3. Sostituire la scheda VGA esistente con la scheda nuova.

La scheda grafica è installata. Prima di riavviare il computer, collegare il monitor PC o altri dispositivi di visualizzazione, a questa scheda (vedi capitolo 2-2, "Connessione periferiche").

Installazione del driver

Dopo avere effettuato il collegamento, riavviare il computer ed installare i driver software e le utilità. Fare clic su "Driver" per iniziare ad impostare il driver della scheda. (Per la descrizione dettagliata della procedura di installazione, si rimanda al Capitolo 3, "Installazione del driver".)



Краткое руководство по установке

Установка Платы

Данную графическую плату можно установить только в систему с AGP слотом. Пожалуйста, аккуратно обращайтесь с платой и, прежде чем ее устанавливать, убедитесь в том, что питание компьютера выключено.

Новые Системы:

1. Отсоедините все провода питания компьютера.
2. Откройте корпус компьютера.
3. Найдите на материнской плате AGP слот.
4. Удалите металлическую заглушку, относящуюся к AGP слоту. Сохраните винт.
5. Примерьте плату к слоту AGP. Держа плату за края, вставьте ее в слот, не прилагая особенных усилий и не нажимая ни на какие ее элементы. Убедитесь, что она плотно вошла в слот.
6. Закрепите плату в задней части корпуса винтом от ранее удаленной металлической заглушки.
7. Закройте корпус компьютера.

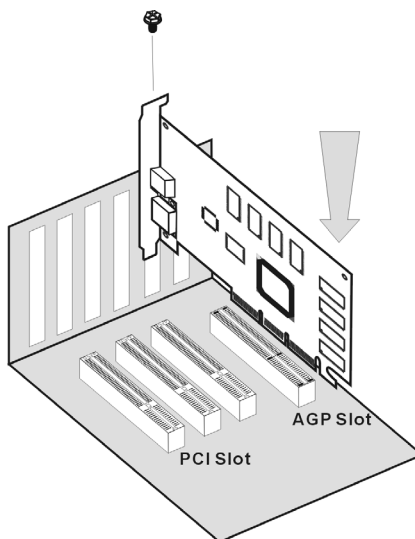


Схема расположения элементов на плате VGA может изменяться в зависимости от модели

Системы с установленной VGA Платой:

1. Замените драйвер монитора на Standard VGA.
2. Выключите компьютер и отсоедините все шнуры питания.
3. Замените старую плату VGA на новую.

Ваш графический адаптер теперь установлен. Перед перезагрузкой компьютера не забудьте подключить монитор, или какое-либо другое устройство вывода изображения (см. Часть 2-2 “Подключение Устройств”).

Установка Драйвера

После завершения подключения перезагрузите компьютер и установите драйверы и программные утилиты. Нажмите “Driver” (“Драйвер”) для запуска настройки драйвера этой платы. (За подробную процедуру установки обращайтесь к Части 3 “Установка Драйвера”).



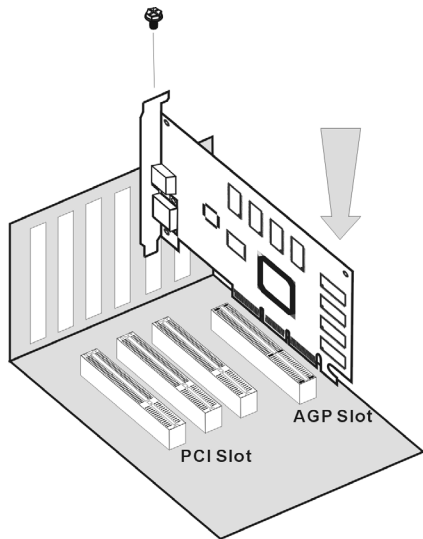
快速安裝指引

卡片安裝

這張顯示卡只能安裝到具有 AGP 插槽設計的主機板上上面，請您小心地拿取這張顯示卡，並且在安裝顯示卡到主機板上之前，先確認電腦的電源線已經拔掉。

全新系統：

1. 拔下電腦的所有電源線。
2. 拆下電腦機蓋。
3. 找出主機板上的 AGP 插槽。
4. 移除該 AGP 插槽之對應金屬蓋條。請保留好螺絲。
5. 將本顯示卡與 AGP 插槽對齊好。握住卡片邊緣，將其插到插槽中，切忌用力過度，也不要按到卡片上的任何組件。請確定其已牢固並完全插入插槽當中。
6. 用原來從固定槽上取下的螺絲將顯示卡鎖到固定槽上。
7. 蓋回電腦機蓋。



VGA 卡之配置狀況因型號不同將有所差異

現有顯示卡之系統：

1. 將顯示驅動程式變更為「標準 VGA」。
2. 關閉電腦電源，並拔下所有電源線。
3. 用新的顯示卡換掉現有的顯示卡。

您的顯示卡現已安裝好。在重新啓動電腦前，將 PC 監視器或其他顯示裝置接回到本卡片上。（請參考 2-2 章“輸出裝置連接圖”）

安裝驅動程式

在連接好顯示裝置後，重新啓動您的電腦，並安裝驅動及公用程式。點選“Driver”，即可開始顯示卡的驅動程式安裝。（關於詳細的安裝程序，請參考第 3 章“安裝驅動程式”。）



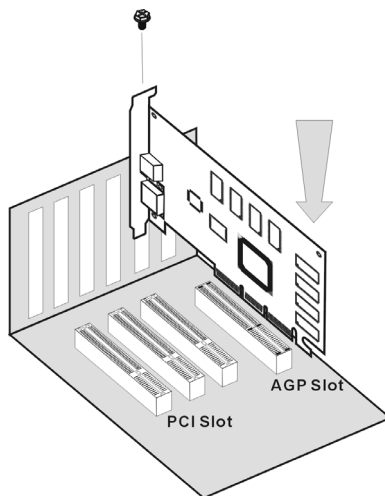
クイックインストールガイド

カードの取り付け

このグラフィックスカードは、AGP スロットを搭載するマザーボードにだけ取り付けることができます。このカードは細心の注意を払って取り扱い、取り付ける前にシステムの電源装置からプラグを抜いてあることを確認してください。

新しいシステム：

1. コンピュータの電源コードをすべて抜く。
2. コンピュータのシャーシカバーを取り外す。
3. マザーボードに AGP スロットを配置する。
4. AGP スロットに対応する金属製ブラケットを取り除く。ネジは保管しておいてください。
5. このカードを AGP スロットの位置に合わせます。カードの端をつかみ、不要な力を入れずに、またカードの他のコンポーネントを押しこめず、スロットに差し込む。スロットにしっかりと完全に固定されているか、確認してください。
6. このカードの取り付けブラケットを、金属製ブラケットから取り外したネジで、コンピュータのシャーシの背面パネルにしっかりと固定する。
7. シャーシカバーを元に戻す。



VGA カードの配置は型式によって異なります

既存の VGA カードを搭載するシステム：

1. ディスプレイドライバを標準の VGA に変更する。
2. コンピュータの電源をオフにして、すべての電源コードを抜く。
3. 既存の VGA カードをこの新しいカードに取り替える。

グラフィックスカードの取り付けがこれで完了しました。コンピュータを再起動する前に、PC モニタまたはその他の表示デバイスをこのカードに接続してください（第 2-2 章「デバイス接続」をご覧ください）。

ドライバのインストール

接続が済んだら、コンピュータを再起動し、ソフトウェアドライバとユーティリティをインストールします。“Driver” をクリックして、このカード用のドライバの設定を開始します。（詳細なインストール手順については、第 3 章「ドライバのインストール」を参照してください。）



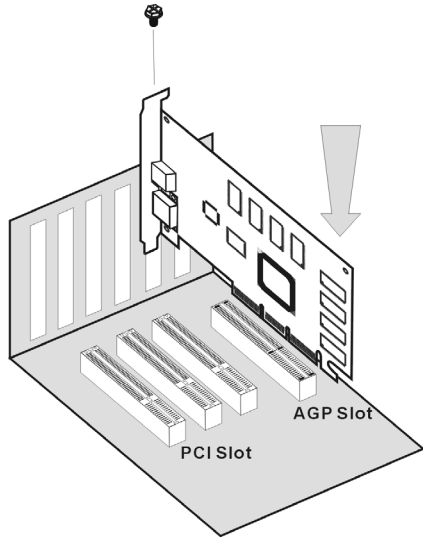
빠른 설치 설명서

카드 설치

이 그래픽 카드는 AGP 슬롯을 가진 마더보드에만 설치가 가능합니다. 카드는 항상 주의를 기울여 취급하시고 설치 전에는 시스템 전원 코드를 뽑으십시오.

새 시스템:

1. 컴퓨터의 모든 전원 코드를 뽑습니다.
2. 컴퓨터 새시 커버를 제거합니다.
3. AGP 슬롯을 마더보드에 위치시킵니다.
4. AGP 슬롯에 해당하는 금속 브래킷을 제거합니다. 나사를 조입니다.
5. 이 카드를 AGP 슬롯의 중심에 맞춥니다. 카드의 가장자리를 잡고 슬롯에 삽입합니다. 무리한 힘을 가하거나 카드의 구성품을 누르면 안됩니다. 슬롯에 단단히 고정되었는지 확인합니다.
6. 금속 브래킷에서 제거한 나사를 사용하여 컴퓨터새시의 뒷면에 이 카드의 마운팅 브래킷을 고정시킵니다.
7. 새시 커버를 제자리에 다시 설치합니다.



VGA 카드 레이아웃은 모델에 따라
다릅니다.

기존 VGA 카드를 가진 시스템:

1. 디스플레이 드라이버를 표준 VGA 로 교체합니다.
2. 컴퓨터를 끄고 모든 전원 코드를 뽑습니다.
3. 기존의 VGA 카드를 새 카드로 교체합니다.

이제 그래픽 카드가 설치되었습니다. 컴퓨터를 다시 시작하기 전에, PC 모니터나 기타 디스플레이 장치를 이 카드에 연결하십시오 (2-2 장 "장치 연결"을 참조하십시오).

드라이버 설치

연결 후에는, 컴퓨터를 다시 시작하고 소프트웨어 드라이버 및 유틸리티를 설치합니다. "Driver" 를 클릭하여 이 카드의 드라이버 설치를 시작합니다. (자세한 설치 순서는 3 장 "드라이버 설치"를 참조하십시오.)



Chapter 1. Introduction

1-1. Features

Thank you for purchasing ABIT Siluro GF4 MX Series Graphics Cards, the most advanced solution for graphics enthusiasts.

Powered by NVIDIA[®] GeForce[™]4 MX440-SE/MX 440 GPU with AGP 8X, the most integrated Graphics Processing Unit (GPU), and the new Video Processing Engine (VPE), integrated Dual 350MHz RAMDACs, 64MB Video Memory and TV encoder, nView[™] and AccuvieW Antialiasing[™], the ABIT Siluro GF4 MX Series Graphics Cards deliver the most visually compelling and complete graphics experience available today.

Combined with other innovations such as SiluroDVD and Graphic Max, the Siluro GF4 MX Series Graphics Cards cater to all your graphics needs and enable a wide range of application.

In addition, AGP 8X provides double the bandwidth of AGP 4X, enables more complex models and detailed textures creating richer and more lifelike environments (for Siluro GF4 MX-8X/MX-8X LP only).

With ABIT Siluro GF4 MX Series Graphics Cards, you will not just see things in the old way but also experience the dynamic and vivid modern 3D world.

1-2. Specification

Siluro GF4 MX-8X:

- Powered by NVIDIA® GeForce™4 MX 440 GPU with AGP 8X working on 275MHz with 256-bit Graphics Core
- On board 64MB Video Memory
- Integrated dual 350MHz RAMDACs supporting twin-view at 2048 x 1536 @ 75Hz
- 1.1 billion texels/sec fill rate
- NVIDIA® Video Processing Engine (VPE) delivers the highest-quality DVD, video and display output
- NVIDIA® Shading Rasterizer technology creates real-time dramatic visual effect
- NVIDIA® nView™ technology for using multiple displays
- NVIDIA® Accuvision™ Antialiasing™ delivers unbeatable visual quality and frame rates
- AGP 8X/4X/2X/1X support and AGP texturing support
- Complete OpenGL® and DirectX® support
- High-quality HDTV/DVD playback support
- TV-Out supports S-Video/RCA output up to 1024x768
- DVI-I interface for LCD Monitor

Siluro GF4 MX-8X LP:

- Powered by NVIDIA[®] GeForce[™]4 MX 440 GPU with AGP 8X working on 250MHz with 256-bit Graphics Core
- On board 64MB Video Memory
- Integrated dual 350MHz RAMDACs supporting twin-view at 2048 x 1536 @ 75Hz
- 1.1 billion texels/sec fill rate
- NVIDIA[®] Video Processing Engine (VPE) delivers the highest-quality DVD, video and display output
- NVIDIA[®] Shading Rasterizer technology creates real-time dramatic visual effect
- NVIDIA[®] nView[™] technology for using multiple displays
- NVIDIA[®] Accuview Antialiasing[™] delivers unbeatable visual quality and frame rates
- AGP 8X/4X/2X/1X support and AGP texturing support
- Complete OpenGL[®] and DirectX[®] support
- High-quality HDTV/DVD playback support
- TV-Out supports S-Video/RCA output up to 1024x768
- DVI-I interface for LCD Monitor

Siluro GF4 MX-SE/MX-SE T:

- Powered by NVIDIA® GeForce™4 MX440-SE GPU working at 256-bit Graphics Core
- On-board 64MB Video Memory
- Integrated dual 350MHz RAMDACs supporting twin-view at 2048 x 1536 @ 75Hz
- 1 billion pixels/sec fill rate
- NVIDIA® Video Processing Engine (VPE) delivers the highest-quality DVD, video and display output
- NVIDIA® Lightspeed Memory Architecture II (LMA) Technology
- NVIDIA® nView™ technology for using multiple displays
- NVIDIA® Accuview Antialiasing™ delivers unbeatable visual quality and frame rates
- Integrated TV encoder provides TV-out functionality supporting 1024x768 resolution
- AGP 4X/2X support and AGP texturing support
- Complete support for DirectX® 8.1 and OpenGL® 1.3
- High-quality HDTV/DVD playback support
- TV-Out supports S-Video/RCA output

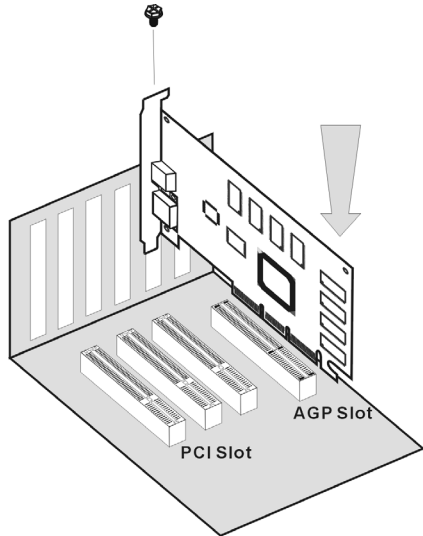
Chapter 2. Hardware Setup

2-1. Card Installation

This graphics card can only be installed in a motherboard with AGP slot. Please handle this card with care and make sure to unplug the power supply of your system before installation.

New Systems:

1. Unplug all power cords of your computer.
2. Remove computer chassis cover.
3. Locate the AGP slot on your motherboard.
4. Remove the metal bracket corresponding to the AGP slot. Keep the screw.
5. Align this card to the AGP slot. Hold the card's edges and insert it into the slot without using excessive force or pressing any components on the card. Make sure it is firmly and completely fixed into the slot.
6. Secure this card's mounting bracket to the back panel of computer chassis with the screw removed from the metal bracket.
7. Replace the chassis cover.



The layout of the VGA card may vary by models.

Systems with Existing VGA Card:

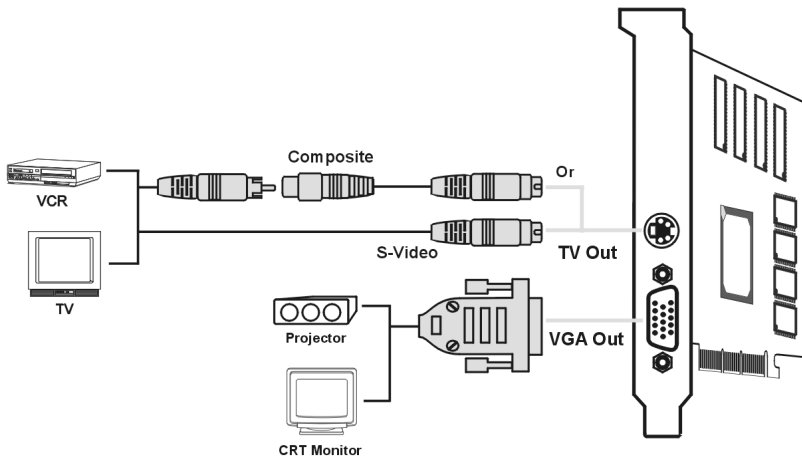
1. Change the display driver to Standard VGA.
2. Shut down your computer and unplug all power cords.
3. Replace the existing VGA card with this new card.

Your graphics card is now installed. Before restarting your computer, connect PC monitor or other display devices to this card (see “Devices Connection”).

2-2. Devices Connection

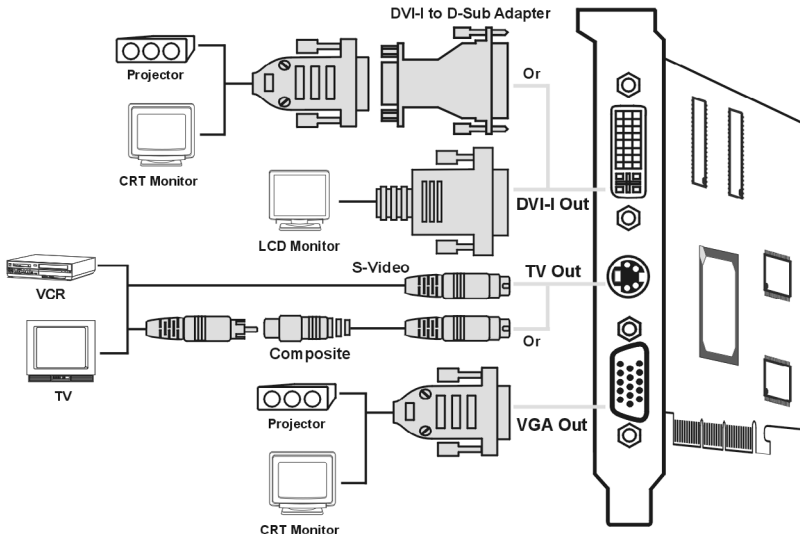
This section shows you how to connect the display devices to your graphics card. The layout of the VGA card may not be exactly the same as the one you have.

Siluro GF4 MX-SE:



Package List:

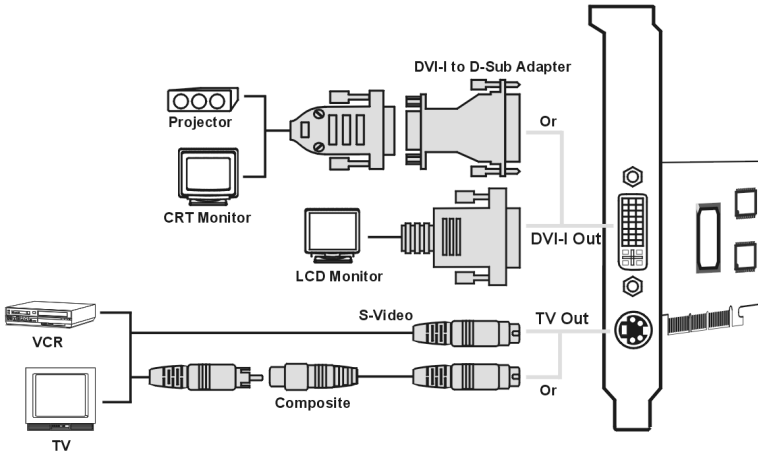
- Siluro GF4 MX-SE 3D Graphics Accelerator
- User's Manual
- S-Video to RCA Cable
- S-Video Extended Cable
- Installation CD:
Driver/SiluroDVD 4

Siluro GF4 MX-8X:

* Please note that DVI-I to D-Sub Adapter and TV-Out connector could not be selected as output interface at the same time.

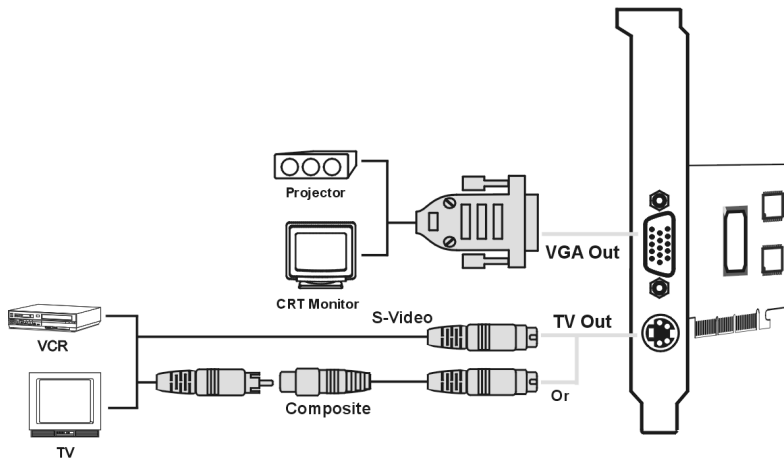
Package List:

- Siluro GF4 MX-8X 3D Graphics Accelerator
- User's Manual
- S-Video to RCA Cable
- S-Video Extended Cable
- DVI-I to D-Sub Adapter
- Bundled Software
 - ☑ Installation CD:
Driver/SiluroDVD 4
 - ☑ Siluro Software Album CD:
Soldier Fortune II Demo/
WindowBlinds NV Edition/
Earthviewer 3D Demo

Siluro GF4 MX-8X LP:

Package List:

- Siluro GF4 MX-8X LP 3D Graphics Accelerator
- User's Manual
- S-Video to RCA Cable
- S-Video Extended cable
- DVI-I to D-Sub Adapter
- Bundled Software
 - Installation CD:
Driver/SiluroDVD 4
 - Siluro Software Album CD:
Soldier Fortune II Demo/
WindowBlinds NV Edition/
Earthviewer 3D Demo

Siluro GF4 MX-SE T:



Package List:

- Siluro GF4 MX-SE T 3D Graphics Accelerator
- User's Manual
- S-Video to RCA Cable
- S-Video Extended cable
- Installation CD:
Driver/SiluroDVD 4



Chapter 3. Driver Installation

The screen displays in this manual may not exactly reflect the screenshots on your screen (for example, the model name would vary according to different video adapter). The contents of the Installation CD that came with this card are subject to change at any time without notice. The latest driver for this board is also downloadable from our Web site at <http://www.abit.com.tw>.

3-1. Windows 98/ME

Auto Setup:



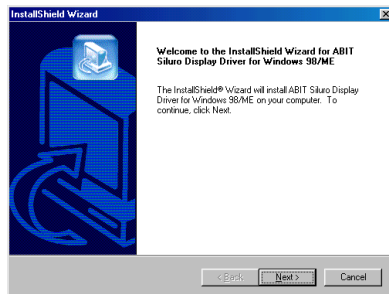
1. Start Windows.

Insert the Installation CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the execution file at the main directory of this Installation CD to enter the installation menu.

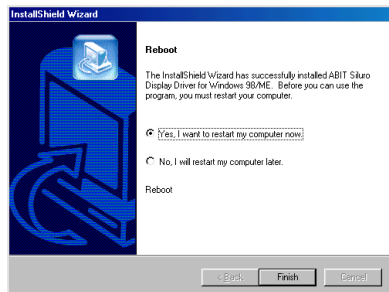
Click "Driver".



2. Click "VGA Driver".



3. Click "Next>" to install display driver.



4. Click "Yes, I want to restart my computer now", and then click "Finish".

3-2. Windows 2000

Plug and Play Setup:



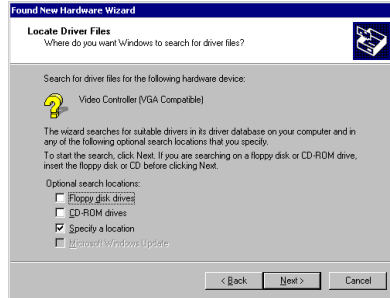
1. Start Windows.

When Windows detects your graphics card, the Found New Hardware Wizard dialog box appears.

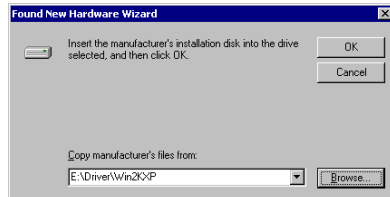
Click “Next>”.



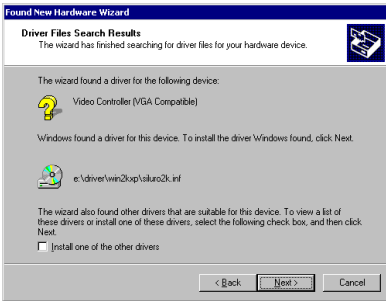
2. Select “Search for a suitable driver for my device [recommended]”, and then click “Next>”.



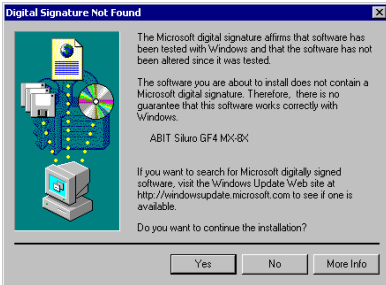
3. Select “Specify a location”, and then click “Next>”.



4. Insert the Installation CD into CD-ROM drive. Use the “Browse...” button to locate the driver, or type “E:\Driver\Win2KXP” to specify the path. E: is the CD-ROM drive. Click “OK” to continue.



5. The wizard has found the driver for this device. Click “Next>” to continue.

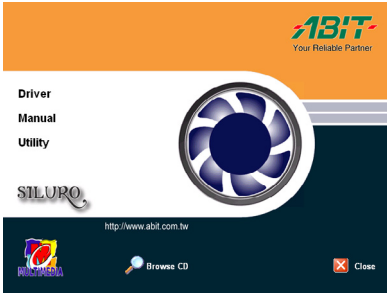


6. Click “Yes” to continue.



7. Windows has finished installing the software for this device. Click “Finish” to close the wizard.

Auto Setup:

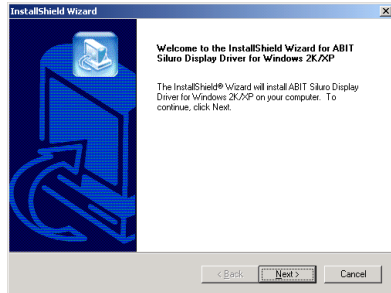


1. Start Windows.
Insert the Installation CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the execution file at the main directory of this Installation CD to enter the installation menu.

Click “Driver”.



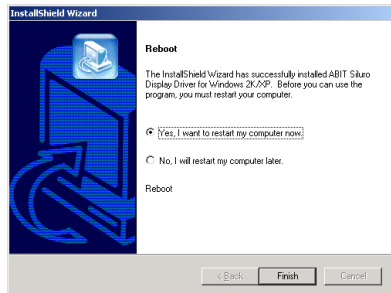
2. Click “VGA Driver”.



3. The welcome screen appears, click “Next>” to start installation.



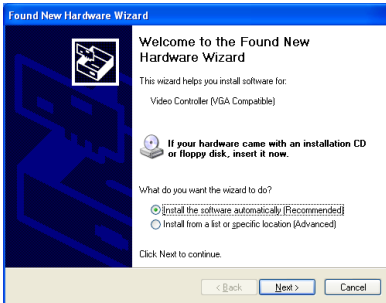
4. Click “Yes” to continue.



5. Click “Yes, I want to restart my computer now”, and then click “Finish”.

3-3. Windows XP

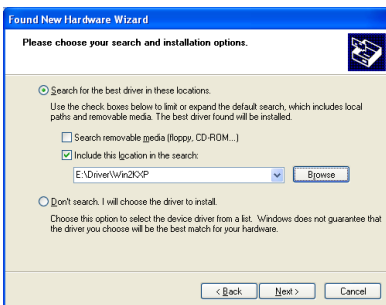
Plug and Play Setup:



1. Start Windows.

When Windows detects your graphics card, the Found New Hardware Wizard dialog box appears.

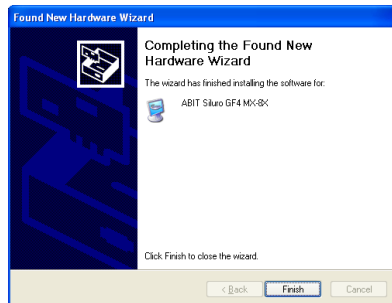
Click “Next>”.



2. Select “Search for the best driver in these locations”, use the “Browse” button to locate the driver, or type “E:\Driver\Win2KXP” to specify the path. E is the CD-ROM drive. Click “Next>”.



3. Click “Continue Anyway”.



4. Click “Finish” to complete the Found New Hardware Wizard.

Auto Setup:

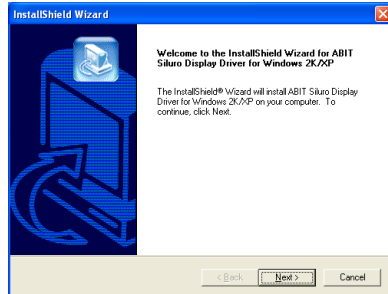


1. Start Windows.
Insert the Installation CD into CD-ROM drive, it should execute the installation program automatically. If not, execute the execution file at the main directory of this Installation Disk. After it has been executed, the setup screen appears.

Click “Driver”.



2. Click “VGA Driver”.



3. The welcome screen appears, click “Next>” to start installation.



4. Click “Continue Anyway”.



5. Click “Yes, I want to restart my computer now”, and then click “Finish”.

Chapter 4. Display Properties

The Display Properties is a control panel that helps you to make adjustments on Adapter, Monitor, Performance, Color Management, Display Position, and nView functions.

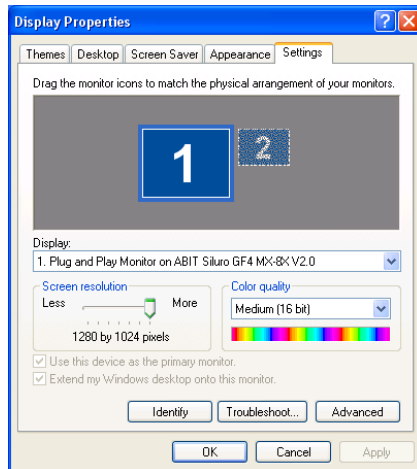
To use the Display Properties, right-click the ABIT Display Tray Icon on the taskbar's status area and then click Display Properties to enter, or you may right-click the Windows 98/ME/2000/XP desktop, click "Properties" → "Settings" → "Advanced" to enter.

NOTE: The screenshots in this chapter are based on the Windows XP operating system and for your reference only, may not completely match what you see on your screen.

4-1. Settings

This tab displays icons that represent your monitors. If more than one icon is displayed, click each one to see the large number in the corresponding monitor. The settings for that monitor appear in Display, Screen resolution, and Color quality.

- **Display:** Displays all installed PCI and AGP video adapters. The adapter for your primary monitor is in position 1.
- **Screen resolution:** Displays the current screen resolution settings for the monitor whose video adapter appears in Display. Drag the slider to specify the screen resolution you want. The higher the number of pixels, the more information you can display on your screen.
- **Color quality:** Displays the current color settings for the monitor whose video adapter appears in Display. To use a different color setting, click the arrow, and then click the setting you want.
- **Use this device as the primary monitor:** Specifies that the monitor corresponding to the icon you selected above is the primary monitor. The

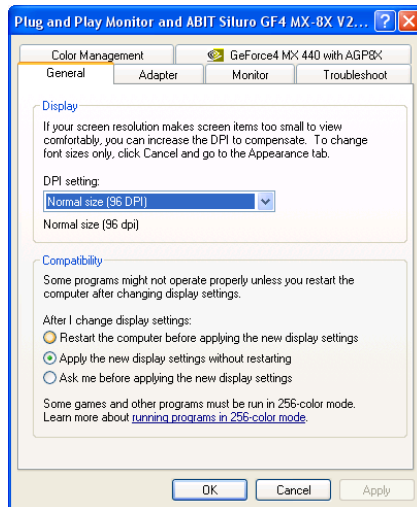


primary monitor will display the logon dialog box when you start your computer. In addition, most programs will display windows on the primary monitor when you initially open them.

- **Extend my Windows desktop onto this monitor:** Selects the monitor whose video adapter appears in Display. This checkbox is available only for video adapters in position 2 and higher.
- **Identify:** Click this button to display a number on the monitors that correspond with the icons shown above.
- **Troubleshoot:** Click this button to start the Display Troubleshooter.
- **Advanced:** Click this button to open the Properties dialog box for the video adapter that appears in Display.

4-2. General

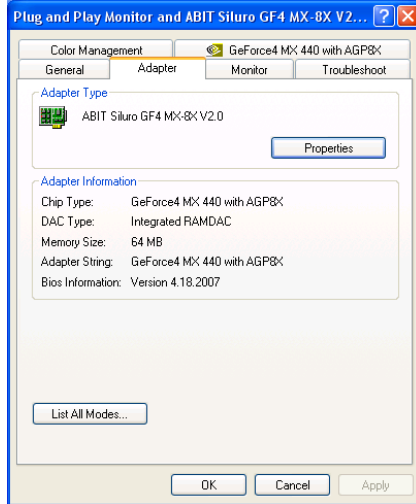
- **DPI setting:** Lists the available DPI (dots per inch) sizes for the selected monitor. Increasing the DPI increases the size of everything on your screen. Decreasing the DPI decreases the size of everything on your screen. To use a different size, click a DPI size in the list or choose **Other**, which allows you to customize the DPI setting for your monitor.
- **Restart the computer before applying the new display settings:** Specifies that you want your computer to restart automatically when you change system display settings.
- **Apply the new display settings without restarting:** Specifies that you want your computer to apply changes to system color settings without restarting. Some programs might not display colors correctly without being restarted after you make changes. To avoid this problem, close the program, change the color settings, and then open the program again.
- **Ask me before applying the new display settings:** Specifies whether Windows should display a prompt to restart every time you change system color settings.



4-3. Adapter

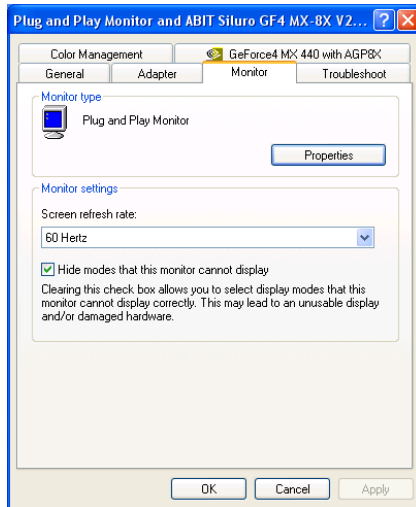
This tab shows what type of display adapter you are currently using.

- **Properties:** Click this button to display device and driver properties for this video adapter.
- **List All Modes:** Click this to view all of the video modes available for this adapter.



4-4. Monitor

- **Properties:** Click this button to display device and driver properties for this video adapter.
- **Screen refresh rate:** Lists the refresh rates available for the selected monitor listed under **Display** on the **Settings** tab. A higher refresh frequency reduces flicker on your screen.
- **Hide modes that this monitor cannot display:** Specifies whether the list under Refresh Frequency will include modes that are not supported by your monitor. Choosing a mode that is inappropriate for your monitor may cause severe display problems and could damage your hardware. You must be logged on as a member of the Administrator group in order to view unsupported modes.



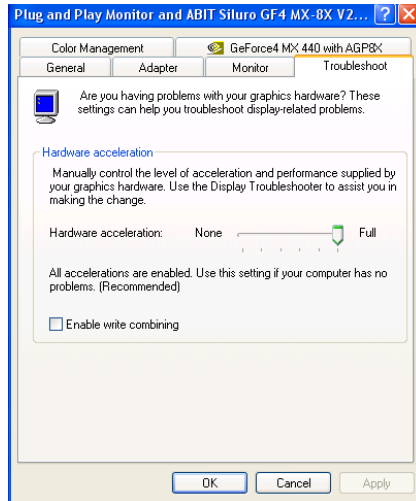
4-5. Troubleshoot

- **Hardware acceleration:**

Adjusts the levels of hardware acceleration controlled by device drivers. Dragging the slider from **Full** to **None** gradually disables portions of hardware acceleration and enables you to detect which areas might be causing you to have problems with your graphics hardware.

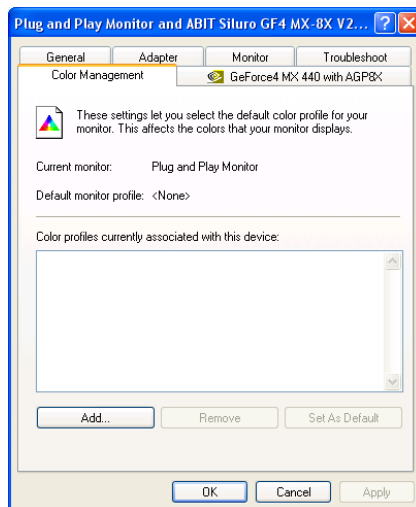
- **Enable write combining:**

Specifies whether "write combining" is turned on or off. Write combining improves video performance by speeding up the display of information to your screen. However, increased speed can cause screen corruption, so if you experience problems with your display, clear the check box.



4-6. Color Management

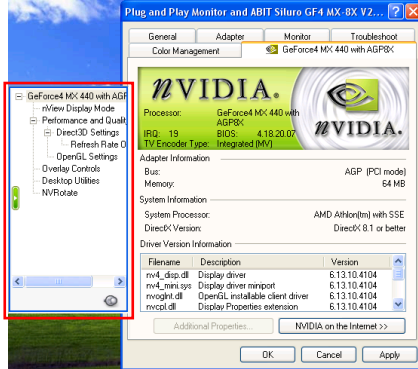
This tab lists all the color profiles currently associated with this monitor. Click a profile to make it the active profile. Otherwise, the default profile is the active profile.



4-7. GeForce4 MX 440 (with AGP 8X)

NOTE: The display information in this section is for reference only, and will vary according to different video adapter.

- **Adapter Information:** This information details the hardware aspects of the currently selected NVIDIA GPU.
- **Driver Version Information:** This table is a list of files and associated version information currently in use by your NVIDIA GPU.
- **Additional Properties button:** After clicking this button, a menu will pop up, from which you could access additional features of your NVIDIA GPU.
- **NVIDIA on the Internet:** Click this button to access the NVIDIA Web site for the latest information and drivers for your NVIDIA GPU.



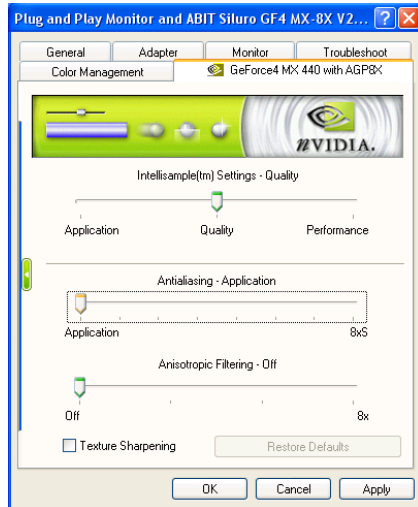
Performance and Quality Settings:

- **Intellisample[tm] Settings:** Drag the slider to select the performance setting (as described below) for quality enhancements in Direct3D and OpenGL applications.

Application: Use this setting to ensure that the driver strictly adheres to all application requests.

Quality: Use this default setting to get the best compromise between the application requests and performance.

Performance: Use this setting to achieve the highest application performance.



- **Antialiasing:** Use this slider by dragging it to set the degree of antialiasing to be used in Direct3D and OpenGL applications. Antialiasing is a technique used to minimize the "stairstep" effect sometimes seen along the edges of 3D objects. Your selection can range from turning antialiasing completely off to selecting the maximum amount possible for a particular application.
 - Off:** This option will disable antialiasing in 3D applications. Select this option if you require maximum performance in your applications.
 - 2x:** This option will enable antialiasing using the 2x mode. It offers improved image quality and high performance in 3D applications.
 - Quincunx:** This option enables a patented antialiasing technique available in the GeForce GPU family. Quincunx antialiasing offers the quality of the slower, 4x antialiasing mode at nearly the performance of the faster, 2x mode.
 - 4x:** This option will enable antialiasing using the 4x mode. It offers the higher image quality at the expense of some performance in 3D applications.
 - 4x, 9-tap Gaussian:** This option enables antialiasing using the 4x, 9-tap (Gaussian) mode. It offers higher image quality but at the expense of some performance in 3D applications.
 - 4xS:** This option will enable antialiasing using the 4xS mode. It offers higher image quality than 4x mode but at slightly lower performance in 3D application. This setting affects only Direct3D applications.
 - 6xS:** This option enables antialiasing using the 6xS mode. It offers higher image quality than 4xS mode. This setting affects only Direct3D applications.
 - 8x:** This option will enable antialiasing using the 8x mode. It offers higher image quality than 6xS mode for Direct3D applications and 4x mode for OpenGL applications.
- **Anisotropic Filtering:** Use this slider by dragging it to set the degree of anisotropic filtering for improved image quality. Enabling this option improves image quality at the cost of performance.
 - Off:** Disables anisotropic filtering.
 - 1x:** Results in maximum performance.
 - 2x:** Results in improved image quality at the cost of performance.
 - 4x:** Results in improved image quality at the cost of performance.
 - 8x:** Results in best image quality.
- **Texture Sharpening:** Sharpens textures when running 3D applications with antialiasing enabled. This can help improve image quality.

Direct3D Settings:

- **Enable fog table emulation:**

This option is used to turn fog table emulation on or off. Direct3D specifies that a display adapter capable of D3D hardware acceleration should be able to implement either vertex fog or table fog. Some games do not correctly query the D3D hardware capabilities and expect table fog support. Choosing this option will ensure that such games will run properly on your NVIDIA graphics processor.

- **Display logo when running Direct3D application:**

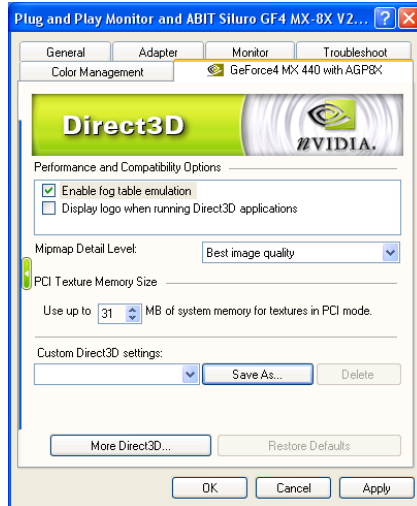
Enables the NVIDIA logo in Direct3D. Enabling this setting will display the NVIDIA logo in the lower corner of the screen while running Direct3D applications.

- **Mipmap detail level:** Allows you to adjust the LOD (Level of Detail) bias for mipmaps. A lower bias will provide better image quality, while a higher bias will increase application performance. You can choose from five preset bias values, varying from “Best Image Quality” to “Best Performance”.

- **PCI Texture Memory Size:** This allows the graphics processor to utilize up to the specified amount of system memory for texture storage (in addition to the memory installed on the display adapter itself).

NOTE: The maximum amount of system memory that can be reserved for texture storage is calculated based on the amount of physical RAM installed in your computer. The more system RAM, the higher the value you will be able to set. This setting applies only to PCI display adapters (or AGP display adapters running in PCI compatibility mode).

- **Custom Direct3D settings:** A list of the custom settings (or “tweaks”) you have saved. Selecting an item from the list will activate the setting. To apply the setting, choose the “OK” or “Apply” button.



More Direct3D:

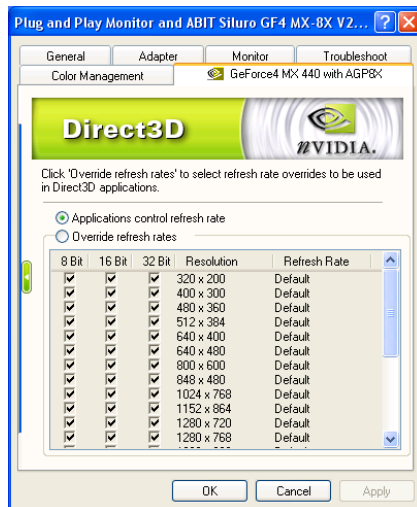
Limits the number of frames the CPU can prepare before the frames are processed by the graphics processor when Vertical Sync is disabled.

NOTE: In some cases, the greater the number of pre-rendered frames allowed, the greater the “input lag” may be in response to devices such as joysticks, gamepads, or keyboards. Reduce this value if you experience a noticeable delay in response to the input devices connected to your computer while playing games.



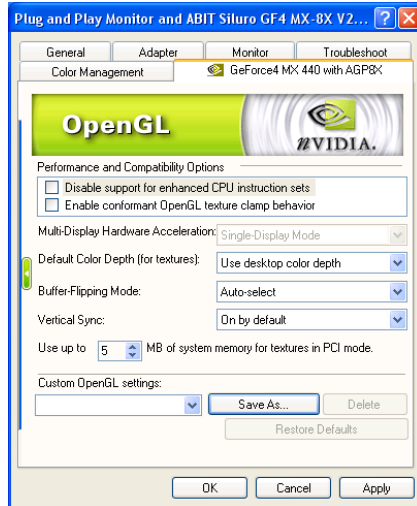
Refresh Rate Override:

- **Applications control refresh rate:** Allows the Direct3D application to select its own refresh rate. The list box below is disabled when this option is enabled.
- **Override refresh rates:** Allows the driver to override the refresh rate for Direct3D applications. The list box below is enabled when this option is enabled.



OpenGL Settings:

- **Disable support for enhanced CPU instruction sets:** Select this option to disable driver support for enhanced instructions used by certain CPUs. Some CPUs support additional 3D instructions that complement your NVIDIA graphics processor and improve performance in 3D games or applications. This option allows you to disable support for these additional 3D instructions in the drivers. This can be useful for performance comparisons or for troubleshooting.
- **Enable conformant OpenGL texture clamp behavior:** Texture clamping refers to how texture coordinates are handled when they fall outside the body of the texture. These can be clamped to the edge or within the image.
- **Multi-Display Hardware Acceleration:** This option determines advanced rendering options when using multiple displays and/or different classes of NVIDIA GPUs.



NOTE: Multi-display hardware acceleration options do not apply when using nView Multiview mode in Windows NT 4.0.

Single-Display Mode: If you have only one active display, this is the default setting. You can also specify this setting if you have problems with the "Multi-Device" modes explained below.

nView Clone/Span Mode: This is the default setting when your nView display configuration is set to nView Clone mode or nView Span mode. If multiple NVIDIA-GPU based graphics cards in your system are in use with active displays, this setting is replaced by one of the "Multi-Device" modes described below.

Multi-Device Compatibility Mode: This mode is available if you have two or more active display devices when running in nView Dualview mode or if you are using different classes of NVIDIA GPU-based cards.

NOTE: When Multi-Device Compatibility Mode is in effect, OpenGL renders in "compatibility" mode for all displays. In this mode, when different classes of GPUs are in use, the lowest common feature set of all active GPUs is exposed to OpenGL applications. The OpenGL rendering performance is slightly slower than in Single-Display mode.

Multi-Device Performance Mode: This mode is available if you have two or more active display devices when running in nView Dualview mode or if you are using different classes of NVIDIA GPU-based cards.

NOTE: When Multi-Device Performance Mode is in effect, OpenGL renders in "performance" mode for all displays. As in "Compatibility Mode", when different classes of GPUs are in use, the lowest common feature set of all active GPUs is exposed to OpenGL applications. However, the rendering performance is "faster" than in Compatibility Mode, although switching or spanning display devices may result in minor transient rendering artifacts.

- **Default color depth for texture:** This option determines whether textures of a specific color depth should be used by default in OpenGL applications. Use **desktop color depth** will always use textures of the color depth at which your Windows desktop is currently running. **The Always use 16 bpp and Always use 32 bpp** options will force the use of textures of the specified color depth, regardless of your desktop settings.
- **Buffer flipping mode:** This option determines the buffer flipping mode for full-screen OpenGL applications. You can select from the block transfer method, the page flip method or auto-select. **Auto-select** allows the driver to determine the best method based on your hardware configuration.
- **Vertical sync:** This option lets you specify how vertical sync is handled in OpenGL. **Always off** will always disable vertical sync in all OpenGL applications. **Off by default** will keep vertical sync disabled, unless an application specifically requests that it be enabled. **On by default** will keep vertical sync enabled, unless an application specifically requests that it be disabled.
- **Use up to "xx" MB of system memory for textures in PCI mode:** This allows the graphics processor to utilize up to the specified amount of system memory for texture storage (in addition to the memory installed on the display adapter itself).

NOTE: The maximum amount of system memory that can be reserved for texture storage is calculated based on the amount of physical RAM installed in your computer. The more system RAM, the higher the value you will be able to set. This setting applies only to PCI display adapters (or AGP display adapters running in PCI compatibility mode).


- **Custom OpenGL settings:** A list of the custom settings (or "tweaks") you have saved. Selecting an item from the list will activate the setting. To apply the setting, choose the "OK" or "Apply" button.

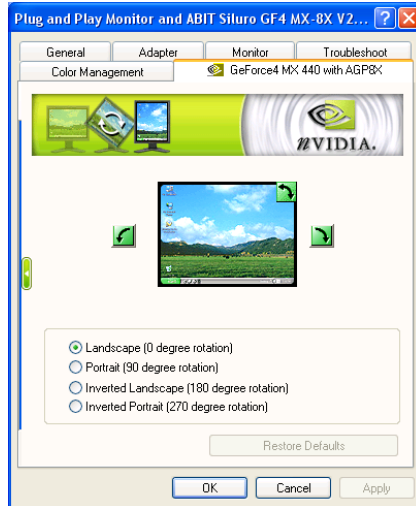
Overlay Controls:

- **Full Screen Device:** Click the down arrow and then select either the **Primary display** or **Secondary display**, depending on the display where you want to play video in full-screen mode. To disable full-screen mode, select **Disable**.
- **Track overlay rotation:** Links the degree of rotation you specified for the video overlay on the Primary display to the Secondary display. This means that the degree of rotation you choose on the NVRotate panel is reflected on both the Primary and Secondary display devices.
- **Brightness, Contrast, Hue, Saturation:** Use these controls to adjust the quality of video or DVD playback on your monitor. You can independently control the brightness, contrast, hue and saturation to achieve optimal image quality when playing back videos or DVD movies on your computer.
- **Select screen region to zoom:** Lets you zoom in or out on the selected portion of the video playback screen.
- **Zoom control:** Lets you zoom into the rendered video. Click the drop-down menu button to select the display to zoom. **Video Mirror** sets the zoom selection to the secondary display on which the video mirror is rendered. **Video Overlay** sets the zoom selection to the primary display on which the overlay video is rendered. **Both** applies the zoom selection to the both the primary and the secondary display on which the video is rendered.
- **Out-In:** Drag the slider to zoom in or out of the selected area of the video playback screen.



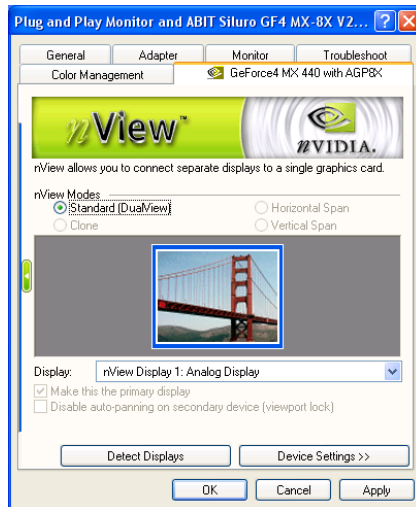
NVRotate:

- : You can use the left/right arrow button to perform the rotation options below. Or you can click circular arrow on the right top and drag it in the direction of the rotation.
- **Landscape:** Landscape is the “default” desktop mode.
- **Portrait:** Portrait results in a 90-degree rotation.
- **Inverted Landscape:** Inverted Landscape results in a 180-degree rotation.
- **Inverted Portrait:** Inverted Portrait results in a 270-degree rotation.

**nView Display Mode:**

The nView functions allow you to connect two separate output devices (analog monitor, digital flat panel or TV) to a single graphics card.

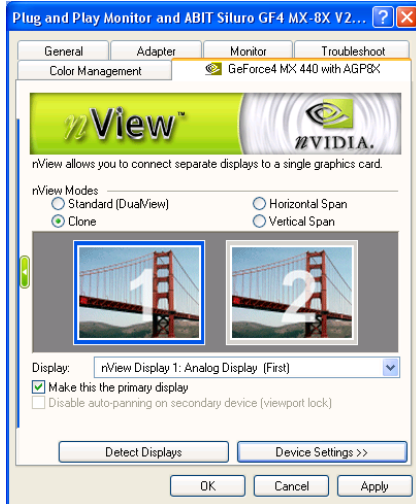
- **Standard Mode (DualView):** Use this mode if you have only one display device attached to your NVIDIA GPU-based graphics card.



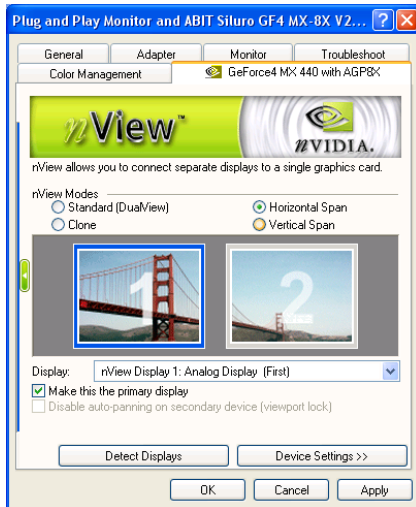
- **Clone Mode:** This mode outputs an exact copy of the primary display on the secondary device.

To enable Clone Mode, select Clone Mode and click OK or Apply. Both display monitors now display the same image.

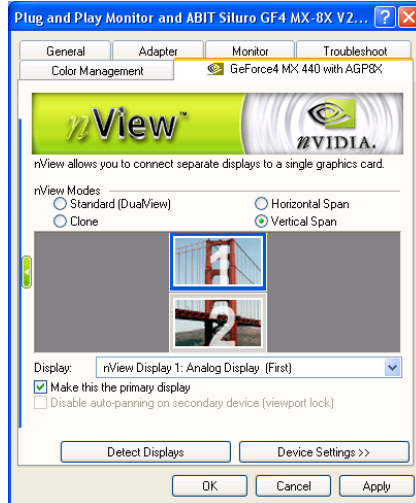
To disable Clone Mode, select Standard Mode and click OK or Apply.



- **Horizontal Span:** This mode allows you to extend the Windows desktop across two display devices horizontally. In this mode the two displays combine to form a wide, spanned display surface, which is useful when viewing items that are wider than a single display.



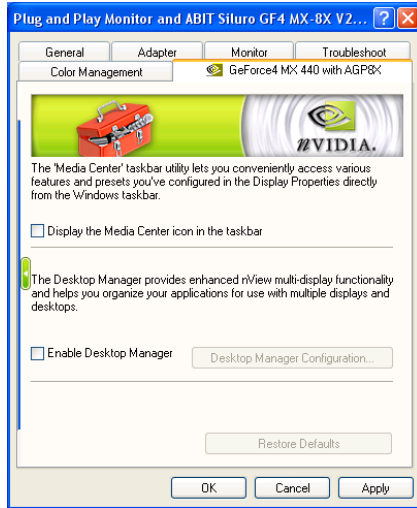
- **Vertical Span:** This mode allows you to extend the Windows desktop across two display devices vertically. In this mode the two displays combine to form a tall, spanned display surface, which is useful when viewing items that are taller than a single display.



- **Display:** Displays all current nView displays. If more than one device is connected and you have switched to a mode other than Standard, you select which display is the current display. You can also click on the monitor graphic in the control directly above to select it as the current display.
- **Disable auto-panning on secondary device (viewport lock):** Turning on this feature will lock the current pan position on the currently selected display. This lets you effectively “freeze” the virtual desktop at a certain position. This is useful for presentations or fine detail work in applications.
- **Detect Displays:** Click this button to detect all display devices connected to your graphics card. Use this feature if you have plugged in any displays after the control panel was opened.
- **Device Settings:** Click this button to setup or change settings related to the output device used for the current display.

Desktop Utilities:

- **Display the Media Center icon in the taskbar:** This option adds the Media Center icon to the Windows taskbar, allowing you to apply any of the custom Direct3D, OpenGL or color settings “on the fly” from a convenient popup menu. The menu also contains items for restoring default settings and accessing the Display Properties dialog box.
- **Enable Desktop Manager:** Allows you to choose the icon used to represent the Media Center utility in the Windows taskbar. Select the icon you want displayed from the list. Then choose “OK” or “Apply” to update the icon in the taskbar.
- **Desktop Manager Configuration:** Click this button to open the nView Desktop Manager properties panel after enabling the **Enable Desktop Manager** option. The nView Desktop Manager properties panel lets you configure a variety of Desktop Manager features, for single and multiple desktops and displays [monitors].

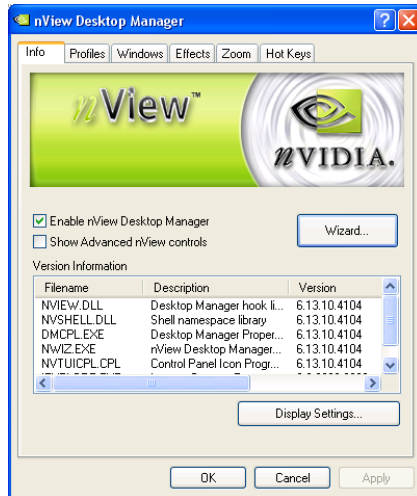


4-8. nView Desktop Manager

This tab contains information about the nView Desktop Manager. The Setup Wizard can also be accessed from this tab.

Info:

- **Enable nView Desktop Manager:** Loads or unloads nView Desktop Manager desktop management. Also controls if nView Desktop Manager automatically starts at boot or not.
- **Show Advanced nView controls:** Shows or hides advanced nView Desktop Manager settings [in the form of additional tabs] for multiple desktops, application management, and user interface features.
- **Wizard:** Click this button to run the NVIDIA nView Desktop Manager Setup Wizard. The Wizard helps set up the most commonly used nView Desktop Manager display settings, including window management, desktop management and “transparency” effects. Using this Wizard, you can enable or disable the automatic startup of nView Desktop Manager when loading Windows. (For detailed setup procedure, please refer to Chapter 5-1 “nView Desktop Manager Setup Wizard”).
- **Display Settings:** Click to access the Windows Display Properties Settings panel where you can turn on or off [attach or detach] your connected displays.



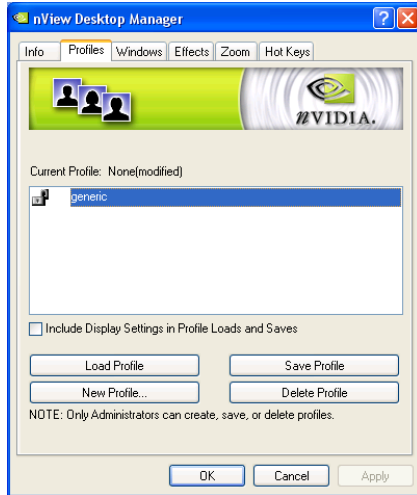
Profiles:

This tab displays a list of all currently available profiles.

A profile contains a record of all nView display settings for easy software setup. You can load a profile after selecting it from the list.

Using nView, an administrator can save a record of all of its display settings in a single file called a Profile and continue to add new profiles that are specific to a company, workgroup, or user. An administrator can create, save, or delete profiles.

NOTE: nView includes several generic profiles for different industries.



- **Include Display Settings in Profile Loads and Saves:** Allows you to control whether display mode information [resolution, display arrangement, etc] is saved to and/or restored from profiles.
- **Load Profile:** Allows you to load a selected profile into nView Desktop Manager. Once you load a profile, all current Desktop Manager settings are replaced with those of the profile that is loaded.
- **New Profile:** Allows you to create and add a new profile that contains all of the current nView Desktop Manager settings. Once saved, you can reload this profile at any time.
- **Save Profile:** Allows you to save current nView Desktop Manager settings to the selected profile. Once saved, you can reload this profile at any time.
- **Delete Profile:** Allows you to delete the selected profile.

Windows:

This tab allows control of window and dialog box placement when using multiple monitors.

- **Enable window spanning across monitors:** Allows windows to span [appear across] displays. If this option is disabled, windows will not span displays.
- **Enable child window spanning across monitors:** Allows child windows within an application to span [appear across] displays. If this option is not checked, child windows will not span displays, even if the parent window does.



NOTE: To access this option, you must first enable the “Enable window spanning across displays” option.

- **Show full-desktop maximize button on title bar:** Allows you to add the nView Desktop Manager window maximize button to title bars on all application windows. Use this title bar button to toggle between maximized and restored states in multiple-display configurations.
- **Allow taskbar to span multiple monitors:** Allows you to control whether the taskbar is limited to a single display or stretched across multiple displays.
- **Enable dialog box repositioning:** This option lets you specify the location of dialog boxes.
- **Center on monitor XX:** Allows you to display dialog boxes on the specified display.
- **Center on cursor's monitor:** Allows you to reposition dialog boxes to the display where the cursor is located.
- **Locate on application's monitor:** Allows you to display dialog boxes on the parent application's display.

Effects:

This tab provides special windows effects that users can apply to their applications.

- **Automatically activate windows under cursor:** Select this function could make windows under the cursor become active and move to the front of the window order.
- **Make windows minimize and maximize faster:** Allows to accelerate the Open, Maximize, and Restore window functions.
- **Make windows transparent when dragged:** Allows to enable window transparency when windows are dragged. Windows become transparent as you hold down the mouse button while on the window’s title bar, so you can quickly see what is underneath the window. When you release the mouse button, the window becomes opaque.
- **Enable drop-down menu transparency:** Select this function could make drop-down menus transparent when the main window is opaque.
- **Enable taskbar transparency:** Allows to make the taskbar transparent.
- **Enable Window Color Keying:** nView Desktop Manager colors the border of application windows according to the application’s Individual Settings [accessible from the Applications panel] or the “Automatically assign colors..” option below. You can then manipulate color-keyed windows using color-keyed hot keys.
- **Automatically assign colors to windows:** nView Desktop Manager automatically color keys windows that are open on the desktop using enabled colors that are not used in an application’s Individual Settings. Colors are automatically chosen from the color pool as long as colors are available.

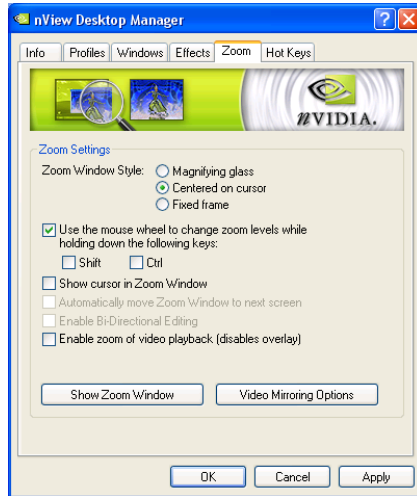


NOTE: If all colors have been used, new windows cannot be colored.

Zoom:

This tab provides dynamic zooms functionality on the desktop. Also enable full screen video playback via the Video Mirroring Control.

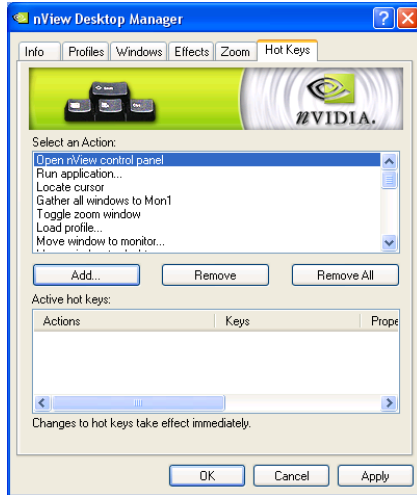
- **Zoom Window Style:** Shows the cursor in the magnified display if the “Centered on cursor” or “Fixed frame” Zoom window style is selected.
- **Use the mouse wheel to change zoom levels while holding down the following keys:** Hold down the Ctrl/Shift key, if you want to use the mouse wheel to change Zoom Levels in a Zoom window by holding down the Ctrl key.
- **Show cursor in Zoom Window:** Click to show the cursor in the magnified display if the “Centered on cursor” or “Fixed frame” Zoom window style is selected.
- **Automatically move Zoom Window to next screen:** When this option is enabled with “Centered on cursor” Zoom window style and the Zoom window is maximized, the Zoom window automatically moves to the next screen if your cursor moves onto the Zoom window.
- **Enable Bi-Directional Editing:** You can use your mouse with applications under either Magnifying Glass or Frame Zoom window styles using the application’s standard mouse editing methods.
- **Enable zoom of video playback [disables overlay]:** Allows video to be displayed in the Zoom window:
NOTE: You must start the video “after” the Zoom window is open in order to see the video in the Zoom window.
- **Show Zoom Window:** Click this button to toggle on or off a window that displays a magnification of a selected area of your screen.
- **Video Mirroring Options:** Click this button to open the Overlay Setting panel, where you can zoom a video window to fit an entire screen at full playback speed.



Hot Keys:

Hot Keys lets users perform various actions with shortcut keys or key combinations.

- **Select an Action:** Lists actions that can be performed when you press a key or combination of keys.



4-9. Device Settings

Device Selection:

In the Extended Desktop Mode, the *nView* tab in the *Advanced* tab menu is replaced by two tabs: *Device Selection* and *Color Correction*.

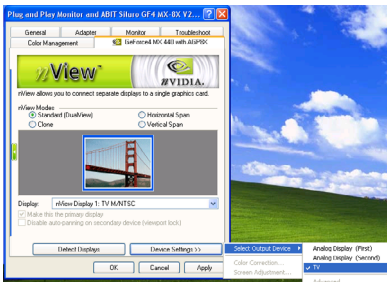
This tab allows you to select the output display device (analog monitor, digital flat panel or TV, depending on which devices your display adapter supports).

- **Format:** Indicates the current format and country settings used for TV output.
- **Change Format:** Opens a window where you can specify a particular TV output format.

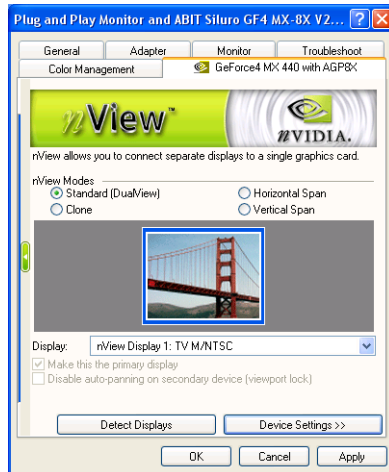


- **Video output format:** Lets you specify the type of output signal sent to the TV. If you have the proper connector cable, S-Video out will generally provide a higher quality output than Composite video out. If you are not sure which type of signal you should specify, choose the Auto-select setting.
- **Check here if you have a TV connected but it remains unselectable:** Select this option to force the detection of a TV connected to the graphics card, even though the control panel does not show that one is currently connected. This useful in situations where the particular TV model attached does not properly load the signals that allow the graphics card to detect its presence. To enable the TV settings: Click the check box, then restart your computer when prompted. Once you log back in, you can use the TV controls.
- **Device Adjustment:** Opens a window where you can customize the settings for the active display device. (For **Analog Display**, refer to “Screen Adjustment” and “Display Timing” on page 4-26; for **TV Display**, refer to “TV Output” on page 4-24.)

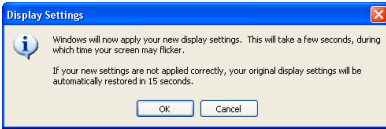
Select TV Output:



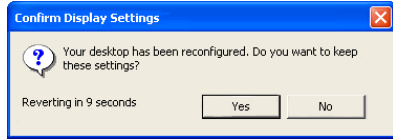
1. Select “nView Display Mode” tab and click “Device Settings>>” → “Select Output Device” → “TV”.



2. Click “Apply”.

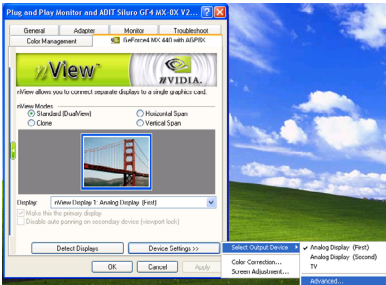


3. Click "OK".

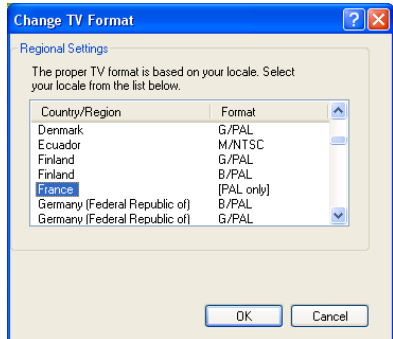


4. Now the output device switches to TV. Click "Yes" to confirm the display settings.

Select NTSC/PAL Format:



1. Select "nView Display Mode" tab and click "Device Settings>>>" → "Select Output Device" → "Advanced...".



3. Select your local TV format and click "OK".



2. Click "Change Format...".



4. Click "Apply" to finish the Device Settings.

TV Output:

For customizing the settings of your TV display, enter the *Device Selection* panel, click *Device Adjustment* to open the *TV Output* panel.

- **Screen Positioning:** Use the arrow buttons to adjust the position of the desktop on the TV.

NOTE: If the TV picture becomes scrambled or goes blank due to over-adjustment, simply wait 10 seconds. The picture will automatically return to its default position. Then you can begin your adjustments again. Once you have positioned the desktop where you want it, you must press the “OK” or “Apply” button to save the settings before the 10-second interval has elapsed.



- **Screen Size:** Use the slider control by dragging it to the level that adjusts the screen size of your TV. For example, if you see a black border on your TV screen, you can use the slider to enlarge the TV screen to remove the border.
- **Flicker Filter:** Use this control to adjust the amount of flicker filter you want applied to the TV signal. It is recommended that you turn off the flicker filter completely for DVD movie playback from a hardware decoder.

Color Correction:

- **Digital Vibrance:** Digital Vibrance gives you more control over color separation and intensity, resulting in brighter cleaner images in all of your applications.
- **Brightness, Contrast, Gamma:** The slider controls allow you to adjust the brightness, contrast or gamma values for the selected color channel. The color correction controls help you to compensate for variations in luminance between a source image and its output on a display device. This is useful when working with image processing applications to help provide more accurate color reproduction of images (such as photographs) when they are displayed on your monitor. Also, many 3D-accelerated games may appear too dark to play. Increasing the brightness and/or gamma value equally across all channels will make these games appear brighter, making them more playable.
- **Image Sharpening:** Allows you to sharpen the image quality by amplifying high frequency content.
- **Active Color Channel:** Allows you to select the color channel controlled by the sliders. You can adjust the red, green or blue channels individually or all three channels at once.
- **Custom color settings:** A list of the custom color settings you have saved. Selecting an item from the list will activate the setting.
- **Automatically apply these settings at startup:** Select this option to automatically restore the color adjustments you have after Windows is restarted. If your computer is running on a network, the color is adjusted after you log on to Windows.



Screen Adjustment:

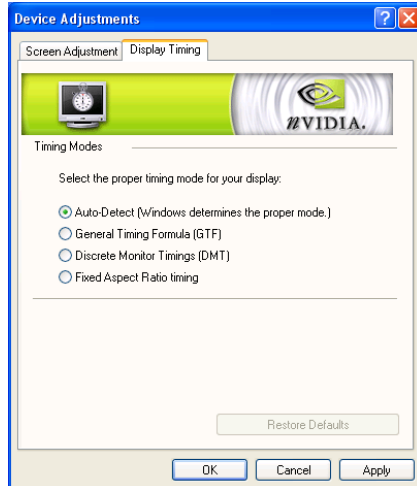
Use the arrow buttons to adjust the position of the desktop on your monitor.



Display Timing:

This tab allows you to select your monitor timing mode:

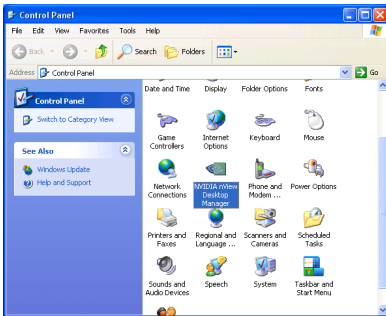
- **Auto-Detect:** Allows Windows to receive the proper timing information directly from the monitor itself. This is the default setting. Note that some older monitors may not support this feature.
- **General Timing Formula (GTF):** This is a standard used by most newer hardware.
- **Discrete Monitor Timings (DMT):** This is an older standard still in use on some hardware. Enable this option if your hardware requires DMT.
- **Fixed Aspect Ratio timing:** Select this option to adjust the monitor timing maintaining the current aspect ratio.



Chapter 5. Utility Setup

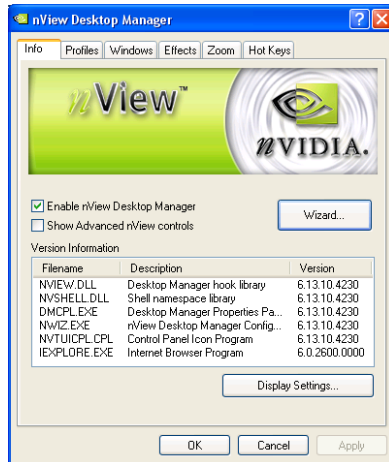
5-1. nView Desktop Manager Setup Wizard

nView is an application to create, manage and switch among maximum 32 different desktop displays. You can keep your e-mail and Web browsing on one desktop while using a second desktop for word processing, or even set up a custom wallpaper for each desktop. For more information on nView, please visit NVIDIA Web site at www.nvidia.com.

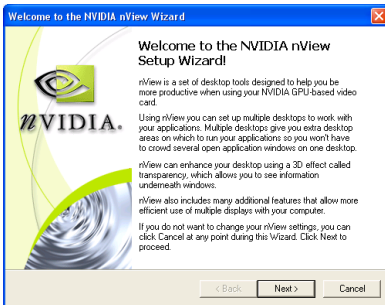


1. Start Windows. Enter Control Panel. Double-click the “NVIDIA nView Desktop Manager” icon.

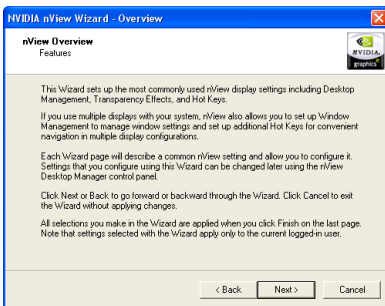
NOTE: Another way to enter nView Desktop Manager is to click the check box of “Enable Desktop Manager” item in the “Desktop Utilities” tab.



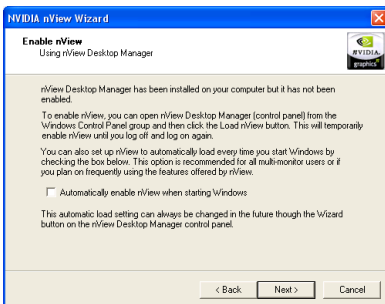
2. Click “Wizard...” to enter “nView Desktop Manager setup wizard”.



3. Click “Next >”.

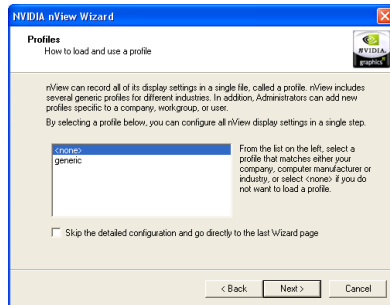


4. Click “Next >”.



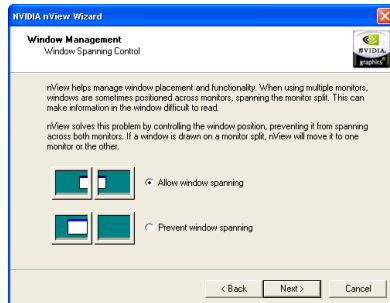
5. Click the check box if you want to automatically enable nView when starting Windows.

Click “Next >” to continue.



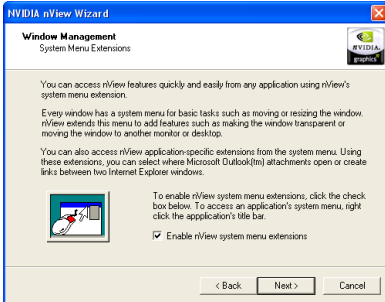
6. By selecting a profile from the list you can configure all nView display settings in a single step.

Click “Next >” to continue.



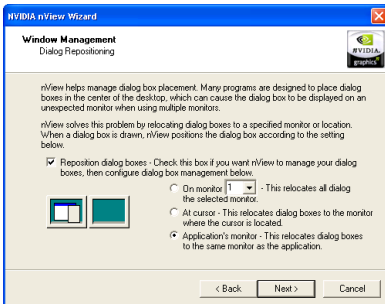
7. Click the check box whether you want to allow or prevent the window spawning.

Click “Next >” to continue.



8. Click the check box if you want to enable nView system menu extensions.

Click “Next >” to continue.



9. Click the check box to decide the dialog boxes placement.

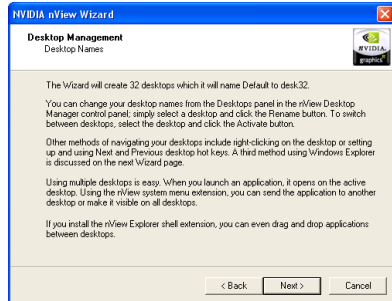
Click “Next >” to continue.



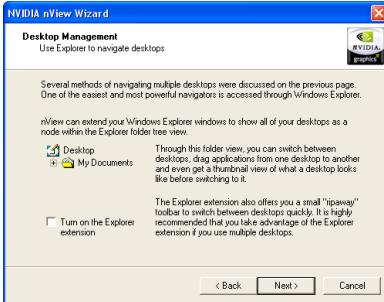
10. Click the check box to decide how many initial desktops you want to use.

Click “Next >” to continue.

NOTE: The maximum number of desktops you can set up is 32.

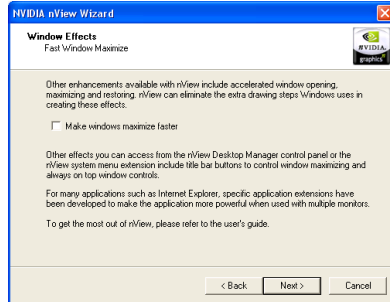


11. Click “Next >” to continue.



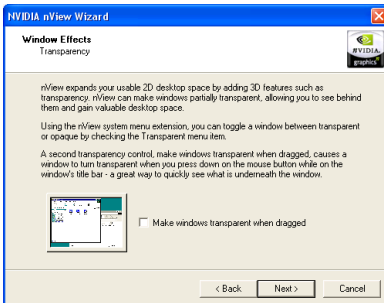
12. Click the check box if you want to use the Explorer to navigate desktops.

Click “Next >” to continue.



14. Click the check box if you want to make windows maximize faster.

Click “Next >” to continue.



13. Click the check box if you want to make the windows transparent when dragged.

Click “Next >” to continue.



15. Click “Finish” to complete the setup.

5-2. SiluroDVD

The SiluroDVD is a simple-to-use DVD player combining all the features you would expect to find in a standard consumer DVD player, in addition to some very advanced functionality, such as full VCD 2.0 support, full precision video decoding, a choice of user interfaces, and video display options. You can play DVD titles or Video CDs - SiluroDVD automatically determines the type of disc in the DVD drive and uses the correct playback method.



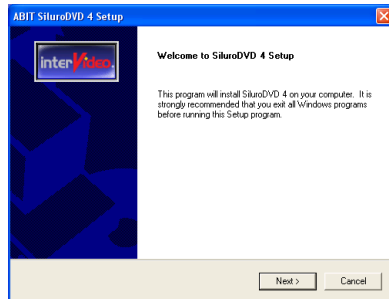
1. Start Windows.

Insert the Installation CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the execution file at the main directory of this Installation CD to enter the installation menu.

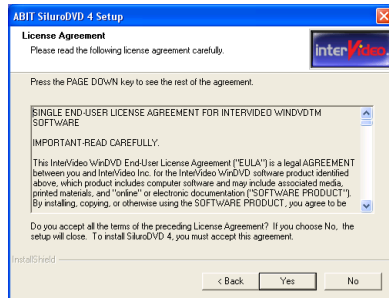
Click "Utility".



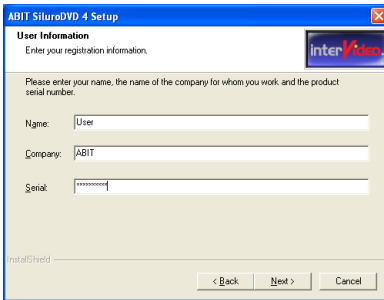
2. Click "SiluroDVD".



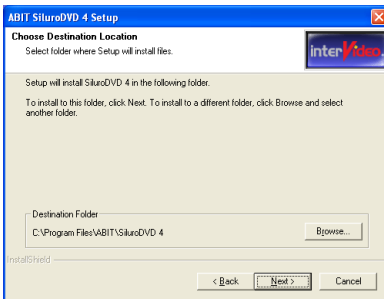
3. The welcome screen appears. Click "Next>" to start installation.



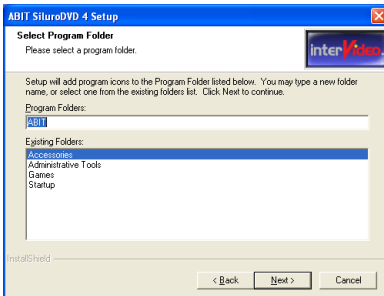
4. Read the license agreement. Click "Yes" to continue.



5. Enter your name, the name of the company for whom you work, and the product serial number. Click “Next>” to continue.

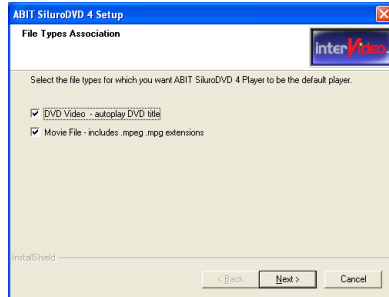


6. Setup will install SiluroDVD in the following folder. To install to this folder, click “Next>”. To install to a different folder, click “Browse...” and select another folder.

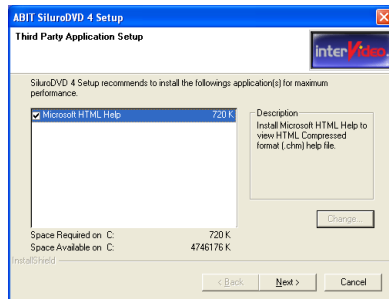


7. Type a new folder name, or select

one from the existing folders list. Click “Next>” to continue.



8. When the installation has finished, a screen will appear, asking you to select the file types for which you want SiluroDVD 4 to be the default player. To select both DVD video and Movie File is recommended.



9. Then another screen will pop up, asking if you want to install Help files or not. Please proceed with the necessary steps if you want to continue. If you don't want to have Help files installed, simply click “Cancel” to end the installation process.

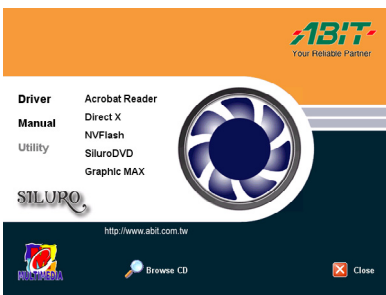
5-3. DirectX

For the best gaming capability, we suggest that you install the latest DirectX driver. Some newer games will also ask you to install the DirectX driver before you start them.

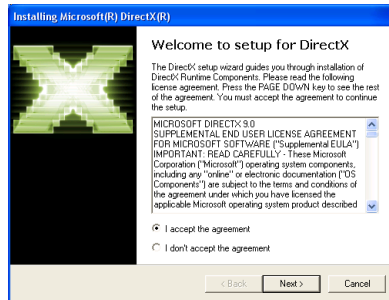


1. Start Windows.
Insert the Installation CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the execution file at the main directory of this Installation CD to enter the installation menu.

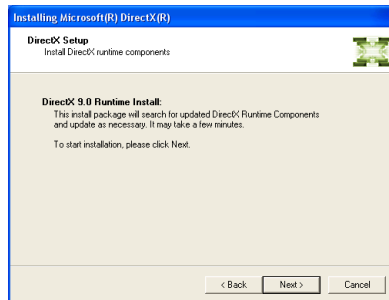
Click “Utility”.



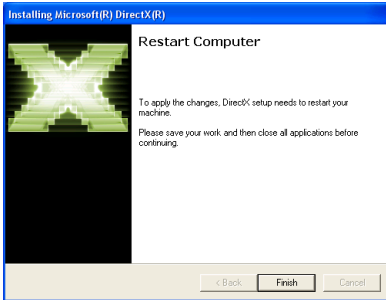
2. Click “DirectX”.



3. The welcome screen appears. Read the license agreement carefully. Select “I accept the agreement”, then click “Next>” to continue.



4. Click “Next>” to start installation.



5. Click “Finish” to end the installation.

NOTE: Some games written for older DirectX versions may not work properly under DirectX 9. Please make sure your application support DirectX 9 before installation. Also note that the DirectX 9 cannot be uninstalled in the normal way.

5-4. Graphic Max

We have provided you with a tool for adjusting both the graphic processors working speed and the graphic memory speed. Please be reminded that it may cause damage to both the graphic processor and graphic memory if you use incorrect settings. Please read the following description carefully before running Graphic Max!

Important Warning Message: ABIT does not provide any warranty or support for this utility. The usage of this utility is at your own risk. This risk includes all damages caused by this utility. If you don't accept this warning, don't use this utility. ABIT does not recommend any over-clocking settings for your hardware. Over-clocking can cause overheating which will damage your chip. If you are not acquainted with the display card hardware, we strongly recommend that you not to use this utility. Improper settings can cause unrecoverable damages to your graphics chip, your display card, and other components!



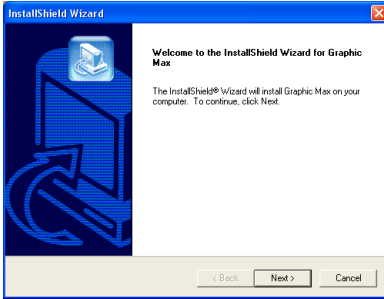
1. Start Windows.

Insert the Installation CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the execution file at the main directory of this Installation CD to enter the installation menu.

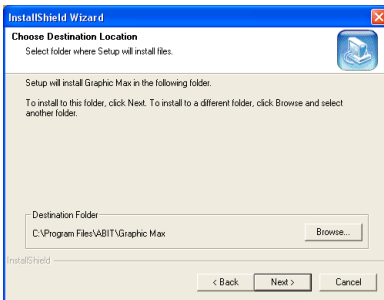
Click "Utility".



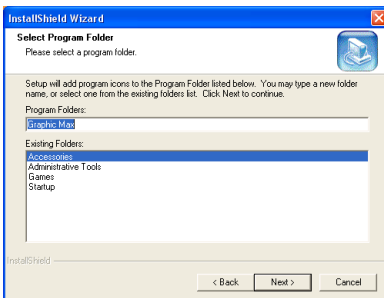
2. Click "Graphic Max".



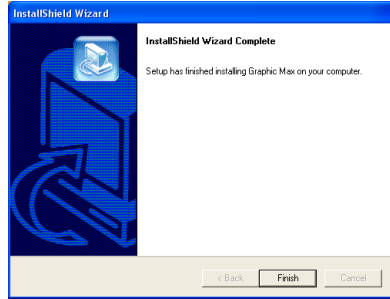
3. The welcome screen appears. Click “Next>” to start installation.



4. Setup will install Graphic Max in the following folder. To install to this folder, click “Next>”. To install to a different folder, click “Browse...” and select another folder.

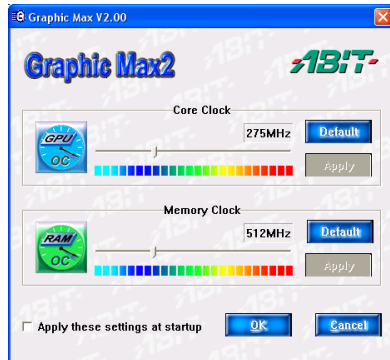


5. Type a new folder name, or select one from the existing folders list. Click “Next>” to continue.



6. Click “Finish” to complete the setup.

7. Select “Start → Programs → ABIT → Graphic Max” to launch Graphic Max.



8. When the Graphic Max screen appears, you can use the sliders to adjust the “Core Clock Frequency” and the “Memory Clock Frequency”. Please proceed with care.

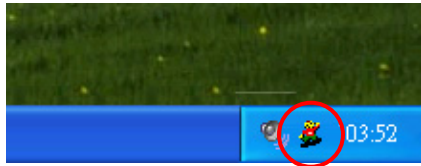
NOTE: The information on this figure is for your reference only; the exact clock frequency would vary by models.

5-5. Display Tray Icon

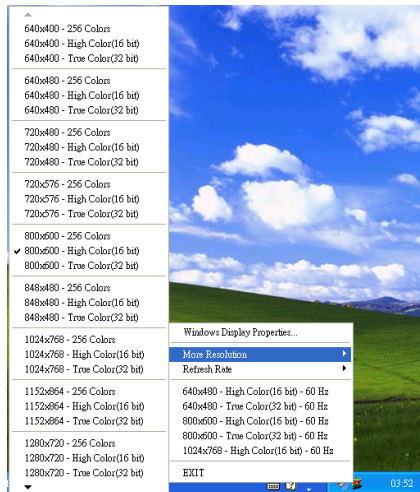
After installation of display drivers, you will find a display tray icon on the taskbar's status area. Clicking this icon opens this Display Tray, showing a menu composed of shortcuts of the graphics board's enhanced and other functions.

NOTE: Besides clicking this display tray icon to control the display properties, another way to do this is to right-click the Windows desktop area, click **Properties** → **Settings** → **Advanced**, and then click the appropriate tab to change your display settings.

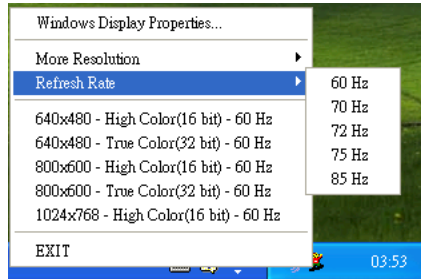
1. Right-click this display tray icon on the taskbar's status area.



2. A menu pops up. Move the cursor to "More Resolution" item to see the entire resolution table. Here you can directly choose the display resolution you want.



3. If you want to change the refresh rate of display adapter, move cursor to “Refresh Rate”, here you can directly choose the display refresh rate you want.



NOTE: Make sure your display monitor supports the higher refresh rate you choose; otherwise, your monitor may not display normally. Please refer to your display monitor user’s manual for detailed specifications.

4. Click “Windows Display Properties...” to start setting up your display properties.
5. Choose “Exit” to leave this program.

Display Modes Table

This display mode table is for your reference only. The display mode will differ depending on your specific monitor, and so the resulting display may not be identical to this table.

Resolution	Colors	Vertical Refresh Rate
640 x 480	8/16/32 bits	60Hz to 240Hz
800 x 600	8/16/32 bits	60Hz to 240Hz
1024 x 768	8/16 bits	60Hz to 240Hz
1024 x 768	32 bits	60Hz to 200Hz
1152 x 864	8/16 bits	60Hz to 200Hz
1152 x 864	32 bits	60Hz to 170Hz
1280 x 960	8/16 bits	60Hz to 170Hz
1280 x 960	32 bits	60Hz to 150Hz
1280 x 1024	8/16 bits	60Hz to 170Hz
1280 x 1024	32 bits	60Hz to 150Hz
1600 x 900	8/16 bits	60Hz to 150Hz
1600 x 900	32 bits	60Hz to 120Hz
1600 x 1200	8/16 bits	60Hz to 120Hz
1600 x 1200	32 bits	60Hz to 100Hz
1920 x 1080	8/16 bits	60Hz to 100Hz
1920 x 1080	32 bits	60Hz to 85Hz
1920 x 1200	8/16 bits	60Hz to 100Hz
1920 x 1200	32 bits	60Hz to 85Hz
1920 x 1440	8/16 bits	60Hz to 85Hz
1920 x 1440	32 bits	60Hz to 75Hz
2048 x 1536	8/16 bits	60Hz to 75Hz
2048 x 1536	32 bits	60Hz

5-6. BIOS Flashing Utility

You may update the newest drivers or BIOS files from your dealer or directly download from our WEB site at <http://www.abit.com.tw>.

NOTE: When you use the flash utility to flash the BIOS, the screen will be blank for about 10 seconds. This is a normal situation, not a malfunction. Do not reboot your computer during this period, or you may cause the flash to fail.

1. Reboot your computer into DOS environment, or open a Windows® 95/98 window to the DOS prompt.

Insert the Installation CD into your CD-ROM drive.

2. Copy CWSDPMI.EXE and NVFLASH.EXE to a new directory from path D:\NVFLASH. (D: refers to the CD-ROM drive letter)
3. Copy the new BIOS binary file to the new directory.
4. Change to the new directory and type the following command:
NVFLASH -F [Filename]. ([Filename] refers to the name of BIOS binary file.)
Then press the “Enter” key. The program will begin flashing your display card BIOS.
5. When the flash is complete (the screen will display images again), you must reboot your computer system to make flash take effect.

The following commands are for the NVIDIA Flash ROM programming utility V4.38, for your reference only.

NVIDIA Flash ROM utility v4.38 Command List:

Usage:

nvflash [commands] [rom filename]

file	f <filename>	Flash the ROM using <filename> (no confirmation), then do compare and ~CRC32.
save	b <filename>	Read ROM and save to <filename>.
compare	k <filename>	Read ROM and compare with <filename>.
tv	x <filename>	Transfer TV data from file to EEPROM.
version	v <filename>	Display file version and ~CRC32 (if no filename, acts on ROM).
erase	e	Erase the ROM.
display	d [bytes]	Display 256 the first bytes of the EEPROM (default is 256 bytes)
check	c	Check for supported EEPROM.
nolight	l	Don't light keyboard LEDs.
override	p	Don't pause if file & chip PCI VenID/DevID mismatch.
overridesub	u	Don't pause if file & chip PCI subsystem ID mismatch.
reboot	y	Reboot the PC after other tasks completed.
protecton	w	Write protect ROM (only works on some ROMs).
protectoff	r	Remove ROM Write protect. (only works on some ROMs).
straps	m<straps>	Change soft straps
	format is:	AND Mask 0, OR Mask 0, AND Mask 1, OR Mask 1
keepstraps	g	Keep the soft straps already present in the EEPROM after flashing the new image.
romstrap	j	Override the ROM strap setting to allow flashing an image when grounding the STRAP_SUB_VENDOR pin. This allows flashing a corrupted or erased EEPROM. Note: Make sure there is a physical EEPROM present when using this option
guid	q<guid>	Set the IEEE 1394 GUID in the ROM image (GUID is in the form of 16 hex digits).
guidsource	l<location>	Set the source of the IEEE 1394 GUID. main - main EEPROM image dedicated - separate serial EEPROM part
list	a	List all NVIDIA display adapters found in the system.
index	i <index>	Force a specific device index.
help	?	Display this screen.
silence	s <level>	Silence level:
	default	All beeps.
	#=4 (or 2)	No progress beeps.
	#=5 (or 1)	No beeps.

override	o <level>	Override safety check level:
	default	unknown EEPROM NV chip aborts application.
	level=1	unknown EEPROM acceptable for read operations.
	level=2	unknown NV chip acceptable for read/write operations.
	level=3	Combined effect of 1,2 (cannot write to unknown EEPROM).
directpci	n	Bypass the PCI BIOS.

Use a single dash ("-") to use the single letter version of a command.

Use a double dash ("--") to use the longer descriptive version of a command.

Use equals ("=") to specify parameters, with separating commas (",").

Sample usage:

```
nvflash --index=1 nv30nz.rom
```

Appendix A. How to Get Technical Support

(From our website) <http://www.abit.com.tw>
(In North America) <http://www.abit-usa.com>
(In Europe) <http://www.abit.nl>

Thank you for choosing ABIT products. ABIT sells all our products through distributors, resellers and system integrators; we have no direct sales to end-users. Before sending email for tech support please check with your resellers or integrators if you need any services, they are the ones who sold you your system and they should know best as to what can be done, how they serve you is a good reference for future purchases.

We appreciate every customer and would like to provide the best service to you. Providing fast service to our customers is our top priority. However we receive many phone calls and a huge amount of email from all over the world. At the present time it is impossible for us to respond to every single inquiry. Therefore it is quite possible that if you send an email to us that you may not receive a response.

We have done many compatibility tests and reliability tests to make sure our products have the best quality and compatibility. In case you need service or technical support, please understand the constraint we have and **always check with the reseller who sold the product to you first.**

To expedite service, we recommend that you follow the procedures outlined below before contacting us. With your help, we can meet our commitment to provide the best service to the **greatest number of ABIT customers:**

- 1. Check the Manual.** It sounds simple but we have taken a lot of care in making a well-written and thorough manual. It is full of information that doesn't only pertain to motherboards. The CD-ROM included with your board will have the manual as well as drivers. If you don't have either one, go to our Program Download Area of the Website or FTP server.
- 2. Download latest BIOS, software or drivers.** Please go to our Program Download area on our Website to check to see if you have the latest BIOS. They are developed over periods of time to fix bugs or incompatibilities. **Also please make sure you have the latest drivers from your peripheral cards makers!**
- 3. Check the ABIT Technical Terms Guide and FAQ on our Website.** We are trying to expand and make the FAQs more helpful and information rich. Let us know if you have any suggestions. For hot topics check out our HOT FAQ!

- 4. Internet Newsgroups.** They are a great source of information and many people there can offer help. ABIT's Internet News group, alt.comp.periphs.mainboard.abit, is an ideal forum for the public to exchange information and discuss experiences they have had with ABIT products. Many times you will see that your question has already been asked before. This is a public Internet news group and it is reserved for free discussions. Here is a list of some of the more popular ones:

alt.comp.periphs.mainboard.abit

comp.sys.ibm.pc.hardware.chips

alt.comp.hardware.overclocking

alt.comp.hardware.homebuilt

alt.comp.hardware.pc-homebuilt

- 5. Ask your reseller.** Your ABIT authorized distributor should be able to provide the fastest solution to your technical problem. We sell our products through distributors who sell to resellers and stores. Your reseller should be very familiar with your system configuration and should be able to solve your problem much more efficiently than we could. After all, your reseller regards you as an important customer who may purchase more products and who can urge your friends to buy from him or her as well. They integrated and sold the system to you. They should know best what your system configuration is and your problem. They should have reasonable return or refund policies. How they serve you is also a good reference for your next purchase.
- 6. Contacting ABIT.** If you feel that you need to contact ABIT directly you can send email to the ABIT technical support department. First, please contact the support team for the branch office closest to you. They will be more familiar with local conditions and problems and will have better insight as to which resellers offer what products and services. Due to the huge number of emails coming in every day and other reasons, such as the time required for problem reproduction, we will not be able to reply to every email. Please understand that we are selling through distribution channels and don't have the resources to serve every end-user. However, we will try to do our best to help every customer. Please also remember that for many of our technical support team English is a second language, you will have a better chance of getting a helpful answer if your question can be understood in the first place. Be sure to use very, simple, concise language that clearly states the problem, avoid rambling or flowery language and always list your system components. Here is the contact information for our branch offices:

North America and South America:

ABIT Computer (U.S.A.) Corporation

45531 Northport Loop West,
Fremont, California 94538, U.S.A.

Tel: 1-510-623-0500

Fax: 1-510-623-1092

sales@abit-usa.com

technical@abit-usa.com

<http://www.abit-usa.com>

U.K. and Ireland:

ABIT Computer (U.K.) Corporation Ltd.

Unit 3, 24-26 Boulton Road,
Stevenage, Herts SG1 4QX, U.K.

Tel: 44-1438-228888

Fax: 44-1438-226333

sales@abitcomputer.co.uk

technical@abitcomputer.co.uk

*Germany, Benelux (Belgium, Netherlands, Luxembourg),
Denmark, Norway, Sweden, Finland, and Switzerland:*

AMOR Computer B.V. (ABIT's European Office)

Van Coehoornstraat 7,
5916 PH Venlo, The Netherlands

Tel: 31-77-3204428

Fax: 31-77-3204420

sales@abit.nl

technical@abit.nl

<http://www.abit.nl>

*Austria, Czech, Romania, Bulgaria, Yugoslavia, Slovakia,
Slovenia, Croatia, Bosnia, Serbia, and Macedonia:*

Asguard Computer Ges.m.b.H

Schmalbachstrasse 5,
A-2201 Gerasdorf/Wien, Austria

Tel: 43-1-7346709

Fax: 43-1-7346713

asguard@asguard.at

Japan:**ABIT Computer (Japan) Co. Ltd.**

Fax: 81-3-5396-5110

<http://www.abit4u.jp>***Shanghai:*****ABIT Computer (Shanghai) Co. Ltd.**

Tel: 86-21-6235-1829

Fax: 86-21-6235-1832

<http://www.abit.com.cn>***Russia:*****ABIT Computer (Russia) Co. Ltd.**

Fax: 7-095-937-2837

techrussia@abit.com.tw<http://www.abit.ru>***France, Italy, Spain, Portugal, and Greece:*****ABIT Computer France SARL**

Tel: 33-1-5858-0043

Fax: 33-1-5858-0047

<http://www.abit.fr>***All other territories not covered above please contact Taiwan Head Office:***

When contacting our headquarters please note we are located in Taiwan and we are 8+ GMT time. In addition, we have holidays that may be different from those in your country.

ABIT Computer Corporation

No.323, Yang Guang St., Neihu, Taipei, 114, Taiwan

Tel: 886-2-8751-8888

Fax: 886-2-8751-3382

sales@abit.com.twmarket@abit.com.twtechnical@abit.com.tw<http://www.abit.com.tw>

7. **RMA Service.** If your system has been working but it just stopped, but you have not installed any new software or hardware recently, it is likely that you have a defective component. Please contact the reseller from whom you bought the product. You should be able to get RMA service there.
8. **Reporting Compatibility Problems to ABIT.** Because of tremendous number of email messages we receive every day, we are forced to give greater weight to certain types of messages than to others. For this reason, any compatibility problem that is reported to us, giving detailed system configuration information and error symptoms will receive the highest priority. For the other questions, we regret that we may not be able to reply directly. But your questions may be posted to the Internet news group in order that a larger number of users can have the benefit of the information. Please check the news group from time to time.
9. **How to Get Technical Support:** If you encounter any problems and need help from our technical staff, please take the time to fill out the Technical Support Form and send it to your dealer or our technical support mailbox. The mailbox address is: technical@abit.com.tw. We will try to solve your problem as soon as possible. You must provide specific information on your equipment. Also please describe in detail the problems you encountered. It's helpful and enables our technicians to analyze your problems more quickly.

Information on items marked with an asterisk "*" on the Technical Support Form are required.

Thank you

ABIT Computer Corporation

<http://www.abit.com.tw>

**Technical Support Form**🏢 **Company Name:**☎ **Phone Number:**👤 **Contact Person:**📠 **Fax Number:**✉ **E-mail Address:**

VGA Card Product Name	*		
GPU	*	BIOS	*
Memory	*	O/S	*
<input type="checkbox"/> TV-Out <input type="checkbox"/> DVI <input type="checkbox"/> VIO		Driver	*
M/B maker/model	*		
CPU Type	Intel: <input type="checkbox"/> PII <input type="checkbox"/> PIII <input type="checkbox"/> P4 AMD: <input type="checkbox"/> Socket A Other: _____		
Chipset	<input type="checkbox"/> Intel <input type="checkbox"/> VIA <input type="checkbox"/> SiS <input type="checkbox"/> ALi Chipset code name description: _____		
Hardware name	Type	Specifications	
HDD IDE1 IDE2			
CD-ROM IDE1 Drive IDE2			
System Memory Size (SDRAM)	*	*	
Monitor maker/model	*	*	

Problem Description:
