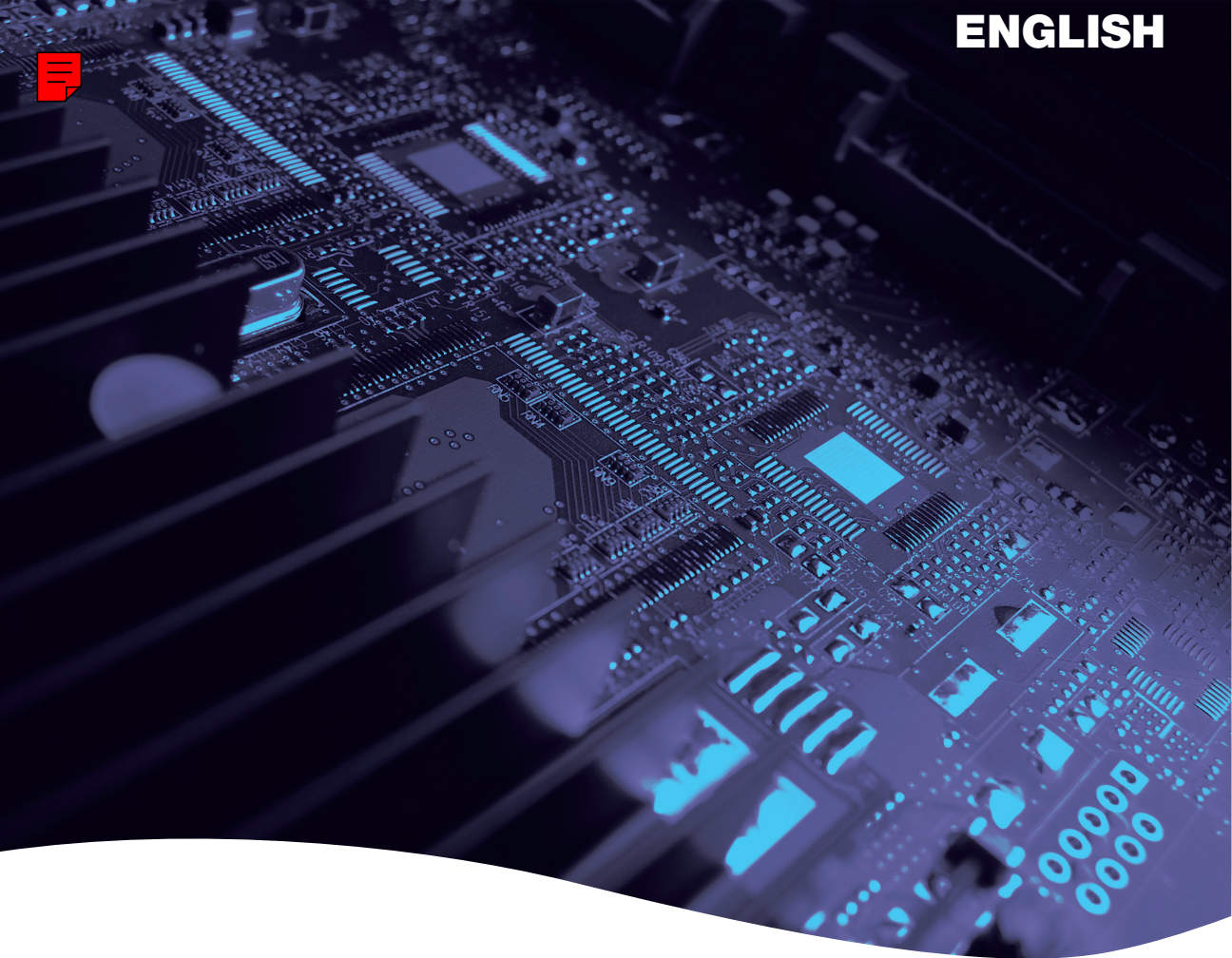


ENGLISH



Matrox **M-Series**

M9120 • M9120 Plus LP • M9125 • M9140 LP

User Guide

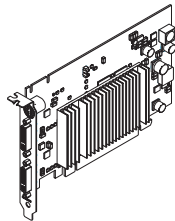
20070-301-0100
2008.05.13

Overview

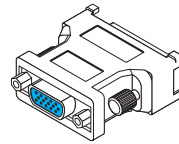
Thank you for purchasing a Matrox M-Series graphics card. This product is a high-performance graphics card that plugs into a PCIe (PCI Express) ×1 or ×16 slot inside your personal computer. With a Matrox M-Series card, you can use 2 or 4 computer monitors at a time depending on your card.

Hardware supplied

Matrox M9120 or M9125

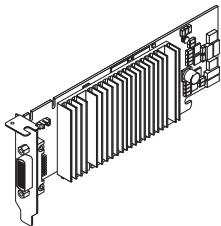


Matrox graphics card
(M9120 card shown)

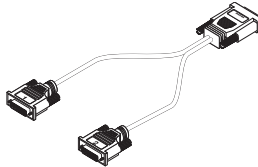


2 DVI-to-HD15 adapters

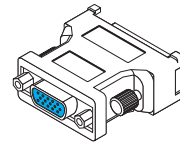
Matrox M9120 Plus LP



Matrox graphics card

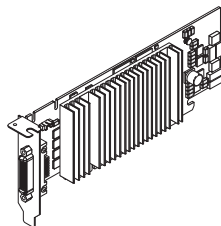


1 dual-monitor cable (LFH60-to-DVI)

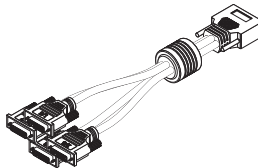


2 DVI-to-HD15 adapters

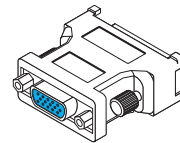
Matrox M9140 LP



Matrox graphics card



1 quad-monitor cable (KX20-to-DVI)



4 DVI-to-HD15 adapters

Software available (for Windows 2000/XP/Vista)

- **Matrox PowerDesk** – to use your Matrox graphics hardware. Matrox provides 32-bit and 64-bit versions of the display driver. Matrox makes new display drivers available on the Matrox Technical Support Web site (www.matrox.com/graphics/support/drivers).
- **Other software** – see the CD-ROM *Readme* file

Installation overview



Note: If your Matrox product is already partially or fully installed on your computer, some or all the installation information in this guide may not apply to you. However, this information may be useful if you need to reinstall your Matrox product.

To install your Matrox product:

- 1** Install the Matrox card – see “[Hardware installation](#)”, page 4.
- 2** Connect your monitors – see “[Standard \(ATX\) connection setup](#)”, page 8 or “[Low-profile connection setup](#)”, page 11.
- 3** Install the software – see “[Software setup](#)”, page 15.

Hardware installation

This section describes how to install your Matrox card. For information specific to your computer, like how to remove its cover, see your system manual.



WARNING: To avoid personal injury and to prevent damage to your computer or Matrox hardware, turn off your computer, unplug it, and then wait for it to cool before you install your Matrox product and touch any of the internal parts of your computer.

While your computer is turned off but still plugged in, some electrical current is supplied to the motherboard. This current may prevent newly installed hardware from working properly.

Also, static electricity can severely damage electronic parts. Before touching any electronic parts, drain static electricity from your body (for example, by touching the metal frame of your computer). When handling a card, carefully hold it by its edges and avoid touching its circuitry.

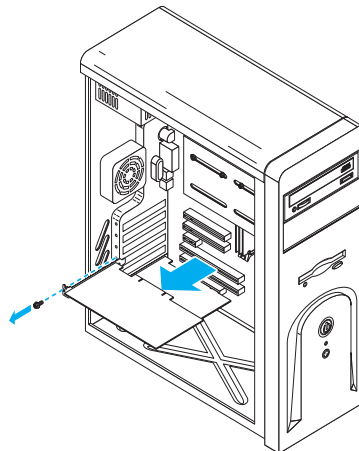


Note: Most Matrox low-profile graphics cards ship with standard (ATX) brackets compatible with most systems. If you have a low-profile system, you may need to change the standard bracket on your graphics card to a low-profile bracket. For more information, see [“Replacing brackets on a low-profile graphics card”](#), page 6.

1 Open your computer and remove your existing graphics card*

If a graphics card *isn't* already installed in your computer, skip to [step 2](#).

- a** Using **Add/Remove Programs** (Windows XP) or **Programs and Features** (Windows Vista) in the Windows **Control Panel**, remove any currently installed display drivers. Restart your computer for the changes to take effect.



* With multi-display mode, you may be able to use your existing graphics card. For Windows 2000/XP, see Windows 2000/XP online help under “Install additional monitors”. For Windows Vista, see the Vista online help under “Add a second monitor”.

After your computer restarts, you're prompted to install drivers for the new graphics hardware detected. Click **Cancel**.

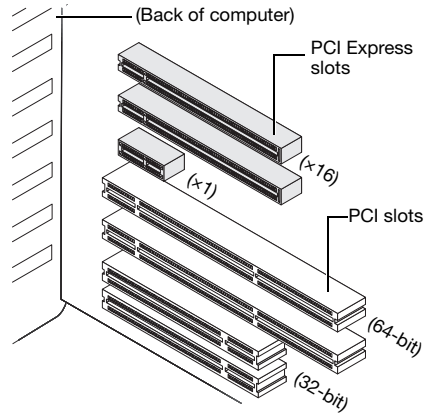
- b** Turn off your computer and all peripherals such as your monitor or printer.
- c** Open the computer and remove your existing graphics card (if any). (If graphics hardware is built into the motherboard of your computer, you may need to disable it manually. For more information, see your system manual.)

2 Choose an expansion slot

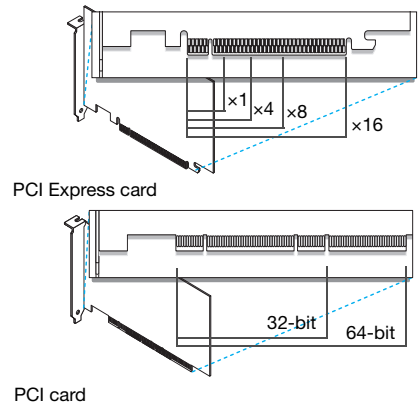
Most computers have different types of expansion slots. Choose a PCI Express (PCIe) $\times 16$ or $\times 1$ slot depending on the type of card. Your system manual should identify the location of each type of expansion slot in your computer.



Note: We recommend using a PCIe $\times 16$ slot with 16 lane support. If your system has multiple PCIe $\times 16$ slots, your choice of PCIe slots may affect your card or system performance. For more information, see your computer manual.

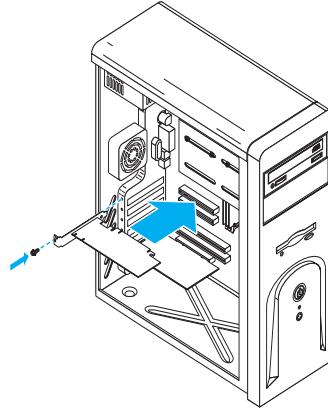


WARNING: Inserting your Matrox card into the wrong type of slot could damage your card, your computer, or both.



3 Insert your Matrox card

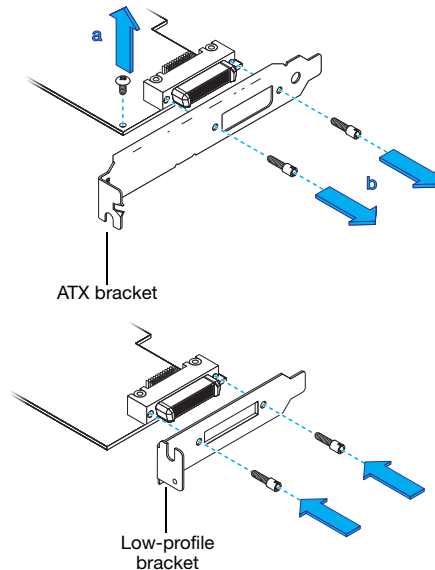
- a** Position your Matrox card over the expansion slot you've chosen.
- b** Push the card in firmly and evenly until it's fully seated in the slot.
- c** Secure the bracket of your Matrox card to the computer frame.



Replacing brackets on a low-profile graphics card

Most Matrox low-profile graphics cards ship with ATX brackets compatible with most systems. The following explains how to change brackets on your Matrox product.

- 1** Remove the current bracket from your Matrox graphics card by removing the screw (a) on top of the graphics card, then the nuts (b) on either side of the monitor connector.
- 2** Attach and fasten the new bracket with the two nuts you just removed.



For M9140 – Secure the bracket to your graphics card

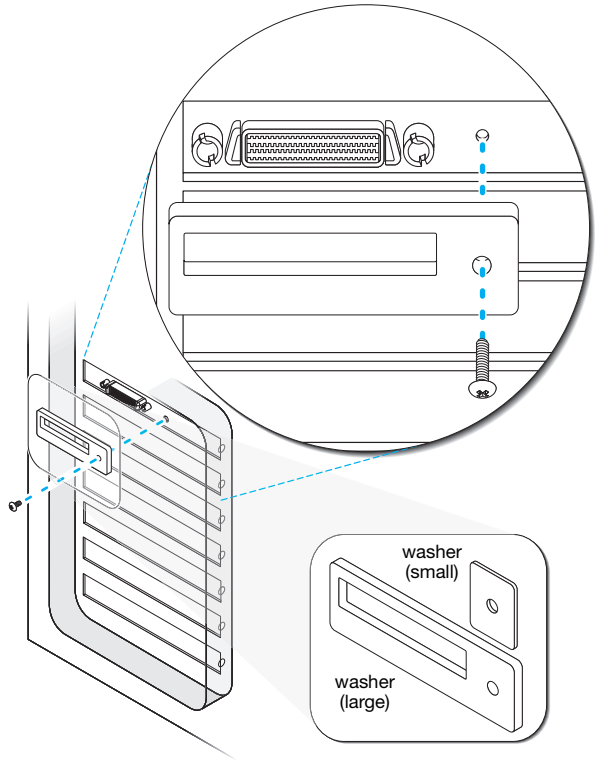
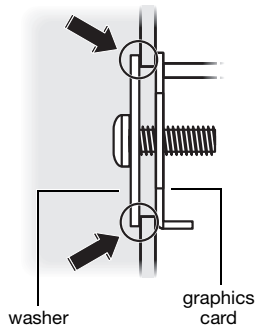


WARNING: To support the weight of your quad-monitor cable and avoid damaging your graphics card, you need to secure the bracket of your graphics card to your computer.

After you install your Matrox graphics card in your computer, but before you connect the quad-monitor cable, properly secure the large washer to the metal frame of your computer.

To secure the washer, slip it over the monitor connector, then screw the washer onto the bracket of your graphics card.

Make sure the washer lies flat against the frame of your computer.



Note: Two washers are provided with your Matrox product. Use the small washer if the large washer doesn't fit on the frame of your computer.

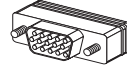
Standard (ATX) connection setup

This section describes how to connect your monitors to a standard (ATX) Matrox graphics card.

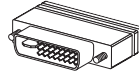


Note: To connect a *digital* monitor (a monitor that uses digital input, usually a flat panel monitor) to your Matrox product, your monitor must have a DVI connector.

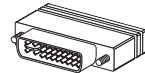
Some monitors with DVI connectors support both digital and analog input. If you're using one of these monitors with your Matrox product, make sure it's configured to use the correct type of input. For more information, see your monitor documentation.



HD-15 connector (analog)



DVI connector
(DVI-D: digital)



DVI connector
(DVI-I: analog/digital)



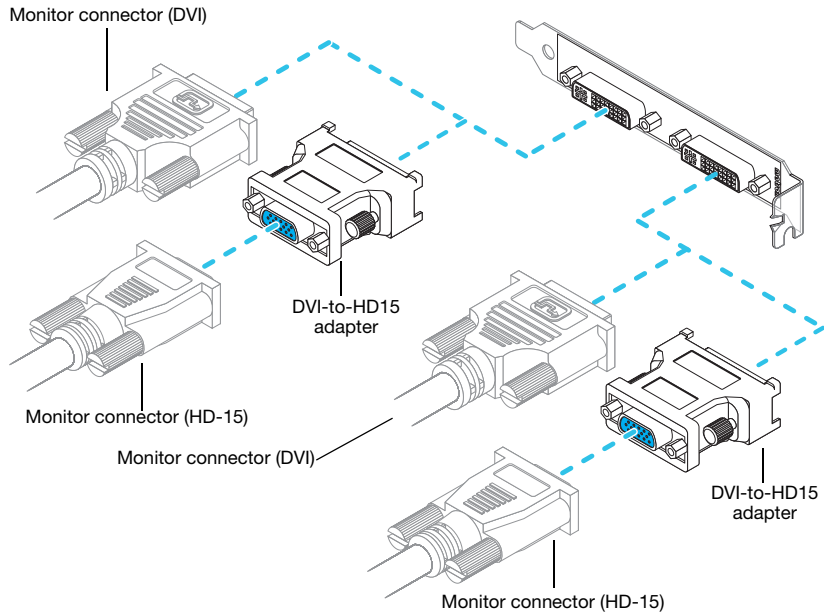
WARNING: Don't change monitor connections while your computer is turned on. While your computer is turned on, it may be using monitor settings that are specific to the current monitor connections. *Some* devices may be permanently damaged if incorrect settings are used.



Note: Whenever you change your connection setup, make sure you're using the correct connectors and that all connectors are properly fastened.

Whenever you restart your computer, make sure your monitors are already turned on. Otherwise, the software may not be able to properly detect your monitors.

Connection overview – DualHead



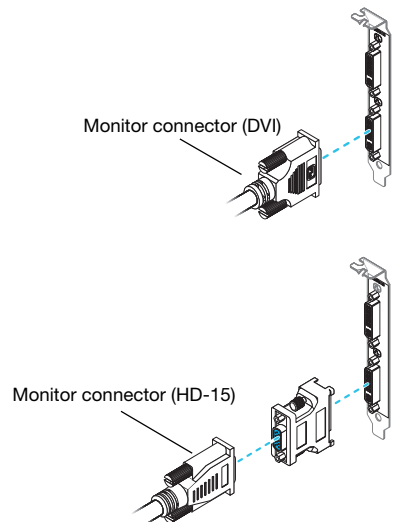
Step-by-step connection setup – DualHead

1 Connect the first monitor

Connect your preferred monitor to the main connector (A) on your Matrox graphics card.

If your monitor has a DVI connector, connect it directly to the main connector of your graphics card.

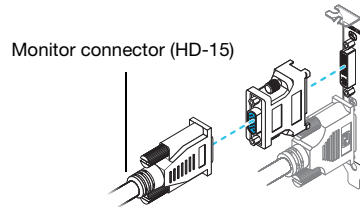
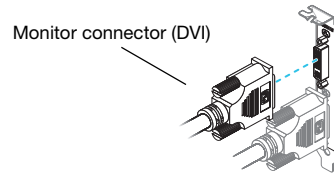
If your monitor has an HD-15 connector, use the DVI-to-HD15 adapter included with your Matrox product to connect your monitor to the main connector.



2 Connect the second monitor

If your second monitor uses a DVI connector, connect it directly to the secondary connector (B) of your graphics card.

If your second monitor uses an HD-15 connector, use a DVI-to-HD15 adapter included with your product to connect your monitor to the secondary connector.



Your Matrox card is now installed. Restart your computer and install your Matrox software (see [“Software setup”, page 15](#)).

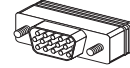
Low-profile connection setup

This section describes how to connect your monitors to a low-profile Matrox graphics card.

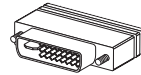


Note: To connect a *digital* monitor (a monitor that uses digital input, usually a flat panel monitor) to your Matrox product, your monitor must have a DVI connector.

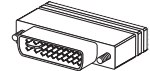
Some monitors with DVI connectors support both digital and analog input. If you're using one of these monitors with your Matrox product, make sure it's configured to use the correct type of input. For more information, see your monitor documentation.



HD-15 connector (analog)



DVI connector
(DVI-D: digital)



DVI connector
(DVI-I: analog/digital)



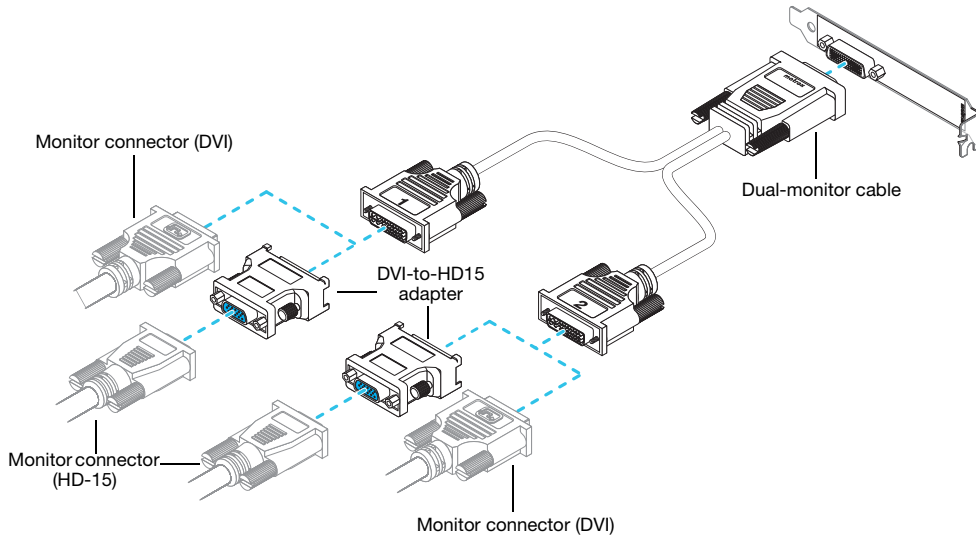
WARNING: Don't change monitor connections while your computer is turned on. While your computer is turned on, it may be using monitor settings that are specific to the current monitor connections. *Some* devices may be permanently damaged if incorrect settings are used.



Note: Whenever you change your connection setup, make sure you're using the correct connectors and that all connectors are properly fastened.

Whenever you restart your computer, make sure your monitors are already turned on. Otherwise, the software may not be able to properly detect your monitors.

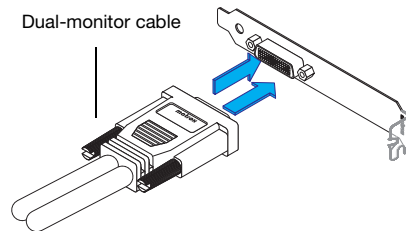
Connection overview – DualHead



Step-by-step connection setup – DualHead

1 Attach the dual-monitor cable

Attach your dual-monitor cable to the connector on the bracket of your Matrox card. Make sure the connectors are properly fastened.



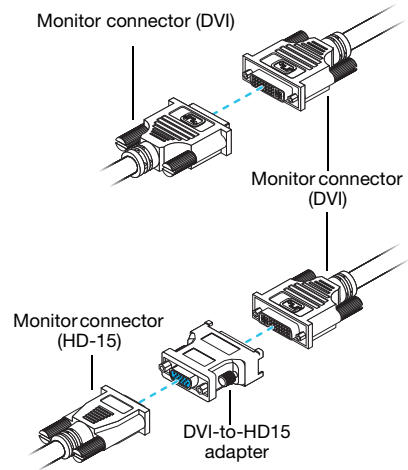
WARNING: To avoid damaging the LFH-60 connector on your dual-monitor cable or on your graphics card, carefully insert the connector on your dual-monitor cable as straight as possible into the connector on your graphics card. Specifically, inserting the connectors into each other at an angle is likely to bend and damage the pins on the connector of the dual-monitor cable.

2 Connect your monitors

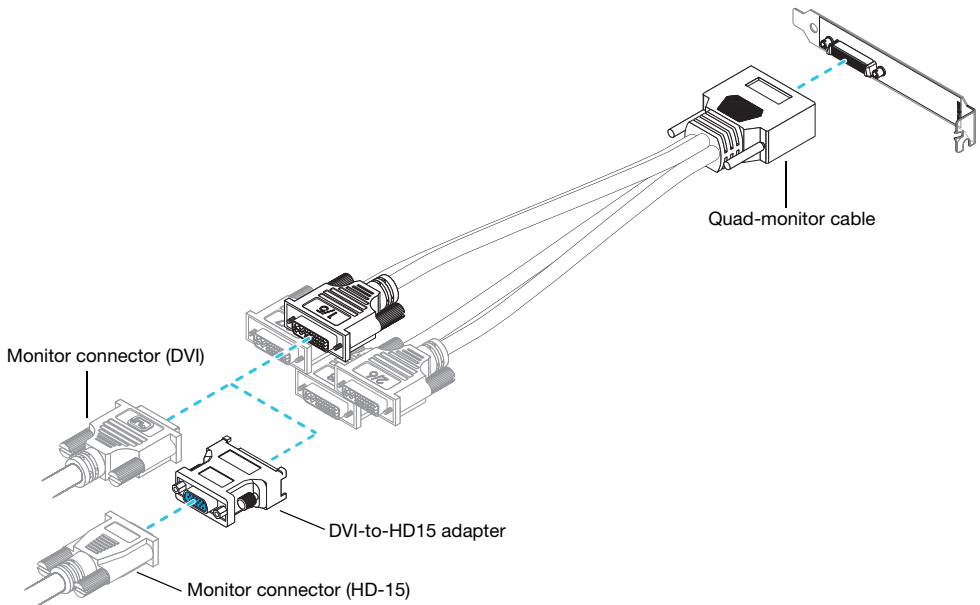
If your monitor has a DVI connector, connect your monitor cable directly to the dual-monitor cable.

If your monitor has an HD-15 connector, use a DVI-to-HD15 adapter included with your product to connect your monitor cable to your dual-monitor cable.

Make sure all connectors are properly fastened.



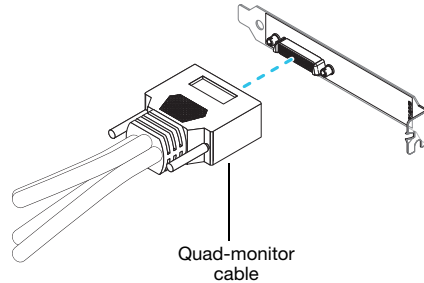
Connection overview – Quad Display



Step-by-step connection setup – Quad Display

1 Connect your quad-monitor cable

Attach your quad-monitor cable to the connector on the bracket of your Matrox card. Make sure the connectors are properly fastened.

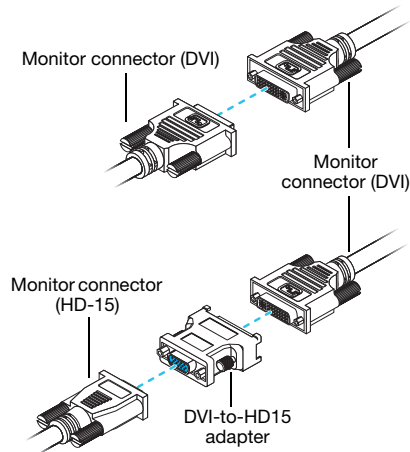


2 Connect your monitors

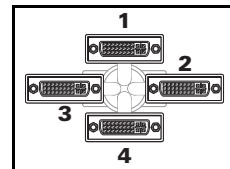
If your monitor has a DVI connector, connect your monitor cable directly to the quad-monitor cable.

If your monitor has an HD-15 connector, use a DVI-to-HD15 adapter included with your product to connect your monitor cable to your quad-monitor cable.

Make sure all connectors are properly fastened.



Note: Monitors are numbered consecutively based on which connector each is attached to. Numbering starts with the *primary display* – the one that first displays information when you restart your computer. If another graphics card is installed in your computer, display numbering may be different.



Your Matrox card is now installed. Restart your computer and install your Matrox software (see “Software setup”, page 15).

Software setup

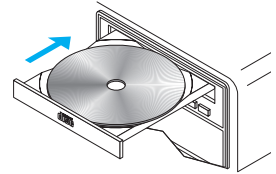


Note: This guide has references that are specific to the Matrox installation CD-ROM. If your Matrox product wasn't packaged by Matrox (for example, if it was included with your computer), your product may not include this CD-ROM.

If you don't have this CD-ROM, certain references in this guide may not reflect the software you have. For more information, see other software documentation provided by your system vendor.

This section describes how to install Matrox software for *Windows 2000*, *Windows Server 2003*, *Windows Server 2008*, *Windows XP*, and *Windows Vista*. The installation of the display driver is the same for the 32-bit and 64-bit versions.

You may need administrator rights to install certain software. For more information, see Windows documentation or contact your system administrator.



Windows 2000/XP

1 Install display driver



Windows detects new hardware when you restart. If Matrox display drivers haven't been previously installed, Windows prompts you to install a display driver. When prompted by the **Found New Hardware** wizard to install a display driver for your graphics hardware, click **Cancel**.

Insert the Matrox Installation CD-ROM and follow the on-screen instructions. The Matrox installation program installs Matrox display drivers and PowerDesk software for your Matrox product.

2 Install optional software

After your computer restarts, the setup program shows you a list of additional items you can install. Follow the on-screen instructions.

3 Set up your display software

Use Matrox PowerDesk software to change certain display settings or access Matrox features. To access PowerDesk, double-click its icon () on your Windows taskbar. To see the PowerDesk icon in Windows XP, you may need to click the **Show hidden icons** button () on your Windows taskbar. For more information on how to use Matrox PowerDesk, see Matrox PowerDesk help.

Windows Vista

1 Install display driver



Windows Vista detects new hardware when you restart and installs a standard VGA driver. To install the Matrox display driver and PowerDesk software for your product, insert the Matrox Installation CD-ROM and follow the on-screen instructions.

2 Install optional software

After your computer restarts, you can install additional software from the installation CD-ROM. If Windows User Account Control (UAC) is disabled, the setup program restarts automatically. Otherwise, you need to manually restart the setup program. To restart manually, on your Windows taskbar, click **Blocked Starting Program** → **Run Blocked Programs Matrox** → **CD Setup**. Follow the on-screen instructions.

3 Set up your display software

Use Matrox PowerDesk software to change certain display settings or access Matrox features.

To access Matrox PowerDesk, double-click its icon () on your Windows taskbar. To see the PowerDesk icon, you may need to click the **Show hidden icons** button () on your Windows taskbar.

If you don't have an icon on your Windows taskbar, you can access Matrox PowerDesk by clicking **Start** → **All programs** → **Matrox Graphics** → **Matrox PowerDesk**.

For more information on how to use Matrox PowerDesk, see Matrox PowerDesk help.

Troubleshooting

Basic procedures

This section explains basic procedures that are referred to by some troubleshooting items in this guide.

Restarting in VGA mode

Windows 2000/XP/Vista – What follows is information on how to restart your computer in *VGA mode*.

- 1 Click **Start** → **Shut Down*** → **Restart** → **OK*** to restart your computer. (* Depending on your version and configuration of Windows, this part of the step may not be necessary.)
If your primary monitor is unusable, see your system manual for information on how to restart your computer using a hardware control.
- 2 *Before* Windows starts, press [F8] for the Windows startup menu to appear. (If [F8] doesn't work, instead try pressing and holding [Ctrl] before Windows starts.)
- 3 Select "VGA mode" (or "Low resolution video"), then press [Enter].



Note: If your system stops responding while it's in VGA mode, select "Safe mode" instead.

Graphics – Main troubleshooting

This section addresses possible problems that could prevent you from using your computer.

Problem Computer doesn't display information or boot after Matrox card is installed

Cause Your Matrox card may not be properly installed.

Solution Make sure your Matrox card is properly installed. Specifically, make sure the card is firmly inserted in its expansion slot and that all connections to it are firmly in place. For more information, see "[Hardware installation](#)", page 4.

Cause If you have more than 1 PCIe ×16 slot, your graphics cards may be using a slot wired electronically to support PCIe ×1, ×4, or ×8 speeds.

Solution Try moving the PCIe card to another PCIe slot in your computer. For more information on the PCIe support of your system, see your system manual.

Cause There may be unsupported graphics hardware in your computer.

Solution If an unsupported graphics card is plugged into an expansion slot, remove it.

Solution If graphics hardware is built into your computer motherboard, your system may not have automatically disabled it when you inserted your Matrox card. Check your system manual for instructions on how to disable your computer's built-in graphics hardware.

Cause Your computer BIOS (Basic Input/Output System) settings may be incorrect.

Solution Change your BIOS settings. For more information on your computer BIOS, see your system manual.

Cause Your computer BIOS may not be up to date. For more information on your computer BIOS, see your system manual.

Solution Reinstall your previous graphics card and, if possible, update your computer BIOS. This can usually be done with software from the manufacturer of your computer. Contact your system vendor or manufacturer to get a BIOS update for your computer.

To get the correct BIOS update, you may need to know the serial number your computer displays when it restarts. (This number is usually in the lower-left corner of the display.)

Cause The BIOS of your Matrox graphics card may need to be updated or restored.

Solution For **advanced users** – If you have another VGA-compatible graphics card (PCI), you can try resetting the BIOS of your Matrox graphics card.

- 1 Turn off your computer and insert the other graphics card into an expansion slot. For more information on expansion slots, see [“Choose an expansion slot”](#), page 5.

- 2 Plug your monitor into the other graphics card and restart your computer.



Note: Make sure your computer uses the other graphics card to control your primary display. The graphics card that controls your primary display is the one that first displays information when you restart your computer.

Your computer BIOS (Basic Input/Output System) and the slot type (PCI, or PCIe – see “[Choose an expansion slot](#)”, page 5) of each graphics card help determine which graphics card controls your primary display.

To control which graphics card is used for your primary display, you may be able to change the configuration of your computer BIOS. For information on how to change your computer BIOS settings, see your system manual.

- 3 Insert your Matrox installation CD-ROM.
- 4 Click **Start** → **Run**, type `D:\Sysutils`. You will need to use the **PBIOSWin** program to update the BIOS of your Matrox graphics card. For more information on how to use this program, see the *Readme* file in the *Sysutils* folder.
- 5 Turn off your computer, remove the other graphics card, then plug your monitor into your Matrox graphics card.
- 6 Restart your computer.

Problem Wrong color balance, screen image off-center, or no picture at all

Cause Your monitor video controls may be improperly set.

Solution Adjust your monitor controls (brightness, contrast, and so on). For more information, see your monitor manual.

Cause Your monitor may not be properly connected.

Solution Make sure you're using the correct connectors (see “[Standard \(ATX\) connection setup](#)”, page 8 or “[Low-profile connection setup](#)”, page 11) and that all connectors are properly fastened.

Solution Make sure the monitor power cable is firmly in place.

Solution Make sure the connection to the back of the monitor is firmly in place.

Cause If your monitor supports multiple input sources (analog/digital), it may be configured to use the wrong source.

Solution Make sure your monitor is using the correct input source. For more information on selecting the input source for your monitor, see your monitor documentation.

Solution Change your connection setup to use a different input source. For more information, see “Standard (ATX) connection setup”, page 8 or “Low-profile connection setup”, page 11.

Problem **After the startup screen, or after display settings are changed, the screen image is garbled or unusable**
(blank screen, rolling or overlapping screen images)

Cause **Analog monitors only** – The Matrox display driver may be trying to use settings your monitor doesn’t support. This can happen if the display resolution was changed to one your monitor doesn’t support or if the monitor connected to your computer was changed without changing the display or monitor settings in the software.



WARNING: If incorrect software monitor settings are applied, *some* monitors can be permanently damaged. For more information, see your monitor manual.

Solution Make sure your monitor supports the display mode currently in use. After installing your Matrox product, your system uses either the preferred display mode for your monitor or a display mode of 800 × 600 at 60 Hz.

Solution If none of your displays are available, reinstall your Matrox display drivers. For more information on reinstalling your display driver, see the following solution.

Cause Files on your system may have been deleted or corrupted.

Solution Uninstall, then reinstall Matrox software:



Note: Before removing software, make sure you have all the necessary files to reinstall software that may still be needed. Also, make sure the display driver you reinstall supports *all* Matrox products in your computer.

Windows 2000/XP/Vista –

1 If your primary display is unusable, restart your computer in VGA mode (see “Restarting in VGA mode”, page 17).

2 To remove Matrox software:

Windows 2000/XP –

a Click **Start** → **Settings*** → **Control Panel** → **Add/Remove Programs** (double-click*) → **Matrox PowerDesk-SE** → **Change/Remove** → **Yes**. (* Depending on your version and configuration of Windows, this part of the step may not be necessary.)

b Click **Matrox Driver** → **Change/Remove** → **Yes**.

Windows Vista –

- a** Click **Start** → **Settings*** → **Control Panel** → **Programs*** → **Programs and Features** → **Matrox PowerDesk-SE** → **Uninstall** → **Yes**. (* Depending on your version and configuration of Windows, this part of the step may not be necessary.)
 - b** Click **Matrox Driver** (or **Matrox M-Series Driver**) → **Uninstall/Change** → **Yes**.
- 3** Restart your computer for the changes to take effect.
- 4** After your computer has restarted, install the latest display driver for your Matrox card. You may also need to reinstall other Matrox software.



Note: Windows 2000/XP/Vista – You may need administrator rights to uninstall certain software. For more information, see Windows documentation.

Graphics – Extra troubleshooting

The following are extra troubleshooting items related to graphics hardware.

Problem Can't use Windows, Windows reports a configuration error, and/or can't install or uninstall Matrox display driver



Note: Windows 2000/XP/Vista – You may need administrator rights to install certain software. For more information, see Windows documentation.

Cause The problem may be specific to the motherboard in your computer.

Solution There may be a software update available for your motherboard. To find out what motherboard model your computer is using, see your system manual. For more information, contact the maker of your motherboard or computer. Many motherboard or computer manufacturers have software updates available on their Web site.

Cause Files on your system may have been deleted or corrupted.

Solution Uninstall, then reinstall Matrox software. For more information, see [page 20](#).

Problem Monitor settings aren't automatically detected



WARNING: If incorrect software monitor settings are used, your display may become unusable and *some* monitors can be permanently damaged. For more information, see your monitor manual.

Cause If a monitor was changed or added while Windows was running, the new monitor may not be detected by the software.

Solution Restart your computer. If your monitor is a Plug-and-Play (DDC) monitor, it should be automatically detected by the software.

Problem **Built-in network hardware doesn't work after graphics card is installed**

Cause The installation of a graphics card may have caused your computer to reallocate system resources.

Solution Try reinstalling your network drivers.

Solution Try moving your Matrox graphics card to another PCI (or PCIe depending on your product) slot in your computer. For instructions on how to safely install your Matrox card, see ["Hardware installation"](#), page 4.

Cause You may be using Windows XP Service Pack 2.

Solution For more information, see the Microsoft Web site (www.microsoft.com).

Problem **After game for Windows 2000/XP/Vista starts, monitor doesn't display properly**
(blank screen, rolling or overlapping screen images)

Cause If your game uses a low-resolution (640 × 480 and below), full-screen display mode, your monitor may not support the refresh rate the Matrox driver is using.

Solution **1** If the game is still running in full-screen mode and your monitor is unusable, exit the game. To do this, press [Alt]+[Tab] *once*, right-click the name of the game on the Windows taskbar, then click **Close**.

2 Make sure the correct monitor is selected in Windows.

Problem **3D and video programs don't work**

Cause Your computer's other BIOS settings may be incorrect.

Solution Reset your computer BIOS settings to the factory defaults using your computer's built-in BIOS setup utility. The factory defaults are usually the "safest" settings. Check your system manual for more information.

Problem Using multiple displays under Windows 2000/XP/Vista, program doesn't work with your Matrox product

Cause Your main graphics card may not be controlling your primary display. The graphics card that controls your primary display is the one that first displays information when you restart your computer.

A program that doesn't recognize multiple displays may not work with a graphics card unless it's controlling your primary display.

Your computer BIOS (Basic Input/Output System) and the slot type (PCI, or PCIe – see [“Choose an expansion slot”](#), page 5) of each graphics card help determine which graphics card controls your primary display.

Solution If you're having problems with a program that can be moved on your Windows desktop, run this program on your primary display. Make sure the program window doesn't overlap any other display. If the program doesn't work with the graphics card controlling your primary display, or you want your main graphics card to control your primary display, see the other solutions.

Solution **Windows 2000/XP and Windows Server 2003** – If you're having problems with a program that can't be moved on your Windows desktop, try changing which display is your primary display.

- 1** Right-click your Windows desktop background, then click **Properties** → **Settings**.
- 2** Select the display you want as the primary display and enable **Use this device as the primary monitor**.
- 3** Click **OK** or **Apply** for your changes to take effect.

Solution Change the configuration of your computer BIOS so that the slot type of your main graphics card has priority for becoming the primary display. For information on how to change your computer BIOS settings, see your system manual.

If your computer BIOS doesn't let you select which slot type has priority for becoming the primary display, a BIOS update may be available to let you do this. (The BIOS of most computers can be updated with software.) For a possible BIOS update for your computer, contact your system vendor.

Solution If there's a graphics controller built into the motherboard of your computer, by changing your computer BIOS settings, you may be able to change which device controls your primary display. For more information, see your system manual.

Solution If you don't need to use the graphics card that's controlling your primary display, remove it from your computer. If your primary display is controlled by the motherboard of your computer, see your system manual for information on how to disable this graphics controller.

Cause The program you're using may not work properly with systems using more than one display at a time.

Solution An update may be available for the program you're using. This update may fix problems this program has with multi-display systems. For more information, contact the software distributor for the program you're using.

Solution If you're using multiple displays in *independent* mode, try using *stretched* mode instead. Programs that don't work in independent mode may work in stretched mode. For more information, see Matrox PowerDesk help.

Problem **Not all graphics cards in the computer are fully supported**
(Software doesn't work with a certain graphics card, or another graphics card doesn't work at all)

Cause If you have different models of graphics cards in your computer, your Matrox display driver may not support all the graphics cards in your computer.

Solution Under Windows 2000/XP/Vista, you can use different display drivers for different products. Software that depends on a specific display driver feature may not work if your graphics hardware is using different display drivers.



Note: If your Matrox product was provided by the manufacturer of your computer, check the Web site of that manufacturer for the latest display driver. A display driver provided by the manufacturer of your computer is more likely to be tested with your computer model.

Solution If a graphics card isn't supported, you may need to remove it. If there's graphics hardware built into the motherboard of your computer that's not supported by your software, see your system manual for information on how to disable this graphics hardware.

Cause **Windows 2000/XP/Vista** – If the Windows method for display driver installation was used (instead of running the setup program included with your Matrox display driver), the driver may not be installed for all the graphics cards it supports.

Solution Run the setup program included with the Matrox display driver. The setup program automatically installs the display driver for each Matrox graphics card it supports.

Cause **Windows Vista/Server 2008** – You may be using a WDDM (Windows Vista Display Driver Model) display driver that doesn't support all graphics hardware in your computer. For more information, see the Microsoft Web site.

Solution Make sure you're using a WDDM display driver that supports all the graphics hardware installed on your system.

Solution Uninstall the WDDM driver and install XPDM (Windows XP Display Driver Model) display drivers for all your graphics cards. Windows Vista supports multiple XPDM drivers running at once.

Solution Disable or remove any graphics cards not supported by the driver you want to use.

Problem In multi-display mode, displays aren't numbered consecutively

Cause If you have more than one graphics card in your computer, the display numbering may not be consecutive for the displays of a multiple-display card (for example, a DualHead supporting card). Display numbering depends on the types of expansion slots used in your computer (PCI, and PCIe) and the BIOS settings of your computer.



Solution Windows 2000/XP/Vista – Move the displays in Windows.

- 1** Windows 2000/XP – Right-click your Windows desktop background, then click **Properties** → **Settings**.
Windows Vista – Right-click your Windows desktop background, then click **Personalize** → **Display Settings**.
- 2** Select a display and move it according to the physical position of the monitor it's associated with.
- 3** Click **OK**.



Note: In multi-display mode, you may have limited control over the arrangement of your displays. For more information, see Matrox PowerDesk documentation.

Problem Screen image defects appear, program doesn't run properly, or Windows doesn't work properly (example: mouse pointer not drawn properly)

Cause Some programs may not work properly with some Matrox acceleration.

Solution Windows 2000/XP/Vista – Disable Windows effects:

Windows 2000 –

- 1** Right-click your Windows desktop background, then click **Properties** → **Effects**.
- 2** Disable one or more features under **Visual effects**.
- 3** Click **OK** → **OK**.

Windows XP –


- 1 Right-click your Windows desktop background, then click **Properties → Appearance → Effects**.
- 2 Disable one or more features.
- 3 Click **OK → OK**.


Windows Vista –

- 1 Right-click your Windows desktop background, then click **Personalize → Window Color and Appearance**.
- 2 If you're using Windows Aero, click **Open classic appearance properties for more color options**. Under **Color scheme**, select **Windows Vista Basic**.
- 3 Click **Effects** and then disable one or more features.
- 4 Click **OK → OK**.

Solution Windows Vista – Disable Windows Aero. Right-click your Windows desktop background, then click **Personalize → Window Color and Appearance → Open classic appearance properties for more color options**. Under **Color**, select **Windows Vista** or **Windows Classic**.

Solution If possible, update your Matrox display driver. Matrox makes new display drivers available on the Matrox Technical Support Web site (www.matrox.com/graphics/support/drivers).

 **Note:** If your Matrox product was provided by the manufacturer of your computer, check the Web site of that manufacturer for the latest display driver. A display driver provided by the manufacturer of your computer is more likely to be tested with your computer model.

 **Note:** If you identify a program that doesn't work well with Matrox acceleration, please contact Matrox technical support (see page 44) and describe the problem. This information may help us come up with a fix or work-around in a future driver release.

Problem Program window or dialog box doesn't appear on screen

Cause Another window or dialog box may be covering the window or dialog box you want to see.

Solution Move, close, or minimize any window or dialog box that may be covering the window or dialog box you want to see.

Cause If you're using multi-display mode, the program window or dialog box may be in a display or on a monitor that's unusable. (For example, your monitor may not be properly connected or configured.)

Solution Make sure all the displays and monitors you want to use are usable. For more information, see other troubleshooting items in this guide.

Cause The software may be using a display you didn't intend to use or the software may be configured to use more displays than the actual number of monitors you have. (For example, you may be in DualHead Multi-Display mode but you only have one monitor.)

Solution Disable the display:

Windows 2000/XP –

- 1 Right-click your Windows desktop background, then click **Properties** → **Settings**.
- 2 Select the display you want to disable, then clear the **Extend my Windows desktop onto this monitor** check box.
- 3 Click **OK** or **Apply** for your changes to take effect.

Windows Vista –

- 1 Right-click your Windows desktop background, then click **Personalize** → **Display settings**.
- 2 Select the display you want to disable, then clear the **Extend the desktop onto this monitor** check box.
- 3 Click **OK** or **Apply** for your changes to take effect.



Cause The program window or dialog box may be somewhere off-screen.

Solution If the program window you want to see is named on the Windows taskbar, right-click on it and select **Maximize**. (If you click **Restore** the program window goes back to its previous position. To fix this problem, see the other solutions.)

Solution Manually move the program window or dialog box:

- 1 Press [Alt]+[Space].
- 2 If you see a pop-up menu, click **Move**. If you don't see a pop-up menu, press [M] (for **Move**).
- 3 Press on one of the arrow keys once and move your mouse pointer to where you want the window or dialog box to appear, then click. The program window or dialog box should appear where you clicked.

Solution Windows 2000/XP/Vista –

- 1 Double-click the PowerDesk icon () on your Windows taskbar to access the PowerDesk main interface. To see the PowerDesk icon in Windows XP/Vista, you may need to click the **Show hidden icons** button () on your Windows taskbar.
If you don't have an icon on your Windows taskbar, you can access Matrox PowerDesk by clicking **Start → All programs → Matrox Graphics Inc → Matrox PowerDesk**.
- 2 Click **Desktop Management**.
- 3 Enable one or more of the following features:
 - **Open program windows**
 - **Center dialog boxes and message boxes**
- 4 Choose where you want the program window or dialog box to appear.

For more information, see Matrox PowerDesk help.

Problem Display on digital monitor appears blurry or uses only a portion of the screen

Cause You may be using a lower display resolution than what your digital monitor supports. If your monitor supports display scaling, the image on your screen may appear blurry. If display scaling isn't supported, the display may use only a portion of your screen.

Solution Select the highest display resolution available. This generally results in better image quality. (While using 2 digital monitors at the same time, certain limitations may apply. For more information, [see page 35.](#))

Problem Can't apply Windows Aero color scheme

Cause You may be using a display driver designed for Windows XP (XPDM).

Solution Windows Aero is supported only with a display driver designed for Windows Vista (WDDM). For a Windows Vista display driver, see the Matrox Technical Support Web site (www.matrox.com/graphics/support/drivers).

Cause You may be using a 16-bit color palette.

Solution Try using a 32-bit color palette instead.

Video

The following troubleshooting items address problems related to video files.

Problem Video file playback is jerky (skipping frames)



Note: Jerky video file playback may be the result of slow playback or recording. Slow recording causes frames to be dropped (frames aren't recorded). If jerky video is caused by frames that were dropped during recording or by the video settings such as the encoding method, the problem can only be fixed by recapturing the video under better conditions or with different video settings.

Cause Your hard disk may be too slow.

Solution Try *defragmenting* your hard disk. To defragment a hard disk:

Windows 2000/XP – Click **Start** → **Programs** → **Accessories** → **System Tools** → **Disk Defragmenter**.

Windows Vista – Click **Start** → **Settings*** → **Control Panel** → **System and Maintenance*** → **Performance Information and Tools** → **Advanced Tools** → **Open Disk Defragmenter**. (* Depending on your version and configuration of Windows, this part of the step may not be necessary.)

Solution If possible, try using a faster disk.



Tip: If your computer has more than one hard disk, you may get better results if you play back video files from a disk *other than* the one where the Windows swap file is stored. The Windows swap file is usually stored on drive “C.”

Solution Make sure the drive you're using (a hard disk or DVD drive) is using DMA (if your drive supports DMA transfers). To use DMA:



WARNING: Not all drives support DMA well. For more information, see the documentation that came with your hard disk.

Windows 2000/XP –

- 1 Click **Start** → **Settings*** → **Control Panel** → **Performance and Maintenance*** → **System** (double-click*) → **Hardware** → **Device Manager**. (* Depending on your version and configuration of Windows, this part of the step may not be necessary.)
- 2 Double-click the **IDE ATA/ATAPI controllers** list item to expand it, then double-click the name of the appropriate controller.

- 3 Change each **Transfer Mode** setting to “**DMA if available**”.
- 4 Click **OK** to accept the changes.

Windows Vista –

- 1 Click **Start** → **Settings*** → **Control Panel** → **System and Maintenance*** → **System** → **Device Manager**. (* Depending on your version and configuration of Windows, this part of the step may not be necessary.)
- 2 Double-click the **IDE ATA/ATAPI controllers** list item to expand it, then double-click the name of the appropriate controller.
- 3 Click **Advance Settings**.
- 4 Under **Device Properties** click “**Enable DMA**”.
- 5 Click **OK** to accept the changes.

Cause Too many programs may be running (using up computer resources).

Solution Close other programs, including memory-resident programs like **System Agent**.

Cause Your video player may not properly support the video file format.

Solution Try using a different video player.

Problem Mouse pointer flickers or disappears when it's over a video window

Cause You may be using a customized mouse pointer. Windows draws customized mouse pointers in a way that may cause them to flicker or disappear while they're over a video window.

Solution Windows 2000/XP/Vista – Use default Windows mouse pointers:

- 1 Windows 2000/XP – Click **Start** → **Settings*** → **Control Panel** → **Printers and Other Hardware*** → **Mouse** (double-click*). (* Depending on your version and configuration of Windows, this part of the step may not be necessary.)

Windows Vista – Click **Start** → **Settings*** → **Control Panel** → **Hardware and Sound*** → **Mouse** (double-click*). (* Depending on your version and configuration of Windows, this part of the step may not be necessary.)
- 2 Click the **Pointers** tab.
- 3 In the **Scheme** box, select (or reselect) “**(None)**”; then click **OK**.

DVD

The following troubleshooting items address problems related to DVD. (For general video-related troubleshooting items, see “Video”, page 29.)

Problem DVD video playback is jerky (skipping frames)

Cause Your DVD drive may be too slow.

Solution If your DVD drive supports DMA transfers, enable this feature (see page 29).

Problem Can't play certain DVD videos

Cause A DVD video may not play back because the region setting on your DVD player doesn't match the region code on the DVD-ROM disc. DVD players and videos use region codes to prevent the playback of video that was intended only for a certain region or market.

Solution To get a copy of a DVD video that's compatible with the region code of your DVD player, contact the vendor of that video.

Problem Can't record DVD video

Cause The video source may be copy protected. Your Matrox product may not let you make copies of copy-protected video. (Some video sources let you make a copy of a video, but you may not be able to make a copy of that copy.)

Solution To get copies of a copy-protected video, contact the vendor of the video.

Sound

The following troubleshooting items address problems related to sound cards.

Problem Sound doesn't record, video files play back with no sound, or sound output is distorted or too loud

Cause If the sound problem is with a particular device (for example, TV or speaker), the volume control on the device itself may need adjusting.

Solution Adjust the volume control on the device itself.



Cause Audio cables may be loose or incorrectly wired.

Solution Make sure your sound card cables are properly connected .

Cause Your sound card's Windows software settings may be incorrect. Specifically, input or output may be disabled, or volume levels may be too low or too high.

Solution Make sure your sound card's Windows software settings are correct.

Windows 2000/XP –

1 Double-click the speaker icon ( or ) on the Windows taskbar.

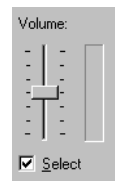
If you *don't* see the speaker icon:

Windows 2000 –

- a** Click **Start** → **Settings** → **Control Panel**.
- b** Double-click the **Multimedia** or **Sounds and Multimedia** icon.
- c** Enable “**Show volume control on the taskbar**”.
- d** Click **OK**.
- e** Double-click the speaker icon on the taskbar.

Windows XP –

- a** Click **Start** → **Settings*** → **Control Panel** → **Sound, Speech, and Audio Devices*** → **Sounds and Audio Devices** (double-click*). (* Depending on your configuration of Windows, this part of the step may not be necessary.)
 - b** Enable “**Place volume icon in the taskbar**”.
 - c** Click **OK**.
 - d** Double-click the speaker icon on the taskbar.
- 2** Click **Options** → **Properties**.
- 3** Click the **Recording** button, enable all check boxes in the list box, then click **OK**.
- 4** For the **Line In** and/or **Microphone** controls, make sure the **Volume** slider levels are okay (if you're not sure, try half level), and the appropriate **Select** check box is enabled.
- 5** Click **Options** → **Properties**.
- 6** Click the **Playback** button, enable all check boxes in the list box, then click **OK**.




- 7 For the **Master**, **Line**, **Aux**, and/or **Wave** controls, make sure the **Volume** sliders are at one-quarter to one-half levels (if you're not sure, try half level), and the **Mute** check boxes are cleared.
- 8 Close the dialog box.





Note: Depending on your sound driver, certain labels may be different. For example, **Line In** may be labeled **Line**.

Windows Vista –

- 1 Right-click the speaker icon () on the Windows taskbar.
If you *don't* see the speaker icon:
 - a Right-click the taskbar and select **Properties** → **Notification area**.
 - b Under **System icons**, enable the **Volume** check box.
 - c Click **OK**.
 - d Right-click the speaker icon on the Windows taskbar.
- 2 Select **Playback** and make sure all the devices you want to use are listed as working. If a device is listed as not working, right-click the device icon and select **Enable**.




Note: To see all your devices, right-click anywhere on the property sheet and make sure **Show disabled devices** and **Show Disconnected Devices** are enabled.

- 3 For each device you want to use, double-click the device icon and select **Levels**. Make sure the volume slider value is okay and the volume button is enabled () . Click **OK**. (To test the volume of a playback device, right-click the device icon in the **Playback** property sheet and select **Test**.)

- 4 Select **Recording** and make sure all the devices you want to use are listed as working. If a device is listed as not working, right-click the device icon and select **Enable**.



Note: To see all your devices, right-click anywhere on the property sheet and make sure **Show disabled devices** and **Show Disconnected Devices** are enabled.

- 5 For each device you want to use, double-click the device icon and select **Levels**. Make sure the volume slider value is okay (if you're not sure, try a value of 50) and the volume button is enabled () . Click **OK**. (To test the volume of a recording device, make sure an audio source plugged into it and playing, then watch the volume meter next to the audio device icon. The volume meter should be between 60 and 100%.)

Cause The problem may be specific to the audio hardware of your computer.

Solution For more information, see the documentation for the audio hardware of your computer.

More Information

We provide additional information in help and *Readme* files. Be sure to check for any last-minute release notes included with your product and in the Matrox CD-ROM *Readme* file. Also, check the Matrox Web site (www.matrox.com/graphics) for the latest Matrox software, technical support, and product information. This guide is available on the CD-ROM as an Adobe Reader file (*Guide\Guide.pdf*).

Display information



Note: For the latest display driver and user guide for your product, check the Matrox Technical Support Web site (www.matrox.com/graphics/support). A more recent display driver may support more features and may offer increased capabilities (such as higher display resolutions).

- Your Matrox graphics card is 100% VGA compatible and supports all VESA standards: VBE 3.0 (Super VGA modes), DPMS (energy saving), and DDC-2B (Plug-and-Play monitor), and DDC-CI.
- To get the most of your Matrox product, we recommend using the highest color palette setting (a 32-bit color palette) for all your displays.
- The display resolutions and refresh rates available depend on your Matrox graphics card, display driver, software monitor settings, and monitor. For information on the capabilities of your monitor, see your monitor documentation.
- Products with only DualHead support have a maximum display resolution of 1920 × 1200 at 60 Hz (with reduced blanking) for digital monitors and 2048 × 1536 at 85 Hz for analog monitors.
- Products with only Quad Display support have a maximum display resolution of 1920 × 1200 at 60 Hz (with reduced blanking) for both digital and analog monitors.
- Dual-link products also support a digital display resolution of 2560 × 1600 at 60 Hz (with reduced blanking).
- If your monitor doesn't support reduced blanking, your screen image may not display properly.

Supported VESA modes (main display)

In the table below, VESA modes supported by your Matrox graphics card are indicated by a VESA mode number. Many Super VGA DOS programs use VESA modes.

Display resolution	16 colors	256 colors	32 K colors	64 K colors	16 M colors
640 × 400	—	100	—	—	—
640 × 480	(VGA)	101	110	111	112
800 × 600	102	103	113	114	115
1024 × 768	—	105	116	117	118
1280 × 1024	—	107	119	11A	11B
1600 × 1200	—	11C	11D	11E	11F

	Rows			
Columns	25	43	50	60
80	—	—	—	108
132	109	10A	10B	10C

Hardware information

Features

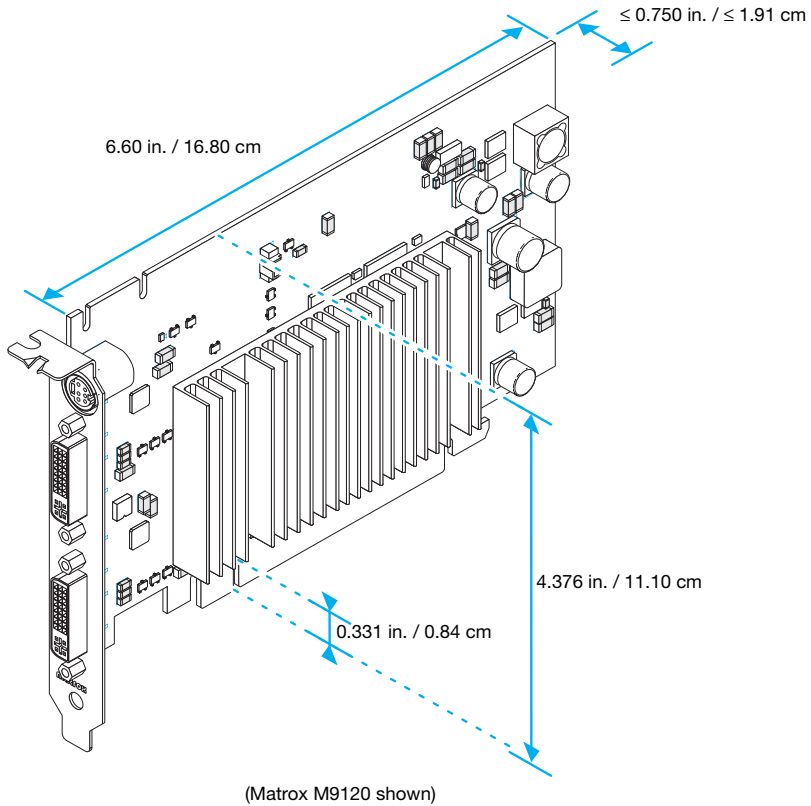
	Matrox M9120 PCIe	Matrox M9120 Plus LP PCIe	Matrox M9125 PCIe	Matrox M9140 LP PCIe
Digital monitor support	DVI	DVI	Dual-link DVI	DVI
Memory	512 MB	512 MB	512 MB	512 MB
Card type	PCIe x16	PCIe x1 or x16	PCIe x16	PCIe x16
Form factor	ATX	Low-profile	ATX	Low-profile
# of displays supported	2	2*	2	4
# of dual-monitor cables	—	1	—	—
# of quad-monitor cables	—	—	—	1
# of DVI-to-HD15 adapters	2	2	2	4
Connectors	2× DVI	1× LFH-60	2× DVI	1× KX20

* Quad analog display upgrade kit available (see <http://shopmatrox.com>).

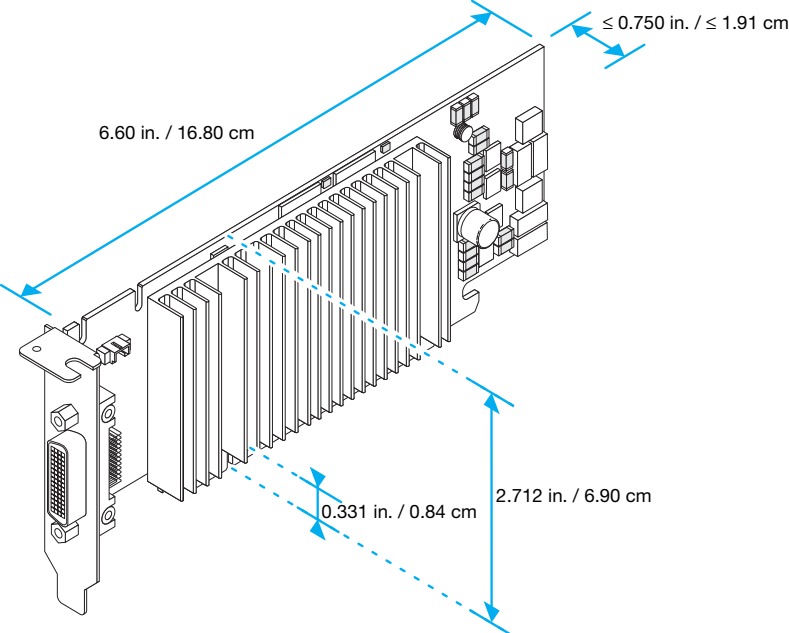
Digital flat panel information

- TMDS (Transition Minimized Differential Signaling) encoding based on the Silicon Image PanelLink standard
- DDWG (Digital Display Working Group) compliant DVI connector
- EDID (Extended Display Identification Data) 1.2 and 1.3 support

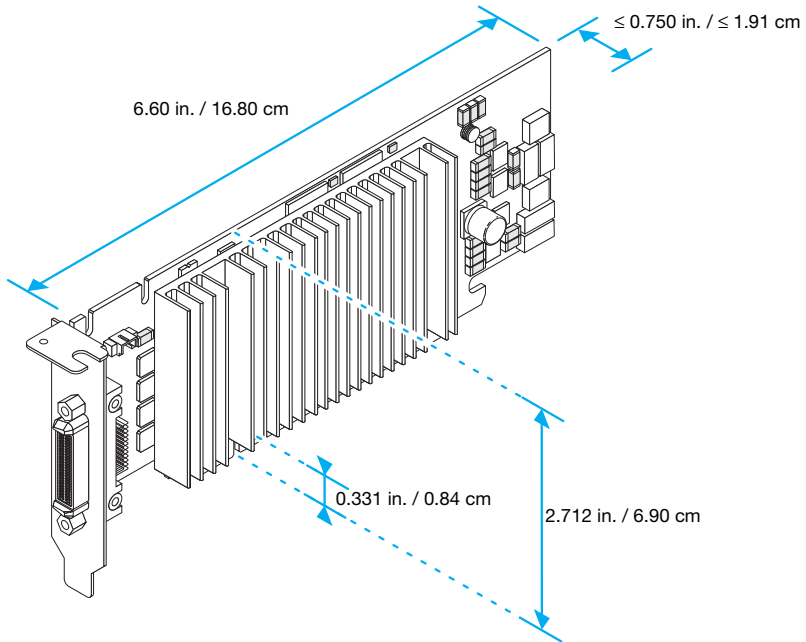
Maximum card dimensions – Matrox M9120 and M9125



Maximum card dimensions – Matrox M9120 Plus LP PCIe



Maximum card dimensions – Matrox M9140 LP PCIe



Warranty

A. Limited Warranty Statement

1. Matrox Graphics Inc. ("Matrox") warrants to the end-user customer, who provides adequate proof of purchase that Matrox hardware products purchased from Matrox authorized dealers will be free from defects in materials and workmanship for a period of three (3) years from the date of purchase. This warranty applies only to the original end-user purchaser and is non-transferable. Conditions and limitations of Matrox's warranty are stated below.
2. Matrox's limited warranty covers only those defects which arise as a result of normal use of the hardware and does not apply to any:
 - a. improper or inadequate maintenance;
 - b. incompatibilities due to the user's hardware or software applications with or in which the Matrox product interfaces;
 - c. product of a special or custom-made nature;
 - d. unauthorized modification or misuse;
 - e. improper installation, misapplication or negligence;
 - f. operation outside the product's environmental specifications;
 - g. improper site preparation or maintenance;
 - h. software;
 - i. other causes that do not relate to a product defect;
 - j. defects or damage suffered as a result of force majeure (including theft);
 - k. defects or damage suffered as a result of normal wear and tear, and/or
 - l. stolen goods.
3. If Matrox receives, during the applicable warranty period, notice of a defect in a warranted hardware product and the defective Matrox product in question, Matrox shall at its sole option, either repair or replace the product, and shall return the repaired product or a replacement product within a reasonable delay. The replacement product may not be new, provided that it has functionality at least equal to that of the product being replaced.
4. This warranty is valid in any country where Matrox hardware products are distributed by Matrox or its authorized dealers.
5. This Limited Warranty Statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country to country elsewhere in the world.

B. Limitations of Warranty

1. NEITHER MATROX NOR ANY OF ITS THIRD PARTY SUPPLIERS MAKES ANY OTHER WARRANTY OF ANY KIND, WHETHER EXPRESSED OR IMPLIED, WITH RESPECT TO MATROX PRODUCTS. MATROX SPECIFICALLY DISCLAIMS (and the customer, by accepting the Matrox product, specifically accepts such disclaimer and waives) ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR OR INTENDED PURPOSE OR USE AND THE WARRANTY AGAINST LATENT DEFECTS, WITH RESPECT TO THE HARDWARE AND/OR SOFTWARE. MATROX FURTHER DISCLAIMS ANY WARRANTY THAT MATROX PRODUCTS, IN WHOLE OR IN PART, WILL BE FREE FROM INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY OR PROPRIETARY RIGHTS.
2. To the extent that this Limited Warranty Statement is inconsistent with the law of the locality where the customer purchases the Matrox product, this Limited Warranty Statement shall be deemed modified to be consistent with such local law. Under such local law, certain limitations of this Limited Warranty Statement may not apply to the consumer.
3. To the extent allowed by local law, the remedies provided in this Limited Warranty Statement are the customer's sole and exclusive remedies.

C. Limitations of Liability

1. EXCEPT FOR THE OBLIGATIONS SPECIFICALLY SET FORTH IN THE LIMITED WARRANTY STATEMENT, IN NO EVENT SHALL MATROX BE LIABLE FOR:
 - a. any direct, indirect, special, incidental, consequential, foreseeable or unforeseeable, or punitive damages, whether based on contract, tort, delict or any other legal theory and whether advised of the possibility of such damages, and/or
 - b. damages arising from the loss of use, data, production revenue and/or profit of in connection with the Matrox product or any business interruption.
2. Without prejudice to the foregoing, any liability of Matrox for any breach of warranty shall be limited to the amount paid by the customer for the defective hardware in question.
3. To the extent allowed by local law, Matrox's entire liability and the customer's exclusive remedy shall be the repair or replacement of any defective product during the warranty period. Matrox does not offer any other warranty with respect to Matrox hardware or software or any other hardware or software.
4. Customer shall be responsible for all applicable taxes, duties and customs fees on any replacement unit, as well as all transport, insurance, storage and other charges incurred on all returned products.

D. Obtaining Service

1. Verify that your Matrox product was installed and configured according to the information in its accompanying documentation.
2. Read the "Troubleshooting" information included with the Matrox product to see if you can solve the problem yourself.
3. If you are still experiencing difficulties, please contact your dealer where you purchased your Matrox product.
4. If you must return a Matrox product, leave the configuration as it was when you were using it, and leave all identification stickers on the product. Pack the product in its original box and return to your Matrox dealer where the product was purchased, together with your proof of purchase. Your Matrox dealer will return the product for you. Alternatively, if this first option is unavailable to you, you may contact the Matrox Technical Support group who will issue an Return Merchandise Authorization (RMA) number, upon receipt of adequate proof of purchase, and inform you of shipping instructions. DO NOT RETURN THE PRODUCT TO MATROX WITHOUT MATROX'S RMA NUMBER AND EXPRESS AUTHORIZATION.

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Matrox Web

Matrox is on the Internet with a World Wide Web (WWW) site. Our Web site has product literature, press releases, technical material, a sales office list, trade show information, and other relevant material.

- Visit the Matrox Graphics Web site at www.matrox.com/graphics.
- E-mail questions or comments regarding the site to webmaster@matrox.com.

If you have a problem

Matrox values your business and offers professional support for your Matrox product. For product support, contact your Matrox representative or visit our technical support Web site at www.matrox.com/graphics/support/.

Information we need

Please give a complete description of the problem, and include:

- Matrox card serial number, model number, revision number, BIOS number, driver type and version, and memory address at which the Matrox card is installed.
- Computer brand and model name.
- Monitor brand and model name.
- Operating system, version, and service pack.
- Brand and model of any other cards and devices installed on your system.

Program specific problems

If a problem appears with a specific program, please give us the following information:

- Display settings (color palette, display resolution, and so on) applied when the problem occurs.
- If possible, take note of the file and segment address that caused the problem.
- Detailed steps known to cause the bug, so we can reproduce it.

Where to get information

For system information:

- Windows 2000 – Right-click the **My Computer** icon on your Windows desktop background, then click Properties.
- Windows 2000/XP – Click **Start** → **Programs** (or **All programs**) → **Accessories** → **System Tools** → **System Information**.
- Windows XP – Click **Start** → **Settings*** → **Control Panel** → **Performance and Maintenance*** → **System** (double-click*). (* Depending on your configuration of Windows, this part of the step may not be necessary.)
- Windows Vista – Click **Start** → **Settings*** → **Control Panel** → **System and Maintenance*** → **System** (double-click*). (* Depending on your version and configuration of Windows, this part of the step may not be necessary.)

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USA

FCC Compliance Statement

Remark for the Matrox hardware products supported by this guide This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: • Reorient or relocate the receiving antenna • Increase the separation between the equipment and receiver • Connect the equipment into an outlet on a circuit different from that to which the receiver is connected • Consult the dealer or an experienced radio/TV technician for help.

WARNING Changes or modifications to this unit not expressly approved by the party responsible for the compliance could void the user's authority to operate this equipment. The use of shielded cables for connection of the monitor to the card is required to meet FCC requirements.

Declaration of conformity of a Class B digital device according to the FCC rules

We, the Responsible Party Matrox, 625 State Route 3, Unit B, Plattsburg, NY 12901 • Telephone: (514) 822-6000 (extension 2026) • Attention: Conformity Group Matrox

Declaration The Matrox hardware products supported by this guide comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) these devices may not cause harmful interference, and (2) these devices must accept any interference received, including interference that may cause undesired operation. Any question regarding this declaration should be forwarded to the above coordinates.

CANADA

(English) Industry Canada Compliance Statement

Remark for the Matrox hardware products supported by this guide These digital devices do not exceed the Class B limits for radio noise emission from digital devices set out in the Radio Interference Regulation of Industry Canada.

(Français) Conformité avec les exigences du ministère de l'Industrie Canada

Remarque sur les produits matériels Matrox couverts par ce guide Ces appareils numériques n'émettent aucun bruit radioélectrique dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par Industrie Canada.

JAPAN

VCCI Compliance Statement

Remark for the Matrox hardware products supported by this guide This is a Class B product based on the standard of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

(English) European user's information – Declaration of Conformity

Remark for the Matrox hardware products supported by this guide These devices comply with EC Directive 89/336/EEC for a Class B digital device. They have been tested and found to comply with EN55022/CISPR22 and EN55024/CISPR24. In a domestic environment these products may cause radio interference in which case the user may be required to take adequate measures. To meet EC requirements, shielded cables must be used to connect the monitor and other peripherals to the card. These products have been tested in a typical class B compliant host system. It is assumed that these products will also achieve compliance in any class B compliant system.

(Français) Informations aux utilisateurs Européens – Déclaration de conformité

Remarque sur les produits matériels Matrox couverts par ce guide Ces unités sont conformes à la directive communautaire 89/336/EEC pour les unités numériques de classe B. Les tests effectués ont prouvé qu'elles sont conformes aux normes EN55022/CISPR22 et EN55024/CISPR24. Le fonctionnement de ces produits dans un environnement résidentiel peut causer des interférences radio, dans ce cas l'utilisateur peut être amené à prendre les mesures appropriées. Pour respecter les impératifs communautaires, les câbles de connexion entre le moniteur ou autres périphériques et la carte doivent être blindés. Ces produits ont été testés dans un système hôte typique compatible classe B. On suppose qu'ils présenteront la même compatibilité dans tout système compatible classe B.

(Deutsch) Information für europäische Anwender – Konformitätserklärung

Anmerkung für die Matrox Hardware-Produktunterstützung durch dieses Handbuch Diese Geräte entsprechen EC Direktive 89/336/EEC für ein digitales Gerät Klasse B. Sie wurden getestet und entsprechen demnach EN55022/CISPR22 und EN55024/CISPR24. In einer Wohnumgebung können diese Produkte Funkinterferenzen erzeugen, und der Benutzer kann genötigt sein, entsprechende Maßnahmen zu ergreifen. Um EG-Anforderungen zu entsprechen, müssen zum Anschließen des Monitors und anderer Peripheriegeräte an die Karte abgeschirmte Kabel verwendet werden. Diese Produkt wurden in einem typischen, der Klasse B entsprechenden, Host-System getestet. Es wird davon ausgegangen, daß diese Produkte auch in jedem Klasse B entsprechenden System entsprechend funktionieren.

(Italiano) Informazioni per gli utenti europei – Dichiarazione di conformità

Nota per i prodotti hardware Matrox supportati da questa guida Questi dispositivi sono conformi alla direttiva CEE 89/336/EEC relativamente ai dispositivi digitali di Classe B. Sono stati provati e sono risultati conformi alle norme EN55022/CISPR22 e EN55024/CISPR24. In un ambiente domestico, questi prodotti possono causare radiointerferenze, nel qual caso all'utente potrebbe venire richiesto di prendere le misure adeguate. Per soddisfare i requisiti CEE, il monitor e le altre periferiche vanno collegati alla scheda grafica con cavi schermati. Questi prodotti sono stati provati in un tipico sistema host conforme alla classe B. Inoltre, si dà per scontato che questi prodotti acquisiranno la conformità in qualsiasi sistema conforme alla classe B.

(Español) Información para usuarios europeos – Declaración de conformidad

Observación referente a los productos de hardware de Matrox apoyados por este manual Estos dispositivos cumplen con la directiva de la CE 89/336/EEC para dispositivos digitales de Clase B. Dichos dispositivos han sido sometidos a prueba y se ha comprobado que cumplen con las normas EN55022/CISPR22 y EN55024/CISPR24. En entornos residenciales, estos productos pueden causar interferencias en las comunicaciones por radio; en tal caso el usuario deberá adoptar las medidas adecuadas. Para satisfacer las disposiciones de la CE, deberán utilizarse cables apantallados para conectar el monitor y demás periféricos a la tarjeta. Estos productos han sido sometidos a prueba en un típico sistema anfitrión que responde a los requisitos de la clase B. Se supone que estos productos cumplirán también con las normas en cualquier sistema que responda a los requisitos de la clase B.

(English) European user's information – Directive on Waste Electrical and Electronic Equipment (WEEE)

Please refer to the Matrox Web site (www.matrox.com/environment/weee) for recycling information.

(Français) Informations aux utilisateurs Européens – Règlementation des déchets d'équipements électriques et électroniques (DEEE)

Se référer au site Web de Matrox (www.matrox.com/environment/weee) pour l'information concernant le recyclage.

(Deutsch) Information für europäische Anwender – Europäische Regelungen zu Elektro- und Elektronikgeräten (WEEE)

Bitte wenden Sie sich an der Matrox-Website (www.matrox.com/environment/weee) für Recycling-Informationen.

(Italiano) Informazioni per gli utenti europei – Direttiva sui rifiuti di apparecchiature elettriche ed elettroniche (RAEE)

Si prega di riferirsi al sito Web Matrox (www.matrox.com/environment/weee) per le informazioni di riciclaggio.

FRANCE

Avertissement sur l'épilepsie

À lire avant toute utilisation d'un jeu vidéo par vous-même ou votre enfant Certaines personnes sont susceptibles de faire des crises d'épilepsie ou d'avoir des pertes de conscience à la vue de certains types de lumières clignotantes ou d'éléments fréquents dans notre environnement quotidien. Ces personnes s'exposent à des crises lorsqu'elles regardent certaines images télévisées ou qu'elles jouent à certains jeux vidéo. Ces phénomènes peuvent apparaître alors même que le sujet n'a pas d'antécédent médical ou n'a jamais été confronté à une crise d'épilepsie.

Si vous-même ou un membre de votre famille avez déjà présenté des symptômes liés à l'épilepsie (crise ou perte de conscience) en présence de stimulations lumineuses, veuillez consulter votre médecin avant toute utilisation.

Nous conseillons aux parents d'être attentifs à leurs enfants lorsqu'ils jouent avec des jeux vidéo. Si vous-même ou votre enfant présentez un des symptômes suivants: vertige, trouble de la vision, contraction des yeux ou des muscles, perte de conscience, trouble de l'orientation, mouvement involontaire ou convulsion, veuillez immédiatement cesser de jouer et consultez un médecin.

Précautions à prendre dans tous les cas pour l'utilisation d'un jeu vidéo

- Ne vous tenez pas trop près de l'écran.
- Jouez à bonne distance de l'écran de TV et aussi loin que le permet le cordon de raccordement.
- Utilisez de préférence les jeux de vidéo sur un écran de petite taille.
- Évitez de jouer si vous êtes fatigué ou si vous manquez de sommeil.
- Assurez-vous que vous jouez dans une pièce bien éclairée.
- En cours d'utilisation, faites des pauses de dix à quinze minutes toutes les heures.

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