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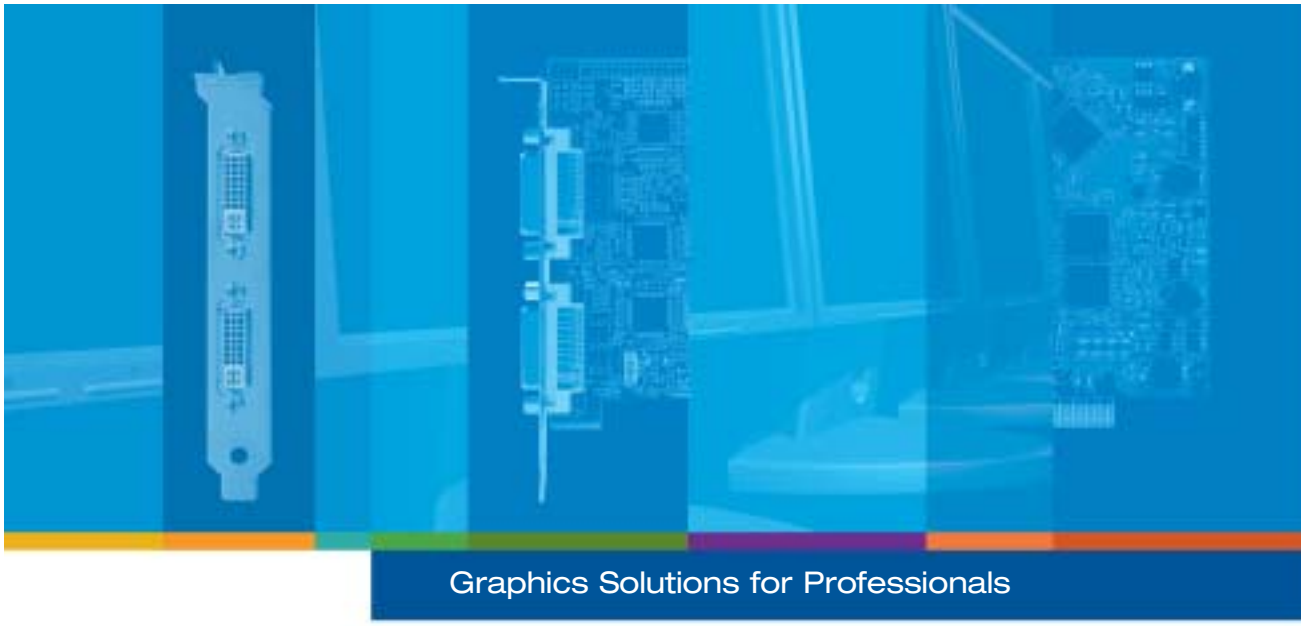
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ENGLISH



matrox QID Series

QID • QID Pro • QID Low-profile

User Guide

10876-301-0221
2008.01.11

www.matrox.com/graphics

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Graphics for Professionals

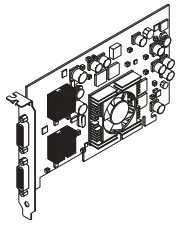
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Overview

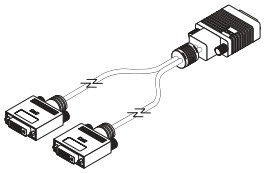
Thank you for purchasing a Matrox QID Series (Quad Information Display) graphics card. This product is a high-performance graphics card that plugs into an expansion slot inside your personal computer. With a Matrox QID Series card, you can use 4 computer monitors at a time. Also with a Matrox QID graphics card, you can use TVs instead of computer monitors.

Hardware supplied

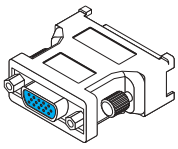
Matrox QID and QID Pro



Matrox QID Series card
(AGP card shown)

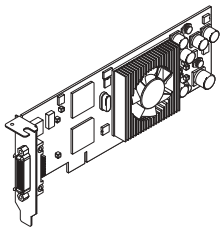


2 DVI dual-monitor cables

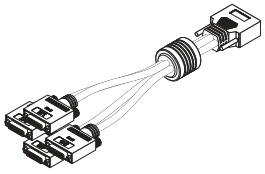


4 DVI-to-HD15 adapters

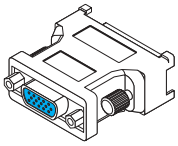
Matrox QID Low-profile PCI and PCIe



Matrox QID Series card
(Low-profile PCI card shown)



1 DVI quad-monitor cable



4 DVI-to-HD15 adapters

Software supplied (for Windows 2000/XP)

- Matrox PowerDesk-SE – to use your Matrox graphics hardware
- Other software – see the CD-ROM *Readme* file

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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 “Connection setup”, page 7.
3. Install the software – see “Software setup”, page 10.

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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.

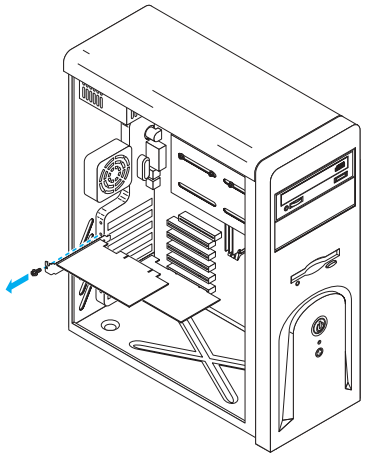
Note: Most Matrox low-profile graphics cards ship with standard (ATX) brackets compatible with most systems. If you have a low-profile system, you may need to change the standard bracket on your graphics card to a low-profile bracket. For more information, see “Replacing brackets on a low-profile graphics 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** in the Windows **Control Panel**, remove any currently installed display drivers. Restart your computer for the changes to take effect.

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



* 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”.

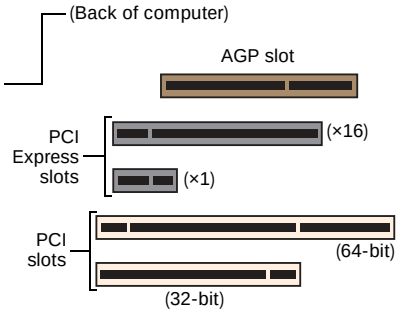
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b Turn off your computer and all peripherals such as your monitor or printer.

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

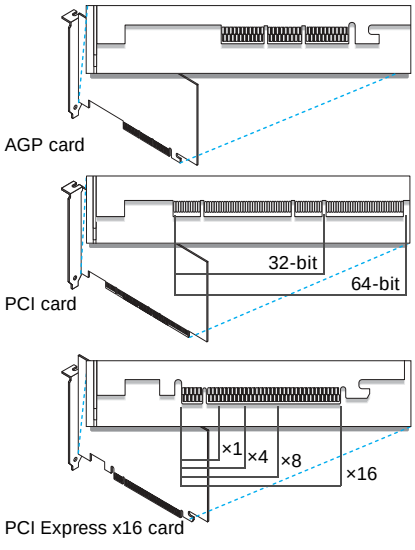
Most computers have different types of expansion slots. Choose an AGP, PCI, or PCI Express ×16 (PCIe) slot, depending on the type of Matrox card you have. If you have a PCI card, your card supports both 64-bit and 32-bit PCI slots. Your system manual should identify the location of each type of expansion slot in your computer.



Note: If you're using a PCI graphics card in a PCI 64-bit compatible slot, your choice of PCI slot 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.

If you have a PCI card and the versions (32- or 64-bit) of your card and PCI expansion slot are different, only part of the card's edge connector (the part closest to the bracket) or expansion slot (the part closest to the back of the computer) should be used.



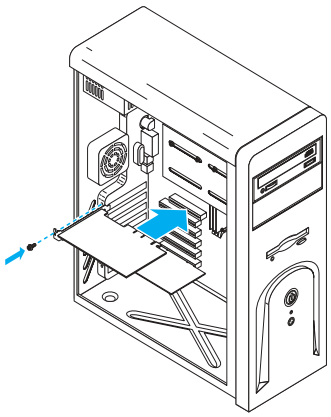
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3 Insert your Matrox card

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.

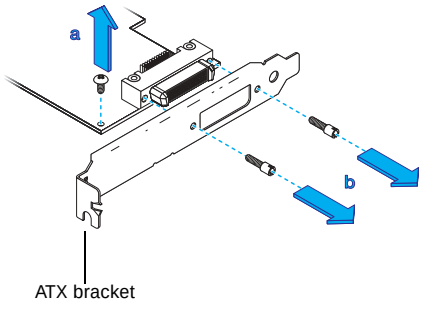
c Secure the bracket of your Matrox card to the computer frame.



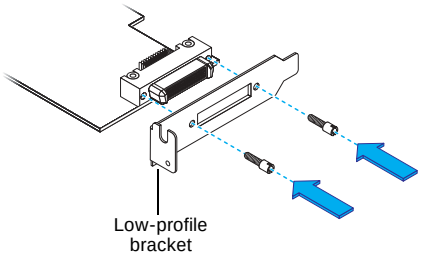
Replacing brackets on a low-profile graphics card

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.

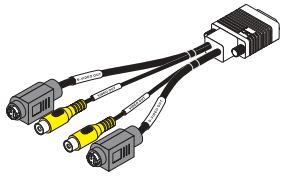


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Connection setup

This section describes how to connect computer monitors to your Matrox product.

Note: Windows 2000/XP and DOS – If you want to use TV output with your Matrox product, you need dual-TV-output cables. For more information, see "TV output", page 13.



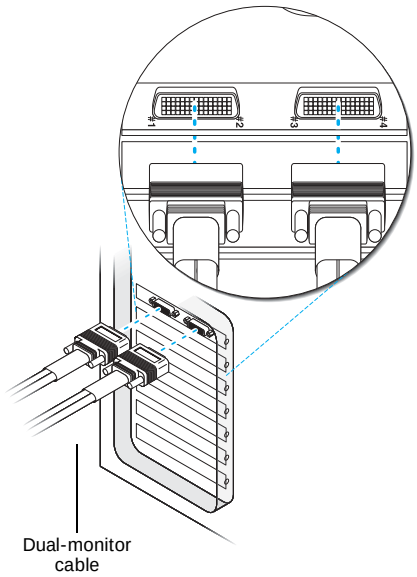
Dual-TV-output cable

To use 4 computer monitors at a time, make sure your monitors support the same monitor settings (such as display resolution and refresh rates). All your monitors must be of the same type, either analog or digital.

While using 4 monitors at the same time, certain limitations may apply. For more information, see "Display information", page 34.

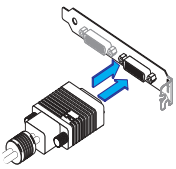
1 Connect your dual-monitor cables or quad-monitor cable

QID and QID Pro – Attach your Matrox dual-monitor cables to the connectors on the bracket of your Matrox card. Make sure the connectors are properly fastened.



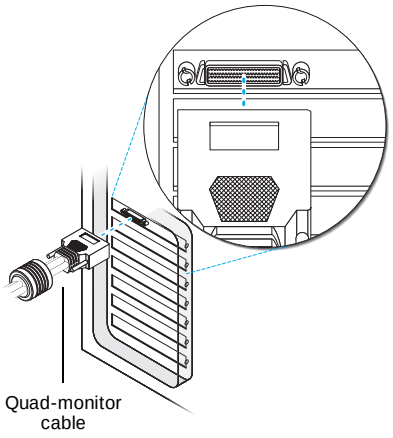
Dual-monitor cable

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.



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QID Low-profile PCI and PCIe – Attach your quad-monitor cable to the connector on the bracket of your Matrox card. Make sure the connectors are properly fastened.

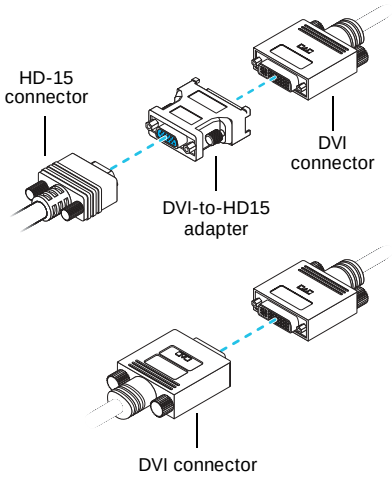


2 Connect your monitors

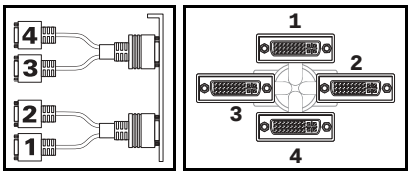
If your monitor has an HD-15 connector, use a DVI-to-HD15 adapter included with your product to connect your monitor cable to your dual-monitor cable.

If your monitor has a DVI connector, connect your monitor cable directly to the dual-monitor cable without using a DVI-to-HD15 adapter.

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.

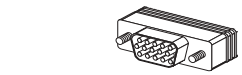


QID and QID Pro

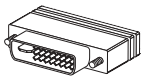
QID Low-profile PCI and PCIe

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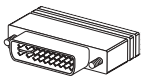
Note: To connect a *digital* monitor (a monitor that uses digital input, usually a flat panel monitor) to your Matrox product, your monitor must have a DVI connector.



HD-15 connector (analog)



DVI connector
(DVI-D: digital)



DVI connector
(DVI-I: analog/digital)

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.

Your Matrox card is now installed. Restart your computer and install your Matrox software (see "Software setup", page 10).

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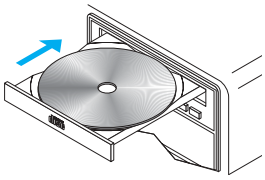
Software setup

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/XP*.

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



1 Install display driver

Note: Windows XP SP2 (Service Pack 2) – Windows may install a Matrox display driver unsupported by your product when your Matrox product is detected as new hardware. If you aren't prompted to install a display driver, *DON'T RESTART* your system. Install the display driver on your Matrox installation CD-ROM before you restart.

If you do restart your computer, see page 18 for more information on reinstalling your 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. Follow the on-screen instructions. There are two display driver versions available for your Matrox QID Series product:

- Version 1.x (SE): Supports multi-display with 4 displays in stretched mode *only* with a maximum single display resolution of 1600 × 1200. This version also supports TV output for all Matrox QID Series graphics cards.
- Version 2.x (SE): Supports multi-display with up to 4 displays in stretched and independent modes with a maximum display resolution of 1600 × 1200. This version doesn't support TV output.

(The Matrox Windows 2000/XP display drivers are respectively in the *Win2kXP_1x* and *Win2kXP_2x* folders of your Matrox installation CD-ROM.)

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2 Install optional software

After your computer has restarted, insert (or reinsert) the Matrox installation CD-ROM in your CD-ROM drive – the CD-ROM installation program automatically starts.* This program shows you a list of items you can install and information you can access. Follow the on-screen instructions.

3 Configure your monitor settings

To take full advantage of your graphics card, make sure the monitor settings for the main monitor are supported by *all* 4 monitors (or TVs) connected to your graphics card:

a Right-click your Windows desktop background, then click **Properties** → **Settings** → **Advanced** → **Monitor**.

b If "**Hide modes that this monitor cannot display**" is available, make sure it's enabled. Under **Screen refresh rate**, select the highest refresh rate listed.

c Click **OK** → **OK**.

For more information on Windows monitor settings, see Windows documentation.



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

4 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 the online help.

5 Adjust your display resolution

Depending on the version of your display driver, your multi-display setup changes when using a low display resolution (for example, 800 × 600) in stretched mode.

- Version 1.x (SE): While using a low display resolution, this version uses clone mode (instead of stretched mode) for all your displays.
- Version 2.x (SE): While using a low display resolution, this version uses single display mode (instead of stretched mode) for your main display.

* If Windows doesn't automatically start the setup program, you can start it manually from the root folder of the CD-ROM.

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To set your display resolution:

a Right-click your Windows desktop background, then click **Properties → Settings**.

b Move the **Screen area** (Windows 2000) or **Screen resolution** (Windows XP) slider.

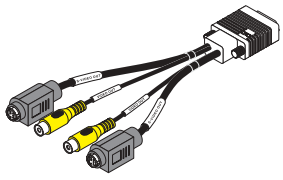
c Click **OK** or **Apply** for your changes to take effect.

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).

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TV output

With your Matrox product, you can use TV-output cables (sold separately) instead of multi-monitor cables to view or record your displays with TVs or video recorders. If you have a regular Matrox product, you need dual-TV-output cables. If you have a low-profile product, you need a quad-TV-output cable. To purchase Matrox TV-output cables for your product, see the Matrox online store (http://shopmatrox.com). This section describes how to use the *TV output* feature.



TV-output cable
(Dual-cable shown)

Connection setup

1 Turn off computer

Windows 2000/XP – To shut down your computer, click **Start** → **Shut Down** → **Shut down** → **OK**, then turn off your computer.

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.

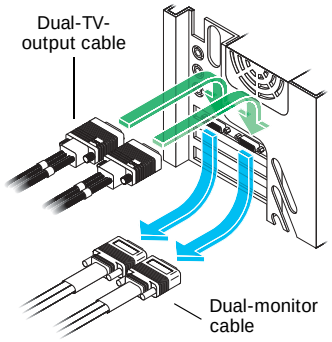
If a display device (monitor, TV or video recorder) is connected while your computer is using settings intended for another display device, the display of the new device may be garbled or unusable. *Some* devices may be permanently damaged if incorrect settings are used.

2 Replace your multi-monitor cables

a Disconnect any computer monitor connected to your dual-monitor cables or to your quad-monitor cable.

b Detach any multi-monitor cable from your Matrox card.

c Attach your dual-TV-output cables or quad-TV-output cable to your Matrox graphics card.



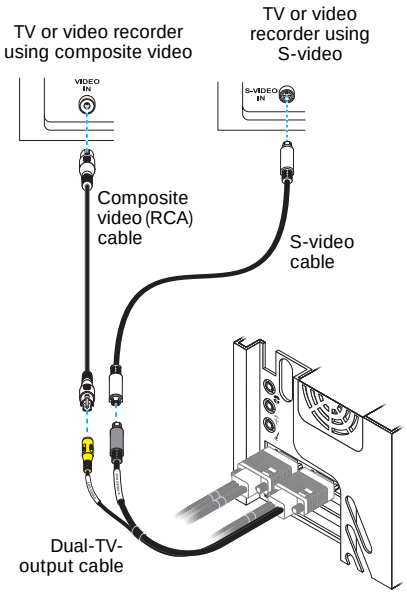
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3 Connect video output

To connect to a TV or a video recorder, you'll need a composite video (RCA) or S-video cable.

If your video device (a TV or a video recorder) didn't come with one of these cables, these types of cable are available at most electronics stores. The type of cable you use depends on what your video device supports. Many video devices support composite video connections, and some higher-quality video devices support S-video connections.

For each TV or video recorder, you want to connect to your Matrox product:



(Note: Using the Matrox composite video ***and*** S-video connectors at the same time is optional.)

a Attach one end of your composite video or S-video cable to the appropriate connector on your TV-output cable.

b Attach the other end to the **VIDEO IN*** connector on your TV† or video recorder.

c Before viewing or recording video output directly from your computer, make sure your TV or video recorder is set up to use *line* input. For example, if your TV has a **TV/VIDEO** switch, set it to **VIDEO**; or if your video recorder has a **TUNER/LINE** switch, set it to **LINE**.

Optionally, if you use the composite video *and* S-video connectors on your TV-output cable, you can directly connect two different video devices at the same time.

To view *and* record output from the same Matrox video connector, you can connect it to a video recorder and connect the video recorder to a TV. For more information, see your video recorder and TV manuals.

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* The labels on your devices may not be consistent with what's in this guide. Different manufacturers sometimes use different labels for the same type of controls and connectors. For example, the **VIDEO IN** connector on your TV may be labeled **VIDEO 1** (or **VIDEO 2**). To match labels, see the documentation for your video devices.

† If your TV only has an antenna or cable TV connector, you can use an *RF modulator* to connect it to your Matrox card. RF modulators are available at most electronics stores.

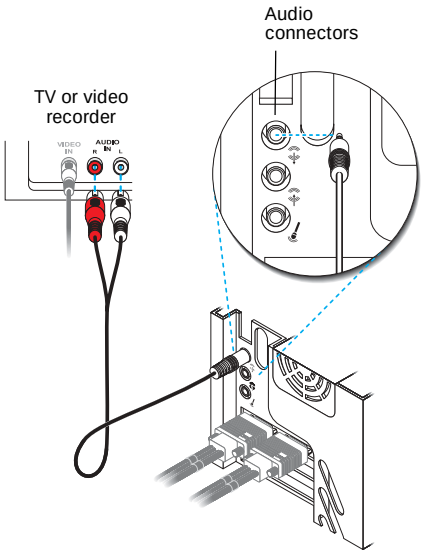
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4 Connect audio output

Typically, the audio output from a computer comes from speakers connected to your computer. If you prefer, you can hear or record the sound output from your computer using the same TV or video recorder you connect to your graphics card. To do this, you need an audio cable with a stereo jack on one end and two RCA connectors on the other end. If you don't have this type of cable, you can buy one at most consumer electronics stores.

a Plug the stereo-jack end of the audio cable into the **LINE OUT*** connector on your computer.

b Plug the other end of the cable into the left (**L**) and right (**R**) **AUDIO IN** connectors of your video device. For more information, see your sound card manual.



SCART information

Some video devices in Europe only have SCART connectors. This type of connector includes video and audio, whereas composite or S-video connectors include only video.

If your video devices *only* have SCART connectors, you need SCART cables to connect to your Matrox product. If you want to use SCART cables, contact your Matrox representative.

* If your computer has no audio **LINE OUT** connector, you can use its **SPKR** (speaker) connector instead. In this case, all your computer sound output goes to the video device you connected to.

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Software setup

If a TV or video recorder is connected to your Matrox product, you can use TV output mode to view or record your display on your TV or video recorder. (To connect video devices to your computer, see page 13.)

TV settings have lower resolutions and refresh rates than typical computer monitor settings. Lower refresh rates may result in more noticeable flicker.



Note: Two TV standards are supported for TV output. The NTSC standard is used in North America and Japan, among other places. The PAL standard is used in most of Western Europe and in China, among other places.

If an incorrect TV standard is selected in Matrox software, the output from your computer may not appear or record properly on your TV or your video recorder. To find out what standard your TV or video recorder supports, see its documentation.

Windows 2000/XP – To adjust TV settings, access the **Multi-Display Setup** dialog box for your Matrox product (see "Set up your display software", page 11).

DOS – To change TV standard, insert your Matrox installation CD-ROM. Run the **PBIOSWin** program from the *Sysutils* folder on your Matrox CD-ROM. Click **Change TV Standard** and select the correct TV standard, then click **OK**. For more information on how to use this program, see the *Readme* file in the *Sysutils* folder.

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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 – 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", then press [Enter].

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 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 built-in graphics hardware.

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Cause Your computer BIOS (Basic Input/Output System) 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.)

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

Cause Windows XP Service Pack 2 – Windows Service Pack 2 has installed a version of the Matrox display driver that doesn't support your Matrox product.

Solution You need to install a display driver that supports your Matrox product. To reinstall the display driver, you first need to restart your computer in VGA mode (see "Restarting in VGA mode", page 17). While in VGA mode, install the Matrox display driver on the installation CD-ROM provided with your product. If no CD was provided with your product, see the Matrox Technical Support Web site (www.matrox.com/graphics/support) to download a display driver.

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 your monitor is properly connected to the correct connector on your Matrox graphics card (see "Connect your dual-monitor cables or quad-monitor cable", page 7).

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

Cause If display problems occur after the startup screen of your operating system, your software monitor settings may be incorrect.

Solution Make sure correct software monitor settings are selected.

If your primary display is still usable, see "Configure your monitor settings", page 11. Otherwise, see the next troubleshooting item.

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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 a monitor was never selected in the software and the display resolution was changed to one your monitor doesn't support, or if the monitor connected to your computer was changed without it being changed in the software. One of your monitors may not support the monitor settings of the main monitor.

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

Solution Make sure the correct monitor is selected in Windows.

Windows 2000/XP –

1. If your primary display is unusable, restart your computer in VGA mode (see "Restarting in VGA mode", page 17).
2. Right-click your Windows desktop background, then click **Properties** → **Settings**.
3. Move the **Screen area** (Windows 2000) or **Screen resolution** (Windows XP) slider down to its lowest setting, then click **OK**.
4. Restart your computer normally.
5. Make sure the correct monitor is selected in Windows (see "Configure your monitor settings", page 11).
6. If necessary, restore your original display settings (see steps 2 and 3).

Note: In multi-display mode, all the monitors connected to your graphics card use the monitor settings of the main monitor (the monitor connected to connector **#1** of your Matrox product). Make sure you're using monitor settings supported by all your monitors.

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

Solution Remove, 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.

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Windows 2000/XP –

1. If your primary display is currently unusable, restart your computer in safe mode or VGA mode (see “Restarting in VGA mode”, page 17).
2. To remove Matrox software:
   a. Click **Start** → **Settings*** → **Control Panel** → **Add/Remove Programs** (double-click*) → **Matrox PowerDesk-HF and Driver** → **Change/Remove** → **Yes**. (* Depending on your version and configuration of Windows, this part of the step may not be necessary.)
   b. Click **No** if you’re asked to restart your computer.
   c. Click **Matrox PowerDesk-SE** → **Change/Remove** → **Yes**.
3. Restart your computer.
4. After removing Matrox software, install the latest display driver for your Matrox graphics card. You may also need to reinstall other Matrox software.

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

Graphics – Extra troubleshooting

The following are extra toubleshooting items related to graphics hardware.

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

Note: Windows 2000/XP – 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 Remove, then reinstall Matrox software. For more information, see page 19.

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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.

Note: Windows 2000/XP – To check if your monitor settings are properly selected:

1. Right-click your Windows desktop background, then click **Properties** → **Settings** → **Advanced** → **Monitor**. If you're using multi-display mode, select a display before clicking **Advanced**.
2. If you see the name of your monitor or "Plug-and-Play", your monitor settings are properly selected.

   If you see the wrong monitor name or **Default monitor**, your monitor settings aren't properly selected.

Cause Your monitor may not be Plug-and-Play. Most new monitors are Plug-and-Play but many older ones aren't. Software can't automatically detect settings for monitors that aren't Plug-and-Play.

Solution Manually select your monitor settings in the software. For Windows 2000/XP, see "Configure your monitor settings", page 11.

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 card doesn't work after multi-monitor graphics card is installed

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

Solution Try reinstalling your network drivers.

Solution Try moving your Matrox multi-monitor graphics card to another PCI slot in your computer.

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Problem 3D and video programs don't work

Note: OpenGL acceleration is only available on the Matrox QID Pro.

Cause Your Matrox card may be in a "slave" expansion slot on a computer that makes a distinction between bus mastering and slave slots.

Solution Change slots – Shut down your computer, disconnect it from the power supply, remove your Matrox card and then insert it into a different PCI expansion slot. For instructions on how to safely install your Matrox card, see "Hardware installation", page 4.

Solution Change settings in your computer BIOS setup utility.

If your computer has the options of enabling Plug-and-Play detection, or assigning an IRQ to a VGA adapter, make sure they're enabled. If your computer doesn't have these options, you may be able to manually assign an IRQ to your graphics card using the BIOS setup utility.

For more information on the BIOS setup utility of your computer, see your system manual or contact your system manufacturer.

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 After game for Windows 2000/XP 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 Windows 2000/XP –

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 (see "Configure your monitor settings", page 11).

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Problem Using multiple displays under Windows 2000/XP, program doesn't work with main graphics card

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 (AGP, 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 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 Windows 2000/XP – For advanced users – To use a program that doesn't support multi-display systems, you can disable all displays other than your primary display:

1. Restart your computer in "VGA" mode (see "Restarting in VGA mode", page 17).

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2 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.)

3 Click the plus sign to the left of the **Display adapters**.

4 For each display adapter, *except* for the one controlling your primary display, right-click the name of a display adapter, then click **Disable** → **Yes**.

Note: Your primary display can't be disabled.

5 Restart your computer for changes to take effect.

Note: To restore display adapters, repeat steps 2–5, but click **Enable** in step 4.

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.

Under Windows 2000/XP, a display driver may support one or more graphics cards. If a display driver doesn't support a certain card, a different display driver must be used for that card. Software that depends on a certain display driver may not work with a graphics card that's not using the same display driver.

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 – 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.

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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. Display numbering depends on the types of expansion slots used in your computer (AGP and PCI) and the BIOS settings of your computer.

Solution

Windows 2000/XP – Move the displays in Windows.

1. Right-click your Windows desktop background, then click **Properties** → **Settings**.
2. Select a display and move it according to the physical position of the monitor it's associated with.

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 acceleration.

Solution

Windows 2000/XP – 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**.

Windows XP –

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

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).

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

Windows 2000/XP – Disable Matrox hardware acceleration:

1. Right-click your Windows desktop background, then click **Properties** → **Settings** → **Advanced** → **Troubleshooting** (or **Troubleshoot**).
2. Move the **Hardware acceleration** slider to **None**.

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3 Click **OK** → **OK** to accept the changes.

Note: If you identify a program that doesn't work well with Matrox acceleration, please contact Matrox technical support (see page 41) 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.

Solution Windows 2000/XP – Disable the display:

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.

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.

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Solution Windows 2000/XP –

1. Click the Matrox PowerDesk icon ( ) on your Windows taskbar, then click **Desktop Management**.
2. Enable one or more of the following features:
   - **Open program windows**
   - **Center dialog boxes and message boxes**
3. 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.

Problem Windows elements and text appear too small on screen

Cause When using a high display resolution, you may be using too small a font size.

Solution Increase the DPI settings of your Windows desktop. Right-click your Windows desktop then click **Properties → Settings → Advanced**. Under **DPI setting**, select **Large size (120 dpi)** or select **Custom Settings** to manually adjust your DPI setting. You may need to restart your computer for the changes to take effect.

Problem Can't select one or more display resolutions supported by your monitor

Cause Windows 2000/XP – Windows may be disabling display resolutions that it can't detect as supported by your monitor.

Solution Install the latest monitor software from your monitor manufacturer.

Solution Change Windows monitor settings:

1. Right-click your Windows desktop background, then click **Properties → Settings**.
2. If you're using a multi-display desktop, select a display.

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3 Click **Advanced** → **Monitor**, disable **Hide modes that this monitor cannot display**, then click **OK** → **OK**.

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, the problem can only be fixed by recapturing the video under better conditions.

Cause Your hard disk may be too slow.

Solution Try *defragmenting* your hard disk.

Windows 2000/XP – To defragment a hard disk, click **Start** → **Programs** (or **All Programs**) → **Accessories** → **System Tools** → **Disk Defragmenter**.

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 or capture video files with 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**".

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4 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 display settings may be too high. As a result, video file playback may not be fully supported by your Matrox hardware.

Solution Try lowering your display settings (resolution, color palette, and/or refresh rate).

Windows 2000/XP – To access display settings, right-click your Windows desktop background, then click **Properties** → **Settings**.

Cause Your Matrox graphics card may be sharing an IRQ (interrupt request) with another PCI card in your computer (for example, a network card).

Solution Try moving the other PCI card to another PCI slot in your computer. For more information, see the documentation for this card or see your system manual.

Solution Try moving your Matrox graphics card to another PCI slot in your computer.

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 – Use default Windows mouse pointers:

1 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.)

2 Click the **Pointers** tab.

3 In the **Scheme** box, select (or reselect) "**(None)**", then click **OK**.

Problem Can't view video

Cause Your display settings may be too high.

Solution Try lowering your display settings (resolution, color palette, and/or refresh rate).

Windows 2000/XP – To access display settings, right-click your Windows desktop background, then click **Properties** → **Settings**.

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TV output

The following troubleshooting items are related to TV output support (see “TV output”, page 13).

Problem TV image is garbled or unusable
(a blank screen, or rolling or overlapping screen images)

Cause Your TV or video recorder may not be properly connected.

Solution Make sure your TV or video recorder is properly connected. For more information, see “Connection setup”, page 13.

Cause Your TV or video recorder may not be properly set up.

Solution If a TV is connected to your Matrox graphics card and the TV has a **TV/VIDEO** switch, set it to **VIDEO**. For more information, see your TV manual.

Solution If a video recorder is connected to your Matrox graphics card and the video recorder has a **TUNER/LINE** switch, set it to **LINE**. For more information, see your video recorder manual.

Cause Matrox software may not be set up for TV output. Particularly, the TV standard selected may not be correct.

Solution Windows 2000/XP – See “Software setup”, page 16.

Cause TV output isn’t supported with full-screen DOS display modes (for example, the information you see before Windows starts) or with standard VGA mode (for example, when you restart Windows in “VGA mode”). Older programs may use these display modes. While one of these display modes is in use, your TV displays nothing (black).

Solution View the program you’re using with your computer monitor instead of your TV.

Problem Computer text is hard to read with a TV

Cause The resolution of a TV is lower than a typical computer display. As a result, some text may be harder to read with a TV than with a computer monitor.

Solution Lower your computer display resolution:

Windows 2000/XP –

1. Right-click your Windows desktop background, then click **Properties → Settings**.
2. Move the **Screen area** (Windows 2000) or **Screen Resolution** (Windows XP) slider to a lower setting.

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3 Click **OK** to close the dialog box and apply changes.

Solution If you're using a display area larger than 640 × 480, you can use larger system fonts to make some text more readable:

Windows 2000/XP –

1 Right-click your Windows desktop background, then click **Properties** → **Settings** → **Advanced** → **General**.

2 Under **Font size**, select **Large Fonts**.

3 Click **OK** to close the dialog box and apply changes.

Problem Poor TV or video recorder image quality

Cause Your software TV settings may need adjusting.

Solution See "Software setup", page 16.

Cause There may be too many video devices between your video source and destination, or one or more of the video devices may be degrading the quality of the video signal. Demodulators, long cables, cable extensions and improper connections can all affect video signal quality.

Solution If your video equipment supports it, use S-video connections. For more information, see "Connection setup", page 13.

Solution Try changing one or more video devices.

Solution If possible, use fewer connections. For example, don't use cable extensions.

Cause The image settings on your TV may need adjusting.

Solution Some TVs have an aperture control sometimes called **PICTURE**. Lowering this setting may reduce this problem. Reducing your TV's brightness setting may also improve image quality. For more information, see your TV manual.

Problem Can't record video with a video recorder

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.

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Sound

The following troubleshooting items address problems related to the audio output of your computer.

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 audio cables are properly connected.

Cause Windows audio settings may be incorrect. Specifically, input or output may be disabled, or volume levels may be too low or too high.

Solution Windows 2000/XP – Make sure your Windows audio settings are correct:

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 the "**Show volume control on the taskbar**" check box.

   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**. (* Depending on your configuration of Windows, this part of the step may not be necessary.)

   b. Enable the "**Place volume icon in the taskbar**" check box.

   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**.

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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**, 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**.

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.

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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 2.0 (Super VGA modes), DPMS (energy saving), and DDC-2B (Plug-and-Play monitor).
- 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.
- Matrox QID Pro – 3D hardware acceleration is only available with a 16- or 32-bit color palette.
- 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.
- While using 4 displays at a time, your Matrox graphics card supports display resolutions up to 1600 × 1200 for each display (6400 × 1200 or 3200 × 2400) with a vertical refresh rate up to 60 Hz.
- Matrox QID Pro – While using a 4 × 1 multi-display setup, 3D hardware acceleration is supported to a maximum display resolution of 1024 × 768 for each display (4096 × 768). While using a 2 × 2 multi-display setup, 3D hardware acceleration is supported to a maximum display resolution of 1600 × 1200 for each display (3200 × 2400).
- If you're using multiple monitors or TVs, Matrox PowerDesk determines the display resolution and monitor settings for your devices.

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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

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Hardware information

Features

	Matrox QID	Matrox QID Low-profile PCI	Matrox QID Low-profile PCIe	Matrox QID Pro
Digital monitor support	DVI	DVI	DVI	DVI
TV output Requires a dual- or quad-TV-output cable	Composite and S-video	Composite and S-video	Composite and S-video	Composite and S-video
Memory	128 MB	128 MB	128 MB	256 MB
Card type	AGP 2×, 4×, 8× compatible	PCI (32-bit, 66 MHz)	PCIe ×16	PCI (64-bit, 66 MHz)
Form factor	ATX	Low-profile	Low-profile	ATX
# of displays supported	4	4	4	4
# of dual-monitor cables	2	—	—	2
# of quad-monitor cables	—	1	1	—
# of DVI-to-HD15 adapters	4	4	4	4
Connectors	2× LFH-60	1× KX20	1× KX20	2× LFH-60

Environmental specifications

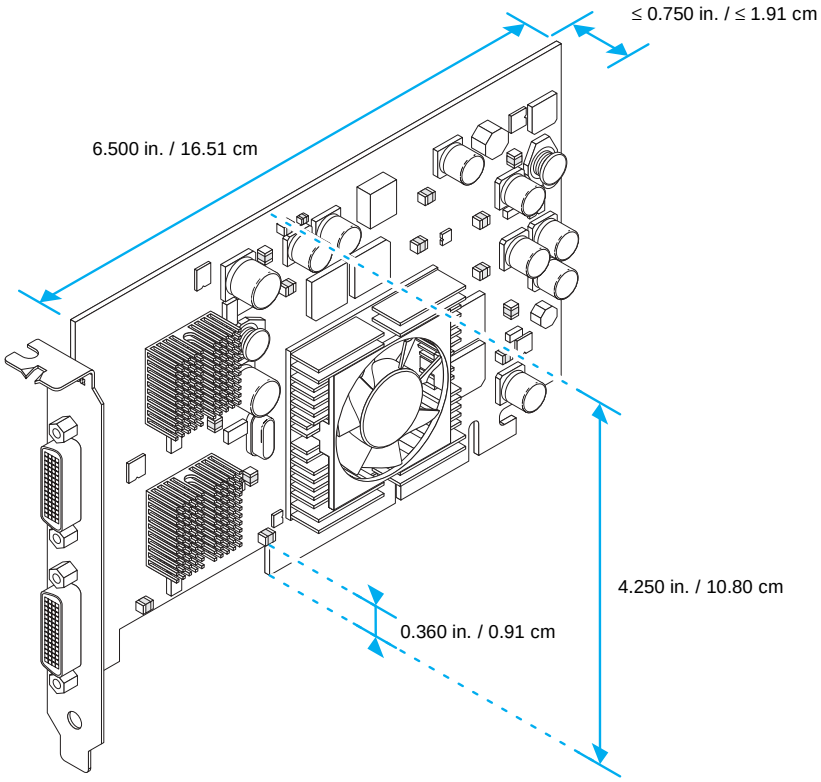
- Minimum/maximum ambient operating temperatures: 0 to 55 °C
- Minimum/maximum storage temperature: -40 to 75 °C
- Maximum altitude for operation: 3,000 meters
- Maximum altitude for transport: 12,000 meters
- Operating humidity: 20 to 80% relative humidity (non-condensing)
- Storage humidity: 5 to 95% relative humidity (non-condensing)

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Digital flat panel information

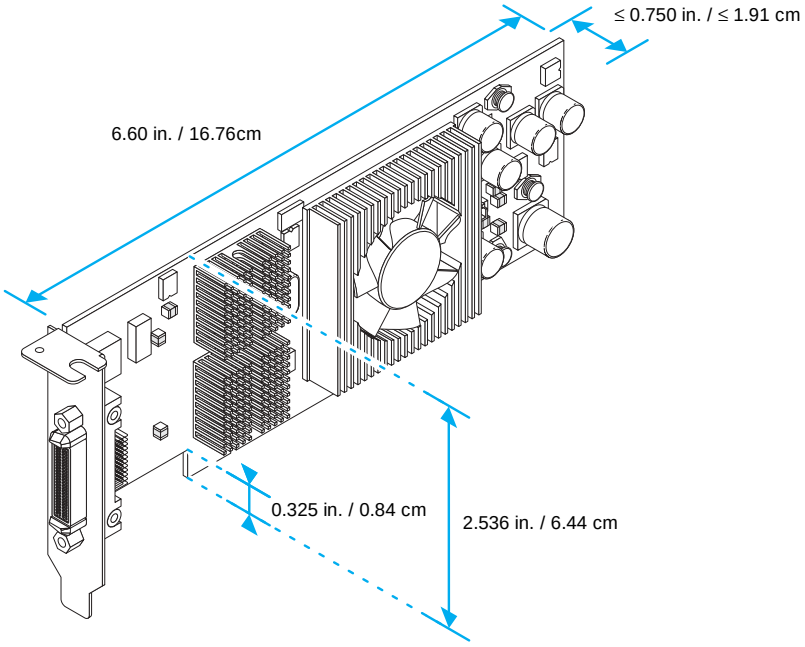
- TMDS (Transition Minimized Differential Signaling) encoding based on the Silicon Image PanelLink standard
- DDWG (Digital Display Working Group) compliant DVI connector
- EDID (Extended Display Identification Data) 1.2 and 2.0 support

Maximum card dimensions – QID AGP



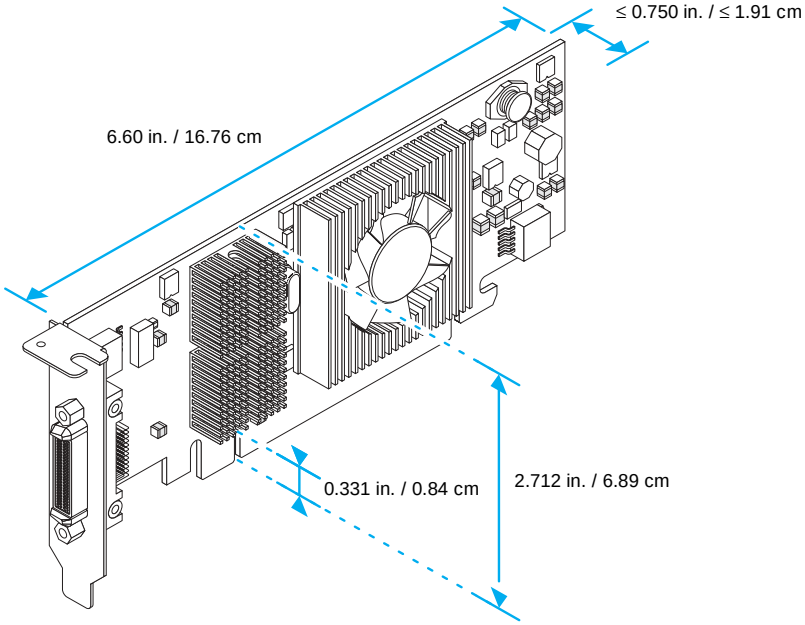
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Maximum card dimensions – QID Low-profile PCI



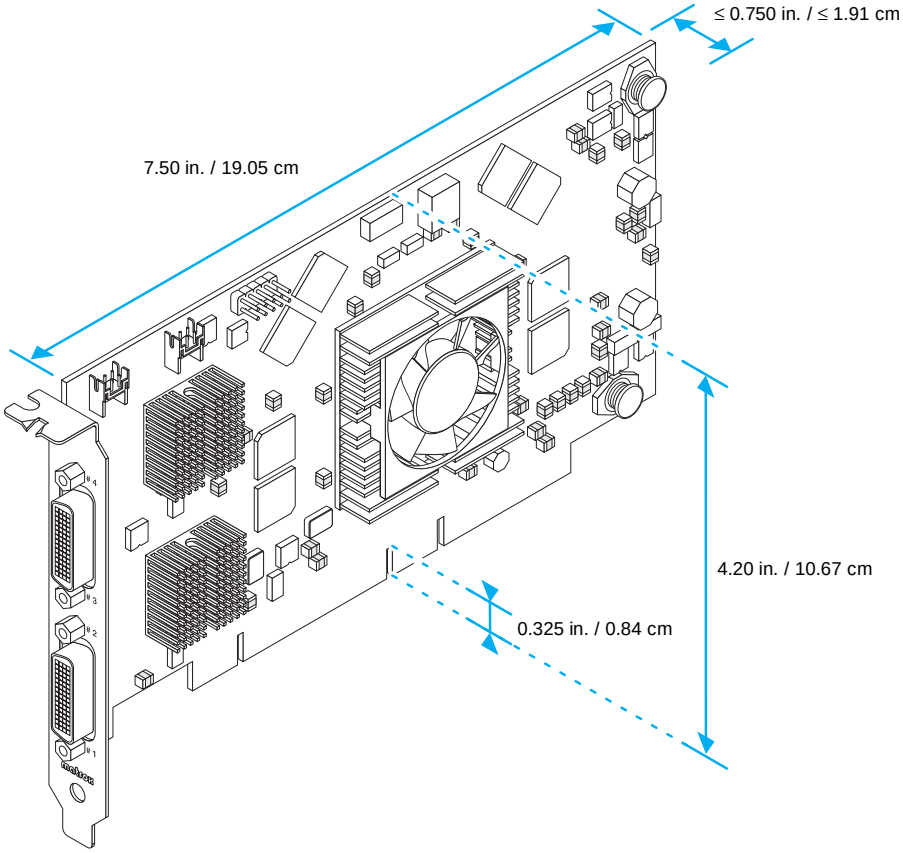
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Maximum card dimensions – QID Low-profile PCIe



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Maximum card dimensions – QID Pro



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Customer support

Matrox Web

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- 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.

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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.)

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   - **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;
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   - **k.** defects or damage suffered as a result of normal wear and tear, and/or
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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.
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Index

A

AGP 5

B

BIOS 18, 22, 23

C

Connector
- DVI 8
- HD-15 8
- LFH-60 7

Customer support 41–42

D

Display information 34–35

E

Expansion slots 5, 17, 22

G

Graphics
- Troubleshooting 17–27

H

Hardware
- Acceleration 25
- Information 2, 36–40
- Installation 4–9

I

Installation
- Hardware 4–9
- Overview 3

M

Monitor
- Settings 18–19, 22

Multi-display mode 25

P

PCI 5, 22

PCI Express 5

PowerDesk 11

Primary display 23

S

Software
- Setup 10–12

Sound
- Output 15
- Troubleshooting 32–33

T

Troubleshooting 17–20
- Extra 20–33
- Graphics 17–27
- Sound 32–33
- TV output 30–31
- Video 28–29

TV output
- Connection setup 13–15
- Display modes 30
- Software setup 16
- Troubleshooting 30–31

V

VESA 34, 35

VGA 34, 35

Video
- Troubleshooting 28–29

W

Warning 4, 5, 7, 11, 13, 19, 21, 28

Warranty 43–44

Web, Matrox 41

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USA

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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.

CANADA

(English) Industry Canada Compliance Statement

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

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JAPAN

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EUROPE

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(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 A. 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

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(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 A. 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 A entsprechenden, Host-System getestet. Es wird davon ausgegangen, daß diese Produkte auch in jedem Klasse A entsprechenden System entsprechend funktionieren.

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EUROPE

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



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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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