



Graphics Solutions for Professionals

# Matrox PJ-4OLP

User Guide

10987-301-0101  
2008.01.11

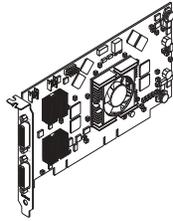
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# Overview

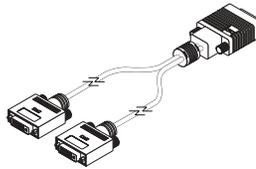
Thank you for purchasing a Matrox PJ-4OLP graphics card. This product is a high-performance graphics card that plugs into an expansion slot inside your personal computer. With a Matrox PJ-4OLP card, you can use 4 monitors<sup>1</sup> at a time.

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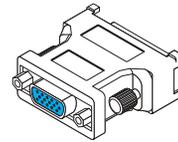
## Hardware supplied



Matrox PJ-4OLP card



2 DVI dual-monitor cables



4 DVI-to-HD15 adapters

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## Software supplied (for Windows 2000/XP, and Windows XP Professional x64)

Download the latest software package for your product from the Matrox Web site ([www.matrox.com/graphics/support/drivers/latest/home.cfm](http://www.matrox.com/graphics/support/drivers/latest/home.cfm)).

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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 3.
- 2 Connect your monitors – see “[Connection setup](#)”, page 6.
- 3 Install the software – see “[Software setup](#)”, page 8.

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<sup>1</sup> The term *monitor* refers to projectors and computer monitors.

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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.

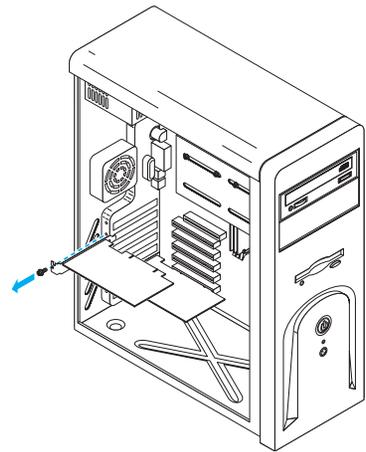
## 1 Open your computer and remove your existing graphics card\*

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**.

- 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, this graphics hardware should automatically disable itself after your Matrox card is installed. For more information, see your system manual.)

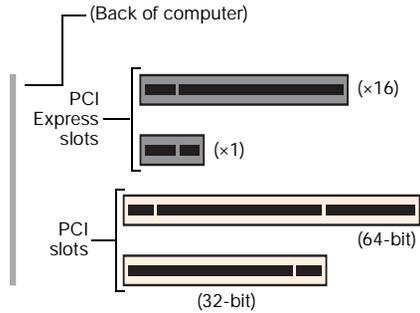


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\* With multi-display mode, you may be able to use your existing graphics card. For Windows 2000/XP, see Windows 2000/XP online help under "Install additional monitors".

## 2 Choose a PCI slot

Most computers have different types of expansion slots. Choose a PCI (not *PCI Express*) slot for your graphics 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.

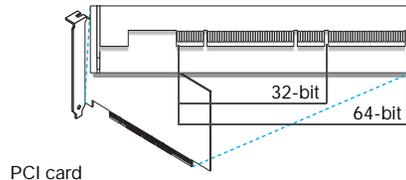


**Note:** If you're using a PCI graphics card in a 64-bit compatible slot, your choice of PCI slot may affect your card or system performance. For more information, see your computer manual.



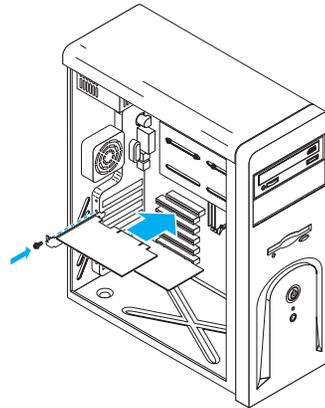
**WARNING:** Inserting your Matrox card into the wrong type of slot could damage your card, your computer, or both.

If you're using a 32-bit PCI slot, only part of your card's edge connector should be inserted into the PCI slot (the part closest to the back of the computer).



## 3 Insert your Matrox card

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



Your Matrox card is now installed. *Before restarting your computer*, connect your monitor or monitors (“[Connection setup](#)”, [page 6](#)). *After connecting*, restart your computer and install your Matrox software (see “[Software setup](#)”, [page 8](#))



**WARNING:** If your computer doesn't restart after your Matrox card is installed, turn off your computer to avoid damaging electronic parts. For troubleshooting information, see [page 10](#).

# Connection setup

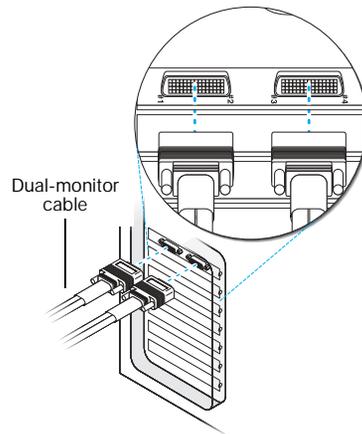
This section describes how to connect computer monitors to your Matrox product.

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

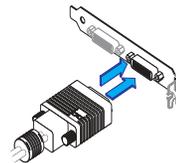
While using 4 monitors at the same time, certain limitations may apply. For more information, see [“Display information”, page 24.](#)

## 1 Connect your dual-monitor cables

Attach your Matrox dual-monitor cables to the connectors 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.

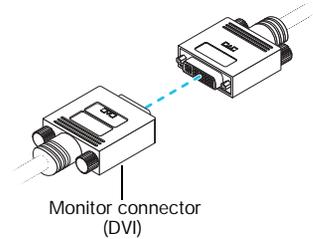
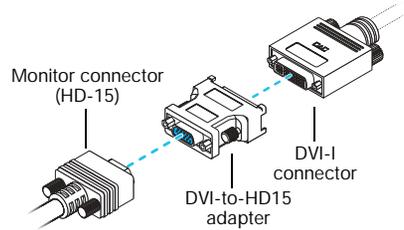


## 2 Connect your monitors

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

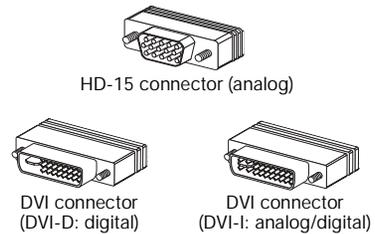
If your monitor has a DVI connector, connect your monitor cable directly to the dual-monitor cable without using a DVI-to-HD15 adapter.

Make sure all connectors are properly fastened.

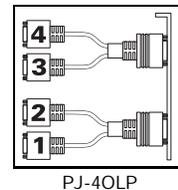


**Note:** To connect a *digital* monitor (a monitor that uses digital input, usually a flat panel monitor) to your Matrox product, your monitor must have a DVI connector.

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.



**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 8).

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# Software setup

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 Download your Matrox software package

Download the latest software package for your product from the Matrox Web site ([www.matrox.com/graphics/support/drivers/latest/home.cfm](http://www.matrox.com/graphics/support/drivers/latest/home.cfm)).

## 2 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 software package you downloaded.

If you do restart your computer, see [page 11](#) 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. Click **Cancel**, then install the software package you downloaded. 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 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.

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### Edge overlap setup

Use the Matrox edge overlap feature to overlap adjacent displays.



**Note:** Before using edge overlap make sure you're using a *horizontal stretched* mode. Edge overlap works only while you're in *horizontal stretched* mode.

**Windows 2000/XP** – To configure edge overlap:

- 1 Click the PowerDesk 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.)
- 2 Select **Edge Overlap** → **Display 1**.
- 3 Choose the amount of overlap you want for your adjacent displays. Click **OK** for changes to take effect.

For more information on Matrox PowerDesk, see the online help.

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# Troubleshooting

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## 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].

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## 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 3.

**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) 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 10). 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 Web site ([www.matrox.com/graphics](http://www.matrox.com/graphics)) 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](#)”, page 6).

**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 using 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, “”, page 7.

**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 8. Otherwise, see the next troubleshooting item.

**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** 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.



**Note:** In multi-display mode, all the monitors connected to your unit use the same monitor settings. While using Windows display controls, all monitors use the settings of the main monitor (the monitor connected to the connector #1 on your Matrox product). While using advanced Matrox display controls, the monitor settings for your monitors are determined by Matrox PowerDesk. Make sure you're using monitor settings supported by your monitors.

**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 –**

- 1 If your primary display is currently unusable, restart your computer in safe mode or VGA mode (see [“Restarting in VGA mode”](#), page 10).

- 2 To remove Matrox software:
  - a Click Start → Settings\* → Control Panel → Add/Remove Programs (double-click\*) → Matrox 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.

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## 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 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** Uninstall, then reinstall Matrox software. For more information, see [page 12](#).

## 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** 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 8.

**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.

## 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 8).

**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 (PCI or AGP – see [“Choose a PCI slot”, page 4](#)) 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 10](#)).

- 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.

## 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 Web site ([www.matrox.com/graphics](http://www.matrox.com/graphics)).



**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**.

- 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 28](#)) 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.

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

**Solution** **For advanced users** – Use advanced Matrox display controls to change your display settings.

Use Matrox PowerRes to enable all the display modes supported by your monitor. For more information on the display modes supported by your monitor, see its documentation.

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## 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”.
- 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**.

### **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**.

---

## 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:

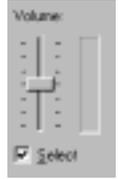
**Windows 2000** –

- 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.

- 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

- 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.
- OpenGL and 3D acceleration are 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 (standard mode) for each display and 1680 × 1050 (wide screen mode) for each display with a vertical refresh rate up to 60 Hz.
- If you're using multiple monitors, your Matrox hardware uses the same display resolution and monitor settings for all your devices.
- *Edge feathering* isn't supported with your Matrox product. *Edge feathering* reduces the brightness in overlapping regions. Without this compensation, a combined display may appear brighter where displays overlap. Edge feathering is available with certain projectors and dedicated external edge-blending hardware.

## 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

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

---

# Hardware information

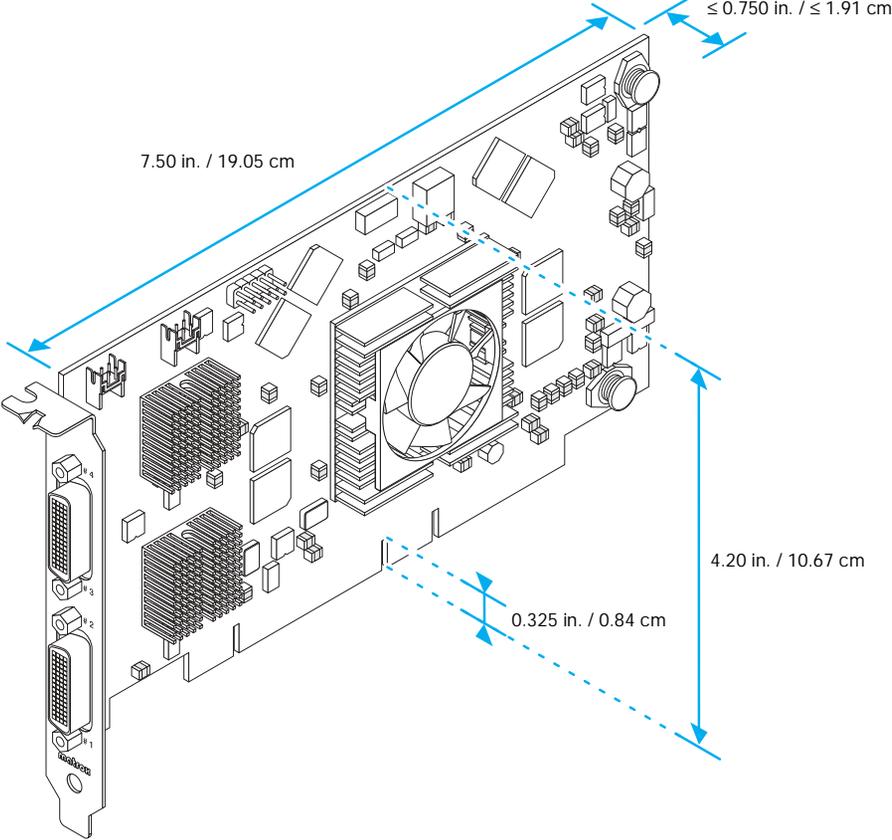
## Features

	Matrox PJ-4OLP
Digital monitor support	DVI
Memory	256 MB
Card type	PCI (64-bit, 66 MHz)
Form factor	ATX
# of projectors or computer monitors supported	4
# of dual-monitor cables	2
# of DVI-to-HD15 adapters	4
Connectors	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)

# Maximum card dimensions



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# Customer support

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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](http://www.matrox.com/graphics).
- E-mail questions or comments regarding the site to [webmaster@matrox.com](mailto:webmaster@matrox.com).

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## 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/](http://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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# Warranty

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

---

## B

BIOS 11, 15

---

## C

Connector

DVI 7

HD-15 7

LFH-60 6

Customer support 28–29

---

## D

Display information 24

---

## E

Edge overlap 9

Expansion slots 10

Information 4

---

## G

Graphics

Troubleshooting 10–18

---

## H

Hardware

Acceleration 17

Information 2, 26–27

Installation 3–7

---

## I

Installation

Hardware 3–7

Overview 2

---

## M

Monitor

Settings 11–12, 14

Multi-display mode 17

---

## P

PCI 4

PowerDesk 9

Primary display 15

---

## S

Software

License agreement 32

Setup 8–9, 14

Sound

Troubleshooting 22–23

---

## T

Troubleshooting 10–23

Extra 13–21

Graphics 10–18

Sound 22–23

Video 20–21

---

## V

VESA 24

VGA 24

Video

Troubleshooting 20–21

---

## W

Warning 3, 4, 5, 6, 8, 12, 14, 20

Warranty 30–31

Web, Matrox 28

---

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EUROPE

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

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Matrox Graphics Inc.  
1055 Saint Regis Boulevard  
Dorval, Quebec, Canada H9P 2T4  
North America: 1-800-361-1408  
International: (514) 822-6000  
Email: [graphics@matrox.com](mailto:graphics@matrox.com)

Web site: [www.matrox.com/graphics](http://www.matrox.com/graphics)

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