

ATI CATALYST™

ATI Graphical Processing Units (GPU's) usually have the capability of supporting more than one monitor or display at the same time



Before we describe how to take advantage of this great feature, we should describe the prerequisites for running a multi-monitor configuration.

Prerequisites: Monitors are plugged into GPU's in one of two ways which are described below.

Video Graphics Array (VGA)

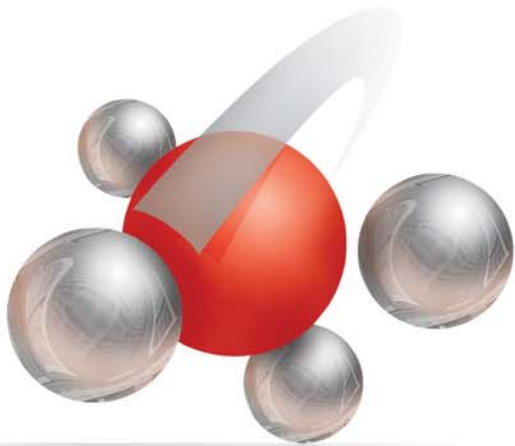
This is the older of the two methods and involves inferior analog based signals. The VGA connector found in the back of your GPU is usually blue and has 15 pin holes (set in three rows of 5 pin holes each)



Digital Video Interface (DVI)

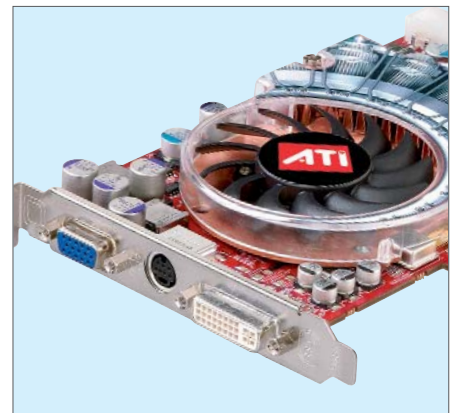
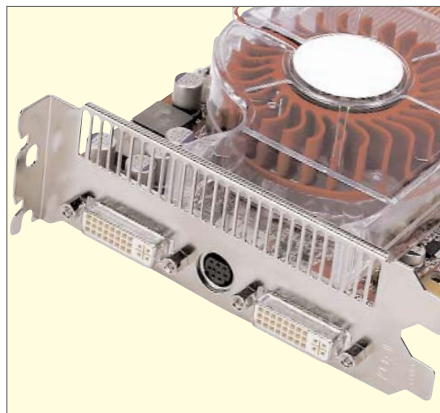
This method is almost always based on a digital signal that produces a better image. The input connector on the back of the graphics card has 28 pin holes (in a square shape). They are lined up as three rows of 8 holes plus a 2X2 holed area beside the three rows.





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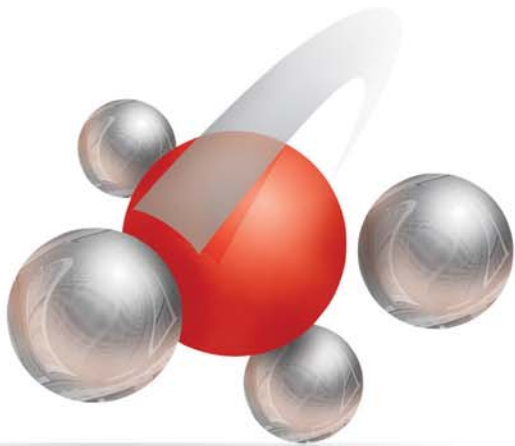
To determine if your GPU supports more than one display is quite simple. Simply look at the back of your GPU (or the back of your PC if the GPU is already installed) and make sure that you have at least two connectors (can be either one DVI and one VGA, two VGA's or two DVI's)



Note: There are even more connector types usually associated with connecting TV's to a GPU such as S-Video, Component output, and HDMI. These will not be discussed in this guide. For more information on these please refer to the HDTV Setup Guide found at this location on the internet http://ati.com/products/catalyst/HDTV_Setup_Guide.pdf

If you happen to not have the two required connectors on your current GPU solution and would like to have multi-monitor capability, visit your favorite PC store and purchase an appropriate ATI Radeon® branded graphic card.

Next we will describe the various types of modes available in multiple monitor configurations.



Different multiple monitor modes:

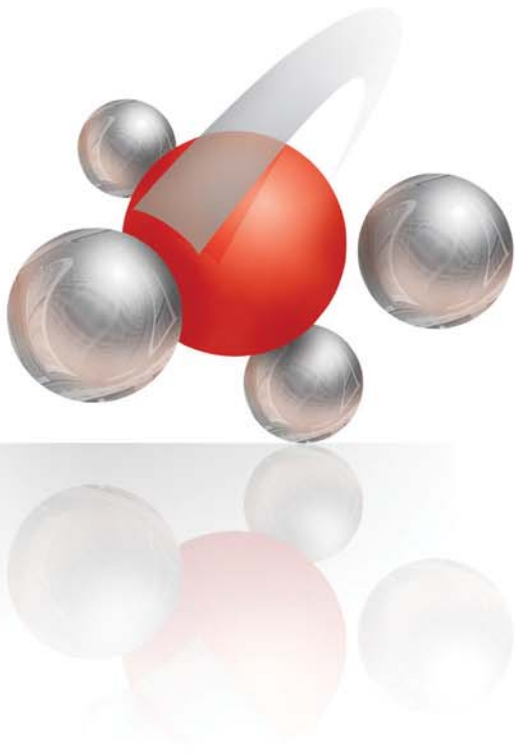
Three different modes exist for users of multiple monitors. Most users pick their favorite mode and stick to it. However it is easy to change between the different modes and the next section will explain how to do so.

1) Clone (Presentation) Mode

This is the considered the most simple mode, and really doesn't take advantage of the efficiency gains that using two monitors can provide. The reason is because in this mode the same image is simply being shown on both displays. Both monitors will run at the same resolution and refresh rate.



Tip: This cloned image is useful for presentations where one display is in front of you and the other display is in front of the audience.



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2) Horizontal Stretch Mode

The Windows desktop is stretched between two monitors. It is treated as one large desktop and as such the resolution can be thought of as the horizontal sum of the two individual monitors.



Example:

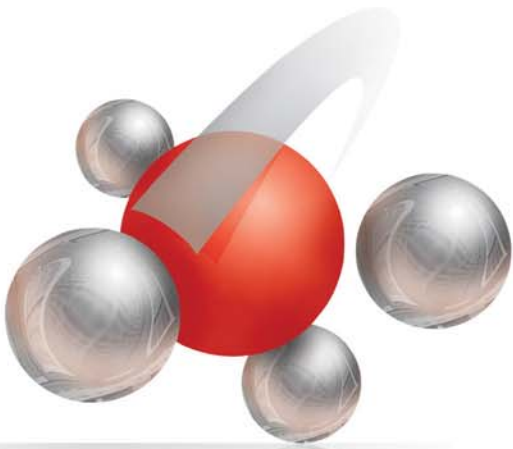
- Monitor 1 is running at 1024 X 768
- Monitor 2 is running at 1024 X 768
- The desktop area is thus now running at 2048 X 768

3) Extended Mode

Each monitor can be used with separate settings (resolution, refresh rates, color quality). The Windows desktop is stretched between the two monitors (except for the task bar)



Tip: This is the recommended method to use if you have two monitors of different size, as you can set up the best resolution and refresh rate for each monitor.



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Selecting Between the Different multiple Monitor Modes:

To configure your monitors you need to have the free Catalyst™ Control Center application installed as well as a Catalyst for Windows driver. These can be obtained from www.ati.com in a single convenient package. (The link is located in the bottom left hand corner of the above mentioned website).

Once the required software is installed simply follow these steps

- 1) Right click your mouse anywhere on the Windows desktop (Figure 1.a)
- 2) Select ATI Catalyst Control Center (Figure 1.a)
- 3) Select the Displays Manager Tab (Figure 1.b)
- 4) Select the Wizard button (Figure 1 b)
- 5) Simply follow the Wizard which will walk you through the steps.

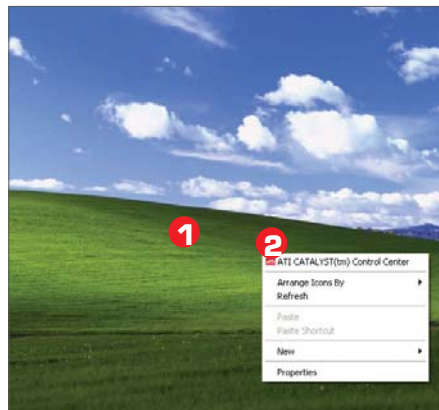


Figure 1.a



Figure 1.b