

## Buying an LCD Computer Monitor

by Bart Koslow (11/26/2006)

There are a number of things you should be aware of when buying an LCD monitor. Some LCD monitors only have analog connections. Now many have both an analog and a digital connection. Do not buy an LCD monitor unless it has a digital connection as the apparent resolution is much better using the digital connection. Your computer is digital. Every conversion of a digital signal to analog or vice versa lowers the resolution. All LCD monitors have a native resolution which is usually the highest one and the one advertised. Important! Your video card must support the native resolution of the monitor for best results. When I reviewed the display modes of my recently purchased video card I did not find some of the commonly used native monitor resolutions like 1680x1050 and 1440x900. You find the video card's supported display modes by right clicking on a blank place on your monitor screen; select Properties, Settings, Advanced, Adapter, and List All Modes. After going to the video card manufacturer's web site and downloading and installing the latest drivers these desired display modes appeared. Make sure you have the latest drivers for your video card.

Many manufacturers consider it acceptable if the LCD has eight or less bad pixels. If you get one or more bad pixels, especially in the middle of your screen, you may not like it, or you may not like the monitor for some other reason once you try it out. I would only buy an LCD monitor locally, where I have an easy return privilege. A few monitors can swivel vertically, which gives you a longer page view. Others have height and tilt adjustments. All monitors come with an analog (VGA) cable. Some come with a digital cable, but many do not. You must have the correct digital cable for the monitor, and LCD monitors do vary. Go to [www.datapro.net/techinfo/dvi\\_info.html](http://www.datapro.net/techinfo/dvi_info.html) for a lucid guide to the Digital Video Interface and which cable to use in each situation.

Besides resolution other important specifications include contrast ratio, brightness and video response time. Contrast ratios of 600:1 are common as is a brightness of 300Cd/m<sup>2</sup>. A higher contrast ratio can noticeably improve the picture more than higher brightness and is desirable. You can find contrast ratios of 700:1 and 800:1. Video response time is important. If response time is too slow you will see blurring when there is motion. Good response times are in the range of 8 ms to 5 ms and are readily found today.

LCD monitors come in 15", 17", 19", 20", 21", 22" and greater sizes. 15" is practically obsolete and the 17" sizes will be obsolete soon. Monitors larger than 19" have a widescreen 16 to 9 aspect ratio instead of the older 4 to 3 ratio. Some 19" ones have a 16 to 9 ratio. I personally will be buying a widescreen 20" to 22" monitor with a resolution of 1680x1050 or a closely equivalent resolution with a contrast ratio of 700:1 or more, a video response time of 8 ms or better and a minimum brightness of 300 Cd/M<sup>2</sup>.