

Upgrading Your Monitor

by Vinny La Bash, vlbash@home.com

Member of the Sarasota Personal Computer Users Group, Inc.

Many more folks than I thought are getting the urge to watch high definition video on their personal computers. If high definition has you captivated, pay attention to the technologies known as HDMI and HDCP.

HDMI or High Definition Media Interface is a technology that connects video receivers and DVD players to devices such as a television. It makes no difference to HDMI if your set is high definition or not. The technology handles both standard and high definition resolutions.

HDCP or High-bandwidth Digital Content Protection is a completely different animal. Intel developed the technology specifically to prevent distortion or any kind of electronic interference between source and receiver. For example, HDCP encrypts the digital content of anything that a device such as a DVD player might send through a Digital Visual Interface (DVI) to a television set, a projector or a computer monitor. The encryption used is not a form of copy protection, but a process designed to protect the integrity of the data. In other words, HDCP makes sure that what is sent is what's received.

It's important to understand that HDCP is content protection, not copy protection. It won't prevent you from pausing live programming or recording a program to view at a later time. Any content provider that did this would soon be at war with its customers.

As long as features such as "time-shifting" keep appearing, protecting copyright material becomes increasingly difficult. Copyrights are important because without them there is no protection for the artists, authors, and performers who create material or those who use them.

Your home equipment can implement any kind of copy protection, but a content provider might allow no copies whatsoever. Another provider might let you make a limited number of copies. Still another provider might put limitations on how the material is used. Many factors come into play. The mechanism for distribution, source, equipment design, and equipment configuration all have their unique effect. A content provider will usually insist on enforcing its own brand of copy protection.

HDCP makes its appearance at the DVI connection, the last link in the video chain. HDCP makes no decisions on any type of copy protection strategy, it merely protects the choice.

It may be a let down to find out that HDCP isn't an issue yet. However, it will become more important when high definition takes over. Expect all high definition DVD players to eventually use HDCP.

If you own a DVD player that isn't HDCP compliant, you will still be able to use it even if your TV isn't HDCP compliant. You just won't experience high definition quality images. HDCP will restrict playback to standard quality. This prevents pirates from getting perfect copies of movies or other digital content. Upgrades are definitely in most people's future.

Windows Vista will certainly support HDCP, as will upcoming versions of the Mac OS. What it comes down to is if you want to watch high definition content on your computer monitor, the monitor must be HDCP-compliant.

Almost any television set you buy today will use HDCP, but very few computer monitors are HDCP compliant. Do your research carefully. If you want to watch high definition on your monitor, it must be HDCP compliant.

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