



Monitor / Video Tutorial

■ What is Monitor / Video?

Monitor/Video products are connection products utilizing various video interfaces to transmit a video signal.

■ How are Monitor / Video products used?

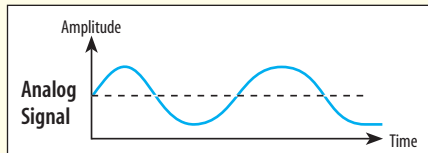
The primary function of Monitor/Video cables is the interconnection between a signal generating device such as a CPU (Central Processing Unit) and a display device such as a monitor. The interfaces used to make this connection have evolved over the years and include HD15, DVI, DP, EVC and HDMI just to name a few.

■ Where are Monitor / Video products used?

Monitor/Video products are used in a wide variety of video signal transmission applications found in both office and home environments from computers to home entertainment systems.

Monitor / Video Terms

Analog Signals: Both video and audio signals that are continuously varying in level are considered analog.



Attenuation: Attenuation is the reduction in the strength of a signal.

Bandwidth: The difference between the upper and lower usable limits of a band of frequencies.

Baseband: Unmodulated video or audio signals with an exclusive transmission path.

Chroma: The color portion of a video signal "C".

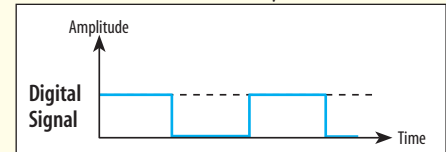
Composite Sync: A combination of horizontal and vertical sync pulses.

dB: A logarithmic unit of measure where 3dB represents a doubling or halving the power level from a given starting point.

DDC: (Data Display Channel) is a standard that defines communication between a monitor and a host system.

DVI: Digital Video Interface

Digital Signals: Data presented as discrete values i.e. On/Off or Binary.



HDMI: High Definition Multimedia Interface. All digital audio and video.

KVM: Keyboard, Video, Mouse. The three major connections found on a typical desk top computer set up.

Luma: The brightness portion of a video signal ("Y").

Pixel: A single point on a display.

Resolution: The density of pixels in a given area typically expressed as the horizontal x vertical values, (ex. 640x480).

Refresh Rate: Also referred to as the scan rate. It is the number of times in one second (Hz) that the electron beam travels across the screen horizontally from one scan line to the next.

RGB: Red, Green and Blue.

SVGA: Super Video Graphics Array (HD15).

S-Video: A video signal that separates the "Y" or Luma and "C" or chroma information.



L-com offers one of the widest selections of video cables found anywhere



In April of 2008 L-com was accepted as a member of the Video Electronics Standards Association (VESA). VESA is an organization that supports and sets industry-wide interface standards for the PC, workstation and consumer electronics industries. VESA promotes and develops timely, relevant, open standards for the display and display interface industry, ensuring interoperability and encouraging innovation and market growth. By attaining membership status L-com can now work on helping to define new standards and interfaces as well as being engaged in the latest new technologies.



DisplayPort, the new standard in digital interface technology, delivers a true digital experience to all PCs and monitors by making more efficient use of available bandwidth and delivering a more robust signal. DisplayPort supports the latest graphics and LCD technologies to vastly improve picture brightness and make device to device connections easier than ever before. The result is a vastly improved viewing experience on both computer monitors and home theatre systems. Unlike devices configured with LVDS, DVI or VGA ports, DisplayPort ready devices can deliver high-definition audio and video paths through a single cable. That means greater signal integrity and a better picture. And the picture quality can be maintained over longer cable lengths than ever before. See [page 80](#) to view L-com's latest DisplayPort offering.