

LCD TV Glossary

Aspect Ratio

Refers to the width to height proportion of a display's content area. Traditional TVs sport an aspect ratio 4:3 and 5:4, while widescreen monitors come in 16:9 or 16:10 aspect ratios.

Brightness

Brightness is the emitted luminous power of a TV screen.

Candelas / square meter (cd/m²)

An international unit used to measure the luminous intensity of LCD TVs. Corresponds to nit units.

Contrast

Contrast is the ratio between the light intensity of the brightest and the darkest point of an image. High contrast performance results in greater color performance and increased detail levels in dark areas of an image.

Digital Tuner

A DTV tuner, which can take the form of a set-top box, is used to decode digital broadcast signals for LCD TVs that are not integrated with their own digital tuners. LCD TVs featuring their own integrated DTV tuners (also called ATSC tuner, digital tuner, etc), do not require the help of an additional DTV tuner.

Display colors

The number of colors that an LCD TV can display is typically 16.2 million or 16.7 million.

DTV

DTV stands for Digital Television, the latest standard and the future of television broadcasting. Unlike analog TV, which is broadcast using magnetic waves, DTV is broadcast digitally to transmit an audio and video signal for movie-like picture quality and surround sound.

DVI

Acronym for Digital Visual Interface, DVI is one of the standard digital interfaces used by LCD TVs and other display devices.

HDTV: A High Definition Television must be able to display at least 720 active vertical scanning lines in progressive mode (720p) or 1080 active vertical scanning lines in interlaced mode (1080i), or higher in a 16:9 widescreen format.

HDMI

HDMI (High Definition Multimedia Interface) is a relatively new digital connector to carry both high definition digital video and maximum 8 channels of uncompressed digital audio signals.

HDMI will eventually replace DVI, and will be the standard connector on high definition devices, such as HD DVD players, Blu-ray players, digital set-top boxes, and the Sony PlayStation 3 game console.

LCD

Liquid Crystal Display - a display solution based on a matrix of liquid crystal pixel elements. There are 3 sub-pixels and an RGB color filter in each pixel element. By applying backlighting and different voltages to each sub-pixel, a pixel can display different colors.

Native resolution

On an LCD TV, the native resolution is the number of physical pixel units on the LCD panel. For example, if an LCD monitor's native resolution is 1280x1024, it means there are 1280 horizontal pixel rows and 1024 vertical pixel columns for a total of 1,310,720 total physical pixels. An LCD TV provides its best performance when displaying pictures in its native resolution

Nits

A unit of luminance equal to 1 cd/m².

Pixel

The pixel is the smallest indivisible unit of a digital image and the smallest visible display element of the LCD TV. It is a word created from "picture element". All computer images are made up of pixels.

RGB

Red, Green and Blue, the tricolor used to represent each color separately.