Video Information
Glossary of Terms

With this concise and conversational guide, you can make sense of an astonishing number of video industry acronyms, buzz words, and essential terminology. Not only will you edit like a pro — you'll sound like one, too.

5.1
A surround sound system that uses three speakers across the front (right, left and center) and two stereo speakers in the rear (right and left), along with a subwoofer.

A/B Edit
An editing technique in which the output is switched form one video source (A) to another (B).

AC-3
Audio Compression-3 is usually marketed as Dolby® Digital and used in DVD, HDTV, and many movie theaters.

Analog
Analog video and audio emit a steady wave of magnetic patterns that are interpreted as video and audio to be transferred to magnetic tape for viewing.

Anamorphic
Anamorphic filming technique was developed to make widescreen movies using 4:3 film. An anamorphic lens distorts the image picked up by the camera before it reaches the film. By using a similar lens when projecting the film back on screen, the correct, intended aspect ratio is restored.

AVI
Stands for Audio Video Interleave and is one of the most common formats for audio/video data on the PC.

Anti-alias
Removing the jagged edges from letters or graphic elements such as titles and 3D objects.

Aperture
An adjustable opening in a lens that, like the iris in the human eye, controls the amount of light entering a camcorder. The size of the aperture is controlled by the iris adjustment and is measured in f-stops. A smaller f-stop number corresponds to a larger opening which passes more light, examples: F2, F2.8, F4, F5.6, F8 and F11. F-stops are logarithmic. Each stop admits 100% more light than the previous one.

Aspect Ratio
The ratio of the width of the picture to the height. Displays commonly have a 4:3 or 16:9 aspect ratio. Program material may have other aspect ratios such as 2.35:1, resulting in it being "letterboxed" on the display.

Assembly Edit
An edit where all existing signals on a tape, if any, are replaced with new signals. Assembly edits cannot be used for editing because they erase the control track portion of the video tape.

Blue Screen
A special effects procedure in which a subject is photographed in front of a uniformly illuminated blue or green background. A new background image can be electronically substituted for the blue or green during the shoot or in postproduction through the use of chroma key to convert analog video to digital form.

CCD (Charge Coupled Device)
A CCD is a sensor that creates a video picture by recording light intensity to recognize a video image and then measures the levels of red, green and blue to reproduce a full-color picture. A single CCD captures information on RGB colors in one go, while a three-chip CCD (found on more expensive camcorders) devotes a CCD to each of the three colors.

Chroma Key
Also known as blue screen or green screen, this is a special effects procedure in which a subject is filmed in front of a uniformly illuminated blue or green background. A new background image can be electronically substituted for the blue or green during the shoot or in post-production

Composite
Composite video was created as a backward-compatible solution for television's transition from black and white to color. Usually recognized as a yellow plug, composite video cable is often teamed with a red and white audio connection.

Component Video
Component video improves the picture quality above S-Video. Component video is most frequently labeled Y, Cb and Cr on high-quality video players such as DVD and HDTV decoders.

Compositing
The overlaying of several layers of DV over the main footage. This facility is found in painting, drawing and graphics programs

Compresssion
Reducing the amount of digital data associated with a single frame of video information. Compression ratios operate up to 100: 1, typically reducing 1+MB down to around 10 Kb. This means that more video information can be stored on the hard disk. There are several (mostly incompatible) compression systems including: Motion-JPEG, JPEG, MPEG, DV and Indeo. Content that has been compressed must be decompressed for playback.

Codec
Short for compressor/decompressor, a codec is any technology for compressing and decompressing data. Codecs can be implemented in software, hardware, or both.

Capture Device
A hardware component that converts analog content (either audio or video) to digital for use on a computer.

Content
A general term that refers to audio and video media, images, text, and any other information that is seen or heard as part of a media presentation.

Cross-fade
A method of smoothly moving from one video clip or photo to another. With a cross-fade transition, the frames in the playing clip fade out as the frames in the new clip fade in.

Cutaway
A shot of something outside the frame that can be used to hide an edit (i.e. going from a wide shot of a scene to a close-up of unwrapping presents at a birthday party).

Dissolve
A video transition where one shot gradually fades out while a second shot fades in.

Digital Video (DV)
A format for storing digital audio and video used by DV-standard digital video cameras

Dolby Digital
Dolby® Digital (AC-3) is Dolby's third generation audio coding algorithm. It is a perceptual coding algorithm developed to allow the use of lower data rates with a minimum of perceived degradation of sound quality. Dolby Digital audio is used as the standard audio track on Digital Versatile Discs (DVD), is the standard audio format for High Definition Television (HDTV), and is being used for digital cable and satellite transmissions.

Digital Video Disc (DVD)
A CD-sized media providing MPEG-2 cinema-quality video and high levels of interactivity

Edit Controls
Some VCRs and camcorders can have their transport actions directly controlled via cables. Most DV devices can also be controlled from the PC through a FireWire® cable.

Fade
A video image that gradually increases or decreases in brightness usually to or from black. Sound can also fade to or from silence

FPS (Frames per Second)
FPS refers to how many video frames are shown on a screen every second. PAL and SECAM video are delivered to the screen at 25 FPS. NTSC video is 29.97 or 30 FPS, while cinema films are 24 FPS.

FireWire
FireWire® is a standard for high-speed transfers between devices including camcorders and FireWire-enabled PCs. This standard supports data rates of 100/200/400 Mbps. The other terms referring to the same standard are iLink and IEEE (Institute of Electrical and Electronics Engineers) 1394. The latest FireWire standard (FireWire 800) is able to support data rates of 800 Mbps.

Green Screen
A special effects procedure in which a subject is photographed in front of a uniformly illuminated blue or green background. A new background image can be electronically substituted for the blue or green during the shoot or in postproduction through the use of chroma key to convert analog video to digital form.

Insert Edit
An electronic edit where the original video and audio are replaced with new footage. Also see Assembly Edit

Letterbox
A technique for displaying widescreen video on a screen with a different aspect ratio by adding black borders above and below the original frame.

Linear/Non-Linear
When video is stored on normal video tape it is done so in a linear fashion. This means that one scene follows another in a sequential order. With non-linear editing the video information is stored on the hard disk in the computer and you can record scenes in any order. This is because it is possible to access the material on the hard disk almost instantly and randomly.

MiniDV
MiniDV is the most popular camcorder format, with cassettes holding 60 to 90 minutes of footage. The video format has an impressive 500 lines of resolution, and can be easily transferred to a PC with FireWire capability.

Moire Patterns
Video artifacts that occur when recording an object that has many thin parallel lines; the lines appear to move or crawl and can be distracting.

Movie File
The file created by combining the audio, video, and still images contained in your project. You can save movies to your hard disk, or send them in an e-mail message or to a Web server.

MPEG
MPEG stands for Moving Picture Experts Group and is a group of standards used for coding audio-visual information (e.g. movies, video, music) in a digital compressed format. MPEG formats use sophisticated compression techniques to deliver video over the Web, on DVD or VCD, depending on the MPEG format.

Monitor
A video display similar to a TV, but having superior visual quality and without a television tuner. An audio monitor is a speaker

NTSC
National Television Standards Committee created the first international television system for use in the U.S. and other countries. It produces pictures by creating 525 alternating lines across the TV screen for each frame of video. Since PAL and SECAM, the other two world systems, were developed later, they took advantage of better technology. Insiders joke that NTSC means "Never the Same Color."

PAL
Phase Alternation by Line. An international TV standard. (Also see NTSC.)

Pan-and-Zoom
A technique for creating moving video from high-resolution still images by varying the magnification at which the image is displayed and/or changing the area of the image which fills the screen.

Picture-in-Picture (PIP)
A special effects procedure in which two video images are combined, scaling or cropping one image so that it is less than full-screen size and then placing the smaller image within the frame of the larger image.

Plug-and-Play
The ability for an operating system to recognize and install necessary drivers for a device without input from the user. To be truly plug and play, the device should begin working without restarting your PC.

Playback Controls
A set of buttons that allow you to playback the tape in the camcorder. These controls are much like the ones on a VCR. They usually include the basic functions of Play, Stop, REW, FF and Pause.

Player
A program that displays multimedia content, typically animated images, video and audio, examples: Microsoft® Windows Media® Player and Apple® QuickTime® Media Player.

Program AE
When selected, the camcorder's Auto Exposure can be set to perform specific program functions. Program settings include Portrait, Sports, High-Speed Action, Twilight, Spotlight, Sand & Snow and Low Light.

Project File
The file created when you save the results of adding various clips to the workspace. The extension varies with the program being used, for example a Premiere file will be saved as a .PPJ file, while a VideoStudio 6 file will be saved with a .VSP extension.

QuickTime
QuickTime® is Apple's equivalent of Video for Windows® for the Macintosh®. Apple also makes QuickTime for Windows. QuickTime also refers to the QuickTime movie file format, a widely used format for digital audio, video and other multimedia.

Rendering
The computer process of creating a special effect, animation or editing task.

RGB
Color represented as red, green and blue components. Most computer monitors use RGB pixels to display an image.

Shutter Speed
The shutter electronically the amount of time that light passing through a lens exposes onto the CCD. Most camcorders are set at a shutter speed of 1/50 sec, with fast shutter speeds varying from 1/120 sec through to 1/10,000 sec. The higher the speed the more precise the detail and the less blur noticeable.

Storyboard
A storyboard is a view of the workspace, showing thumbnails of the clips in a video editing program. Storyboards also refer to sketches or descriptions of scenes to be shot in a movie before production gets underway.

Streaming
Streaming video is video that can be played in portions over a network, before the entire file is delivered.

Surround Sound
Any multichannel audio system designed to provide both front and rear sound sources (in addition to left and right channels). Surround sound adds a third dimension to the program.

S-Video
S-Video provides better color separation and a much cleaner signal than composite by keeping separate the color and picture parts of a composite-video signal.

Timeline
A view of the workspace that focuses on the timing of your clips.

Tracks
Timelines are divided into horizontal sections known as tracks. Clips are arranged in various tracks to adjust their timing relative to one another.

Transition
The method of smoothly moving from one video clip or photo to another.

Trimming
This process involves removing parts of a clip that you don't want in your project without deleting them from the original source material. You can trim by adjusting the start or end trim points of a clip.

USB (Universal Serial Bus)
Some of the latest capture devices, mostly external ones, are connected to the PC via the USB port. These offer a much lower data-rate than FireWire/i.LINK, but they do not require a capture card to be installed into the PC. Generally they are good for capturing high-resolution still images from video or lower resolution MPEG-1 video files

White Balance
White balance both takes an automatic reading, or one chosen by the user, and sets the balance for the ambient light in the scene based on the information.

Widescreen

Video material produced in wider aspect ratio than the standard TV ratio (4:3 or 1.33:1) is commonly referred to as widescreen video. In general anything with an aspect ratio above 1.66:1 can be considered widescreen. Widescreen material is presented on DVDs in either anamorphic or letterboxed format. At times widescreen material is also cropped into 4:3 format using pan-and-zoom.

Zoom

The lens on a camcorder ranges from wide angle through to telephoto. Currently camcorders come with anything from a 10x to a 22x optical zoom. All camcorders also have a digital zoom which magnifies pixels